# **Progressive Architecture**

n IIII Reinhold public































NOT NOT STATES



wards

# Who can you turn to for the finest in floor styling?

When you want creative styling...Azrock vinyl asbestos floor tile is the answer. When you are looking for the almost perfect floor ... Azrock is the answer. When you need someone on your side in the fight for more floor for the money... Azrock is still the answer. Yet it costs as little as it did 20 years ago. And Azrock vinyl asbestos tile answers more floor requirements more perfectly than any other type of flooring: Over 100 styles and colors • low initial cost • long-lasting durability • low-cost, no-wax maintenance • fire safe, will not support combustion • exceeds federal specifications. Turn to Azrock to get the job done... beautifully.

Circle No. 312, on Reader Service Card

Azrock is still the answer.



Floor shown is Custom Cortina, through-thickness styling for heavy traffic areas. For samples and more information, write Azrock Floor Products, Dept. 534A, P.O. Box 531, San Antonio, Texas 78292.



ULTRAWALL®.... 3/4" thick for that permanent wall feeling.

Three big benefits of this hefty <sup>3</sup>/<sub>4</sub>" gypsum thickness are: • Superior strength. ULTRAWALL gives you the rigidity of permanent walls. No annoying shake or rattle.

• Higher sound rating. ULTRAWALL provides a 42 STC rating without use of insulating wool (48 to 50 STC performance available where desired).

• Greater fire resistance. ULTRAWALL systems are available with up to 2-hour fire rating.

And ULTRAWALL looks permanent, too, thanks to concealed attachments, flush installation, and absence of battens. A simplified design concept, utilizing prefinished panels and trim makes installations faster and easier. True movability allows you to meet changing space needs in short order with minimum disruption, no loss of tenancy. Other benefits include: choice of bank rail, cornice or ceiling height with full glazing possibilities; new self-mortising, reversible Delta door frame accommodates any hinge location; new H-R stud assembly permits accessibility within the wall without sacrificing security. Wide choice of tough vinyl surfaces: 27 elegant colors and 5 patterns in all! ULTRAWALL costs no more than other systems offering far less. Call your U.S.G. Technical Representative. Or write to us at 101 S. Wacker Dr., Chicago, III. 60606, Dept. PA-16



CTUAL SIZE



# Like Classics of the Past

# ...Kinnear Rolling Doors are treasured for lasting worth

To the many firms whose Kinnear Rolling Doors have been giving dependable service for 20, 30, 40 or more years, a Kinnear door is indeed a classic in every respect.

**Classic Construction:** Kinnear Rolling Doors of rugged, galvanized steel have for years withstood the most damaging punishment of nature and man alike, from severe winds and fire to vandals and thieves — as well as the everyday wear-and-tear that slowly erodes most other barricades.

**Classic Efficiency:** Operating convenience and economy are built into all Kinnear Rolling Doors. They coil compactly above the opening for maximum conservation of space, freeing floor and wall space around the opening. And, with the operating mechanism spring-counterbalanced, they open and close easily, either manually or by Kinnear motor control.

Classic Tradition: Kinnear developed the interlocking metal slat rolling door over 80 years ago and continues to perfect the product. This persistent pursuit of our basic rolling door concept allows every new customer to buy and install a Kinnear door with absolute confidence in its quality and long life. And Kinnear dependability doesn't end there — because every door qualifies under our "Registered" Life-Extension Policy, backed by a nationwide network of service depots, to give fast service on damaged doors.

But unlike other classics of the past, Kinnear Rolling Doors are the products of *today's* engineering technology, designed to do the job now – and for years to come. Whether you're constructing a new building or remodeling a classic of your own, consult your nearby Kinnear Representative and get the full story on: Kinnear Rolling Doors and Grilles; Fire Doors and Shutters; Metal, Wood or Fiberglass RoL-TOP Doors; Counter Shutters and Power Operators.

Circle No. 330, on Reader Service Card



Editor John Morris Dixon, AIA

Managing Editor James A. Murphy, AIA

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

Associate Editors Sharon Lee Ryder, Interior design Roger Yee, Technics Ann Carter, News report Charlotte VanVoorhis, Products

Assistant to the Editor Barbara McCarthy

Editorial Assistant Judith A. Wasson

#### Graphics

George Coderre, Art Director Anne Marie Sapione, Art & Production David W. Scott, AIA, Architectural drawings

#### **Contributing Editors**

Norman Coplan, It's the law Bernard Tomson, Hon. AIA, It's the law Harold J. Rosen, PE, FCSI, Specifications clinic Josephine H. Drummond, Specifications clinic William T. Lohmann, AIA, CSI, Specifications clinic Alvin D. Skolnik, FCSI, Specifications clinic Ronald P. Bowie, Specifications clinic Martin P. Martensen, Specifications clinic Robert D. Williams, CSI, Specifications clinic

#### Correspondents

Esther McCoy, Los Angeles Roger Montgomery, San Francisco Sally Woodbridge, San Francisco Antonin Aeck, AIA, Atlanta George McCue, St. Louis Peter Papademetriou, Houston Ralph Warburton, AIA, AIP, PE, Miami Stuart E. Cohen, AIA, Chicago

#### Publisher

Philip H. Hubbard, Jr.

James J. Hoverman, Director of Sales Burchard M. Day, Promotion Director Daniel H. Desimone, Production Manager Thomas Moran, Circulation Director G. Charles Huebner, Circulation Manager E.M. Dwyer, Customer Service Manager Elizabeth A. Mercede, Sales Service Manager

IR

Progressive Architecture is published monthly by Reinhold Publishing Company, Inc., a subsidiary of Industrial Publishing Co. Thomas L. Dempsey, Chairman; Philip H. Hubbard, Jr., President; Harry I. Martin, Vice-President, Executive and editorial offices, 600 Summer St., Stamford, Conn. 06904 (203-348-7531).

For all subscription information write Circulation Dept., Industrial Publishing Co., 614 Superior Ave., W., Cleveland, Ohio 44113 (216-696-0300). When filing: 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. Subscriptions payable in advance. Publisher reserves right to refuse unqualified subscriptions. Professional rate (\$7 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. and Canada \$18 per year. Nonprofessionals outside U.S. and Canada \$30 per year. Single copy \$3, payable in advance. Indexed in Art Index, Architectural Index, Engineering Index. Second-class postage paid at Stamford, Conn. and additional offices. Volume LVII, No. 1. Printed in U.S.A. Copyright © 1976 Reinhold Publishing Company, Inc. All rights reserved.

CABP

January 1976

# **Progressive Architecture**

#### 7 Editorial: Selecting

#### 55 The 23rd Awards Program

#### 58 Architectural design: Four for all

- 60 A Beaux-Arts courthouse in Grand Rapids, Mich.
- 62 The Southside Settlement, Columbus, Ohio.
- 64 Willows Child Learning Center near Denver, Colo.
- 65 A residence in Westchester County, N.Y.
- 66 The Fountain House, a second residence in Southern Calif.
- 68 A private house in Fort Wayne, Ind.
- 70 A building addition for Indiana Bell Telephone at Columbus, Ind.
- 71 Art Center College of Design, Pasadena, Calif.
- 72 Drive-in cabin for a 1973 Dodge van.
- 73 Public Library, Champaign, Ill.

#### 74 Urban design and planning: Making things real

- 76 Proposal for the Tremont Street Special District in downtown Boston, Mass.
- 78 Shoreline Appearance and Design: A Planning Handbook for Long Island Sound.
- 80 Development program for downtown Lincoln, Neb.
- 81 The Transportation Action Kit: A Layperson's Guide to Transportation.
- 82 Piazza d'Italia in New Orleans, La.

#### 84 Applied research: Architects who clash by night

- 86 Solar Heated Houses of New England.
- 88 From Recess to Hang-out: The Design of Open Space Opportunities.
- 90 The Health Maintenance Organization Facility Development Handbook.
- 91 Reducing Property Damage in Schools.
- 92 Michigan Soil Erosion and Sedimentation Control Guidebook.

#### 94 Technics: Specifications clinic: CRS Technical Data Resource Center.

#### Departments

Personalities

In perspective

Calendar

In progress

23 News report

10

44

46

48

50

- Views
- 99 It's the law 100 Books
- 40 Report from New Orleans 112 Products and literature
  - 125 Notices
  - 120 100000
  - 128 Job mart
  - 130 Directory of advertisers
  - 131 Reader service card

**Cover:** Slides of the 20 winners in the 23rd annual Awards Program: seals denote Awards. Cover design by John Watson with George Coderre, Art Director. Photo: Pete Wootton.



1. Slotted Metal Base

2. Insulperm™ Insulation Board



3. Zonolite Base Ply Fasteners

# Three design improvements tops in performance,



**Progressive Architecture: Editorial** 

### Selecting

January 1976

In the world we report on, everything hinges on selection: selection of the architect, selection of one scheme among alternatives, selection of materials, components, colors. And journalism is fundamentally an art of choice: all year long the editors of P/A are involved in selecting subjects for publication, then words and illustrations to explain them.

Once a year, as we have for 23 years, we invite a jury of practicing architects (of our choosing) to select winners in the P/A Awards program. In this issue, you can review their selections and some of the considerations behind them.

And what do these jury selections represent? The best of the submissions before them, of course—the best as the jury subtly redefines it each year. The program has acquired its authority, and maintained it these 23 years, because each jury is able to generate its own definition of best, within program rules that are more constant (though these, too, have been gradually adjusted).

The two governing rules that define the program and sustain it are easily stated: the work submitted must not yet be executed; it must have been done on behalf of an actual client. The winners represent, therefore, the most recent concepts or procedures—advances in some way beyond the architecture being realized around us—but only insofar as those advances are supported and accepted by realworld clients. Implicit in this stipulation is a belief in architecture as a profession serving society, not as a generator of idealizations and unbridled visions.

Operating within these ground rules, each jury is asked only to determine which submissions are *most worthy of recognition*. Each jury works out its own solution to the dilemma of ideal vs. real. The very first jury decided that winners must display "more than mere competence"; some recent juries have called for architecture that addresses crucial "issues," or embodies "seminal concepts." The most recent juries have been particularly concerned with relation of design to the client's needs and the environmental context—ruling out otherwise impressive entries where these were not satisfactorily explained. What all of the juries have been seeking, and what they have recognized with remarkable accuracy, is architecture that meets the demands of reality, yet transcends them.

This year, P/A inaugurates an additional awards program, for the advertisements that help to support the publication. The effectiveness of our advertising has always been a matter of great concern at P/A and, judging from various reader surveys, it is a matter of great concern among readers as well.

Results of our first advertising award competition, honoring the best advertising to appear in the pages of P/A this year, are reported in full in this issue's News Report. The jury for this competition, composed of accomplished professionals representing P/A's audience, also discussed the universal principles and ideals of graphic communication. But, as the P/A design juries do, this one quickly got down to discussing the candidates as solutions to specific problems in a specific context—the problem of reaching architecture. Their choices, like those of the P/A Award jury this year, are catholic in approach; what they have in common is their effectiveness in communicating with practicing professionals like you.

John Maris Dife



# Six years ago Washington County took Andersen to court.



1969 Perma-Shield Window.

1975 Perma-Shield Window.



#### Circle No. 353, on Reader Service Card

# And we're still appealing.

Back in 1969, Washington County opened its dramatic new courthouse and government office building. And the first Andersen<sup>®</sup> Perma-Shield<sup>®</sup> Windows were put on trial.

Now, after six years of cold, snowy Minnesota winters and humid, sun-baked summers, Andersen's crisp, clean beauty is still appealing.

The evidence? A side-by-side comparison with the brand new Perma-Shield Windows in the building's 1975 addition.

A confrontation that could keep a jury deliberating for months as to which are the old and which are the new.

The reason for Perma-Shield's longlasting beauty? A low maintenance rigid vinyl sheath (over a wood core) that doesn't rust, pit or corrode. Doesn't chip, crack or peel. Keeps on looking its best year after year.

But don't accept one county's decision. Try the case yourself. Use long-life, low maintenance Perma-Shield Windows in your next building.

For more details, see Sweet's File 8P. Or call your Andersen Dealer or Distributor. He's in the Yellow Pages under "Windows". Or write us.

The beautiful, carefree window. Andersen Windowalls

Washington County Office Building, Stillwater, Minnesota.

#### Letters from readers

# Views

#### Couverture d'art

P/A's November cover of the Centre d'Arts in Paris is a refreshing departure for a trade publication cover. This polished presentation is especially welcome when there are still too many poor graphic executions around. Great job. Congratulations to Sharon Lee Ryder, et al. *Ingrid Allex* 

New York, N.Y.

#### Function vs fancy

I was astonished by your implications in "Goodbye Five: work by young architects" (Nov. P/A, p. 20). How can aesthetic achievement in architecture exist outside of social and environmental concerns? We already have a term that describes spatial aesthetics for their own sake: Sculpture. Let's not confuse it with architecture.

During a period when architects are being asked to assume wider and more far-reaching responsibilities, we find instead an exhibition promoting the retrenchment of architecture into "intellectual exercises of puns and imagery."

Are we happy as architects to become, as Geoffrey Coppcutt warned, "interior decorators who work in the rain?" *Michael M. Sizemore, AIA Sizemore & Associates* and The Energy Group, Inc. Atlanta, Ga.

#### The gray doughnut

It is interesting to note that the emphasis of Jeffrey Heller's "In Perspective" article on the Airport Charles de Gaulle (P/A, Sept. 1975, p. 54) is on speed. It seems strange to view an airport terminal for its efficiency potential alone.

Mr. Heller's article pays little attention to the interior environment and never considers what it would be like to experience that gray-tile doughnut for three, five, or nine hours of anxiety-ridden waiting. Gray tile accedes to more gray tile as you try to walk away the hours in an atmosphere as comforting and varied as the one in which Beckett's tramps await Godot. The atrium and its fountain which supposedly provide a natural touch are enclosed in glass, and when the wind shifts the spray onto the windows or glass satellite ramps the waiting area feels like a sealed aquarium—hardly a refreshing sensation for tired travelers.

It is true that waiting areas for large numbers of people in transit are public spaces and cannot be expected to provide the atmosphere of a private space; however, since the public is composed of individuals, any building which fails to provide more than a few round, orange sofas for physical comfort and which ignores psychic ease is failing in one of its essential functions. The simplicity, ease, and clarity Mr. Heller mentions as characteristic of the Airport Charles de Gaulle seem to refer solely to auto accessibility (an accomplishment, indeed) and to be contingent upon less than a two-hour stay. For longer periods the experience gives way to coldness and circular restlessness.

Though praise should certainly be given where it is due, a building or complex should be appraised for all of its requisite functions, and an airport, as any traveler knows, is often far more than a place of arrival and departure. *Laura Ress-Campus* 

New Haven, Conn.

[One of the great virtues of Saarinen's TWA Terminal in New York is a feeling of warmth, of comfort—even a bit of spectacle—appreciated during long waits. It is quite understandable that the Airport Charles de Gaulle could become rather bleak after the initial excitement wears off.—Editors]

#### Mr. Heller replies:

Pedantic allusions to Beckett's "Waiting for Godot" aside, I believe Ms. Laura Ress-Campus has somewhat missed the point. In judging my lack of consideration for the delayed traveler, she erroneously assumes I spent something like three minutes at "Charles de Gaulle Airport." I was, in fact, there for something over three hours and found many shopping, eating, and visual diversions with which to pleasantly pass the time. It was my time spent at the airport which prompted me to write my article.

For me, the great comfort of the place came from the clarity and simplicity of the process. The ability to divest oneself of the problems of tickets and baggage in an immediate and straightforward manner is a very great relief. To see and understand where one is heading towards is of overriding importance to the harassed and disoriented traveler. I will not revive the overused arguments of comfort of the mind vs. comfort of the body here, but will merely note its existence.

Ms. Ress-Campus's aversion to the hard finish of the terminal is akin to the commonly held misconception that pleasure can only be derived from a pervasive use of sensual materials, textures, and colors. In an aesthetic responding to the phenomenon of transportation one can, and should, respond to the high technology necessarily employed therein. It is an asset to be able to feel a unity with the extraordinary achievement of flight. This can be done by absorbing the requisite technology if the architect and client have the self-confidence to document their purpose. The great Railroad Stations of an earlier age are fine examples of a built response to that part of our culture. The counterpoint, the small, personal, and comfortable lounge is to be found, if one looks, when needed. But the whole should be what it is, an expansive part of a great machine of movement. A great node of transitional activity. If it works well, and in a straightforward manner, it has a beauty of its own. Hopefully, our mass culture shock reaction to technology has not taken us so far as to be unable to appreciate that fact.

I feel truly sorry for anyone who is trapped for nine hours waiting for a plane. There is no way to ameliorate that kind of situation. (I understand that Charles de Gaulle Airport operations are quite good, as that effort was part of the concept.) Airport Charles de Gaulle cannot be the Ritz or Restaurant Lasserre or the Jeu de Paume. If Ms. Ress-Campus was faced with an unpleasant and lengthy wait there can be no pleasure in her experience there. Jeffrey Heller, Architect San Francisco, Calif.

#### Best metric module forward

As an American who has worked in Finland for the past five years, I have learned to appreciate the convenience and versatility of the Metric System, and was thus interested to see the article (Specifications Clinic, P/A, Sept. 1975) advocating its acceptance in the United States.

While the proposed 100mm basic unit is sound and in line with current trends, I would however suggest a more workable alternative to Mr. Williams's 1 meter multiple module. Over the last few years, much of Europe has been working towards a higher degree of standardization with the so-called 3M System, where M-100mm and 3M-300mm, or about a foot. The basic multiple module is thus 1200mm, which approximates the familiar 4-ft module. I would urge serious consideration of the 3M System for the following reasons:

1 It already exists. If, as Mr. Williams notes, the U.S. hopes to compete in the international building market, it might as well gear up to a system for which materials are already being produced. 2 It's easy to work with. The superior numerical workability of a 12 system over a 10 system has long been known, and this has been one of the beauties of the otherwise awkward English system. 12 divides evenly by 1, 2, 3, 4, 6, and 12 whereas 10 divides evenly by only 1, 2, 5, and 10. For normal architectural purposes 1200 divides rather nicely into usable dimensions according to 3M. 300mm defines a brick, 600mm a closet depth, 900mm a normal door-frame width, and 1200mm sheet building materials such as plywood, to cite a few examples. On the other hand, 200mm and 500mm and their multiples have limited practical value.

3 It's not such a drastic change. The existing sizes of building materials and components in the English system have developed naturally, and thus have a certain validity. By switching to a system in which current dimensions are approximated, (1200mm = 47.24'') the change-over to Metric (building materials manufacturers take notice) need not be accompanied by drastic changes in quantities of material or production systems.

The 3M System is not a magic cure-all and will not meet every dimensional requirement, but provides a practical point of departure in applying the Metric System to architecture. The subject of the United States going Metric is a monumental one, and more articles like Mr. Williams's are called for.

Roger L. Freundlich

Helsinki, Finland

[Mr. Freundlich's recommendation seems quite valid and should certainly be considered in establishing a metric program for the U.S.—Robert D. Williams, CSI]

#### **Correct credit**

The architects of record for the Marymount Manhattan College expansion program (Nov. 1975 P/A, p. 30) were Evans, Delehanty & O'Brien. P/A credited the successor firm, O'Brien & Justin, which is responsible for the ongoing second phase of the work.

#### A lesson from Bedford-Stuyvesant

Brooklyn's Bedford-Stuyvesant section has a new heart. October 2 marked the grand opening of "Downtown Bedford-Stuyvesant," a sparkling collage of new and salvaged buildings on a full block in Bed-Stuy's center. It is a triumph for the community, and the most visible effort to date of the ambitious Bedford-Stuyvesant Restoration Corporation. Designed by Arthur Cotton Moore/Associates of Washington, D.C., the commercial-office-recreational complex was conceived as a focus for the troubled community—another step on the way back up.

For the Restoration Corporation, Bed-Stuy is "a place to live, not to leave." Rehabilitating existing housing and commercial structures, the Corporation is leading the community efforts to recharge the area's financial batteries. The new center, containing 115,000 sq ft of retail space, 70,000 sq ft of office space, an 8500-sq-ft skating rink, and 30,000 sq ft of open plaza, appears to be off to a strong start. Even before the grand opening, shop owners reported doing a brisk business. Art and music are also becoming an integral part of the center's activities.

Originally, the Bed-Stuy block was composed of a milk bottling plant and other manufacturing/warehouse functions, and one building was being remodeled for the Corporation before the Moore office was retained. After a study of the existing buildings was made, decisions about which buildings would be saved were formed. The original Fulton Street façade of one of the structures was preserved and braced,



Entrance to complex from Fulton Street (above, below right) is through retained façade.



Juxtaposed new and existing structures, a larger-scale version of the architects' earlier Canal Square in Washington, D.C.

to form a screen-like gateway to the plaza. It simultaneously creates a sense of enclosure, yet preserves a familiar element in the community. The first plaza, ringed with both old and new, is alive with retail activity. Passing through this plaza, a visitor may continue through a more constricted passage to emerge in the broad skating rink court, which then leads to another plaza. The eventual construction of a supermarket at the end of this third space will ensure the full traffic flow





Olympics stadium: service ring segment ready to go .



Columns form 17 different-size pairs.



. . And hoisted into place.

Rear cantilever beams of stadium columns.



Olympics stadium with low-rise garage in foreground.

throughout the complex. Steel roof trusses of the old building put a symbolic ."lid" on this court which, besides the supermarket, will be faced by a fast food establishment, a utility company and other retail and office space.

Within the context of the Bedford-Stuyvesant community, the Corporation and the architects were striving to make the center a magnet for shoppers who had been lured or driven to outlving retail/entertainment sources, either by better selection or out of fear of the area. While it is still difficult to get a cab (knowingly) to take an outsider there, the center seems to accomplish what it was intended to do. Inside, the atmosphere is light, active, and positive. The complex has to be the brightest thing to happen to the beleaguered community in years, and represents the best possible form of affirmative action. Bright community leaders have made impressive strides to show how to stay and fight, a lesson needed in depressed sections of our cities. [JM]

# Montreal reaches towards Olympus

Montreal's building endeavors always seem to rate high with designers and planners—there was the Metro, then Expo, and the downtown underground shopping development, Place Ville-Marie—so the city's latest endeavors hold a large promise. Last month Mirabel opened, one of the "third generation" type of international airport facilities, and this summer the 1976 Olympics site will be ready for two million visitors.

Everyone wants to know if the Olympic buildings will be finished in time for the July 17 opening of the Games. The







official answer is yes, and 11-hour crews of 2500 during the day and 800 at night are working to meet the deadline. Strikes during the past year have seriously slowed construction—110 days were lost—so that some of the secondary facilities may not be completed until after the Games. However, Lionel Reeves, superintendent of the Sports Center construction, said all facilities for the athletes and the public will be ready. Nearly 60 percent of the work remains to be completed, but the most difficult has been finished.

Roger Taillibert is the French architect who designed the extraordinary Olympic buildings, spectacular sculptural pieces which will give Montreal a much-visited year-round landmark. After the Games end Aug. 1, the buildings will be used for major league sports events.

The French system of post-tensioning precast concrete elements was used to build the three major sports facilities: the stadium, its mast, and the velodrome. The stadium skeleton is a circle of 34 columns rising 140 ft above ground to be joined at the top by a hollow ring containing mechanical and lighting equipment. This installation will be completed in mid-January, and the next stage (already begun) of installing prefabricated floors and roof will be finished a few weeks thereafter.

The velodrome, an arena for cycle events, was completed almost a year ago. After all the roof beams were installed, the roof was dropped onto four abutments by removing temporary steel support towers and gently lowering it by draining the fluid out of 236 flat hydraulic jacks and filling the jacks with cement. Neoprene pads cushion the roof against vibration.

A 552-ft-high mast rises over the stadium to house a membrane that will be used after the Games are over to cover the facility during inclement weather. It cantilevers 175 ft over the stadium, its center of gravity falling 23 ft behind the front face of the mast, which is anchored 160 ft deep into rock at the rear. At the base of the mast, members post-tensioned with cables arch 600 ft to form a caisson structure straddling four pools underneath. Inside the mast are 18 levels containing athletic training rooms and a two-level restaurant.

Less than a quarter-mile away is the 19-story Olympic Village. Four buildings shaped as half-pyramids form the



Processing level of Mirabel where linear concept encourages efficiency



Mezzanine restaurant with children's mural.

complex, designed by D'Astous & Durand of Montreal to house the 10,000 athletes and their trainers during the two-week games. Construction has been underway for more than a year; the 980 units are built with a concrete wall and flat slab system.

Most of the athletes as well as many spectators will arrive in Montreal at the new \$300 million international airport, Mirabel. The Canadian government paid an additional \$140 million for 88,000 acres of land 35 miles northwest of Montreal for long-term development of the airport, said Denis Boissy, specialist on land acquisition. A land use plan for the peripheral 71,000 acres will preserve forever 40,000 acres of existing farm land, and will provide 3000 acres for an industrial and commercial park, and 15,000 acres for recreational green space.

The design and planning was by a consortium of civilian professionals known as CAIM (French acronym for Airport Consultants of Montreal Ltd.) working under the Transport Ministry of Canada and the semi-autonomous New Montreal International Airport Project Office.

What the main terminal building, the first of six, lacks in aesthetic appeal it will have in efficiency of passenger



One of two security booths, mezzanine level.



Section of departure end of terminal.

processing. The boxy, linear building, 1160' x 300', is divided into two systems of passenger activity: lengthwise into levels that separate departing passengers from those waiting or visiting with friends; and then the departure space is further divided crosswise into sections for individual airline counters.

The departing passenger enters the terminal at the airline of his choice; walks no farther than 300 ft to a ticket counter where baggage is processed (there is no curbside check-in though it's provided for); and if he is departing immediately he enters the "sterile" zone where only travelers which have been thoroughly inspected are allowed. From there, they board a PTV (passenger transport vehicle) for transportation to the remote boarding gates, a process inspired by the system at



Turner



Marvin



Devoe



Olympic



LOF



Andersen



Free-standing Ad Award plaque.



Koppers



Bradlev



Russwin



LOF



PPG



Integrated



Welsbach



Koppers





Herman Miller



Knoll





Dulles Airport in Washington, D.C.

If the passenger wants to visit with friends he must go up to the top, mezzaninelike level where all shops and restaurants are grouped along a center spine surrounded on either side by waiting areas with chairs. From this uppermost level, there is a wide panoramic view of the airport activities through the tinted glass walls of the building. Arriving passengers enter customs at one end of the main level but are visible to welcoming friends waiting on the mezzanine. After baggage is claimed they may join their friends.

This linear concept of separating various broad functions will reduce congestion and speed the flow. By eliminating each airline's individual waiting lounges and gate areas through consolidation at the "sterile" zone and the remote gates, much waste of expensive equipment and maintenance has been avoided. [AC]

#### P/A gives awards for outstanding ads

Progressive Architecture will present awards to 16 companies and their advertising agencies for outstanding advertisements appearing in the magazine during the last year. The awards will be presented at the magazine's First Awards Seminar Jan. 16 at the Plaza Hotel, New York.

A jury of three architects and an interior designer selected the 16 equal winners from among 353 eligible ads. The winners, by category, are Sterner Lighting and Welsbach Lighting Products, electrical; Libbey-Owens-Ford Company and PPG Industries, glass; Emhart Corporation/Russwin Division, hardware; Herman Miller, Knoll International, and Turner, Ltd., interior design; Koppers, Inc., Celanese Coatings Company/Devoe Paint Div., Comerco/Olympic Stain Div., and Integrated Ceilings, materials and systems.

PPG Industries/Mineral Products, non-load-bearing structural: Bradley Corp., plumbing; Andersen Corp. and Marvin Windows, windows.

The jurors were architects J. Karl Justin of O'Brien & Justin, New York; Rolf Ohlhausen of Prentice & Chan, Ohlhausen, New York; and Harold J. Rosen, columnist for P/A Specifications Clinic; and Lawrence Lerner, president of SLS Environetics, space

Koppers







# TURN A SHOPPING MALL INTO A CATHEDRAL.

Moduspan® space-frame system lets your buildings soar almost as far as your imagination.

Because Moduspan eliminates the need for welded steel trusses that restrict building design.

Instead, Moduspan employs lightweight, standardized modules. A simple nut and bolt construction. And random supports and overhangs in two direc-

As a result, there's almost no limit to the variety tions. of modular configurations you can use on roofs, walls

and specialty designs. But Moduspan isn't just

beautiful. It's also practical. Moduspan virtually eliminates on-the-job delays tom designed fabrications.

It also makes the attachment of such auxiliary items as light fixtures, sprinklers and glass simple because the entire structure is made up of Unistrut

And Moduspan components are available in both channels. 4' and 5' systems and six durable colors.

Moduspan. The space-frame system that can make some of your wildest dreams come true.

For more information write to Unistrut Corporation, Wayne, Michigan 48184



The Mall at Columbia, Maryland. Owners: The Rouse Co., Columbia, Maryland. Architects: Cope, Linder and Walmsley, Philadelphia, Pa. General Contractors: The Whiting-Turner Contracting Co., Towson, Baltimore, Maryland.

# That's the beauty of Kalcolor. Our integral-color hardcoat anodized aluminum...

Illustrations show how beautifully Kalcolor aluminum can be used in high traffic areas like stairwells, building exteriors, escalators and rapid transit stations.



# can take the traffic.





Kalcolor aluminum can take the rain, the snow, the beating hot sun, and the heavy traffic, too. Beautifully. Because Kalcolor is no ordinary anodic finish.

This finish is produced by an exclusive integral (self-coloring) anodizing process (shown at right) developed, patented and licensed by Kaiser Aluminum. Result: a hard, Class I architectural finish in thicknesses of 0.7 mil or greater. No dyes are used. Kalcolor is excellent for its abrasionresistance, corrosion-resistance and sunresistance. And for subtle colors of lasting beauty. Choose champagne, gold, light amber, amber, statuary bronze, black or



three subtle shades of gray. For new construction or remodeling projects, be sure to specify Kalcolor alu-

minum for enduring quality. You'll be glad you did. Now and later.

Send for our new catalog for more details. Write Kaiser Aluminum, Room 776-P KB, Kaiser Center, Oakland, Ca. 94643. Or contact one of our Kalcolor aluminum licensees. He'll show you how to beat the traffic.



#### Take your traffic problems to these Kalcolor licensees.

Kalcolor aluminum is available only from these trademark licensees. Ask them for an architectural Class I solution to your high traffic problems. Don't be satisfied with anything less.

#### ARKANSAS

HOWMET CORP. Southern Extrusions Div., Magnolia 71753 CALIFORNIA ALUMINUM PROCESSING CO., INC., THE Burbank 91502 ALUMTREAT, INC., Monterey Park 91754 HEATH TECNA CORP. Heathtec Finishes, Hayward 94545 METALCO, INC., Emeryville 94608 NORTHROP ARCHITECTURAL SYSTEMS City of Industry 94745 QUALITY METAL FINISHING CO. Lynwood 90262 CONNECTICUT H. A. LEED CO., THE, Hamden 06503 FLORIDA ANACONDA COMPANY, THE, Opa-Locka 33054 GEORGIA ANACONDA COMPANY, THE, Atlanta 30301 SOUTHERN ALUMINUM FINISHING CO., INC., Atlanta 30318 WILLIAM L BONNELL CO., INC., THE Newnan 30263 INDIANA ALUMINUM FINISHING CORP. OF INDIANA Indianapolis 46202 EXTRUDED ALLOYS CORP., Bedford 47421 PPG INDUSTRIES, INC., Kokomo 46901 MICHIGAN NORTH AMERICAN ALUMINUM CORP. Kalamazoo 49004 MISSOURI METALS PROTECTION PLATING, INC. Kansas City 64127 NEW JERSEY REBCO, INC., West Paterson 07425 OREGON ANODIZING INC., Portland 97211 TENNESSEE WILLIAM L BONNELL CO., INC., THE Carthage 37030 TEXAS ATLAS ARCHITECTURAL METALS, INC. Dallas 75227 HOWMET CORP. Texas Extrusions Div., Terrell 75160 VIRGINIA HANKINS & JOHANN, INC., Richmond 23221 WASHINGTON HEATH TECNA CORP. Fentron Industries, Inc., Seattle 98107 WISCONSIN GORDON ALUMINUM INDUSTRIES, INC. Schofield 54476 CANADA ALUMANODE LIMITED Toronto, Ontario M9W1N1 CANADIAN PITTSBURGH Toronto, Ontario M4V1M8 KAWNEER COMPANY CANADA LIMITED Scarborough, Ontario M1P2X1

#### **News** report

planning and design firm, New York.

The Jan. 16 Seminar with panel discussion by the judges will be moderated by Charles H. Biederman, advertising and sales promotion executive with General Electric Co., who was present during the jurying process. Biederman also will comment on a slide presentation of the winners. Awards will be presented by P/A publisher Philip H. Hubbard, Jr. The Seminar and the Awards presentation, said Hubbard, is an effort to improve the effectiveness of advertising in architectural magazines, generally, and in P/A specifically. The Awards and Seminar will be held annually.

Following the Seminar, the participants will attend the luncheon presentation for the 23rd annual P/A Awards Program.

# The joke is out of S.I.T.E.

Driving through the relative chaos of Houston's Almeda-Genoa strip, an amorphous area characterized by lowrise, low-density commercial buildings, the new home of Best Products has an impact of well, ... a ton of bricks.

The effect is created by the new skin applied to the exterior of a structure housing the computer-designed interiors of Best Products, the nation's largest catalog-showroom merchandizer. The S.I.T.E. group of New York was retained by Best in 1972 to design a project in Richmond, and in 1974 to propose solutions for several other buildings. This showroom in Houston is the second completed project of the series. Its façade of white bricks and irregular profile wraps around the basic box and is ruptured by a "fracture" and a tumbling cascade of masonry.

S.I.T.E. characterizes the Houston project as the ''indeterminate façade,'' that is neither designed architecture nor applied sculpture. The firm maintains, ''It is an inversion of situation recalling Mies van der Rohe's familiar axiom, 'Less is more.' In this case, the inclusion of *more* implies that there is *less*, and that the intention of less may hold greater interest than the aspiration to more.''

This is referred to as a process of



De-architecturization of Best Products, Houston



Hurricane story easier to swallow.

"de-architecturization" by James Wines, president of S.I.T.E., which upholds a theory of iconography that generally is critical of capitalist values (particularly when espoused in foreign journals such as *Casabella* or A + U.)

In any event, S.I.T.E. relishes the vehemently mixed reaction the work has received. Going around is the story of a city inspector who was told by the construction supervisor that a local hurricane had caused the building's appearance. Realizing that the joke possibly had gone too far, the supervisor attempted to explain the truth by showing blueprints of the design. After some scrutiny, the inspector decided to enter the hurricane story into his report as the more plausible of the two incredible explanations. [Peter Papademetriou]

#### George H. Miehls 1895–1975

George H. Miehls, former president and chairman of the board of Albert Kahn Associates of Detroit, died suddenly in November at the age of 80. Miehls joined the firm in 1919 following [continued on page 33]



### Outside, a low maintenance, acrylic coated aluminum exterior in one of 11 colors available.

In a Pella Clad Wood Window, all exterior wood surfaces are covered with an acrylic coated aluminum skin. An outside finish that is known for its durable, low maintenance qualities. Equally important, however, is the fact that our clad exterior lets you select colors, shapes and sizes that complement



your plans. Naturally. Pella Clad Wood Windows. Available in three standard (a) and eight special colors. On our Casement, Awning, Double Hung, Fixed and Trapezoidal Windows.

#### Inside, the natural warmth and beauty you expect to find in a quality wood window.

While we recognize the need for a low maintenance exterior, we are also well aware of the natural warmth and beauty that a wood window contributes to a building's interior. So we were very careful to preserve these two qualities when we designed the Pella Clad Wood Window. For example, the exterior



(b)

aluminum skin never penetrates the frame or sash (b). Leaving the natural insulating value of the wood intact. And the natural beauty of the interior wood surfaces completely undisturbed.

At Fingerhut's new headquarters, this Pella Clad window system blends in beautifully, inside and out.

(a)

graduation from Ohio State University (1917) and service during World War I with the 23rd Engineers, U.S. Army. In 1942 he was elected vice-president and 18 months later was named executive vice-president. His associates chose him as president in 1945 after the passing of the founding Kahn brothers, and from 1958 until his retirement he was chairman and treasurer.

During his early years with the firm he was structural engineer on a number of automobile and newspaper plants and other facilities. In 1939 he worked on numerous war plants designed by the Kahn firm for the Curtiss-Wright corporation.

# ASLA guidelines for outdoor sculpture

"Object and Environment," a slide presentation distributed by the American Society of Landscape Architects Foundation, McLean, Va., is now available for architects and others involved with placing sculpture outdoors. The package, prepared by Margaret Roth Robinette through a grant from the National Endowment for the Arts, consists of 80 color slides, cassette tape, and a guidebook, and sells for \$60. Illustrations are taken from a number of cities in the United States and several from abroad; sculptors included are Tony Rosenthal, Barbara Hepworth, Rodin, and Picasso.

# Pratt's athletic facility opens

The new \$6 million athletic facility for Pratt Institute in Brooklyn, N.Y. was ready to open 15 months after construction began and was dedicated last fall. The building, designed to accommodate a number of uses, is by Daniel F. Tully Associates of Boston and Ezra D. Ehrenkrantz of New York. It's a column-free, 390'x130' space roofed by pine laminated to plywood in the shape of a hyperbolic parabola. The building was erected in 65-ft modules reaching a maximum 49 ft at five points.

The underground level will contain offices, classrooms, and laboratories; the gymnasium floor contains six multi-



purpose courts (the school hopes to rent courts for tennis to the community), the mezzanine will contain two dance studios, offices, and an observation deck. The main athletic floor also may be converted into a meeting room for 4000 people for lectures and concerts, and a ¼ mile track encircles the main floor. Provision has been made for future additions to house indoor swimming and other ball courts.

During the energy crisis two years ago, plans were changed from designing an all-electric building to one that uses steam from the school's main heating plant for heat and tapping an underground aquifer to supplement the cooling system. These changes will save an estimated \$60,000 annually.

#### A new star by Morris Lapidus

Another building by Miami architect Morris Lapidus has been added to the city's skyline to join his well-known Fontainebleau Hotel, the Eden Roc, and the Americana. The Citizens Federal Savings & Loan Association's new corporate headquarters opened less than a year ago, an 11-story structure of exposed concrete and chrome mirror glass designed in the shape of a star. The rotunda lobby is topped by a 25-ft white illuminated dome. Outdoors is a landscaped plaza with a 40-sq-ft cascading fountain, lit at night with multicolored lights. The four-level parking deck behind the building also is landscaped on top to blend with the environment.

Pratt Institute's multi-purpose athletic building.



Star-shaped savings and loan tower in Miami.



Citizens Federal main floor. Rotunda lobby with 25-ft illuminated dome.





Wilton Wastewater Treatment Plant, award.

# Owens-Corning winners announced

Energy-saving architectural design gets the special recognition it deserves in the annual Owens-Corning Energy Conservation Awards, announced in November. This year, only three projects out of about 200 submissions were deemed worthy of recognition.

One award went to the Wilton Wastewater Treatment Plant, Wilton,



Princeton Center, honorable mention.

Maine (Douglas A. Wilke, architect, engineer, and solar consultant, Wright, Pierce, Wyman Engineers), which will have solar collectors, a heat pump, and use by-product methane gas to operate a generator as needed. Another award-winner was the Terraset Elementary School, Reston, Va. (Davis, Smith & Carter, architects, with Vinzant Associates, mechanical systems; and Hankins & Anderson, solar energy) which is largely underground, with three feet of earth insulation, and relies on a solar collector system capable of sustaining temperatures through three and a half cloudy days (see P/A, May 1975, p. 22).

An honorable mention went to the Princeton Education Center at Blairstown, N.J., (Harrison Fraker, architect, and Flack & Kurtz, consulting engineers) a rural institution in which solar energy will take care of 75 percent of heating needs and 100 percent of hot water demand.

The jury for this competition stressed the need to consider energy conservation as an integral part of design, considered in form, siting, structure, and materials-not just as gadgetry tacked on. If such an integrated approach can be followed, "there is no need to wait for new energy sources or governmental action to solve this part of the energy crisis," observed William L. Porter, jury chairman and Dean of the MIT School of Architecture and Planning. Too often, Porter reported, the jury found inadequate realization in the submissions of the economic justi-[continued on page 38]

# SHEET RUBBER GYM FLOORS



Sheet rubber flooring is great for basketball, volleyball, gymnastics — other athletic events. Because sheet rubber flooring effectively withstands scuffing, grinding and heavy foot traffic, it can also be used for dances, banquets, rallies, other activities.

It's economical to install, comes in a wide variety of colors, is cigarette scorch-resistant. Requires no sanding, looks terrific with minimal normal care. Provides 100% "top to bottom" wear, has excellent dimensional stability . . . plus outstanding rebound characteristics.

Investigate the many advantages of installing a new or replacing an old gym floor with colorful, long-lasting and economical sheet rubber flooring.

Write or call for more information See our catalog in Sweet's Architectural Catalog File



#### THE R.C.A. RUBBER CO.

An Ohio Corporation of Akron, Ohio 1833 E. Market Street • Akron, Ohio 44305 Phone: (216) 784-1291

Circle No. 339, on Reader Service Card Circle No. 366, on Reader Service Card the haller program is inherently flexible, inherently mobile.

HO HUM



Haller flexibility permits design specification from a wide range of planning choices, relating to both functional and aesthetic criteria. Selection of components from numerous options that work within a predetermined modular framework are then factory assembled and shipped completely set up to the job site.

Haller mobility permits smoother, faster, more purposeful paper flow. Mobile pedestals and roll carts facilitate movement of vast quantities of paper with fewer chances of loss, confusion and error.

#### M herman miller

For more information contact your Herman Miller dealer, or write or phone the Herman Miller Sales Aid Center, (616) 772-9585, Zeeland, Michigan 49464.

Circle No. 334, on Reader Service Caro





One Shell Square witnesses demolition next door.

Hyatt Regency Hotel at Polydras Plaza.

land, exclusive of streets, is vacant. Existing permissible Floor Area Ratios there have been as high as 20, resulting in a violent juxtaposition of scale where new development has occurred.

It became apparent that New Orleans was on the verge of losing a substantial portion of its architectural fabric. While the Vieux Carré, the historic French Quarter, has enjoyed legal protection since 1937, the rest of the downtown area was taken for granted even though the French Quarter contains only a small and particular part of the overall inventory of New Orleans architecture. Only a few blocks from the Quarter, large sections were being demolished purely to speculate against rising land values.

Basic to the center city's future was the issue of preservation, adaptive reuse, and continuity of the present character of the area. In an attempt to gain time to study the phenomena of growth, a demolition moratorium was voted by the City Council in April 1974 to last until January 1975 and was extended for another year after that. While new construction had been a primary factor in arousing general awareness of evolving growth, a loss of retail shopping and gradual erosion of public services downtown were negative byproducts.

In 1973 a joint effort was undertaken by the city and the Chamber of Commerce to initiate a process whereby future growth could be effectively managed in the broadest terms to reinforce and not simply replace the existing context. Wallace, McHarg, Roberts & Todd of Philadelphia was asked to produce a Growth Management Program, in association with Curtis & Davis of New Orleans (transportation) and Gladstone Associates of Washington, D.C. (economics). Zoning consultants to WMRT were Haines Lundberg & Waehler of New York.

The Growth Management Program presented in the WMRT Technical Report seems to have countered the negative effects of growth. The goals set emphasize the channeling of development to reinforce and expand the retail core, make the most of the Superdome, capitalize on the success of the Vieux Carré, rationally organize movement systems, and increase residential occupancy in the central area.

This concept of "tout ensemble" has allowed New Orleans to skip over the impulse of designating individual landmarks and instead develop specific strategies affecting whole sections of the central area. Recognizing that existing downtown commercial structures are economically in a category "most susceptible to change," a defense was developed combining historic value with amenity potential exhibiting both physical and functional components. As a result, two new historic districts have been created and a CBD zoning study undertaken to generally reduce the permissible FAR.

With the existing amount of vacant land, uniform development of new structures would result in an FAR of 6, which more accurately reflects the projected market. The Growth Management Program observes that average FAR of all proposed new developments is below 7, and Poydras Plaza (in proximity with the Superdome), the highest intensity of all the major projects totals only 7.3.

Land use, density, and parking

strategies evidently are basic to the success of the proposed pedestrianoriented amenity system. Design controls operate conjointly with bonus provisions (such as increased FAR) to encourage developers to provide specific public benefits consistent with the nature of a particular district.

As a result of the Growth Management Program, a Core Area Development District plan has encouraged further specific studies, the most immediate and significant of which will be a self-imposed, two-year core area special tax. A state law allows such a tax up to 10 mills to be levied on real property within the CADD, with an anticipated yield annually of \$150,000 from each mill. Levied by City Council at the request of CADD, the tax was to be considered in citywide referendum in mid-December. It would finance demonstrations of broad services, improvements, and facilities required by the Act to be special and in addition to those New Orleans provides within the district, as well as the refinements of concepts to specifics with "price tags" for longer range implementation. Also included will be a "show-me" block as a model for central development.

Such concentration on immediate impact reflects the seriousness with which the Growth Management Program is regarded. In securing these results, the possibility of effective preservation and adaptive reuse in conjunction with sympathetic new development will be demonstrated. It should prove an effective framework for realizing the complex goals of New Orleans' future, instead of the spotty development and demolition that had gone on before. [Peter Papademetriou]



# Outrageously handsome and infinitely practical-Radiance is a Franciscan Terra Floor pattern, naturally.

Radiance-one of the most exciting things to happen to ceramic tile floors in a long time.

Radiance-a multi-piece, pattern offering three basic variations and the flexibility to combine these variations for many effects.

Radiance-ideal for shopping malls, banks, stores, indoors and out.

Radiance-available in Brown, Mint Green, Glacier, Fawn and Summer Tan.

Radiance-a Franciscan Terra Floor 12"x12" tile.

See Sweet's Architectural and Interior Design files for more detailed information.





Fabric designs by Alexander Girard.



Rosewood frames for the Eames chair and ottoman.

#### Nelson/Eames Girard/Propst

Ever wonder what George Nelson, Charles and Ray Eames, Alexander Girard, and Robert Propst have in common? An obvious answer is that they all work or have worked for the Herman Miller company. In an exhibition called "The Design Process at Herman Miller" on view through Jan. 18 at the Walker Art Center in Minneapolis, more of the less obvious connections are explored.

Organized by Mildred Friedman, editor of the Walker's *Design Quarterly*, the exhibit presents work of these four designers within the context of the technology of materials and production at Herman Miller. What becomes clear is that these four people were much more than designers. Each, in his or her own way, also invented the process by which to realize his or her own ideas, whether it was a methodology, as in Propst's case, or the process of molding compound curves in plywood for the Eames' "potato chip" chair.

The exhibition is immense, not only



Installation of Herman Miller show, Walker Art Center, Minneapolis.

in the body of work which it encompasses, but also just in its physical size. Early Nelson pieces, no longer in production, have been found and refurbished; the first bent wood prototypes of the Eames' are seen next to the final, manufactured designs; outof-production fabrics designed by Girard have been reprinted from original screens and full set-ups of Action Office II and Co-Struc systems represent Propst's work.

In addition, there is extensive graphic coverage, including some remarkable photographs of the manufacturing process taken by Judith Olausen. The current issue of *Design Quarterly*, serves as the catalog and contains essays on the designers as well as documentation on the manufacturing process at the Herman Miller factory.

The show, supported partly by a grant from the National Endowment for the Arts, will travel to Milwaukee, Detroit, Pittsburgh, and Boston. Once again, Minneapolis has a hit, and as someone there pointed out, it is the first time all four designers have been in the same room at the same time. [SLR]

#### Personalities

Francis W. Sargent, former Governor of Massachusetts, has been appointed senior lecturer at Harvard's Graduate School of Design and Massachusetts Institute of Technology's School of Architecture and Planning. Sargent will also be with the MIT-Harvard Joint Center for Urban Studies.

Ralph T. Rowland, AIA, vice president of Fletcher-Thompson, Inc., architects-engineers of Bridgeport, has been appointed to the Connecticut Building Code Standards Committee.

Anthony Costello has been named chairman of programs in architecture at Ball State University, Muncie, Ind.



Alexander Girard's Action Office.



Eames: lounge chair, ottoman, Time-Life chair, aluminum arm chair, oval table.



# A classroom building on the curve. ELEVATORS BY DOVER

The new Olin Hall of Engineering at Vanderbilt University presents a striking curvilinear front to its campus neighbors. Inside the 10-level building are classrooms, offices and laboratory space for programs in chemical engineering and materials science and engineering science, as well as the center for water quality management. Three Dover Geared Traction Elevators serve student and faculty needs. For more information on Dover Elevators, write Dover Corporation, Elevator Division, Dept. U, Box 2177, Memphis, TN 38101. Olin Hall of Engineering, Vanderbilt University, Nashville, Tn. Architect: Robinson Neil Bass & Associates, Nashville, Tn. Contractor: Joe M. Rodgers & Associates, Inc. Nashville, Tn. Dover Elevators installed by Nashville Machine Co., Inc., Nashville, Tn.





The California Council of the American Institute of Architects has elected the following officers: William R. Hawley, president; Howard R. Lane, first vice president/president-elect; William R. Richardson, secretary/treasurer.

John Dziurman, AIA, vice president of Straub, Van Dine, Dziurman Architects, Troy, Mich., has received the outstanding young engineer award from the Engineering Society of Detroit.

M. Paul Friedberg of M. Paul Friedberg & Associates, New York City, has been named program chairman for the 1976 International Design Conference in Aspen.

#### Calendar

Through Feb. 22. "Naives and Visionaries" exhibit, Worcester Art Museum, Worcester, Mass.

Jan. 21. Deadline for mailing data binders for the R.S. Reynolds memorial awards program for distinguished architecture using aluminum. The program is administered by the AIA. Jan. 24–28. Two solar heating and cooling workshops and a product exhibit, sponsored by the Solar Energy Industries Association, Hyatt House Hotel Los Angeles International Airport. Jan. 29–30. Fourth national architecture/engineering federal programs conference, sponsored by the Committee on Federal Procurement of A/E Services, San Francisco.

Feb. 3-6. Thirty-first annual conference of the Reinforced Plastics/ Composites Institute, Shoreham-Americana Hotel, Washington, D.C. Feb. 6-7. Conference on new developments and research in fire safety. University of California, Berkeley. Feb. 27-Mar. 27. "Form, Space, and Symbol in Chicago Architecture" show, Cooper Union, New York City. Mar. 31-Apr. 2. National conference on the conservation of the older courthouse, sponsored by the National Trust for Historic Preservation, the National Clearinghouse for Criminal Justice Planning & Architecture, the University of Illinois Department of Architecture, the National Association of Counties and the National Endowment for the Arts, St. Louis. May 2-5. Annual convention of the American Institute of Architects, Philadelphia, Pa.

Circle No. 365, on Reader Service Card

# NATURE'S FORMS





The logic of a tensioned membrane structure is as exciting as its design. What could be more practical than these dramatic shelters for an outdoor music amphitheater? Or more graceful than this white tensioned structure at the Aspen Design Conference in Colorado? Or more eye-catching than these unique sunshades?

When your imagination calls up sweeping curvilinear shapes or great enclosed space, Helios Tension Products are the people to bring your ideas into existance. 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. It's a total comprehensive service unmatched in the U.S.

Circle No. 354, on Reader Service Card



If you have a project where a membrane structure may be the answer, or if you'd just like more information for future reference, write and tell us: Dept. Pl, Helios Tension Products, Inc., 1602 Tacoma Way, Redwood City, CA 94063. Telephone (415) 364-1770



#### In perspective



Exterior stair connects floors of Atlanta speculative office building





Configuration determined by site and path of driveway to rear parking lot.



Back of the building facing parking lot.



Gray/Durfee & Associates won an award for 1965 The Park.

#### Spec office building au naturel

Since the 1960s, Georgia's gently rolling hills around Atlanta have acquired a new image: a look studded with corporate office parks. No fewer than 82 corporate and industrial parks exist in the metropolitan area, said to be one of the fastest growing in the country. The appearance a year ago of a speculative office building called 1965 The Park after its address was a turning-point of sorts, as developer Johnny Gresham, president of North x Northwest Inc., commissioned a prototypical building that would actually enhance its setting and establish a design standard for future buildings in the park.

Moreover, the developer, in conjunc-

tion with local zoning codes, established for all park buildings a minimum setback of 50 ft, set graphics and landscape standards, and restricted parking to the back of the buildings.

Architects Gray/Durfee & Associates of Atlanta let these requirements and the conditions of the site shape the design solution. The site's incline required a two-level structure, which in turn offered the advantage of at-grade access for each floor. The long driveway to the rear parking lot cut a swath through the yard creating a triangular space in front of the building.

In refining the design, Gray/Durfee created an exterior stairway connection for the two levels, organized the fenestration to emphasize major vistas, and provided a balcony and large overhangs to reduce the mechanical energy demands and protect the façade. Cedar siding was selected to give the building its desired warmth and an environmental blend.

The structure was to be attractive to either a single tenant or a group of tenants. Each floor is planned for flexibility to accommodate a variety of leasing arrangements. As a result of the emphasis placed on design quality (1965 The Park won a recent merit award from the Georgia Association of the AIA), subsequent builders in the park, with one exception, have followed with commendable buildings. PermaGrain acrylic/wood is a uniquely desirable flooring surface. It's the warm natural beauty of fine hardwoods enhanced by the reflective lustre of acrylic plastic.

The durability and ease of maintenance associated with PermaGrain are inherent within the flooring. The color is evenly dispersed throughout the material thereby allowing sanding or other repairs to be made and still maintaining the original selected color.

Its unequaled wear characteristics are achieved by forcing liquid acrylic into the porous wood structure and hardening by gamma irradiation.

Installed in commercial buildings and retail stores throughout the country, its beauty and performance are proven in high traffic areas. It's a flooring that can satisfy the most demanding of clients... giving the same high level of permanent beauty that leading designers and builders have already achieved.

Call us, or write today for our Designer Brochure...it will help you visualize how PermaGrain can work for you.

# PermaGrain Acrylic/wood flooring the hightraffic floor

manufactured for **E.L. Bruce Co. Inc.** Box 16902, Memphis, Tenn. 38116 (901) 332-8071 a Ci Company

PermaGrain is a registered trademark of ARCO Chemical Company Division of AtlanticRichfieldCompany



Kent Memorial Library, Suffield, CT.

Larwin Company, Encino, CA

Burdines, Orlando, FL

In progress



ENTR

MEDIA



FOURNIER

2





3

1 Low profile school-The principal design objective in the Newhallville Middle School, a public facility owned by the City of New Haven, Conn., was to minimize its impact on the parklike 12-acre site. Stull Associates of Boston set out to achieve this goal through massing and materials selection. The building breaks into three segments-"houses"-sloping down towards a neighboring residential section revealing only one and a half of its four levels on that side. A curved canopy further emphasizes the one-story appearance. A light frame and translucent plastic panel skin also help minimize the building's intrusion on the landscape; plastic panels were an effort to make the building vandalproof without resorting to solid walls.

BEAVER PARK LAGOON

2 Galaxy luxury towers-Three octagonal towers containing 1200 luxury apartments are nearing completion on the Hudson River's New Jersey shore opposite Manhattan. The \$75 million project is by Gruzen & Partners, New York; developers are Belfer & Partners and the Prudential Insurance Company. Occupancy of the first tower will be in July. Included in the project is a two-level shopping mall for the town of Guttenberg, a movie theater, bank, retail space, and health facilities including indoor-outdoor pools and outdoor tennis courts. The apartment floors rise over 10 levels of parking; two towers are 43 stories each, and the third has 50 stories. The poured-in-place concrete towers hug the steep, 160-foot Palisades cliff (once considered impossible to build on) and straddle a public road.

3 MARTA station-The first two stations for the Metropolitan Atlanta Rapid Transit Authority (MARTA) have been announced and construction will begin in March on one of them, by Aeck Associates of Atlanta and Reynolds, Smith & Hills of Jacksonville, Fla. Completion is scheduled for May, 1978. The three-level concretestation will serve a 600-foot aerial platform accessible by stairs, escalators, and elevators capable of handling 320 passengers per minute. A wall-size glass mosaic mural by Atlanta artist Athos Menaboni will greet riders as they enter. Included in the parking facilities will be provisions for cars of handicapped drivers, motorcycles, and bicycles. The \$8.5 million Grant Street Station will be located in a light industrial section of the city a mile east of the downtown.

4 Longest pedestrian mall—Completion of 10block-long Mid-America Mall is scheduled for June in downtown Memphis, Tenn. The grand entrance to the mall from the north will open onto a long, tree-lined reflecting pool leading to the Civic Center plaza with its 120-ft-diameter fountain that sends a column of water 60 ft into the air. Each block of the mall will have kiosks and pavilions providing services. A tram will furnish free transportation along the mall, and plenty of sitting areas and covered waiting stations will be provided. Architects are Gassner Nathan Browne of Memphis.

**5 Tulsa's pedestrian mall**—Construction on a \$2.1 million pedestrian mall along two cross streets of downtown Tulsa, Okla., will begin this month and will be completed in late summer. Architects for the project, a total half-mile in length, is Hudgins Thompson, Ball & Associates of Tulsa with Lawrence Halprin & Associates of San Francisco, consultant. A participatory fountain will be located at Fifth and Main streets, the hub of the system. The sequence of park-like spaces will include both relaxing sitting areas and activity spaces connecting office buildings, hotels, government buildings, and stores.

6 Pei's National Gallery wing-Work continues towards a 1977 completion of the \$70 millionplus East Building of the National Gallery of Art, Washington, D.C. Designed by I.M. Pei & Partners, New York, the addition, begun in 1971, is progressing slowly for several reasons-principally because half of its 600,000 sq ft is underground, in fact, beneath the public street that separates the wing from the main gallery. Utilities and traffic had to be re-routed for a twoyear period. This portion of the gallery's expansion, containing a cafeteria, will be ready for public use this spring. The addition itself is two triangular buildings. One is a study center and the other a gallery. The gallery structure contains a main floor exhibit area covered by a glazed space frame. At each point are three, eight-story-high exhibition towers linked at the second and fourth floor levels.

#### 7 Renewal given boost by MARTA station-

Decatur, Ga., participating in the Metropolitan Atlanta Rapid Transit Authority (MARTA) system, decided to use its \$15 million station as a springboard for rejuvenating the city center. A "concept team" of citizenry and professionals devised the basic plan-to convert the roof of the below grade station into a pedestrian malland Stevens & Wilkinson of Atlanta and Edwards & Kelcey of Newark, N.J., translated the plan into design. The result is a 600-ft-long mall in three sections: the westernmost portion, sodded, adds to the lawn of the County Courthouse, a landmark building dominating the center; the middle section runs parallel to existing shops and will have benches and plantings; the east section steps down to a bus dropoff protected by a glazed canopy. Two large murals by Savannah artist Larry Connatser will cover facing walls inside the station, which will be finished in buff-colored brick. Construction will begin early this year, to be finished in 1978.





a the second sec







Construction management will be seen in a different perspective after P/A examines it in the February issue. Although architects have practiced some construction management services for years, they have viewed its emergence as a distinct professional service with the strange mixture of pride, relief, and alarm that accompanies the birth of a child. For construction management is in fact the offspring of the architect, the engineer, and the contractor, and it serves them all by making the construction process more dependable. The architect's role, P/A finds, is strengthened by the use of CM.

#### In this revealing examination, P/A

tells how construction management works today, then describes the operations and outlook of two leading organizations in the CM field, CMA of Houston — a division of CRS and Heery Associates, an arm of Heery & Heery, Atlanta. A rich variety of architectural design in the February issue will include **two past P/A-Award-winning** projects by the firm of MLTW, now ready for review as completed buildings:

The Pembroke College Dormitories, Providence, R.I., were designed under the direction of MLTW partner

**Don Lyndon of Cambridge, Mass.** Singled out for a First Award by the 1970 jury, the buildings break many design precedents, yet do so within the constraints of a very simple structural system.

A house by another MLTW partner, William Turnbull of San Francisco, was completed within a year of receiving an Award in the 1974 P/A Awards program. It is notable for the screening of its complex forms and several porches behind facades of lattice work.

Among the **other lively examples** of current architectural design scheduled for the February issue: the Fireman Training School for the City of New York, by architects **Hardy, Holzman, Pfeiffer Associates;** a science building for Madeira School, by **Arthur Cotton Moore Associates,** which is designed around its solar energy collection system. Interior Architecture for February will cover the exceptional office building designed — down to the last item of furnishing — by Los Angeles architect **Frank Gehry** for the Rouse Company, developers, in their own new town of Columbia, Maryland.

# And coming in the March P/A

a comprehensive discussion and review of **urban housing** and a technical updating on one of the most ancient of building materials — **stone.** 

52

## The 23rd Awards Program

At the end of the second day's deliberations, P/A juries historically have reflected on what they've seen and done for those two days. Sometimes, there are recriminations or deep disagreement; not this year. Sometimes there are clear and explicit trends or specific ideals singled out for comment, if not for awards or citations; again, not this year. It's not that the jurors had no comments, but rather that they chose to agree on a broad spectrum of standards for selection. Their greatest disappointments were in the lack of submissions that could live up to their criteria for defining excellence. Therefore, of the 462 submissions, none stood out clearly as a Top Award. (Not surprisingly, the economy being what it is, submission totals were off considerably from former "fat" years.) Pre-screened by separate parts of the jury-architectural design, planning and urban design, and applied research-projects underwent final deliberation by the entire group on the second day.

#### Architectural design

Always a subject of some discussion, the single family house again sparked the jury's interest. Describing one

group, those presumably inspired by Le Corbusier (or the "whites"), William Turnbull described them as "very, very knowledgeable of historic background, very skillful within very, very limited parameters." While some of the jury's selections also borrow openly from historic precedent, they are generally derived from broader layers of history. The jurors tried doubly hard to find a winner in multi-family housing, pouring over all rejects a second and third time. But none was deemed outstanding enough to justify citing it.

Arthur Moore also pinpointed another major no-show. ''I want to say something about a gap we didn't talk much about before,'' he said. ''Although I feel very good about those we've chosen, if you step back and look, there is something almost shocking about the overall content here. The major thing that's going to happen in cities is commercial and speculative investment development. We found nothing in that. The few submissions we had were inept, obviously indicating that the architects had no actual power or causal role in these things. They were absolutely just fluff; it's really incredible, in the end we have to fight like demons to keep from picking all single-family houses. All



#### Introduction: 23rd Awards Program



that says to me is that the house is the only thing the architect has any power over, any level of control, and in the other cases he is absolutely academic."

Elaborating, Stanley Tigerman agreed with Russ Ellis's statement that the architect doesn't have much power. "It isn't just that the power is being eroded," said Tigerman, "the point is that the erosion is not just from without, but from within, I feel. I think that the architect abdicates very easily. A part of his life is to synthesize, not just to collate, but synthesize—as a reductive process in some ways, as effectuated by some people, which is proper; he tends to abdicate certain roles." Moore continued, "Why does he do that, Stanley? Because he perceives that he has no power, and so he retreates into an ever smaller realm where he can operate. I particularly dislike the notion that architects were set up not to have power. I think that's a great mistake. We use the word "process" all the time, but we do in fact have to find a way in which the designer has more leverage in our society.'

#### Planning and urban design

Comments by the planning and urban design component of the jury took on a similar tone. As Raquel Ramati noted, "The link that you are not finding between the submissions and the more major, complex development is also the link that is missing between major urban design complexes and the architect's role. In a lot of these complexes, the architect doesn't even have any influence. I think it's interesting, too, that architects are not involved in the design of suburbia, or of mobile homes, where most people really are affected. Architecture, I hope, is here to stay, and good architecture should certainly be integrated into all of these tools and methods that we devise as urban designers."

"We had some other problems with our submissions," Donald Appleyard added. "One is that to be a P/A award, it should emphasize either design or visual quality. We got a number of proposals that were competent, and probably very good, plans. But they didn't deal with those qualities, and we ruled them out. That needs to be made clear to those who submitted otherwise good schemes. Another problem relates to social significance, which we did put in as a platform criterion; in fact, it didn't operate very well. We felt all schemes were significant in some way, but it was difficult to tell whether they were going to be acceptable to the community, or realizable by it. I would tend to want some kind of citizens' affidavits on some of these proposals."

#### **Applied research**

Like the other jury segments, the research jury members were disappointed by the lack of depth and quality of their submissions. As Gary Hack put it, "There is nothing in that pile of entries that would cause me to choose anything different than we did, and that is discouraging; I came prepared to see more. But there is a kind of gut feeling that I have about these—an understanding, they stand on their own feet and I feel good about them in that sense." Added Russ Ellis, "I think as a package, they're nice things to present from here as attempts to assemble a lot of scattered information, to make it available, and to draw out the implications for legislation as well as for architectural prac-



tice. They're really quite good. But I looked forward to pouring through a lot of interesting things and to having to struggle over which had merit; there wasn't much of a struggle, there is no greatness in here, no breakthrough.'' "But maybe the solar houses thing is constructive,'' said Hack, "because it says 'look, I can't make inroads on that whole big system out there, but what I can do is offer something in this particular area.' And maybe by offering that, he gains credibility, and gets a chance to do a little bit more.''

Further reflections include a discussion of the relationship between architecture, urban design, and research. It was rather naturally agreed that the ideal would be a total integration of those considerations, but the state of the art seemed to be one of segregation, at least for now. As Ellis put it, "for the time being it's probably more important simply to be giving awards in the different areas and encouraging entries; the next task, however, is to take them out of their separate containers, in effect."

One of the strongest directions, especially with the architectural design segment of the jury, was discussed in terms of past P/A awards programs. As all past juries have noted, numerous entries always reflect past winning "trends" or attempts to guess the current jury's affinities or design "taste." This year, the group was determined not to be influenced by preconception, but to select submissions which represented diversity, poetry and social relevance, whimsy and pragmatism, intellectual statements and good solid workmanlike solutions. And they felt good about it.

#### Jury procedure

For a proper understanding of the results of jury deliberations, a few words on the selection procedure are in order. As the scope of professional concerns has expanded over the years, the P/A Awards jury has evolved from a fivemember panel, reviewing all entries, to an eight-member group, subdivided for the early rounds of judging into three teams, covering the three categories of architectural design, applied research, and urban design/planning.

The jury process this year, as in all recent years, required two full days. After an initial review of procedure, the three teams separated to single out submissions that best met agreed-upon criteria. All submissions were reviewed by members of the assigned teams.

Throughout the judging, entries remained anonymous. While no works by the jurors' own offices may be submitted, it is not unusual for some jurors to be familiar through local press coverage or professional contact—with certain of the entries. In order to ensure anonymity and objectivity, any juror with previous knowledge of an entry under discussion is asked to make that situation clear, without divulging the authorship of the work, so that further comments will be viewed in that light. Any juror who could benefit indirectly from selection of an entry (if it is work by a teaching colleague, for instance, or other work for one of his own clients) is asked to state such a connection and abstain from voting on that entry.

At some point on the second day, the three teams are ready to propose candidates for citations and awards to the jury as a whole—citations recognizing certain outstanding strengths, awards indicating all-round excellence. Only after a full discussion of these candidates does the jury compile the final list of winners. There is a mechanism for voting by the full jury, giving some extra weight to the votes of the assigned team, but formal votes are hardly ever needed. In this year's jury, at least, there were no standoffs, no decisions close enough to demand a count.

The Jury. Architectural Design: Arthur Cotton Moore, AIA, Arthur Cotton Moore Associates, Washington, D.C.; Cesar Pelli, AIA, Partner for Design, Gruen Associates Inc., Los Angeles; Stanley Tigerman, FAIA, Stanley Tigerman & Associates, Chicago; William Turnbull, Jr., AIA, MLTW/Turnbull Associates, San Francisco. Urban Design and Planning: Donald S. Appleyard, Professor of Urban Design, University of California, Berkeley; Raquel Ramati, AIP, Urban Design Group, City Planning Commission, New York. Applied Research: W. Russell Ellis, Associate Professor of Behavioral Sciences in Architecture, University of California, Berkeley; Gary A. Hack, Demonstration Program Coordinator, Central Mortgage and Housing Corporation, Ottawa, Canada, and Assistant Professor of Urban Design (on leave), Massachusetts Institute of Technology, Cambridge.



### Four for all



Stanley Tigerman

In the process of selecting this year's P/A Awards and Citations, the jury revealed some of the basic issues inherent in the conflicting process of making judgments. Juries and jurors are difficult to come to terms with. In past years, some jurors have been subtly subversive, wanting to redefine the whole program before beginning to judge the submissions; others wanted to use the opportunity to make unequivocal value judgments about certain styles of architecture as practiced by their contemporaries. Some jurors have ended up, after heated discussion, on opposite sides of the table, separated by vast ideological gulfs that a five-foot conference table would never bridge; others have been more suavely persuasive; some quietly acquiesce, only to go home and have second thoughts. Some juries agree to disagree, but then no one seems really happy with the compromise in the end.

This year's jury, too, was not without its own particular bias. It seems that if one thing was clear, it was that this jury did not want to stand for any one thing, or single out one direction stylistically or conceptually to uphold as the one and only valid approach. The attitude could be summed up as "fairmindedness"—to recognize the multiplicity of current approaches in the practice of architecture as valid—an attitude that might appear to be the very antithesis of the *raison d'être* of any jury. One very interesting issue emerged concerning the current state of the art and the role of any jury in regard to recognizing "excellence." **Tigerman:** We're going to have a problem with respect to things becoming very similar or reflecting what's current.



Arthur Cotton Moore

We can only be responders to what is presented and what is presented is what we ourselves do as architects. What is presented is responding to what is current. It's a fact; its what's happening.

**Pelli:** We can not superimpose; we can only choose. The only thing is that you hope an architect is doing his job well and, in responding, *transforms* whatever ideas or forms are current. But you don't necessarily need to be adventure-some or eclectic in transforming something. As long as you end up with something fresh, it can still be perfectly safe and secure.

**Turnbull:** It's all right to be safe and secure, as long as the solution represents an insight into the problem at all levels. **Moore:** Yet, in the end, our choices are an invention and we state a position in making those choices.

**Tigerman:** All I'm saying is that there has to be a whole point of view. It doesn't have to be remarkable for itself, but it has to be very competent. People who work in a vernacular trying to refine something are as valid in a certain sense as those who are trying to move on and break through. Personally, I would opt for the breakthrough, but I also find it a perfectly reasonable thing that a man or woman spend a great deal of their time working within a structure, making better the thing that they do.

Yet, in the end, Arthur Moore was right. Their choices did indicate a particular bias. Despite the fact that the influence of the Miesian tradition can be felt in two of the citations, the 'whites' represented by one house but much discussion, eclectic assemblage represented by two different


Cesar Pelli

'vernacular' houses, and various other current idioms represented in the remaining citations, two projects were singled out and accorded a different status. Yet the reasons for such distinctions are not inconsistent with the earlier objectives of the jury. The two projects together represented a total—one dealt with art, the other with a multiplicity of social problems . . . ''the combination of which we would have been happy to find in any one project, and had we, we would have found a first award.''

**Moore:** What we're saying, in effect, is that we will borrow and incorporate . . . a little more poetry in this, a little more practical response in that.

**Pelli:** At least together they both represent some of the fresher, newer, and stronger attitudes that we have toward architecture today.

**Tigerman:** What I find hopeful, in something like the P/A Awards, is the potential of merging, at long last, those very things that become poetry, that transcend the contextual aspects, but never leave them.

**Turnbull:** What we've seen in the last two days is that poetry is coming back. We are looking at more than just the hard, mathematical exercises that a group of East Coast people did. We are looking at more than just problem-solving. It's layers of richness, layers of poetry; it's building and landscape combined.

**Pelli:** Most of the projects we have been looking at deal primarily with elaboration; stylistic attitudes that are highly inbred, primarily by professionals. Only architects know and see many of those inflections and subtle elaborations.



William Turnbull

**Tigerman:** I think that the superimposition of multiple ideas has a kind of richness that is observed by all kinds of lay people. It's a simple question of richness, a question of superimposing more than a single idea shoved down a person's throat, even if it's reductive, sensible, and economic. If it is a single idea, as when the man said 'less is more' (and in his case it really was more because it was thoroughly thought out and complete), it had better be really extraordinary. But whether it's the real world that one inhabits or it's just the world of concepts, it's always a question of style and of how well things are done.

**Pelli:** I agree that it's a matter of style, but what we see in drawings is not necessarily what happens in reality. Certain kinds of designs are extremely appealing in presentation form and there are other types of design that don't communicate necessarily in presentation form, because they are not designs that are charming or that present an intellectual challenge or a visual stimulus in drawing form. Yet the building, in the end, may be much more exciting or may have a more durable appeal."

And so that ever-present conflict showed itself again the drama of poetry and pragmaticism, budget and art, slick presentations and socially relevant content. And these issues were dealt with by four different personalities trying to come to terms with their own ideals and those of the group. Happily, this time, there was no need for one side to win out. If this jury did one thing, it was to clearly point out the weakness inherent in any process of judgment, at the same time that it was able to transcend it.

# Emilio Ambasz



Existing rear façade (above) will become new entrance of museum (below).

A Beaux-Arts courthouse, Grand Rapids, Michigan, will be turned into an arts center as part of downtown renovation.

*Program:* To turn an existing, but vacant, U.S. courthouse building of Beaux-Arts style (1908) into a community arts center. The structure, transferred by the GSA to the city, is part of a larger program to study adaptive re-use of under-used and abandoned buildings nearby. *Site:* One block area on the edge of downtown.

Solution: The entrance, originally on the closed side of the U-shaped plan is reversed to its open side to relate directly to a junior college facing it, and to reinforce the street's role as the edge of the commercial downtown redevelopment area. The entrance will also be independent from the building's other functions (public community spaces and artists studios), while still maintaining the façade's identity as the main gateway for the center's activities. The U-shaped open space is roofed by a translucent inclined plane to permit the museum to have a large unobstructed foyer. This roof actually becomes a large monumental outdoor stairway, by laying fiberglass stairs over a space frame. Water cascades down concave channels in the steps from the top (except for functional stairs), while the entrance opening is carved out of the stairs at the second level. Other museum spaces include auditorium and offices on the second level, rehearsal space third level, and studios on the fourth. Both the permanent and temporary collection exhibit spaces are located on the ground level with studios and art workshops below grade. The use of inclined planes treated differently in texture and appearance, will also serve as a signifying device for other buildings recovered by the community arts center.

*Materials and construction:* Existing building is granite construction, with fiberglass stairs over inclined space frame.

# Jury comments

Pelli: I think it's delightful . . . beautiful. I

wonder if the idea is good in terms of the immediate surroundings.

**Turnbull:** There is only one main idea we see here.

### Moore: It is beautifully done.

**Tigerman:** There are some unanswered questions. It's possible that the submission could be built, but not necessarily come out a definitive design.

Turnbull: It's a very good rehab—bringing back an existing structure in a way that is poetic. I think it's a neat thing, but I think it's a one-idea building. I'm not sure it's all that well worked out in terms of circulation. I'm not sure that the business of the inclined plane is all that good as architecture.

**Moore:** The monumental staircase gets you up to the main auditorium level and that functions perfectly as a main auditorium floor. It's a juxtaposition at a critical point in the building.

**Turnbull:** I wonder how good the light quality is in that public space at the entry. The vehicular circulation is not good. I think it's really a bold idea and that's where its value is-the drama of one plane. Pelli: I must say the drawings are gorgeous, incredibly seductive, and surrealistic. But the stairway, for example, is drawn with clouds reflected in the water, which it will never have, not on a stepped sloping plane. It's a very delicate idea, although very strong. Still, if a high-rise building appeared next to it, or a high pole in front of it, it would destroy the delicacy of the conception. The front of the building did not have a good entrance before. He did many things well, this whole thing could be a really first-class piece of architecture, dealing with issues . . . new versus old, water, movement, people, entrances. This is one idea that does dozens of things, although the details he shows are unconvincing at this scale.

### Credits

Architect: Emilio Ambasz. Consultant: John Zoldos, structural. Renderer: Mark Mack.





# Studio Works

The Southside Settlement, a community facility in Columbus, Ohio, takes its cues from existing wood frame dwellings.

*Program:* A new neighborhood community facility for an existing settlement house in the Reeb-Hosack section of Columbus, Ohio. As an already established social entity within the community, the staff wanted the facility to provide new opportunities, new activities, and new relationships, without rigidly defining them. It wanted to maintain change as a constant to support spontaneous activities and encounters among staff and residents.

Solution: A series of community spaces on the ground floor (gym, theater, day care) linked by a series of "indefinite" places, designed to encourage people to stop, observe, meet, talk, and sit—an attitude that makes much more of circulation than simple coming or going. The second floor has workshops, meeting space, and administrative offices. The building is organized to develop most of the unbuilt-upon portion of the site as outdoor courts directly related to the street or to the interior linkages.

Materials and construction: A system of precast concrete, tilt-up bearing walls with alternating large and small openings. The interior spaces are adapted to specific uses by adding units onto the exterior, similar to the way porches, bay windows, and other eclecticisms modify the surrounding wood frame houses.

# Jury comments

**Turnbull:** The basic organizing system, the parallel wall planes which let everything happen against them, is really very simple, yet very rich. The linear qualities of the geometry reflect and reinforce the existing gridiron of the neighborhood and the city plan. I like the recall of the city streets so that building architecture and city architecture work together. Moore: But at the same time, it also has something of the single-family house scale in the area. I like the linear geometry and the pushing/pulling of the wall plane. **Tigerman:** This project is fascinating, because it is many different things simultaneously. It's not one of those outrageous, single-point-of-view, insistent sort of designs, but rather flexible, sensitive, and sensible; aesthetically a most successful building. It is the only project that is at once mannered in a contemporary, idiomatic language, yet related to people and community problems.

### Credits

Architect: Studio Works, Craig Hodgetts/ Robert Mangurian with Marianne Burkhalter and Thane Roberts. Consultants: Geiger Berger, structural; David Tritt, community liaison. Modelmaker: Staff/Richard Holod. Photographer: David Sagarin. Client: South Side Settlement.





# Arley Rinehart John Wulfmeyer Richard Henry



Willows Child Learning Center, near Denver meets program needs by careful handling of interior and exterior scales.

Program: Design, within a modest budget, an educational environment for 160 children between the ages of 2½ and 5. Site: Sloping 1.56-acre lot surrounded by single-family tract housing, in an expanding residential area of Englewood, Colorado (near Denver).

Solution: In order to reduce the impact of the building on its sloped site, floor and roof structures step down with the terrain, maintaining a less-than-residential profile. Interior volumes are varied by the steppeddown cross section concept, and by orienting partitions diagonally with respect to the structural grid. To further increase the variety and decrease the scale, the interior furnishing modules will provide intimate and active discovery areas. Colored and clear sheet plastic windows in geometric shapes will be located at child level, and lighting color adapters and dimmers will allow for altering moods.

Materials and construction: Built-up roof with special aggregate to harmonize with resawn plywood siding; truss-joist roof structure on glued laminated wood beams and columns. Removable vinyl plastic canopies over exterior educational spaces, supported by colored steel cables; colored and clear sheet plastic windows.

### Jury comments

**Moore:** Very friendly and very nice at two different scales.

**Turnbull:** He tiers the building down the slope, he's broken it down into a number of asymmetrical spaces for various age groups; then he's turned around and built whimsical furniture inside those spaces—that's very nice.

**Pelli:** That curve looks very nice in plan, but start looking at it as an outside wall and it doesn't say much; this other side is rather handsome.

Turnbull: I come at it from a 2- or 3- or 4year-old's point of view, as a kids' space-





the space, light, and structure—it's very good at that. I don't look at it as an object in the landscape, although it handles that aspect very competently.

Ellis: The only concern I have is the severe age grading, the separation, that's a relatively outmoded notion. It's now known fairly definitely that kids learn from each other.

Moore: It's so small and informal that I doubt if it would seem separated.

**Tigerman:** It's not hierarchical; we like the scale of the pieces. They divide the spaces into minor spaces for different activities.

The architects very carefully thought about coming down to little people's size.

#### Credits

Architects: Arley Rinehart, John Wulfmeyer, Richard Henry, Denver.

**Consultants:** Structural, Ron Frickel and John Zielinski of AD&C Group, Inc.; mechanical, J.J. Blank Engineering Co.; electrical, Cox-Gambrell Associates, Inc.

Modelmakers: Rinehart, Wulfmeyer, Henry. Photography: Henry. Clients: Marilyn and Daryl Bivens.

# Robert A.M. Stern and John S. Hagmann

A modern country estate in a suburban setting represents a skillful handling of architectural ideas in its plan.

*Program:* Residence with four master bedrooms, located on one floor with high ceilings, ample natural light, and a modest scale. Two outbuildings, one a three-bedroom gardener's house, the other a greenhouse/utility shed were also requested by client.

Site: Crown of a ridge in a wooded section of Westchester County of over 100 acres. Solution: Two outbuildings are offset on sloping terrain across the entrance drive to form a gateway. The shifting of the axis of the main house away from drive, combined with the curved wall and staggered section of the guest wing, reduce the scale of the house as it is perceived from the drive. Layering of spaces in transverse direction permits great depth while introducing ample light to most spaces. On the garden side, a false wall or sun screen defines the main living "pavilion." The erosion of the basic plan rectangle, the terracing, and the landscaping all combine to minimize the sense of the house's length. Creamy yellow stucco walls, terra cotta trim at roof line, and broad white molding bands around important openings unify the complex. The color scheme also seeks to emphasize distinctions between inside and outside and between wall as enclosure of volume and wall as plane. Materials and construction: Conventional wood frame construction sheathed in stucco, concrete curved screen wall. All exposed podium walls and landscape walls are built with local stone. Terraces and most interior floors are bluestone.

# Jury comments

**Tigerman:** It is a very large house which is successful in its plan quality. It is a very simple building: only the outer skin is inflected or eroded, but it is done very well and is very direct at that level.

**Turnbull:** The house is a very skillful job; the forms and ideas seem acceptable in terms of a house site.

**Tigerman:** This house is most interesting because of its development of certain ideas. There's a little Lutyens there; the architect is taking earlier things and honing them. He's doing extremely well with it. It's quite a good building, a beautiful object. **Moore:** One thing that bothers me about the house is that it is very worked out in





plan-that is, the various levels are all thought out in plan. But the elevation isn't worked out.

**Turnbull:** The elevations don't really tell you anything; they are just colored bands. I wonder how much of this was done from the plan and roof views of the model. We know some of the effects he's created here are going to be very nice. But it's kind of a one-dimensional house. It doesn't have the richness I would like to see in a house of this kind of grandness. The architect has come up with a super plan, but still has to develop an awareness of how to be as skillful in the third dimension. **Moore:** It's a good beginning.

Pelli: I think this should get some kind of recognition, without question. It is very beautiful. I don't get terribly turned on, however, by the enormous contrivances that are required to develop some of the beautiful spaces. I don't have great sympathy for the mannerisms. This project looks on the building process as an extension of cardboard. Sometimes this is O.K., but not completely my bag. But because the architect has taken the edges and shaped them a little, this house is perfectly easy to live in. The architectural impositions are all at the edges. They are not necessarily imposing on the lives of those who will live there. I appreciate that. **Credits** 

Architects: Robert A.M. Stern and John S. Hagmann, principals; Jeremy Lang, associate in charge of site development; Daniel L. Colbert, associate in charge of building design; Robert Buford and Ronne Fisher, senior assistants; Joan Chan, Gregg Gall, Toby Levy, Clifford M. Thacher-Renshaw, and Edmund Stoecklein, assistants.

**Consultants:** Zoldos/Silman, structural engineers; George Langer Associates, mechanical; Carroll Cline, architectural lighting; Wilson Skewes, landscape lighting; Peter Rolland & Associates, landscape architects Daniel Stewart associate in charge of landscaping. **Photography:** Edmund Stoecklein.

# Rodolfo Machado and Jorge Silvetti

The Fountain House, a second residence in Southern California, is a synthesis of a program for living accommodation and water gardens into one single metaphor.

Program: The objectives of both the architects and the client were to develop a design strategy that began with an image rather than with functional programmatic considerations, which would generate a solution that reinforces the artistic nature of architecture. The clients suggested images, such as "grotto," "pavilion," etc., to characterize the type of environment which they envisioned for themselves. The design process allowed the architects to draw on various eclectic fragments in their attempts to synthesize an image. Solution: The fountain house was a natural outgrowth of the couple's desire for shelter as well as outdoor living focusing on the use of water. The house includes a library, music room, master bedroom suite, and living/dining areas. The four-story house both wraps around and under-as well as becoming-the fountain on the back façade. The imagery is at once singular, in the strength of the object in the landscape, and multiple, in the readings derived from the elements composing it. Materials and construction: The main structure is built of concrete. The triangular surfaces of the front façade are glass curtain wall; the back facade is white stucco with black tile trim. The east "cave" is painted yellow; the corresponding west "cave" is painted blue. The interior materials include glass block, marble, white tile and canvas.

# Jury comments

**Turnbull:** Single family houses should embody dreams and desires. The architect had it all going in terms of evocativeness, the capacity to make a building that was a form and a space, to make a landscape. Yet it has nothing to do with people and everything to do with all the component elements of architecture.

**Pelli:** Whatever social awareness or responsibility a man is faced with in a single family house is very small. Yet, if you take it on its own aristocratic terms, the entrance is very poor. He's treated it in a most callous and indifferent way. But the house is tremendously skillful and witty; the drawings are gorgeous. It's dealing with a number of aesthetic issues and putting them all together in a most clever way.

# Credits

Architects: Rodolfo Machado and Jorge Silvetti. Modelmaker: Stephen Wierzbowski. Photographer: Audri Philips.

Renderer: Rodolfo Machado, Jorge Silvetti, Jack Hartley.







5

\*

# Michael Graves



A private house in Fort Wayne, Indiana, is spatially successful although it raises questions concerning past styles.

*Program:* provide private residence for family of five, with separate sleeping quarters for three children, master bedroom, social areas, future guest rooms, outdoor recreational and social areas.

Site: About 40 acres of heavily wooded land ten miles from Fort Wayne, Indiana; house sits on plateau with trees around periphery.

Solution: Design takes cues (for its configuration in the organization of its spaces) from aspects of the natural landscape. For example, the guest room and terrace on the second floor project over the entry in a freeform, cloudlike formation. Within the overall frame, façades vary, relative to sun orientation, entry, and types of procession. General social areas are given south and east orientations. These, in turn, are adjacent to parents' sleeping quarters, with the study as a vertical extension of the living space. Children's bedrooms on the second floor are adjacent to roof terraces and have their own access to ground. Materials and construction: Wood frame with stucco skin; wood and slate floors, plaster partitions on the interior.

# Jury comments

**Turnbull:** This house is more successful than others we've been looking at, in the third dimension, in terms of planned geometries and planned ideas in relationships. These are carried through more clearly in the third dimension. Spatially it is successful. But it is derivative of about a 30-year period from 1920 on, with a set of ideas based on geometric intellectual attitudes existing in Europe then.

**Tigerman:** Despite the fact that it is derivative, done for a certain affluent clientele, it is done with a high level of style, both in its parts and in its totality. **Turnbull:** It (and others we've seen) are very highly skillful within very limited parameters. It's the parameters that I object to. There are layers of historical ideas that Isometric from south elevation

DOD NOVE



West elevation

can carry connotations for us, to make places richer. But some of these architects are working in a very narrow time span, a very narrow vein.

### bey, Robert Carey White, Peter Waldman, Christopher Chimera, Peter Carl, assistants. **Consultants:** Cole Matson & Matott, mechanical.

Modelmaker: Peter Carl, Christopher Chimera. Photography: Laurin McCraken. Clients: Dr. and Mrs. Sanford Snyderman.

# Credits

Architect: Michael Graves, principal; Bruce Ab-





Model showing east elevation



# Caudill Rowlett Scott Burkart, Shropshire, Boots, Reid & Associates, Inc.

Columbus 37 X ESS addition for Indiana Bell Telephone is a design to rehab and add to an existing building, wrapping it skillfully to allow for future expansion.

*Program:* Convert existing mechanical switching facility to expanded electronic switching building, without interrupting service. Provision for future expansion was required, and energy conservation was stressed by the client. As the building is a mechanical, non-people structure, the architects wanted to avoid making it any more obtrusive in the neighborhood than necessary.

Site: Corner lot in existing neighborhood, Columbus, Indiana.

Solution: In order to allow for anticipated expansion and change without loss of material integrity, the older building will be clad in the same bronze reflective glass and stainless steel proposed for addition. Vertical space grid structures on the street sides (east and south) will be plant-covered to shade those façades in summer; the north and west sides face a parking lot and alley respectively. These mid-block elevations are more highly articulated because of their mechanical functional nature. New stair towers extend full height, the framework for future expansion. Materials and construction: Bronze reflective glass, stainless steel, colored steel, and vertical space grid are the major exterior materials.

### Jury comments

**Tigerman:** When I first looked at it, I thought it was a tour de force—and it is it's slick, but it's done so well, and it handles its entry so well.

**Turnbull:** Looking at it really carefully, I think his scale is off; the big walls outside are up as high as the roof, and yet he's in next to one-story stuff. He hasn't understood scale, but he has understood integration of landscape, rehab, and color.

**Moore:** This is mainly a camouflage job for a street corner, a very nice piece of camouflage for an obnoxious element in a basically residential neighborhood. Are they really convinced that the vertical trellis will do what they think it will?

**Pelli:** Camouflage implies that all one does is hide, and it is not a positive value of its own, but this is positive. In that climate, the trellis should be easy to make work.





### Credits

Architects: Caudill Rowlett Scott, Los Angeles; associated architects Burkart, Shropshire, Boots, Reid & Associates, Inc., Indianapolis. For CRS, Paul Kennon, design director; Jay S. Bauer, project designer; Truitt B. Garrison, executive project manager. For BSBR, Max D. Boots, partner-in-charge; James F. Smith, project architect.

Consultants: Structural, Robert Crooks; mechanical, electrical, and plumbing, CRS with M & E Engineering Services; landscape architects, Dan Kiley & Partners. Model and renderings: Caudill Rowlett Scott. Photographs: Richard Koch.

Client: Indiana Bell Telephone Co., Indianapolis.

# Craig Ellwood Associates



# California, a Miesian expression in steel and glass, bridges 192 ft over a ravine.

Program: Craig Ellwood, always guaranteeing a client's budget, promised to build the 165,000-sq-ft Art Center for \$6.5 million, and although the economy underwent above-normal inflation since design commenced five years ago, the building, at \$30 per sq ft, is within its budget-well below the cost for comparable state university facilities on level sites.

Site: A steeply folded Pasadena hillside with ridges and a canyon.

Solution: A stepped-down, multi-level building was ruled out because the ratio of corridor to work area was unrealistic, expensive, difficult to service, and hindered communication. The dictated solution of bridging the canyon was not a goal in itself, although Ellwood has designed a number of exposed truss buildings over the past 20 years. The school, under construction, is in three portions: adminis-

Art Center College of Design, Pasadena, trative offices and the library are in the 192-ft bridge section; the north and south wings contain classrooms, studios, and a cafeteria. The main entrance and an open atrium are the south wing. Planned for the future is a 144-sq-ft "habitat" addition at the extreme south for student work cubicles

Materials and construction: Exposed steel truss with opaque gray insulated panels and matching glass set into the frame.

### Jury comments

Pelli: I think it's straight Mies, well-done. Tigerman: I think it's beautifully done. In terms of organization it smacks of the megastructure-but I think you have to look for the kinds of environments it creates. Pelli: It's a creditable design working within a very restrictive system. Within the context of all the projects we've seen, it's worthwhile keeping, because all of the others are so inflected, which I find tiring. There's not a single curve, or angle, or 45 degree, or slant.

Turnbull: But it's an art school, right? And

it seems a rigid or imposed answer. Tigerman: They're remodeling Crown Hall becauseitdoesn'tworkandneverdid, inthat sense. I really don't agree with you. As a serious alternative-part of the entire milieu of what is contemporary-it's important because it's handled with a great deal of style

Turnbull: In terms of the man's understanding his problem-he's got the building oriented east-west, and that means it's going to get a lot of hot light.

Moore: What's nice is it's straight Miesian, and then it's a bridge, and it's very clear.

#### Credits

Architect: Craig Ellwood Associates, Los Angeles; James Tyler, design associate; Stephen Woolley, project architect.

Consultants: Norman Epstein, structural, Eli Silon & Associates, mechanical/electrical; Alfred Caldwell/Erik Katzmaier, landscape; Craig Ellwood Associates, interior design.

Renderer: Carlos Diniz Associates.

Client: Art Center College of Design, Los Angeles, Calif.

# Ron Filson The Urban Innovations Group

Drive-in cabin for a 1973 Dodge van lets an active family 'plug in' for extended camp trips in the Tehachapi Mountains.

Program: Design a permanent structure to replace the "tents, tarps, shelters, camp stove, etc." required for yearly two-month stays. Enough space for up to two visiting families was required, as were shower, toilet, lighting, and kitchen facilities. *Site:* Isolated land in California's Tehachapi Mountains.

Solution: The concept centers on a standard truss-joist roof structure on four columns, on which are hinged tilt-up plywood "walls." Closed, the space is only 160 sq ft, but with walls in the open position, a 600-sq-ft area is sheltered. A nylon mesh may be attached with Velcro fasteners for dust and insect protection. The roof supports cylindrical solar collectors for water heating, hot and cold water tanks, and wind rotors generating low voltage electricity and water pumping. The bath, permanently enclosed, contains a Clivus Multrum composting toilet, a sink, and a shower. When the van is shrouded by a standard loading dock enclosure, it acts as the kitchen.

Materials and construction: Wood trussjoists, wood columns, concrete floor, standard sliding barn door (bath), plywood tiltup walls. nylon mesh screening, rooftop solar collectors, water tanks, and rotors.

### Jury comments

**Moore:** I find the main thing in this scheme is the single piece of cleverness in those plywood walls coming down and closing it off. A very simple problem with a certain richness.

**Pelli:** What I like about this is that it is done as an extra ordinarily light, simple, delightful statement. It's a house I can think of as architecture or I can just use it as a shelter. It doesn't expect you to think "Ah, I'm going into a piece of architecture" every time you come in. That kind of very light comfortable feeling is just what one wants in that type of thing. Also, I have no question that this can be built to achieve all the things he wants to achieve.

**Tigerman:** This was, in fact, a unique idea, an individual, separate and distinct idea, more involved with shelter design and industrialization—off-the-shelf items.

# Credits

Architects, model, and photographs: Ron Filson, The Urban Innovations Group (UCLA), Los Angeles; assistants, Phil Hawkins, David Weaver.

Client: Mr. and Mrs. Brad Nichols.





# Hammond Beeby and Associates









# Champaign, Illinois Public Library, with drive-in circulation 'teller,' is to be built of an industrialized panel system.

Program: Library with an unusually active children's section in a university town needed a facility with a community assembly hall, audio-visual equipment circulation, and drive-in checkout area. Site: Block-long strip between two traffic arteries in a mixed residential-commercial neighborhood of Champaign, Illinois. Solution: A linear structure rising at one section to two stories. West elevation is low to blend with residential scale. South elevation has high-placed windows and walled courtyard to maintain privacy of nearby homes.

Materials and construction: Factory-built system of 21-ft square bays, corrugated metal deck, and insulated porcelain enamel wall panels ranging from white to gray. Staircase and assembly hall clad in natural finish corrugated aluminum.

# Jury comments

Tigerman: It's an absolutely beautiful building

Pelli: It looks like a pragmatic kind of problem: using industrial materials not because of the aesthetic and economic value but because they are useful on every level. .... It's a handsome solution to the problem. Turnbull: One of the things that's bugging me is that a public building really should be more than super-good, technically wellexecuted. This reading room really is not that pleasant a space to be in. The guy is a good craftsman but, one has to be a really good intellectual craftsman. Resources are well-utilized, and it's very good technically, but I don't think the site is used well. Pelli: To me this deals with something that is important: the correct, intelligent, responsible use of resources, which very few projects here have dealt with. Moore: I think there is a serious barrier in this site plan. The building is not welcome to the public, tends to communicate an institutional image, and is not a friendly addition to the neighborhood. It's all right to use industrial elements, but you don't have to come out with an industrial work. Tigerman: What is important is that it rep-

resents a kind of seriousness-a serious attitude-which would be so welcome, in my judgment, in the P/A Awards.

# Credits

Architects: Hammond Beeby & Associates, Chicago; Kirsten P. Beeby, Thomas H. Beeby, Harry B. Burroughs, John J. Ekholm, James W. Hammond, Carl R. Hoglund, Ronald E. Krueck, Cora S. O'Fallon, Keith R. Olsen, design team. Consultants: Gullaksen and Getty, structural; Environmental Systems Design, mechanical and electrical; Hammond Beeby & Associates, landscape; Hanscomb Associates, construction cost estimating; Irving D. Schwartz, interior design. Modelmaker: Christopher Rudolph and Steven O'Malley.

Photographer: Ruyell Ho. Client: Champaign Public Library. Urban design and planning

# Making things real



Donald Appleyard

After Donald Appleyard and Raquel Ramati spent most of one day looking over the 61 entries submitted to the urban design and planning category, they felt it was necessary to summarize their feelings about what had been seen and to formulate some criteria that could guide them in selecting the projects that would finally be awarded. Paramount in their considerations was that schemes must be real, meaning that they must be realizable not only in physical terms, but specifically in physical terms as they are modified and conditioned by the economic and social realities of today. In the discussions that followed, the criteria the jurors outlined could be seen as a set of valuable guidelines for judging not only submissions for the P/A design awards, but for appraising any urban design or planning proposal.

**Appleyard:** The situation is so variable today that on one hand you have many apparently costly new developments that in fact may be built, and on the other hand you have the cities that are in a very low cost situation, so we have to make some judgment of whether a project is a realistic in-



Raquel Ramati

terpretation for its situation.

**Ramati:** I think we have a very picturesque way of looking at cities, in terms of urban design approaches. Few of the projects here really take a very long-range look at what the cities should be like in 20 years. Rather than subjective design proposals, I think there are several elements in a city that should be related to each other, to the physical, social, and economic aspects. In the case of existing cities, the existing development must be considered; as in the case of environmental projects, the ecological problems must be realized. In each situation the elements have to be tied together and looked at. We can't have subjective daydreams. It's the quality of the analysis that interrelates certain elements to make an urban design scheme or planning scheme rational within its context.

**Appleyard:** Yes, I agree that the quality criteria is important, and so is another criteria—the ability to grasp the analysis in some way to produce a clear set of policies. **Ramati:** In other words, the assumption behind the projects is also very important. Before all the analysis is done, one must make certain assumptions about the urban design alternatives, so it's the assumption and the analysis we're talking about.

**Appleyard:** Yes, depth of analysis by itself isn't enough. In some projects reams of work has been done but it hasn't been brought together in a clear way.

**Ramati:** There has to be a concept behind the project. It can't be just analysis. It has to have a combination of analyses to understand the problem, and the concept to tie it all together.

Appleyard: And another very important criterion is that it has to be comprehensible to the public, in a simple way. Ramati: Both in visual and written terms, I think that today urban design has to have a language that is comprehensible to everyone. Unlike the architect, who usually has one client to sit down with and discuss a building, in urban design and planning you deal with a major variety of disciplines and people, from the very simple person to the very complex. Therefore, your language has to be such that it's absolutely comprehensible. But we still haven't covered the point I want to make, which is the question of linkage of the various elements in the general concept. I see both planning and urban design as tied to other things, and analysis is part of it. For instance, if you have a scheme for a downtown area that doesn't analyze the adjoining situations in mass transit, quality of air, etc., then it doesn't form the linkages I'm talking about; if it doesn't tie with all the aspects of the environment around it, even though it may be very high in terms of design, then it isn't my idea of what urban design and planning are about. However, I feel that quality of design is very important. If a scheme meets all the criteria we've talked about and still looks terrible, doesn't elevate the spirit or add to the aesthetic quality of the area, then it's still poor. One of the problems today is that architectural quality has been too much eliminated from planning. A planning or urban design proposal should be flexible enough to allow architectural quality to occur, it should encourage better architecture, it should not constrain the architect from developing an architectural solution. An urban design scheme has to go from the very general to the very specific, but in order for it to convince me, it has to be flexible enough to allow for many different architectural

alternatives within its context.

**Appleyard:** I would agree. A scheme should not pretend to architecture; there should be looseness, a flexibility that means the scheme can't be destroyed by the details. **Ramati:** The appearance of the total quality of the environment is important. Urban design is a combination of architecture and planning, and you can't lose sight of the quality of the design because you're searching for the largest scale. Urban design must create a framework for better quality of the environment, and it has not tended to do this for the last few years. The anti-architecture attitude is very dangerous. Architecture cannot solve the urban problems, but I think the urban problems without architecture are as much of a problem.

**Appleyard:** Qualities like integration, simplicity, scale, and variety are all important qualities. But I would add another: care. That's a major problem because there often isn't much care, much concern with the social impact. I would give more credit to schemes that have wide positive social impact, that would appear to be of social benefit to more groups, that would serve a wide range of people. I think the social issue is very important because it is the one that is usually more neglected. The tendency in many cases is to neglect certain groups . . . to forget children, forget the low income people, forget the handicapped.

**Ramati:** I would certainly agree that encouraging uses that serve a wide range of people are more significant than those that serve a narrow range. The urban design should allow social interaction to occur, but I don't think it can force it. There is another important aspect, though, and that is energy conservation. An urban design scheme should encourage the maximum use of the infra-structure. Most downtown areas, for instance, are dead for 12 hours a day. They have proven themselves to be problems because they don't use the existing infra-structures. A final point I would add would be that a scheme should also show attention to questions of preservation and conservation of existing qualities.

**Appleyard:** Finally, I would add innovation. I think that should be a very important criterion, because if there is a project in urban design which we've seen a thousand times before, then I don't think it deserves an award; we should not look just for a good solution to an old problem.

# William Fain, Jr.

# The proposal for the Tremont Street Special District in downtown Boston recognizes that days of urban renewal are gone, and that public pressures and economic uncertainties will have to be reckoned with in the future.

Program: For the past two years, the Boston Redevelopment Authority (BRA) has been closing out its urban renewal projects, responding to change in the federal funding priorities from the categorical grant programs of the 1960s and early 1970s to the new Community Development Block Grants, which will bring to Boston one-ninth of previous years' funding. A major concern of the BRA, therefore, is how planning is to be administered and development managed in the future without the economic leverage of urban renewal. Primary among the consultant's tasks was to show the BRA how new strategies, using a variety of implementation tools and benefiting from available resources, could be written into public policy. Another task was to identify the community of the Tremont District and to provide a means through which it could participate in the planning and development process. A third concern deals with the sensitive problem of development interest and planning interest-the concern that developers be made accountable for trade-offs between public goods and private costs.

Site: Tremont District incorporates the major retail core of Boston. It is situated at the city's most accessible location, surrounded by six subway stations. The District is high in amenities, with direct view and access to Boston Common and several notable landmarks. The area has remained relatively untouched in recent years, despite rapid redevelopment of many sites in the nearby financial district. Recently announced developments immediately adjacent to the District have increased land speculation and the possibility of new development.

Solution: This planning proposal builds on public policy experience in San Francisco, and the special district approach pioneered in New York City. In addition, this



paramount. As the District ownership patterns are not aggregated ones, an incremental approach to redevelopment through zoning processes is used, enabling the small property owner as well as large development interests to participate. This proposal is an outgrowth of the consultant's studies for Boston's new Downtown Plan, scheduled for publication later this year.

### Jury comments

Ramati: This is one of the best pieces of



TREMONT STREET SPECIAL DISTRICT

5

IRST PRIORITY BUILDING

THROUGH BLOCK ARCADE PREFERRED ALIGNMENT

SPECIAL PROJECT



work I've seen in terms of developing a downtown area and implementing the plan all the way from the very general aspects and concepts to the very specific. It has some new ideas in terms of implementation. Instead of developing everything on the basis of floor-area ratios, they use tax bonuses for incentive development; they use development funds to extract money from the developer to improve a certain street . . . they specify which street, which improvements, how much they cost. The plan integrates residential areas in the downtown area; it puts emphasis on the conservation of buildings, in fact, it goes into detail on the differentiation between retention of buildings and the rehabilitation of the buildings, and the areas where these buildings exist. The plan puts priority on pedestrian circulation by widening corners and allocating certain areas for pedestrians; it closes streets to allow only services at certain areas. It is a plan that uses existing concepts in an excellent, comprehensive, and most professional way.

# Credits:

Architect: William Fain, Jr., Boston, Mass. Client team: Stuart Forbes, Richard Joslin, project review; William Bittinger, Lowell Richards, Carol Warren, concept team; John Sloan, community liaison.

**Consultants:** Stephen L. Quick, Michael Pittas, advisors; Lowell Richards, legal; Deborah Gott-Lin, building conservation.

Graphics, photography: Paul Kelly, Carla Schrage.

Client: Boston Redevelopment Authority, Boston, Mass.

# Roy Mann Associates, Inc.,

Shoreline Appearance and Design: A Planning Handbook develops and recommends management procedures for protecting and enhancing some 200 "shorescapes" of Long Island Sound.

Program: The Shoreline Appearance and Design Planning Handbook is one of ten management planning elements prepared for the Long Island Sound Study—a federal-state-regional comprehensive planning effort—for the Connecticut and New York shorelands and waters of the Sound. The key purpose of the Handbook is to develop and recommend management procedures for protecting and enhancing the scenic values of the Sound environment and to increase opportunities for people to enjoy physical and visual contact with the Sound and its shores.

Site: Long Island Sound, Connecticut, New York.

Solution: The Handbook provides background information on the region's scenic resource base and on the specific characteristics of each of its almost 200 shorescape units. The Handbook provides guidance for both regional and local decisions involving location of new development, protection of areas of special scenic concern, and other resource planning. In addition, it provides guidelines for local planners and developers in site planning and design of new development, and it presents alternative management and implementation tools for use at the state, subregional, and local levels.

# Jury comments

Appleyard: This is a comprehensive handbook on how to evaluate landscape, on the visual quality of the shoreline, on what the visual problems are of a whole coastline, and on what kinds of issues arise when you put a number of different kinds of urban facilities along a shoreline. Here they've developed a set of criteria for visual quality that is graphically and conceptually a very clear document. While they're dealing with a very large area of land, they manage to get down to the little landscape



Shorescape Types and Site Controls

Connecticut

The North For

Stra

Lloyds Neck Eatons Neck

# Townscape Types and Site Controls





CROSS SECTION OF LONG ISLAND SOUND COASTAL ZONE SHOWING POINTS OF AESTHETIC IMPORTANCE.



units and to identify some of the major problems and major assets that each has. They have a very clear set of steps by which they analyze and develop their criteria, evaluations, and policy recommendations. The criteria can be debated, but at least they're out in the open so they can be discussed. This is innovative, and it certainly represents a new field of planning that is coming up more and more. *Ramati:* One of the strengths of this project is the very original aspect of the specific details, of, for instance, how a water tank looks from a certain view. The guidelines they give could be a base for a waterfront community to relate to, they could be implemented on several levels, and they could be a strong handle for people who want to keep their waterfront from being developed.

# Credits

Landscape architects: Roy Mann Associates, Inc. Cambridge, Mass., landscape architects and environmental planners; Roy Mann, project director; Jane Algmin, project coordinator; Robert Sabbatini, graphics and production coordination; Peter D. C. Thomas, sketches. Clients: New England River Basins Commission, National Park Service.

# Barton-Aschman Associates, Inc.

Development program for downtown Lincoln, Nebraska, involves intense citizen participation and discourages the development of outlying areas.

Program: The Lincoln Center Development Program proposes an overall strategy for programming, financing, implementing new development, and strengthening local management capabilities. The planning framework has been adopted by the City Council and is now being used to coordinate all new downtown improvements. *Site:* The 80-block area of Lincoln, Nebraska, that contains the retail core, financial district, University of Nebraska, and the centers of state, county, and local government.

Solution: A planning systems framework establishes performance standards and criteria for crucial aspects of the downtown; it provides guidelines for detailed project design and establishes ground rules by which designers and developers may operate. An overall strategy for programming and implementing development provides the community with a detailed plan of action for achieving the objectives of the planning framework. The management system guidelines for coordinating new development identifies key linkages between projects, determines sequential relationships, and establishes guidelines for directing project implementation. Throughout the process, the community participated in a series of work sessions to define goals and principles used to guide planning decisions. The community has agreed on an overall organizing concept for the downtown area which does not end with a physical plan, but includes a de-

tailed strategy for organizing, programming, scheduling, managing, and implementing new downtown development.

# Jury comments

Ramati: This is a very excellent urban design planning proposal. It takes the various opportunities, the existing and proposed construction, and develops a plan framework with the participation of citizens. Its interest is that it deals with issues like highways and parking, issues that are what most of the cities in the United States are really interested in. It presents these issues to the people and the agencies involved through a series of work papers which I find excellent. The work papers provide various design techniques, discuss and question them, and then develops various alternatives. My criticism of this plan is that it looks like a variety of actions that are overlays on top of each other; you don't look at the plan and really sense what the town is like, what they are



1. development districts



. vehicular circulation and parking



3. pedestrian pathway and open space



4. landscaping and lighting





attempting to accomplish; in other words, you don't really see very clearly what might happen, they only show you guidelines. However, I think a town like Lincoln should be congratulated for this amount of work, thought, and innovative ideas. These are guidelines which would allow architecture to occur.



### Credits

Planners: Barton-Aschman Associates, Inc., Evanston, III.; Robert B. Teska, project administrator; John H. Lockner, project director; Thomas O. Payne, project planner/designer. Economic consultant: Hammer, Siler, George. Client: Downtown Advisory Committee, Lincoln, Nebraska.

# Public Policy Research Associates, Inc. and The ELS Design Group



The Transportation Action Kit: A Layperson's Guide to Transportation Planning helps citizens identify and solve transportation problems.

Program: The Transportation Action Kit grew out of a concern in California for making local communities an integral part of the planning process. The regional transportation plans now being assembled there will become the basis of a state plan, and this Kit is intended to help communities sort out their priorities. *Solution:* The Kit begins with an introductory flier that presents a problem-solving process geared to the needs of citizens; it then spells out steps and roles that are typical in solving any problem. The heart of the Kit is a set of fliers that focus on six problem areas. Each follows the same format: the problem area and some facet of the problem are identified, issues are raised and alternatives looked at, and then the reader is presented with a problem exercise or puzzle. Finally, the Kit includes a Guide to Resources which gives more detailed information on each problem. The Kit is flexible so that any combination of fliers can be used, depending upon need.

# Jury comments

Ramati: I think we need the language of translating urban design problems and concepts to people who are not architectural planners, and in this sense, what this Kit tries to do, it does very well. It's innovative, very aesthetically done, and also very comprehensible . . . it's very coherent in how you approach an urban problem if you actually want to explain the issues you are presenting.

Appleyard: It's innovative in that it's trying to get people involved in the planning process. Graphically, it appears to be one of the clearest community participation publications I have seen, and yet it's very simple. The Kit gets a lot of things over, it's interesting and well laid out, and it appears to be something people would in fact be willing to read, and perhaps act upon.

### Credits

Architects: Public Policy Research Associates and The ELS Design Group, Berkeley, Calif.; Carolyn Fratessa (PPRA) and Donn Logan (ELS), principals-in-charge; Robert Grether (ELS), project designer. Client: California State Assembly.

# August Perez and Associates

# Piazza d'Italia in New Orleans reuses old commercial structures to commemorate achievements of the Italian community.

*Program:* The Italian community in New Orleans and the rest of Louisiana wanted a place of memorial to its achievements in this country. The facility includes space for meetings, social events, and outdoor gatherings, as well as offices, restaurants, and shops.

Site: The Piazza is located in some 19th-Century commercial buildings in downtown New Orleans. Its main entrance is on Poydras Street, which is currently being renewed, and which extends from the Superdome to the new River Center development now under construction. Solution: As part of the Povdras Street renovation, the city was encouraging the reuse of old commercial buildings located there. The Italian Community and the city worked together on the programming, financing, and economic organization of Piazza d'Italia. The Piazza includes most of a city block of handsome, low-scale, noncontiguous buildings. One major corner, which is excluded from the project, houses a modern, 22-story office building. In form and texture, the Piazza acknowledges both the older low-scale buildings nearby and the new high-rise structures (which represent a scale that is becoming dominant on Poydras Street, and whose occupants will become important users of the Piazza's amenities). Existing buildings will be shored, with their façades left much as they are; new portions will have steel structure and brick veneer or stucco exteriors. For the architects, an important part of the Italian-American tradition is a feeling for grand gestures, love of magnificence, real or imagined. In this spirit, the St. Joseph Fountain is created in the center of the Piazza. It is enclosed by a radial order of new construction, and occupies land where the backs of older buildings, which were recently lost in a fire, once stood.

# Jury comments

Ramati: It tries to relate the old and the new, but the submission doesn't tell you how they do it.

Pelli: In terms of its context, I wonder if that plaza would be any good there. You have this gigantic scale, but you really don't have a feeling of what the buildings are going to do for it. A project like this probably can't be judged until after it's built; if people use it, it's good, if they don't, forget it.

Ramati: I don't know anything about Little Italy in New Orleans, but in Little Italy in New York they would love this. Although I'm not crazy about the way it's imple-



Peristyle surrounding fountain.



mented, I like the concept, it is very imaginative and worth citing.

**Appleyard:** It's different from all the other projects we've seen in urban design in that it's specific, and I like it because of that. It's also innovative; I haven't seen anything quite like it before.

### Credits:

Architects: August Perez & Associates, New Orleans, La.; R. Allen Eskew and Malcolm Heard, project designers. **Consultants:** Morphy, Makofsky and Masson, structural; Gary Gamble and Associates, mechanical/electrical; Charles Caplinger Planners, landscape architect; Charles W. Moore of Charles W. Moore & Associates, fountain design; Urban Innovations Group (UCLA), Ron Filson, project coordinator, Marty Schwartz, assistant.

# Modelmaker: APA Models.

Model photographer: Frank Lotz Miller. Client: Office of Mayor Moon Landrieu, New Orleans, La.



# Architects who clash by night



Gary Hack



Russell Ellis

The face of applied research in architecture today wears at best a tight-lipped smile. Or so say this year's P/A jurors for applied research, W. Russell Ellis and Gary Hack. On the one hand, the state of the art is poised on the plateau of its learning curve, consolidating and evaluating itself for the next big thrust. On the other, the finest fruits of that labor lie in shambles, unwanted and ignored by the very people they were to nurture.

Researchers like Clare Cooper Marcus, John Zeisel, Ellis, Hack, and others have had the skills, time, facilities, and dollars to produce scores of academic housing studies. Their effect to date on the market at large, or even the design fraternity? Nil. Perhaps only government could drive their findings through the thick skin of habit and the "success formulas" of housing, through financial incentives or legal qualifications, the jurors felt.

They also found P/A's entries rather depressing. The work was solid, they conceded. But they saw nothing in any of the submissions to change the way research is conducted. Where were the inspirations, special discoveries, or new techniques? was their rhetorical question.

While no entry bore such distinction, five were judged substantial enough to win commendations. Two received awards, a study of solar energy as adapted to the mass market housing vernacular in New England, by Massdesign, Cambridge, Mass., and another concerned with the design and function of open spaces around schools, by James Batchelor and Deana Rhodeside, Cambridge, Mass. Three "handbooks" were accorded citations, including one on the physical and societal implications of school property damage, by John Zeisel and Andrew Seidel, Architecture Research Office, Harvard University, Cambridge, Mass., a procedural analysis and workbook of how to plan, build, and operate a health maintenance organization, by Westermann/Miller/Associates, New York, N.Y., and a designer's guide to implementation of the Michigan Soil Erosion and Sedimentation Control Act of 1972, by Beckett Jackson Raeder Inc., Ann Arbor, Mich.

# **Fumbling for matches**

Architects who undertake applied research are not alone in their predicament. The jurors described the social science community as locked in its own rigid protocol too. Pure theoretical work is appropriate to the academic mien. It is fine for scholars—unintelligible to designers, whose needs are largely on an applied level. Ellis and Hack felt the professional researchers need a way to "break through" this conceptual barrier.

And what's on the other side? The jurors believed strongly in what constitutes "good" applied research. Most importantly, it is a project whose "linkage" or modus operandi is continuously apparent and highly visible. A report is only as useful as its means are replicable. Another field worker should be able to trace and duplicate its results. Obviously, brilliant results alone are not sufficient.

Field observations were judged essential to good research. Anyone can create intellectual categories that oversimplify or complicate a subject matter. The danger of armchair sociology is that policy makers crave these orderly sets of recommendations and easy truths, and the jurors detected this tendency in a number of submissions.

Good research is also bolstered by graphic exploration

since social science concepts are extremely difficult to transfer to architecture. As to whether glossy graphic packaging or excruciatingly homespun scrawls were the greater evil, the jurors could not say. Either excess was seen to create a palpable distance between the report and its readers.

Too many of this year's entries were not applied research at all, in the jurors' minds. Results without means, bibliographies that compile facts without generating new knowledge, "how to" manuals, and traditional architectural program writing were not considered eligible. There were a discouraging number of "lists" that recited pertinent facts to a problem as quickly as possible, and then leaped blithely to an astonishing graphic conclusion. This was interpreted as standard architectural presentation in fancy dress.

**Ellis:** I'd like to see more comprehensiveness in applied research. A researcher should be able to take his material to its proper end product: a practical outcome, new idea, new form, or new design. And there should be reference to past literature and accomplishments. Or maybe there's no supportive community in research, and we're talking to ourselves.

**Hack:** In good applied research, the researcher correctly perceives the leverage he can get out of doing the work. He must perceive his proper audience and tailor his work to it. His writing should be appropriate to the culture of research. The methodology should be replicable; it can be built upon only if it informs others of its means. Without a sense of process, we must reinvent the wheel. The trouble in research is that there's so little accumulation: just shots in the dark.

**Ellis:** "Methodology" is an overworked term which excites notions of numbers and postures in the research world. Every field has data gathering devices. But why focus on these numbers? We see process short-circuited anyway. There's no continuity from problem statement to conclusion. We are cut off from participation and development. **Hack:** It might be better to open a small window on a big world instead. Take a small problem and give a fine, full answer. The continuing incompleteness in these reports could mean trouble for research.

# Massdesign Architects and Planners Inc.

Solar Heated Houses for New England tests the feasibility of solar energy for regional traditional housing prototypes.

There was nothing like this on Judge Hawthorne's roof. However, it appears homeowners in New England will have solar collectors some day. Space heating and domestic hot water can already be delivered at competitive prices in the region by present day solar equipment integrated into traditional mass market single-family housing prototypes. So concludes Massdesign in its study for the American Institute of Architects AIA Research Corporation and its clients, the Dept. of Housing and Urban Development and the National Bureau of Standards.

Solar energy for frugal, conservative, overcast New England? The question is approached with deliberate care. Public skepticism to the contrary, the case seems very convincing.

The investigation focuses on nine 11/2story configurations based on "Capes," "Saltboxes," and "Townhouses" using standard heating elements or solar heating systems meeting approximately 20, 40, 60, and 100 percent of the required heating load. Three solar systems are tested: solar heated water, solar forced air, and "passive" systems of insolation and storage. There are construction variables as well, that distinguish one house from another: floor plans, dimensions, elevations, foundations, building materials such as insulation, glazing, and weatherstripping, thermal characteristics, and thermal performance.

Computer models simulate the thermal behavior of each configuration over a oneyear period using 1958 weather data recorded at Blue Hill Observatory, Mass. Critical parameters such as amount of insolation on building surfaces of varying attitude, mean ambient temperature, and window and collector areas are gauged to determine the units of thermal energy each configuration has available for internal use. A cost analysis then identifies and compares traditional energy costs against solar equivalents. A bibliography, particulars of the computer program, and other technical materials supplement the principal findings of the research.

Complete reliance on solar energy is not recommended at this time. Nor is solar heating less costly than fossil fuel heating at today's prices. However, solar houses demand relatively few design changes from the usual manner of residential construction. They can be built for the mass market when standards of comfort, heat











Solar Saltbox

Solar Townhouse



loss estimation, climatic data, and of course, the cost of tomorrow's fossil fuel are more certain in the author's mind—or anyone else's.

# Jury comments

Ellis: I think this is an interesting piece of work because these guys decided not to mess with the enormous system that delivers spec housing the way it is. Instead, they decided to take typical housing types and look carefully at the possibility of integrating solar collectors into them. So the designs they produced look like Cape Cod houses. And the technical work that went into them is the solid, professional compilation of materials that are seen in a decent research model.

Hack: This study doesn't presume to design. It simply sets out a range of very circumscribed alternatives. To me, it is a fine example of applied research, starting with a problem, moving through existing research, stating a new problem based on what's known, and then introducing a set of alternatives. As this problem is faced by architects, they often immediately try to transcend it and make designs out of it. They fail because there isn't the body of data. Having this in hand, somebody might build that next step.

# Credits

Architects: Massdesign Architects and Planners Inc., Cambridge, Mass. Hugh Russell, Gordon Tully, Tudor Ingersoll, Ralph Bennett, principals in charge.

**Consultants:** William Shurcliff, solar heating; Robert Ivano, computer program. **Client:** AIA Research Corporation, Washington, D.C.



# James P. Batchelor and Deana Rhodeside

From Recess to Hang-out. The Design of Open Space Opportunities. The authors find each type of outdoor space has its own special potential for use and abuse.

"Meet you behind the school building!" Many of us can recall certain moments in our education that took place *outside* the school building. Some were happy, some were not. But even as children we sensed those open spaces on the campus that were safe to occupy. And we face them again as parents, teachers, and neighbors.

Boston commissioned a series of innovative community schools designed to enrich the lives of the children and adults in their locales. A diversity of outdoor spaces, some integral with the school site, others in existing playgrounds adjacent to the building and operated by other city agencies, were designed to complement the formal goals of the educators. To evaluate how effectively the design exploited these scarce resources, the Boston Public Facilities Dept. asked Batchelor and Rhodeside to analyze the activities around seven community schools and to recommend ways to create usable open spaces.

The report opens with a scenario that is a composite picture of a day's events at the seven schools. From these actual observations, ten functions of school open space are identified: recess, team sports, informal play, hanging (non-threatening), hanging (threatening), parking, circulation, maintenance, and vandalism. "In some spaces," the report notes, "virtually nothing happens." This is "no use."

Each school's open spaces create different opportunities for activity, as the authors discover. The schools often contrast sharply in open space design and administration. Nevertheless, the researchers find emerging architectonic patterns for the creation or nurture of opportunities that form the basis of general recommendations for the ten open space functions.

The merits of a recent city policy of locating schools adjacent to city parks is then considered. Ostensibly an economy for schools lacking adequate site assemblages, this policy is shown to have dire implications for school and community.

First-hand observations form the core material of this study. Besides this passive aspect, interviews with school, community, and city officials and representatives lend their own authority to the writing. The ten open space functions are overlaid on plans of each of the seven schools, and these "bubbles" seem alive with the people they describe.

# Jury comments

Ellis: This is a very close look at what happens in schoolyards. It's not pretty by any means, but it is really a fine piece of "barefoot empiricism." The researchers walk out into the world and look at a large number of schools and the way kids use their outdoor spaces. From all their observations they build a scenario of outdoor space use around a school and then proceed to make a set of recommendations based on that. It's relatively simpleminded, but it obviously represents a great deal of observational work, which we would like to award.

**Hack:** Its weakness is in not showing the skeleton of the method it used, how it was done. Some mundane facts are brought

out, but what actually happens is soon exhausted. For school administrators, this is probably all they need. Others can compare their experiences with this. Still, we feel close to the subject here. There was a close-up inspection of use, rather than a "twenty percent said no" attitude. Many researchers' observations are internal, creating intellectual categories. There's a basic, real mundaneness in this work.

# Credits

Authors: James P. Batchelor, Deana D. Rhodeside, Cambridge, Mass.

**Clients:** Public Facilities Dept., City of Boston, Mass., Robert J. Vey, director, Stuart Lesser, chief architect.

Ten open space functions are mapped on Holland School plan from on-site observation.



The boulders are indigenous, picturesque, and menacing at Holland School (below left). Together with the many dark, hidden corners of the building, they present security problems to pedestrians during and after school. The low walls at the community center entrance of Murphy School (below right) are the only seating the elderly can occupy by day. At night, the mood changes. The elderly vanish as teenagers come to the center.







A hard ground surface in the tot-lot area of Lee School (above) is not used wholeheartedly by teachers. There are few other open spaces the school can claim as its own. However, nearby is a Parks & Recreation Dept. facility.



The steps at Marshall School, above, serve as the entrance to the school's primary open space. In addition they are bleachers, congregation space, and a good buffer between basketball court and school. To the right of the court, a large baseball field. Behind the camera, a tot-lot. Though the principal feared student injuries on the timber play equipment at Agassiz School (right) it has been popular with younger children (particularly girls) by day and teenagers who hang out by night—since its installation.



# Westermann/Miller/Associates, P.C.

# The Health Maintenance Organization Facility Development Handbook guides users and designers in the planning and the creating of an HMO.

America dispenses new institutions like so many hamburgers. Energy conservation, space program, and consumer protection, for example. Almost overnight, new bureaucratic machineries issue spates of rules and regulations. How does a new institution like the Health Maintenance Organization (HMO) enacted by Congress in 1974 generate its own internal structure? In this handbook, Westermann/Miller/Associates provides the Dept. of Health, Education and Welfare with the institutional pathways to specific solutions only individual users can design.

To escape what the author calls the conventional "cookbook" approach, the report analyzes and diagrams the complete facility development sequence by locating all major decision points and decision makers. Arriving at a particular building type is not its only goal. Possible outcomes at each decision point, data needed, and consequences of alternate decisions, supported by comprehensive worksheets completed by the user, give insight into the HMO development process.

The text is documented by institutional flow charts, bubble diagrams, and sample worksheets. Existing HMO floor plans are scrutinized. At every moment, the user must participate, for the text proceeds from general discussions to specific details to personal questions about the user's own organization rather quickly.

By the end, he has examined himself on such matters as HMO development team, process, and planning; coordinating planning and design; facility design, implementation, start-up, and operation. Appendixed specialized information gives him some support as well. Nothing is taken for granted. If the text sounds authoritative on questions of medical practice and technology, it can also be disarmingly simple about signage or public relations. Such are the birthrights of a new institution.

### Jury comments

Ellis: Its value for someone wanting to set up and house an HMO program is that it talks about a broad range of issues. It really outlines the procedures and problems he would encounter. The trouble is that it tends to be mechanistic. It must be used selectively and humanely.

Hack: It's workmanlike, great for technicians and engineers. But it lacks any elevating intuitions, insights, or humanist implications. Not that this is unworthy of recognition as a "how to." But it requires a corps of bureaucracies to interpret, and I think this is a bad direction.

#### Credits

Architect: Westermann/Miller/Associates, P.C., New York, N.Y. Louis Reuter IV, project director; Richard Miller, Howard Seltzer, Lawrence Mason, principals; Glenn Abel, graphic design; Stanley Stark, Denise Mason, project team. Client: Bureau of Community Health Services, Public Health Service, Dept. of Health, Education and Welfare. Paul Kosco, Donald Boyle, project co-directors.



# Architecture Research Office, Harvard University

## Reducing Property Damage in Schools inquires into the symptoms, causes, and solutions of "vandalism" in our schools.

Books and apples are not the only heavy ammunition students take to school. Adolescent growing pains, irrepressible energies, and healthy curiosities come along too. Put all this in a school, mix well for hours, and invariably some property damage will result. "Vandalism"? Not always. To examine what physical designs and administrative actions could ameliorate this problem, as well as to assemble available literature, cost benefit programs, and the opinions of school superintendents across the state, the Massachusetts Advisory Council on Education and the Public Facilities Dept., City of Boston commissioned this report by John Zeisel and Andrew Seidel.

This is a methodical but compassionate view. The reader is cautioned: there is more to property damage in schools than "vandalism." This means malicious vandalism (deliberate acts of violence), misnamed vandalism (accidental damage), nonmalicious property damage (illegal alterations of the environment to facilitate legitimate activities), and hidden maintenance damage (normal but hard to service wear and tear).

The problem is confronted in person in scores of visits to school officials, students, school buildings, and architects designing schools for Boston. School administration personnel across the country also contribute their efforts in curbing property damage. A literature search seeks to acknowledge, summarize, criticize, and build upon the achievements of many other researchers.

Physical design responses to property damage are characteristically seen as preventive measures exercised not so much to intimidate vandals as to discourage them. Overall, the recommendations to improve physical design are either to toughen the building or to scrape its surfaces of tempting details. Appeals to common sense are surprisingly frequent in the



Glass breakage, the largest school property damage and expense, is not always malicious.



"solutions."

A survey of administrative responses nationwide to school property damage is one of the more fascinating sections. The contradictory goals of American education, of orderly cultural assimilation versus educating as the development of reason and judgment, are seen to establish the framework for our administrative responses. The concept of a "student vandalism account," entrusted to students each term, against which payments for vandalism are drawn and from which the balance is available for student activities, is among many intriguing possibilities described and analyzed here.

This is a workbook as well. Worksheets offer decision-makers three pathways to cost control of property damage: intuitive, analytic, and hard dollar. The level of fiscal detail varies inversely with the level of policy concerned.

Then, a legislative proposal to use cost effective techniques to reduce public monies spent on school property damage is proposed. Responses to a property damage questionnaire by state school superintendents are tabulated in the closing pages. But this report in looseleaf format has no real ending. As the author suggests, the reader and his community must write their own.

### Jury comments

Ellis: It's largely a cookbook. But there's depth. It is primarily about vandalism as social interactive behavior in space, not merely about destructive action taken against a building.

**Hack:** It's worthy as a serious attempt to build a system to record this environment. Taking simple pieces of data, it packages them in a format that tells designers how to cope with its findings. New information can be readily added to it.

### Credits

**Project team:** John Zeisel, project director, Andrew Seidel, project manager, Deana Rhodeside, Mary Griffin. From the Architecture Research Office, Harvard University, Cambridge, Mass.

Consultants: William March and Brenda Levin, graphics.

**Client:** Public Facilities Dept., City of Boston, Educational Facilities Laboratories, New York, N.Y., Advisory Council on Education, Commonwealth of Massachusetts.

Students may use a lavatory as a "clubhouse" as one of few private places in a school.

# Beckett Jackson Raeder Inc.



CONTROL MEASURES ARE OFTEN USED IN COMBINATION

# land use law for designers and enforcers. of erosion from earliest planning to final

Michigan will not go down the drain. True, an estimated 40 million tons of soil (U.S. Dept. of Agriculture) are lost annually from the state's farmlands, slightly less than 4 tons/acre, while urban and suburban developments lose soil even faster. However, the passage of Act 347 (1972), the Michigan Soil Erosion and Sedimentation Control Act, mandates a new era of stable soils and cleaner waters for the state. To enhance the likelihood of compliance by all parties involved, Beckett Jackson Raeder Inc. and state and federal agencies have produced a guidebook for the Michigan Water Resources Commission, Bureau of Water Management.

The guidebook addresses two audiences. One is identified as "earth changers," or owners, developers, planners, designers, and builders, and the other as "enforcers," or government officials. It purports to speak in a language that provides both an efficient review process and a common ground for coopera-

Michigan Soil Erosion and Sedimentation tion between the groups. It is intended to Control Guidebook graphically portrays convey the essense of the entire problem construction and operation.

The spare text, profusely illustrated with explanatory sketches, takes the user through various steps and procedures needed to comply with Act 347. "Soil erosion is the removal and loss of soil by the action of water, ice, gravity or wind," begins the introduction to basic principles of soil erosion and sedimentation. This is followed by a comparison of control measures applicable to each geological phenomenon. Planning is considered in an investigation and analysis of natural site characteristics for potential erosion. Then specific responsibilities are assigned to 'earth changers'' and "enforcers": submission and review processes, preparing a municipal control ordinance for better administration of the Act's intent, and planning for agricultural conservation.

The author is candid about his work. Soil research does not sparkle as an adjunct of architectural planning and design. However, in these pages it seems much closer to the designer's frame of mind. So Michigan won't go down the drain.

### Jury comments

Hack: Like other cookbooks, this one squeezes consequence from what is known. Its attitude should be encouraged. That is, distillation and clarification, a communication link between policy-makers and designers. It explains the state legislation. Then, it recommends local level controls as the better way and says "here's how" with a model ordinance. This is a creative act.

Ellis: The model legislation in the report is a good end product, a highly desirable outcome. A good critique takes others' results, tests them, and goes beyond. Here we have just that: a wellpresented set of issues that leads to a re-ordering of priorities, a new path for more study.

### Credits

Architect: Beckett Jackson Raeder Inc., Ann Arbor, Mich

Client: Michigan Dept. of Natural Resources, Bureau of Water Management, Michigan Dept. of Agriculture, Soil and Water Conservation Division, Michigan Dept. of State Highways and Transportation, U.S. Dept. of Agriculture, Soil Conservation Service.



**Technics: Specifications clinic** 

# CRS Technical Data Resource Center

The CRS Technical Data Resource Center is one firm's diagnosis for how to control the verbal flood of our most current technical and product developments.

The heart is vital to human anatomy; specifications are no less critical to contract documents. The heart powers the flow of life to the body. Similarly, specifications carry the flow of specifics of materials, construction, and installations to drawings. The degree of efficiency depends on the writer's tools. How many tools and what kind depend on his needs and available sources.

What are the sources? They can range from materialistic to humanistic. Communication between the source and user demands an organization of material resource data which permits easy access, yet is flexible enough to permit evaluation of similar product types, including differences in function, dimension, appearance, and quality.

We at CRS have developed the Resource Center, which includes our in-house master specifications, a microfilm library, Sweet's Catalogs, Thomas Register, manufacturers' catalogs, trade association literature, a material technologist, project administration group, project manuals and drawings on completed projects, fellow specifications writers, and manufacturers' representatives. Information is available in a multitude of forms, but it must be current. In a time when new products and modifications to existing ones are occurring almost overnight, it is the responsibility of the specifications writer to seek, demand, and use only up-todate information.

The daily bombardment of product information demands never-ending analyses in every architectural firm. Product information can be described as "eye-catching" and descriptive literature. Each type serves a purpose, but the latter produces the life-giving force of specifications.

Once the content of information is discerned, it must be dated. Too often unnecessary time and effort is spent to determine if information is current when retrieved. Then comes cataloging. Half the battle of cataloging an item is deciding where it belongs. We have found it practical to separate material and products according to the Uniform Construction Index. This system provides a ready and logical breakdown of products by division and section. Storage, the evil necessity of specifications writers, is next. How often have we found ourselves besieged with stacks of information too precious to discard and too massive not to? To help reduce this accumulation we have partially converted to a microfilm retrieval system.

Most microfilm systems provide the user a variety of information, offering not only construction building products data, but also such items as specifications standards and more, depending on the capabilities of the supplier of the system and the needs of the user. These systems tend to "maintain themselves" with minimal assistance. The task of organizing, cataloging, and sometimes cross-cataloging is provided by the supplier. The major problems with any film retrieval system is the timeliness of the data, since film systems must rely on manufacturers' updates. It is the user's responsibility to verify this.

Literature from manufacturers and trade associations are valuable, needed tools. Completed project manuals provide an additional information source, but if used, data should be reviewed only for performance and acceptability. Complementing the project manual is the feedback of the project administration group who can inform the specifications writer about project installation experience, use of alternate material, and product failures. However, a previous project should never dictate what is to be done. It is only a guide.

The material technologist plays an important part in the Resource Center. His professional interests are another vessel for the flow of information. Through the development of the in-house material technologist, we reach a better understanding of particular areas of construction, their related products, and their particular problem areas. The fellow specifications writer is a vital source for similar reasons.

Manufacturers' representatives, another vessel for the flow of information, have a twofold role: updating categorized and stored information and forming a direct liaison with manufacturers. Like other sources, their information is valued for its timeliness. Most firms rely heavily on representatives to keep their literature updated.

The other role is that of providing a source of contact with manufacturers. How often have we found ourselves seeking information not contained within product literature? We often find our answers through the representatives.

Representatives also can and should help evaluate and update existing products. Manufacturers may be forced to modify "tried and true" products because of rising material costs, and these changes can be a specifier's nightmare. Here is where a good representative can help.

Specifications writers are not indisputable fonts of knowledge and expertise on materials and products, even when members of an architectural firm think so. We can only understand so much. With all the resources at hand, our most valuable one is still our inquisitive minds. Through them, sources will be found, information analyzed, evaluated, and categorized, and like the human heart, specifications will provide the flow of vital specifics to contract document drawings.

Author: Rohald P. Bowie is a Specifier in the Specifications Group, Caudill Rowlett Scott, Houston, Texas.
It's the law

## Court disallows damage claims

Bernard Tomson and Norman Coplan

In rejecting claims for damages, the court finds that contract's 'increase or decrease of cost' language is not applicable to added overhead costs and loss of labor efficiency resulting from delays over which the contractor has no control.

Contractors' claims for damages arising from construction delays raise significant legal and economic questions as to the appropriate rules and principles which should govern the resolution of such claims. Litigation in this area is spiraling in both the number of lawsuits and in the magnitude of the amounts claimed. Some claimants seem to be under the misapprehension that the owner is chargeable for the consequences to the contractor of every delay to his performance if the delay is occasioned without fault on the contractor's part. However, whether a contractor may recover damages for any such delay will depend both upon the terms of the construction contract and whether or not the owner has breached any duty or obligation to the contractor thereunder.

Although federal and state courts have spoken on this subject, the nature of many claims presently being asserted seem to indicate the need for a better understanding of the principles enunciated by such courts. For example, the United States Supreme Court some years ago in a leading case *United States* v. *Rice*, 317 U.S. 61) considered the government's liability for damages allegedly sustained by a contractor arising from delay. A review of this decision is helpful in understanding some of the parameters to which a contractor's delay claims are subject.

The *Rice* case involved a mechanical contractor who had entered into a contract to install plumbing, heating, and electrical equipment in a veteran's house to be erected in Maine. The contractor agreed to commence work upon receiving a notice to proceed and to finish his work by the time the general contractor's work had been completed. The general contractor was to complete his work within 250 days. After notice to commence was given to the mechanical contractor, he arrived at the site with tools and equipment, and upon his arrival, found that the general contractor had been stopped by the Government because of an unexpected discovery of unsuitable soil conditions. It eventually became necessary to change the building site, to alter the specifications and, because of the delay resulting from the preparation of a new foundation, the mechanical contractor was unable to commence his work until approximately five months after the notice to commence had been given. As a result, the mechanical contractor accumulated overhead expenses and the work he would have done during warm weather or after the building was enclosed, was performed outside in cold weather.

The Government extended the time of performance by the mechanical contractor and waived any claim on its part for liquidated damages. The contractor received payment in full for the work which he had performed, but sued the Government for substantial damages claimed to have been suffered due to delay. The United States Court of Claims awarded the contractor damages based upon the overhead costs he had accumulated during the delay to the start of his work and also based upon decrease in labor effectiveness because the work was done outside in cold weather. Upon appeal, the decision was reversed.

The United States Supreme Court pointed out that one of the chief issues of the case was whether the delay in commencing the construction constituted a breach of contract on the owner's part. The Court said:

"We do not think the terms of the contract bound the government to have the contemplated structure ready for respondent at a fixed time. Provisions of the contract showed that the dates were tentative and subject to modification by the government. The government reserved the right to make changes which might interrupt the work, and even to suspend any portion of the construction if it were deemed necessary. Respondent was required to adjust its work to that of the general contractor, so that delay by the general contractor would necessarily delay respondent's work. Under these circumstances it seems appropriate to repeat what was said in the H.E. Crook Co. Case, that 'When such a situation was displayed by the contract it was not to be expected that the Government should bind itself to a fixed time for the work to come to an end, and there is not a word in the instrument by which it did so, unless an undertaking contrary to what seems to us the implication is implied.' '

The mechanical contractor had contended that those provisions of the construction contract which provided in substance that there would be an adjustment in fee if changes were made resulting in an increase or decrease in cost, supported his claim for additional monies arising from an increase in overhead costs and loss of labor efficiency. The United States Supreme Court, in rejecting this contention, stated:

"... 'increase or decrease of cost' language ... is not broad enough to include damages for delay ... It was never contemplated that delays incident to changes would subject the Government to damage beyond that involved in the changes themselves ... It seems wholly reasonable that 'an increase or decrease in the amount due' should be met with an alteration of price and that an increase or decrease in the time required should be met with alteration of time allowed."

The court concluded that for delays incident to unanticipated changes, the contractor was only entitled to an extension of time and could not recover alleged damages.



NOW YOU SEE IT



NOW YOU DON'T

## Tamper-proof nges that

Soss Invisible Hinges can't be seen or tampered with when a door is closed. Hinge bodies are mortised into the door and jamb to discourage any intruder. Specify Soss invisibility for beauty and security. Our new catalog includes application and installation ideas on all 20

models. Look for it in Sweet's, or write to Soss Mfg. Co., Div. of SOS Consolidated Inc., P. O. Box 8200, Detroit, Mich. 48213.



Circle No. 344, on Reader Service Card

## VPI Vinyl Rail

See how

#### SHAPES UP

Decorative thermoplastic rail covering conforms smoothly to curves, spirals, angles. Provides an attractive accent (7 colors), firm grip, freedom from maintenance. Installs easily in shop or on the job. Profiles to fit standard railings and pipe.

Send for Free color catalog



3123 S. 9th ST., SHEBOYGAN, WIS. 53081 - PHONE 414-458-4664

Circle No. 350, on Reader Service Card

51-281R

Books

## American places



'Map'' of Houston, Texas, from Houston: an architectural guide, published by the Houston Chapter, American Institute of Architects, 1972.

Close-up: How to Read the American City by Grady Clay. New York, Praeger Publishers, 1973, 192 pp., \$10. The Place of Houses by Charles Moore, Gerald Allen, Donlyn Lyndon. New York, Holt, Rinehart and Winston, 1974, 356 pp., \$17.95.

Reviewed by David Clarke, executive Director, Association of Collegiate Schools of Architecture.

Both of these books are at least titularly addressed to the general public and they complement each other's scale nicely. Both are important books that had been gestating for a long time. I take it as a healthy sign that they are addressing the public rather than us since it makes the assumption that the public is ready for this. In fact, I heartily recommend the pair as an appropriate gift to a nonprofessional client or colleague. Never-the-less, they are both flawed in their grasp of their readership and I have a gloomy vision of their being "just right" only for a small group of people who, although perhaps nonprofessional in [continued on page 102]

Fine wood windows don't have to be squares and rectangles. and un-square windows don't have to be hard to find. At Marvin we make many trapezoidal and triangular windows. These are handsome units with 1-inch insulating glass glazed direct in a 5/4 frame. Marvin does the things that make it easy to design and build with trapezoids. The only specifications we

is shipped set up, ready

# Classic windows: Trapezoids the way to go into the opening. We can furnish solar bronze or solar gray glass in addition to clear float glass, and can prime or prefinish the window at the factory. If you need a special jamb width or special exterior

Marvin Marvin Windows Circle No. 336, on Reader Service Card

Architect: Robert Parker Coffin, Barrington, Illinois



## THE MATERIALS MAKE IT... THE SYSTEM SHOWS IT.

Send for MM Systems' FREE brochure and let us show you how our proven engineering designs can help you with your roofing construction needs. For example, the brochure includes MM Systems' FM approved DRIP PROOF fascia system with the exclusive non-penetrating LOK-TITE design.

All MM Systems' products are factory prefabricated and include custom and standard designs to fit your needs. Contact MM Systems for complete details today.



Circle No. 333, on Reader Service Card

#### ELECTRIC-AIRE DRYERS Give You Greatest Design Flexibility

With a choice of three smartly styled Electric-

Aire hand or hair dryers, architects can provide for sanitary drying in both new and remodeled installations. Beautifully fashioned in <u>stainless steel</u>, this line offers surface mounted, semi-recessed and the only fully recessed, self-contained dryers on the market. In addition, the all-metal construction, vandal resistant design and low wattage make these units ideal for longrange, low cost operation.

Write for full details. ELECTRIC-AIRE

#### ELECTRIC-AIRE CORPORATION Creators of Quality Dryers Since 1946

16939 State Street, South Holland, Illinois 60473 Phone 312/339-7410 Circle No. 320, on Reader Service Card

#### Books continued from page 100

status, already have acquaintance with the meaning of their environments. I hope the sales figures will prove me to be wildly wrong.

Close-up is an epiphanous collection of types of places and processes familiar to us all but here re-labeled in an attempt to give them some organization in our minds. Typical chapter titles are "Strips," "Beats," "Sinks," "Fronts," "Vantages," etc. Each chapter attempts to describe these places in general while providing us with enough specific examples so we can know what he's talking about. Clay has made a valiant attempt here to forge words into bridges between literary and environmental experiences. Rather often, he has beaten the words to pulp instead. Their occasionally palpable pulpiness often obscures the author's valuable insights about the workings of our larger environments-and those insights also come along rather often, although you might not notice. Clay is the editor of Landscape Architecture magazine (one of the more interesting built-environment magazines around) and is reported to be the most informative and fascinating person to go for a drive with in the world. In fact, two of the best seers anywhere are widely acknowledged to be Clay and Moore. Unfortunately, seeing and conveying are two very different activities. I wish Clay's book were more like a conversational drive and less like a series of McLuhanesque revelations. Ordinary people, I think, have to be introduced to their environmental illiteracy with great warmth-and in their own tonque.



Charles Moore Associates, Murray House, Cambridge, Mass., 1973.

The Place of Houses is a much warmer (and shyer) book, and a much wittier one, too. I especially like the way it begins—with reminiscences each of Edgartown, Santa Bar-[continued on page 104]

### New Flush-Front, Low Decibel IONIDR LOCKER

3

-

1000

You could arrange them 494 different ways and never use the same locker twice.

Make a wall of lockers a work of art. Republic's new MONDRIAN\* locker design offers all the function of traditional lockers in five styles, 26 sizes, and 19 crisply-outlined colors . . .

And then goes a giant step ahead! MONDRIAN lockers are the first

(the only) lockers designed to allow you to create bold, stimulating Mondrian wall murals. Virtually unlimited color design possibilities for walls, for halls, for exciting new use as area dividers in open space planning, for brightly remodeling older rooms, older buildings. MONDRIAN lockers are quiet, handsome, flexible.

MONDRIAN lockers do everything conventional lockers do, but do it with excitement! Send coupon for complete product information.

Rattleproof.

ALC D

.

\*MONDRIAN is a trademark of Republic Steel Corporation.

Industrial Products





Circle No. 321, on Reader Service Card

#### Books continued from page 102

bara, and the Sea Ranch before zeroing in on houses. As my father was forever saying, "You gotta get the lay of the land first." This opening section of the book very nicely lets you know what kind of territory you've wandered into. Then the house is delicately dissected into the order of rooms, the order of machines, and the order of dreams—with nothing mysterious or sensational implied beyond the ordinary use of these terms. The rest of the book is a gentle attempt to draw the reader (and potential home-maker) into a whole world of tools and options for making places, ending with a rather lame questionnaire on where you prefer to keep your towels and what kind of heat you want, etc.

I really only have two criticisms of the book. If *Close-up* is overly zippy, then this book is too Victorian and proper. Indeed, Charles Moore is one of the last great living Victorians. The problem is a sticky one. The people who read books often enough to buy either of these tomes are welleducated and therefore very print-oriented. How do you design a book—something meant to be read—that gently leads people away from a print-oriented experience towards a visual and spatial experience?

The ink drawings in *The Place of Houses*, mostly by Bill Turnbull, are exquisite from an architect's point of view, but I doubt very much if the average liberal arts graduate/ executive-type man or woman can appreciate that. Ordinary people are used to glancing at visuals, not reading them. A more cartoony approach would have helped here. Some of the photos are small and dark; and for both the drawings and the photos much more imaginative and integrative use could have been made of captions as a bridge between the two kinds of experiences. I wish Mssrs Moore, Allen and Lyndon could have made a book that was as immediately there as their wonderful buildings are.

Which brings me to my second criticism—namely the confusion between whether this book is really supposed to help John and Jane build a suitable home (the ostensible book) or whether it's a platform for MLTW et al, their theories and their buildings. I'm for either book but am uncertain about the combination and how the transparency of it all will affect John and Jane.

On the other hand, both of these books are valuable for their expositions of theory and, I suspect, will have wide currency among design students if and when they are released in paperback editions. The Clay book would go far to ameliorate an astounding level of illiteracy among architectural students regarding developments outside of buildings. And The Place of Houses is, after all, the first collection of the MLTW work that has become available. That work is, I think, terribly unique and influential in American architecture today, but influential only in a secondhand, formalistic way. I for one would like to see some literature. preferably book length, address the body of their work for its own sake, with a professional readership in mind. One wince I experienced while reading this book is that it might confirm many people's suspicion that all MLTW et al can design are houses, and I know this not to be true. At any rate, and for the moment, reading this book can only advance the work of the copyists. [continued on page 107]

#### Books continued from page 104



Greene & Greene, Gamble House, Pasadena, Ca., 1909 Sketch of North elevation by Gregory Cloud.

A Guide to the Work of Greene and Greene by Randell K. Makinson. Salt Lake City, Peregrine Smith, 1974, 65 pp. \$4.95.

A Greene & Greene Guide by Janann Strand. Los Angeles, Dahlstrom, 1974, 128 pp. \$15.

Greene & Greene, Architects in the Residential Style by William R. and Karen Current. Fort Worth, Amon Carter Museum, 1974. 128 pp. \$15.

After a long silence on Greene and Greene, three books have appeared in a matter of months. A fourth by Randell Makinson, curator of the Gamble house, is scheduled for 1976, and Praeger has brought out a new edition of *Five California Architects* (Reinhold, 1960) for which Makinson wrote the chapter on the Greenes.

All reviewed here are published by western houses, the publication coinciding with the centennial of Pasadena where most of the Greene work is located. Peregrine Smith, a new house, is welcome because of its emphasis on West Coast architecture and history; the company has revived Carey McWilliams' 1946 Southern California County, which is indispensable for understanding the region, and it is coming out this winter with the revised and expanded Gebhard-Winter guide to Architecture in Southern California, companion to their guide on the North on which P/A contributing editors Sally Woodbridge and Roger Montgomery collaborated. However, the quality of the reproductions in the Guide to the Work of Greene and Greene book are disappointing, and I hope their process improves before the major Makinson book goes to press. Reproductions in the Currents' book, published by Amon Carter Museum, are uneven; more the pity because excellent new photographs were made by the Currents for the book and a traveling show.

Makinson's thin volume, excerpted from his forthcoming book on the lives, buildings, and furniture of the Greenes, is a complete list of buildings, projects, alterations, and additions, with introduction and comments.

Of this Greene and Greene crop, the prettiest is Janann Strand's. But the book might rather have been called *Greene & Greene Walking Tours* since half of the pages are devoted to carefully laid-out walks of the Greenes' work. The remainder provides a pot pourri of excerpts from the [continued on page 108]

## KALWALL® SYSTEMS

#### CUT HEATING BILLS ALONE AS MUCH AS 40% — IMMEDIATELY!



Goldsboro High School

Griffin-Flynn, Architects, LTD



Waynflete Gym

Stockley & Leahy

Heat loss through glass sash, particularly in older buildings, is the biggest waste of heat in a building.

A Kalwall Window Replacement System will stop this waste, and make your building look great! It will pay for itself, too, FAST.

"Blue Chip" companies use the System. They report fuel cost savings of \$100,000\*. Savings of 25 to 40% are common.

In your new building designs, don't sacrifice natural lighting — Kalwall Wall and Skyroof Systems provide equally dramatic savings because of these key energy saving benefits.

- "U" Factors ranging between .06 and .40!
- Light transmitting value ranging between 3% and 75%!
- Shading Coefficients from .85 to less than .06!

Or, if you have a SOLAR HEATING project going ... Phone or write today for complete information!

\*Names on request.



Patented

1111 Candia Road, Manchester, N.H. 03103 Phone 603-627-3861

Circle No. 328, on Reader Service Card

## SOME PEOPLE BUY OUR SCREENS BECAUSE THEY'RE BEAUTIFUL.

They're attracted by the rich-looking, heavy nylon velvet coverings (available in 14 colors) and mirror stainless or elegant wood grain trim...

While they are good looking, the real reasons for choosing one of our PLANSCAPE<sup>TM</sup> Screens are the things you can't see: A superb sound absorbing quality that meets or surpasses State and Federal requirements (.85 NRC), and a rigid, long lasting construction. The tubular steel frame is strong, yet light weight, and will never get loose and wobbly. The core is filled with a highdensity fiberglass sponge that traps and smothers sound. A layer of porous foam laminated over perforated hardboard gives the nylon cover its padded look and feel. The cover (besides looking great) is itself an excellent acoustical material.

Technical and appearance considerations aside, you might want to choose a PLANSCAPE Screen for its versatility. There are heights and widths to do any job, and they're available straight and curved, post locked or free standing in a complete range of sizes. (PLANSCAPE Screens qualify for a 10% investment credit under the 1975 Tax Reduction Act.)

Write for our descriptive catalog.

#### VOGEL-PETERSON COMPANY RT. 83 & MADISON STREET

ELMHURST, ILL. 60126 • 312/279-7123

Books continued from page 107

writings of the Greenes and others, a modest introduction, a building list, and something about the docents, those expertly trained volunteers who with Makinson have made the Gamble house a model of how to run an historic building. (Mrs. Strand was the first docent.) The book is peppered with sketches literal enough for quick identification of buildings by walkers.

The Current book is more ambitious. The text by Mrs. Current is organized into essays whose subjects overlap, thus taking the reader often enough back to Square One (Industrial Revolution, cultural and social climate, etc.) The 19th-Century residential architects are noted but there is little attempt to relate them to the Greenes—or to relate the Greenes to any tradition other than wood construction and early American self reliance. I wish that once Mrs. Current had opened the door to H.H. Richardson she would have tarried long enough to speculate at least on what Henry Greene learned in his year in the office of Shepley, Rutan,



Greene & Greene, Daniel L. James House, Carmel Highlands, Ca., 1918. Photo from *The Architectural Record*, Oct., 1922.

and Coolidge who took over Richardson's practice.

Some of her claims are excessive; for instance, that the Greenes had "the most coherent body of work of any modern architects" (what could be more coherent than the houses of the early technologist Irving Gill?), and that the curtain fell on residential architecture in the mid-teens when the Greenes closed their office.

Omitted in the book is any mention of Makinson, from whose basic research on the Greenes she and everyone [continued on page 110]

Circle No. 357, on Reader Service Card

## Express yourself.

Expressions

Unique

Expressions.

Devoe announces Unique Expressions<sup>®</sup>. Over a hundred bright, ultra-deep colors for interior walls and trim.

Unique

Here's a collection of bright, new colors in a satin-finish latex especially developed for you by Devoe and Celanese stylists. They are easy-to-apply, fast-drying, faderesistant, and clean up with soap and



water. Now you can bring any room alive with Unique Expressions from Devoe.

Unique

+ Unique

thique

For a free color card, write to: Devoe Paint, Dept. A, P.O. Box 1863, Louisville, Kentucky 40201.

DEVOE PAINT SINCE 1754 ... IMAGINATION FROM

Circle No. 363, on Reader Service Card



## NEW SPECTRA-GLAZE® II satin-gloss masonry units are AMAZINGLY EASY TO CLEAN DOWN, CLEAN AND KEEP CLEAN!

STRUCTURAL GLAZED BLOCK WALLS

Never need refurbishing. Provide fire ratings, U-factors, STL, USDA & OSHA requirements. Fool-proof color constancy. Scored & Design faces. . . . AND they're AVAILABLE!



@U.S. Pat. Off., Can., & other countries by
 THE BURNS & RUSSELL CO., Box 6063, Baltimore, Md. 21231.
 301/837-0720. 4.4/Bu in SWEET's (\$)

Circle No. 359, on Reader Service Card

SAVE

## Journal of Architectural Research

#### An Interdisciplinary Forum for Research, Practice and Education

#### Check out Vol. 4 #1, February 1975:

- Confidentiality in health centres and group practices: design implications—R. Cammock
- Physical and social factors effecting multi-family housing residents' sense of security—F. D. Becker
- Preliminary cost estimates for mechanical work— J. S. Crandall & M. Cedercreutz
- La politique de l'espace Parisien a la fin de l'ancien regime—B. Fortier
- Experimental use of computers to teach energy considerations in architecture—F. N. Arumi
   Book review section
- Can you afford to miss Vol. 5, 1976?

**JAR** is published three times yearly by AIA and RIBA and circulated in over 50 countries. Editorial boards in Washington and London are composed of leading researchers, practitioners and educators committed to communicating research relevant to practice.

Annual postpaid subscription to JAR is \$15.

Books continued from page 108



Gamble House stair detail from Greene & Greene, Architects in the Residential Scale, William R. Current & Karen Current.

else must draw; for after Jean Murray Bangs pulled together the first information on the Greenes, Makinson carried it on. Mrs. Current lumps together original and derivative sources and allows that each of their viewpoints is "not without some validity" but disallows that any of them has "expressed or explained" the "unique character of their (the Greenes) creation nor the architectural meaning of their work." To do so is her stated intention; she fails in this mainly because she is more suited to reading than looking. Square One here is Giedion's interpretation of the balloon frame. She is chary of revealing the sources of her 20th-Century readings; Pugin she credits with a quote, not Robert Winter's article in SAH Journal on H.R. Ashbee which she quotes twice.

This attitude is not unknown in architecture. Once it was put into words by an editor who was explaining to architecture students why certain buildings were published, others not. The example he used was of a shell he was asked to publish, whose similarity to Saarinen's TWA terminal the editor pointed out to the architect. "Not at all," countered the architect, "no ungainly feet, no wasted concrete." The editor agreed, but he added, "You didn't make your *own* mistakes." [Esther McCoy]

Dictionary of Development Terminology by J. Robert Dumouchel. New York, McGraw-Hill Book Company, 1975, 278 pp, \$9.95.

For those who ever wished for a book that would give straight and short explanations of parlance in the building field, this dictionary is it. Compact and concise, it takes the obscurity out of such oft-heard but often vague terms as "turnkey" and "Fannie Mae," gives 10 pages of abbreviations and acronyms (EDA, AMP, and PRS); and explanations of legal landmarks terminology, such as the "Louisville case" and the "Phillips Amendment." Most helpful are lists of sections and titles referring to federal legislation shaping the building market-Section 8, which is the latest-and 236. The author, who has more than a dozen years' experience in the housing and community development field, compiled the book to both enhance the multidisciplinary exchange among professionals and to give laymen-the consumer-a basic language in the development world. He provides definitions for both current and dated terms and identifies the source (such as HUD) for specific meanings gaining widespread acceptance. [AC]

Circle No. 367, on Reader Service Card

## Add a livelier touch.



Dirke design Russwin Tenstrike<sup>™</sup> mortise lockset. Swift, smooth lever action at the pressure of a finger. A bold thrust of fresh, new styling that flows in any decor. Enduring design in the Russwin tradition. Russwin, Divivision of Emhart, Berlin, Connecticut 06037. In Canada – Russwin, Division of International Hardware.

Circle No. 341, on Reader Service Card **Progressive Architecture** 

## Products and literature

Super room. Designed to fill the needs of certain facilities which require a room for maximum privacy or security while rataining the flexibility of their open plan installations, super rooms can be assembled in a variety of sizes from 10'x10' to 14'x16' and can have right-angled or curved corners, glazing or solid panels, and locked doors. They can be skidded to other locations if necessary, states maker. Introduced at the same time is the low profile group which uses a group of 34 in. panels and a new group of work surfaces, transaction counters, end panels, and connectors. These come KD and form freestanding units from 48 in. minimal work stations to 8-ft-long desks and credenzas. They can be L-shaped, T-shaped, U-shaped, or your choice. Herman Miller, Inc.

Circle 101 on reader service card

Soundblox. Adds 10 points to the noise reduction coefficient in the 8 in. Type Q unit by using metal septa to acoustically divide the cavity volumes and using funnel-shaped slots to provide improved acoustical coupling to the resonator cavities, according to maker. The Proudfoot Company, Inc.

Circle 102 on reader service card

Pre-fab structures and rooms. Mass-produced laminated panels made of two thick sheets of plywood permanently secured to a polystyrene core form the nucleus of the Living Component concept and are factory assembled to form walls, floors, and ceilings of the structures in "box beam" construction. Interior walls and ceilings can be finished with plasterboard and painted; floors can be carpeted or tiled; doors, windows, and closets are built in and electrical service facilities are installed. Components have a maximum limitation of size that is either 12'x42' or 14'x42'. The design height of the unit is 8'-10" from bottom of floor to top of ceiling. Components may vary in length from 20 ft to 42 ft in 2-ft increments and are designed for permanent foundation support along all edges. A standard unit consists of the basic structure and factory installation of doors and windows, plumbing, heating, and electrical systems, and unfinished drywall and interior trim. Options include installation of carpeting and kitchen cabinets. Winnebago Industries, Inc. Circle 103 on reader service card

Super room



Push button faucet. Red and blue buttons control hot and cold water. Units are equipped with ball-joint aerator and mixer for modulating water flow. Integral drain control. Imported from Europe with standard installation. 2001 Products. Circle 104 on reader service card

Free-standing sound screens combine two 1in.-thick layers of fiberglass insulation, faced on either side with a molded shell of sound-diffusing fiberglass Glastrate which gives the screens shape and abuse-resistance and serves as a tack surface, states manufacturer. Basic system consists of three 30" x 60" panels. Width variations in 30-in. steps are created by changing the number of panels. Screens are available in a broad range of colors. Fabric is nylon. Base and post configurations are painted, anodized aluminum. Owens-Corning Fiberglass Corporation.

Circle 105 on reader service card



FUNNEL-SHAPED SLOT



Carpet. Of 100 percent acrylic, Echelon is tuft in 12-ft widths. It is part of company's custom dye program which gives the designer any col wanted (30 ft minimum). Suitable for heavy, commercial use, states maker. Patcraft Mills. Circle 106 on reader service card

Indirect recreational lighting. Units include a linear lamp compartment design with 48 degre sloping sides. Fixtures are available for 400 w and 100 w mercury vapor and metal halide lamps and for 400 w high pressure sodium lamps as well. Constructed of 20 gauge steel lamp compartments, specular Alzak aluminum reflector; cast aluminum ballast housing and electro-polished wire guard. All units attach to conventional "uni-strut" with fast-tach fittings. Guth Lighting, Div. of Sola Basic Industries. Circle 107 on reader service card

[continued on page 115]

#### Products continued from page 112

Library system of bookstacks, furniture, and accessories features DecorGraphics, an original signing concept for classification and identification. Included are single and double-faced bookstacks with T-Bar and closed bases; circulation check-in and check-out stations; work and study carrels; book-mobiles; circular, rectangular, square, or trapezoidal tables, and a variety of other accessories such as card catalog cabinets, newspaper racks, dictionary and atlas stands, microfilm cabinets, and magazine racks. Merchandising Equipment Group, Inc. *Circle 108 on reader service card* 

Fiberglass safety signs. Designed for indoor and outdoor use, safety directional and information signs are reinforced with fiberglass. All conform to OSHA size, color, and legend specifications. Signs are supplied with grommeted holes for installation. W.H. Brady Co. *Circle 109 on reader service card* 

**Hinges.** Roto-Pin series of hinges has pin that rotates on anti-friction bearings which are sealed against dirt and moisture. Hinges are available in special design with capacities for doors up to 75 tons. It features a built-in load equalizer that distributes the weight of the door equally because each hinge is engineered to individual specification. Kason Hardware Corp. *Circle 110 on reader service card* 



Library system

**Elevators** for handicapped are designed to facilitate access by persons with impairments. The line includes a broad range of pre-engineered elevators with capacities from 2000 to 4500 lbs for use for commercial, health care, and residential buildings up to 30 stories. In-car controls have been lowered and rearranged for use by handicapped persons in wheelchairs. Emergency button and communication cabinets are below the floor buttons. The 2000-lb elevators meet HUD's requirements for accommodating a wheelchair and the 2500-lb units for a stretcher. Otis Elevator Company.

Circle 111 on reader service card

Music practice rooms. Available in a variety of sizes and acoustic designs, the room is said to provide the necessary sound transmission loss and sound absorption to create the environment best suited to a particular instrument or vocal requirement. Maker also states that responsive-ness and reverberation time can be varied with the application of Vari-tone plaques. Ventilation and silencer system provide quiet air supply. Rooms are available in Duet, Trio, Quartet, Quintet, and Sextet Models. Industrial Acoustics Company.

Circle 112 on reader service card [continued on page 118]

Stains, Waxes, Seals... in one operation





California home; Designer: Russell Forester, La Jalla, California; Cabot's Stain Wax on all interior woodwork

## Cabot's STAIN WAX

This unique "three-in-one" finish, suitable for all wood paneling, beams, and woodwork, brings out the best in wood, enhancing the grain and producing a soft, satin finish in a choice of thirteen colors plus ebony, white, and natural. When a flat finish is desired, specify Cabot's Interior Stains for all interior wood surfaces.

#### Samuel Cabot Inc.

One Union Street, Dept. 128, Boston, Mass. 02108 Send color cards on Stain Wax and Interior Stains Please send Cabot's handbook on wood stains

Circle No. 316, on Reader Service Card



# Our dual-tube distribution system was inspired by a center stripe.

Along the way to a better pneumatic tube system, we came up with a double-barreled solution.

A system that would take things both ways at the same time.

Dual-tube distribution.

Right off the bat it solved the need for more efficiency during periods of peak activity.

At the same time, dual-tube systems have the larger capacity needed to handle the demands of today's larger hospitals.

Our studies show it is the best way to handle the ever-shifting exchange of paperwork, medical records, unit dose medications, instrument kits, mail, and those allimportant stat deliveries.

Another nice thing. The bottom line turns out to be more economical in the long run.

And best of all, you won't have to waste time, paint, or people repainting the center stripes every year.

Pneumatic Distribution Systems



ERIE. PENNSYLVANIA . 16512

#### Products continued from page 115

**Modular seating** for commercial and institutional use includes a chair and single seater-plus table. Individual seating unit is a one-piece serpentine plywood shell with supported vinyl or fabric cover over 2-in. polyfoam padding. Tables are surfaced with melamine laminate in a wide range of colors and patterns. Total height is 32 in. B. Brody Seating Company. *Circle 113 on reader service card* 

Hand-woven silk fabrics. Collection consists of exotic prints, Jacquard weaves, ribbon stripes, and solids in a variety of colorways. Each is adaptable for paper or acrylic backing (for wall application), stain-water-oil repelling processing, and flame proofing. All are suitable for draperies and wall coverings, many for upholstery. Robert Tait Fabrics.

Circle 114 on reader service card





I



[continued on page 122]

## Make it the best room.

A Revised and Expanded Edition by Alexander Kira

Bathroom design in most homes is a horror, in terms of both appearance and function. In this wellillustrated and fascinating book the author analyzes each use of the bathroom, discusses the history of our attitudes and the possible ways we can achieve the most effective design.

71 black-and-white photographs and line drawings



#### THE VIKING PRESS Dept. ATE-PA

625 Madison Ave., New York, N.Y. 10022 Please send me \_\_\_\_\_ copies of the cloth edition of THE BATHROOM @ \$18.95 ea. and \_\_\_\_\_ copies of the paper edition @ \$7.95 ea. I enclose \\_ check \\_ money order for \$\_\_\_\_\_ total. (Please add sales tax where applicable.)

Address		
Address		
City	State	Zip



#### 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 wheelchair 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-16 Grandview, Missouri 64030

Circle No. 346, on Reader Service Card

Circle No. 311, on Reader Service Card

A foam-in-place thermal/acoustical insulation that architects can specify without trepidation.

Not a polyurethane. . . .

Not a polystyrene. . . .

insulation product, formulated in accordance with the patented Isoschaum® process. It overcomes the shortcomings that limit usefulness of other types of insulation materials.

EFFICIENCY: Rapco-Foam has a thermal K factor of 0.18 at 35°F., – and an R factor of 5.5 at 35°F. Sound transmission (STC) is 53.7 in an apartment partition.

NON-EXPANDING: Once Rapco-Foam leaves the application gun, there is no further expansion. Cavities can be completely filled without fear of pressure build-up.

ELIMINATION OF CONDENSATION: Virtually no moisture problems when applied in accordance with manufacturer's manual of instruction. HYDROPHOBIC: Repels water.

FIRE BEHAVIOR: Heated to 1208°F (650°C) it will smolder. Upon further heating it will ignite and burn releasing 924 BTU's per board foot @ 0.6 lbs/cu. ft. However, it will not melt away. It will char, lose weight and volume, but remain in place as foam. It will increase the fire endurance of an unrated 2½" wall, with ½" gypsum wallboard on both sides from 15 to 50 minutes.

TOXICITY: Gases generated when burning are less toxic than those of either plywood or paper (Federal Hazardous Substances Act 191(F) (2).

APPLICATION: Rapco-Foam is applied only by trained and licensed applicators.

HISTORY: Rapco-Foam was developed in Germany (where it is known as Isoschaum) over 30 years ago. It has been used as insulation in homes and commercial buildings for over 20 years in Europe and a track record of almost 10 years in the U.S.A. By European mining regulations, it is also used in coal mines to prevent methane gas explosions.

RAPPERSWILL CORPORATION is the exclusive licensee for North America.

In Chicago's Water Tower Place a workman fills air space between the concrete structure and marble facing with Rapco-Foam, to prevent moisture condensation, – and provide thermal and acoustical insulation. This 74 story building, costing \$250,000,000, is the world's largest poured-in-place concrete structure.



Circle No. 342, on Reader Service Card

Call us toll-free at 800-227-0750 (in California, 800-772-3988), or use the coupon to get the technical details!

Gentlemen: Please have your local representative contact me. Please send me technical information on Rapco-Foam. Name
City

## P/A Book Store

Described on the following pages are architectural books that are now available to you from leading publishers. Each has been selected for its usefulness to you in the various aspects of your professional practice.

Book orders will be forwarded to the publishers who will bill you direct, including all required state and local taxes. As purchases of professional and business publications are tax deductible, we suggest that you retain copies of the publishers' invoices.

#### **Reader Service**

As a service to the profession, Progressive Architecture provides easy-to-use Reader Service cards in the back of each issue to speed your book orders to publishers. To order books, simply circle the appropriate number or numbers on the card, add your name and address and drop in the mail. Postage is paid by P/A, and your order will be forwarded immediately to publishers for shipment to you.

#### Subscribe to Progressive Architecture

To subscribe to P/A or to renew your subscription, check the appropriate boxes on the Reader Service card.

We cannot accept book orders from outside of the United States unless they are accompanied by a money order.



#### 1 Construction Inspection Handbook

By James J. O'Brien, 512 pp., 140 illus., ... \$17.95

Outlines the duties, requirements and interests of the construction inspector. Describes the "whys" as well as the "how-tos" involved in observation of construction quality. Including handy checklists to work from, the book shows you exactly what should be reviewed and inspected.

Circle B601 under Books.

#### 2 New Uses for Old Buildings

By Sherban Cantacuzino, 280 pp., illus., ... \$29.95

'New Uses for Old Buildings' presents an architectural concept whose time has come. There are many unused or under-utilized buildings existing today whose construction and detail — which can never be recreated — should be preserved. But today's increasingly sophisticated demands for standards and services, as well as tighter codes for fire and safety, make the conversion of an old building to a new one a formidable task.

#### Circle B602 under Books.

#### 3 Perspective: a new system for designers

By Jay Doblin,

68 pp., illus., . . \$7.50

The first system developed to solve the kind of drawing problems encountered by designers. Eliminates the complex mechanical drawing that an architect normally employs in his traditional way of working with plans and elevations. The system offers a simpler method of visualizing any three dimensional object accurately and quickly. **Circle B603 under Books.** 

#### 4 Marinas: A Working Guide to Their Development and Design

#### By Donald W. Adie, 336 pp., illus., . . \$39.95

Boating occupies an increasingly important position in the major growth industry of leisure. Because boating involves vast expenditures, and the need to conserve and use water resources wisely, these facilities demand high expertise in planning and design, which this up-to-date guide provides. **Circle B604 under Books.** 

#### **5** Architectural Graphics

by Frank Ching, 128 pp., illus., ... \$9.95

This book presents graphic techniques available for conveying architectural ideas. Included is know-how on equipment and materials; drafting; architectural conventions for orthographic, paraline and perspective drawings; devices for rendering tonal/textural values and context; graphic symbols and lettering; freehand sketching and diagramming; and effective presentation of design proposals. **Circle B605 under Books.** 

#### 6 Architectural Rendering The Techniques of Contemporary Presentation

By Albert O. Halse, 326 pp., illus., 2nd edition, 1972 ... \$24.50 This completely up-dated revision of the most widely used guide to arctitectural 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 equipment and work in different media.

Circle B606 under Books.

#### 7 Construction Design For Landscape Architects

By Albe E. Munson,

256 pp., illus., ... \$11.50

This volume is a complete guide to the preparation of a building site for construction or landscaping. The book was written for use as a rapid refresher for the practicing landscape architect as well as a handy reference guide to short-cut methods that will be of interest to the civil engineer doing site improvement plans.

#### Circle B607 under Books.

#### 8 Residential Designs Edited by David E. Link,

192 pp., . . . \$14.50

Hi-rise or low cost, condo, multi-family, custom or townhouse, here's a design book that shows you the very best in



every class. Complete collection of designs with over 200 illustrations featuring techniques used by some of the nation's leading builders, planners and designers.

#### Circle B608 under Books.

#### 9 Housing for the Elderly

By Isaac Green, Bernard E. Fedewa, Charles A. Johnston, William M. Jackson and Howard L. Deardorff, 174 pp., illus., ... \$13.95

This book provides ready-to-use guidelines for producing high quality housing for older Americans. It shows the kinds of housing that meets the physical, social and perceptual needs of senior citizens. Emphasized are types of shelter, environments and services required by independent elderly tenants as well as those who need limited health and social services. Circle B609 under Books.

#### 10 Anatomy for Interior Designers:

Third Edition By Julius Panero, 160 pp., illus., ... \$9.95

This is a comprehensive book of reader needs for designing around people, designing people in and designing things for people to use the basis of design. State and com-marcial applications lighting material mercial applications, lighting, material on horizontal and vertical movement, storage space, furniture, windows, and doors

#### Circle B610 under Books.

#### **11** Designer's Guide to OSHA

By Peter S. Hopf, A.I.A. 288 pp., illus., ... \$17.50

This practical volume translates OSHA's tens of thousands of words into easy-to-use drawings, diagrams, charts and graphs. With OSHA violations increasing, engineers obviously need a working guide to compliance with government job safety and health standards. This book fills that need. All material is presented in the same se-quence as the OSHA regulations are written

#### Circle B611 under Books.

#### 12 Architectural Delineation A Photographic Approach to Presentation

By Ernest Burden, 288 pp., illus., 1971 ... \$21.95

In this illustrated book, the author demonstrates a simple, flexible method of using photography to depict architectural projects in true perspective. Also how to create models for photography and how to put together an effective slide presentation. Circle B612 under Books.

#### 13 Energy and Form By Ralph L. Knowles,

198 pp., illus., ... \$27.50

This is a scholarly, theoretical book, a major work that will be used for years to come. The projects described concentrate on reducing environmental problems in individual or groups of buildings by controlling shape and structure, scale and surface, volume ratio, location and orientation, isolation and insulation

Publisher will bill you direct before shipping any book.

Circle B613 under Books.

#### 14 The Architecture of Frank Lloyd Wright: A Complete Catalog

By William Allin Storrer, \$9.95

The first fully complete catalog of every building designed by Wright that was actually constructed — 433 in all — includes a photograph of practically every one of them, and a descriptive note on the materials used, the plan, and the circumstances of construction.

Publisher will bill you direct before shipping any book.

#### Circle B614 under Books.

### 15 Professional Corporation Desk Book

Published by: The Institute for Business Planning, Inc. 427 pp., illus., \$29.95

You see at a glance which form of practice is best for you — partnership or corporation. The Desk Book compares the opportunities and pitfalls of each. It singles out retirement planning, especially in light of the new Pension Reform — the biggest single reason why so many professional men have opted for a corporate form of practice. Circle B615 under Books.

#### 16 Architecture

By David Jacobs, 191 pp., illus., ... \$10.00

Stunning modern photographs jux-taposed with plans, cross sections, scale models and historic views form a vivid counterpoint to the authoritative text. A five-page chronology relates events in the history of architecture to other cultural and political developments.

#### Circle B616 under Books.

#### 17 Fabrics for Interiors

By Jack Larsen and Jeanne Weeks, 208 pp., illus., ... \$14.95

Completely geared to current trends, this book can make the difference between costly mistakes and successful, personalized interiors. It explains functions and requirements of fabrics for wndows, furniture, walls and ceilings. Circle B617 under Books.

### 18 Architecture and Design, 1890-1939

Edited by Timothy Benton and Charlotte Benton; with Dennis Sharp, 264 pp., illus., ... \$12.50

This concentrated study of the rise of the Modern Movement in architecture and design covers the half century during which attitudes toward these practical arts were changing dramatically Based solely on original source material, this book contains extracts from the writings of such influential men as: Adolf Loos, Henry Van De Velde, Hermann Muthesius, Walter Gropius, Le Corbusier, Mies van der Rohe, Bruno Taut, Louis Sullivan, and Frank Lloyd Wright.

Circle B618 under Books.

#### 19 Rendering With Pen And Ink By Robert W. Gill,

\$6.95 368 pp., illus., . This paper-back edition is a copiously illustrated 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 B619 under Books.

#### **Building Construction** 20 Illustrated

By Frank Ching, 320 pp., illus., ... \$17.95

Charmingly hand-lettered by the author, this book presents step-by-step techniques in residential and light construction. Containing over 1,000 drawings, it covers materials, finishes, fastenings, posts, trusses, slabs, wood joists, light steel/aluminum, structural calculations, planning and site work, cost estimating, and construction sequencing

Circle B620 under Books.

#### 21 Trees

By Robert L. Zion, 168 pp., illus., ... \$12.95

An inexpensive paperback version of the book with virtually everything you want to know about using trees to complement the buildings you design. Both aesthetic and practical considerations are given, including tree characteristics. as well as cost considerations, planting, maintenance, rate of growth, and city and seashore recommenda-

Circle B621 under Books.

#### 22 James Stirling

Introduction by John Jacobus, 184 pp., illus., . . . \$30

Although Stirling's fame rests primarily on his designs for academic institu-tions, his work covers a wide range of building types, from single houses in London to mass low-cost housing in Peru, from an urban redevelopment study for part of New York to commercial and industrial buildings. Close to 700 photos, drawings, plans. 121



#### Products continued from page 118



Armchair is constructed using a one-piece shell of molded, reinforced, rigid urethane foam. Seat, back, arms, and outer surfaces are padded with polyurethane foam. Barrel styled chair is fully upholstered with enclosed arms. A continuous welt accents the chair's design. Steelcase. *Circle 115 on reader service card* 

Hand hewn beams. Hand-hewn beams of white pine, both structural and decorative in standard 8- and 16-ft lengths are available from company who also does custom hewing in hardwoods and longer lengths. The Broad-Axe Co., Inc. *Circle 116 on reader service card*  Vinyl/cork tiles for floor and wall surfaces are manufactured in Sweden. Called Cork-O-Plast, natural cork is permanently bonded between a vinyl moisture barrier and a transparent vinyl wearing surface. It is available in tile form 3.1 mm (0.146 in.) thick, 300x300 mm (11.8 in. sq) and 150x900 mm (5.9x35.4 in.). ARCO Chemical Company.

Circle 117 on reader service card

Electronic boilerless water heater. The device features point-of-use temperature controls, and has a heating capability of up to 6 KW. It occupies less than one-half the cuft of space, of largest residential tank type electrical heater and it weighs less than 2 lbs. Several configuration adaption kits are available for particular installations. The inlet cold water is heated as it flows across special coils in the heater by direct heat exchange. Turning the red dot valve on the heater counterclockwise will cause the heater to be turned on. A red light indicates when the heater is operating. Hot and cold water are mixed by opening the red dot valve and the blue dot valve. Chronomite Laboratories. Circle 118 on reader service card

All-purpose expansion joint moves in any direction—horizontal, vertical, and shear. It features a 5-in. insulation bellows with 4-in. metal flanges to fit joint openings with cants, is watertight, and requires no soldering. Available in 50ft lengths. Rubber & Plastics Compound Co. *Circle 119 on reader service card*  Flat wire clips are molded from high strength nylon, and come in two styles: push-mount and adhesive backed. Both types are for routing flat wire systems. One feature is the patented quick lock/release mechanism which is a barbed locking element that holds wire securely until you need to get at it. Dek, Inc. *Circle 120 on reader service card* 

Portable directional lighting. Each unit is equipped with reflector which is said to boost light output from a 60 watt inside frost "A" lamp to the equivalent of 100 watt lamp. Choice of shades in white and chrome and brass metal finishes and of several models for wall or ceiling mounting is available. Each light rotates 358 degrees in one direction and 180 degrees in the other direction. Inlite Corporation. *Circle 121 on reader service card* 

#### Literature

**Cabinetry.** Complete line for institutional and commercial installations includes executive credenzas, wall cabinets, office base cabinets, wardrobes, wall desks, and laboratory and medical cabinets. Construction features are shown with size and options. All cabinets are surfaced inside and out with plastic laminate and come in choice of wood grain or colored surface finishes. Touche Continental Cabinet and Fixture Corporation.

Circle 201 on reader service card

#### Handbook

#### The Action Office Acoustic Handbook

a guide for the open plan facility manager, planner and designer

ay Robert Propst Ind Michael Wodka Ierman Miller Research Sorporation

To order your copy, simply fill out and mail this coupon to: Please send me \_\_\_\_\_ copies of the Action Office Acoustic Handbook at \$5.50 per copy (plus applicable tax).

Herman Miller Research	check enclosed bill me
Corporation	Other books available
3970 Varsity Drive	
Ann Arbor, Michigan	The Office: A Facility Based on
48104	Change \$3.50
	The Dormitory Experiment \$5.50

#### Introducing "The Action Office Acoustic Handbook"

This new handbook, authored by researchers Robert L. Propst and Michael Wodka, provides the office planner, designer, and facilities manager with a long-awaited guide to acoustical control in the open plan office.

Organized into nine easy-to-read chapters, the book deals with the many variables of acoustical problem solving. The chapters include: Acoustical Objectives in Space Planning; How Sound Travels; The Elements and How to Control Them; A Facility Performance Check List; How to Tune and Balance The Action Office; How to Treat Special Problems, and; References and Resources.

The book can be used as a basic text, an easy reference tool and as a guide to additional sources of helpful information from articles, books and experts. A glossary of important acoustical terms and definitions offers additional help and understanding.

Name		
Title		
Firm		
Address		22.5
State	Zip	

Circle No. 332, on Reader Service Card

Office seating catalog illustrates over 100 seating pieces for the traditional or modern office. Styles range from high-back executive posture chairs, contour side chairs, and secretarial chairs to a complete selection of lounge seating and tables. R-Way Furniture Company. *Circle 202 on reader service card* 

**Plywood.** A composite core sheathing plywood that is said to be free of core voids, gaps, and laps, and natural defects found in conventional plywood core and is completely interchangeable with conventional plywood. Folder provides application data for roof, sub-floor, and sidewall sheathing. Potlatch Corporation. *Circle 203 on reader service card* 

Test report. The results of testing the chemical resistance of solid vinyl floor tile to such compounds as acids, strong alkalis, alcohols, aromatics, and aliphatics has been made available by VPI Vinyl Plastics Inc. *Circle 204 on reader service card* 

Visual and oral communications. 40-page four-color catalog contains over 200 illustrations of new products and ideas for improving visual and oral communications. Added to the line are a folding easel, a visual communication center with crayon marking surface, reception area wall and floor model poster frames for employee or customer messages, and lecterns. Request catalog No. 16. Oravisual Company, Inc. *Circle 205 on reader service card*  Steel reference manual lists beams, channels, angles, plates, bars, sheet, and specialties. Included are all dimensions, decimals, weights, and metric tables. Request Blue Book. Illinois Steel Service, Inc.

Circle 206 on reader service card

Steel catalogs on roof decks, floor decks, and composite decks include revised technical data and up-dated specifications. Steel framing catalog, also revised, illustrates studs, joists, track and bridging, and shows various steel framing jobs at various stages of construction. Includes technical data on physical and structural properties, load tables, and curtain wall construction. Grid-Crete catalog illustrates use of this product in the formation of bank vault walls, floors, and roof. Wheeling Corrugating Company. *Circle 207 on reader service card* 

Automatic door operators. Brochure describes and gives specifications for complete line of operators including the inertia, swing, and overcenter type. Air-Lec Industries, Inc. *Circle 208 on reader service card* 

Aluminum interior door frames. Illustrated brochure describes prefinished frame, gives specifications, finishes, hardware, materials, erection, cleaning, and sizes. Engineering and technical renderings show the door frame's adjustability, its weather stripping capability, and its self-mortising features. Howmet Corporation. *Circle 209 on reader service card*  **Glulam systems.** 40-page product description and technical design information catalog in full color covers a wide range of structures, including industrial, commercial, religious, recreational, and agricultural projects, as well as bridges. Technical design information includes stress tables, section properties, simple span beam tables, cantilever beam design tables, arch tables, panelized roof grid systems, and decking systems. Connection details for timber beams, columns, arches, and other connections are also included. Recommended architectural specifications and engineering data are listed. American Institute of Timber Construction. *Circle 210 on reader service card* 

Flush wood doors. Both interior and exterior types are included in 1976 catalog which contains cutaway views, technical information, specifications, and door grade information. Request Catalog S/76, Mohawk Flush Doors. *Circle 211 on reader service card* 

Sprinkler actuator. Product literature details specifications and operation of actuator designed for installation in hospitals, nursing homes, high-rise office and apartment buildings, and other structures where evacuation of occupants could be difficult. It is offered as original equipment on new sprinklers or for retrofitting into existing installations. Grinnell Fire Protection Systems Co., Inc.

Circle 212 on reader service card [continued on page 124]

#### Literature continued from page 123

Flooring catalog. Full-color 1976 edition illustrates all colors and patterns available in asbestos and asphalt floor tile. Includes general information on sizes, gauges, uses, installation, light reflectance values, and brief specifications. Azrock Floor Products.

Circle 213 on reader service card

Grout. Brochure presents technical data, as well as area, preparation, mixing, installation, curing, coverage, packaging, storage, and specifying information of a nonmetallic inorganic compound suitable for placement of both structural members and heavy equipment. Sauereisen Cements Company.

Circle 214 on reader service card

Wood panel doors. A variety of designs and information on installation and finishing are contained in two brochures. The packet also includes Industry Standard FHDA/5-75, Fir & Hemlock Door Association. Circle 215 on reader service card

Electrical operators for swinging, sliding, and vertical-lift gates are illustrated and described in 16-page brochure. Tables on electrical characteristics, operating speeds, and recommended capacities are given and complete architectural specifications are included. Request catalog No. A-240. Richards-Wilcox Manufacturing Co. Circle 216 on reader service card

#### A Guide to Flight Information Display Systems

is a 24-page monograph prepared for architects, engineers, and system designers concerned with the display of information throughout an airport complex. It is offered as a tool for general system design and discusses what has been done in airport display and what can be done. Conrac Corporation. Circle 217 on reader service card

Glass vs. masonry. 73-page report issued by the Texas Building Materials & Systems Laboratory is based on 10 months of research on energy conservation and comparative costs of glass and masonry buildings. Complete report has been reprinted and is available from Acme Brick Company.

Circle 218 on reader service card

Metalarc lamp applications that are discussed in brochure include enclosed and outdoor sports arenas, stores, offices, convention centers, and other large or open areas. The values of clear and coated lamps in various applications are discussed, diagrams, lumen maintenance curves, and comparison lamp efficiencies are shown. GTE Sylvania, Inc.

Circle 219 on reader service card

Mineral insulated cable for snow melting and slab heating is illustrated in catalog, which also gives complete engineering specifications and design details for using cable. Request Cat. No. MISM100. Emerson-Chromalox.

Circle 220 on reader service card

#### Pocket Calculator Buyer's Guide describes

and gives specifications for full line of preprogrammed and programmable pocket calculators for engineering, business science, finance, and education. Brochure 5952-6062D includes a complete listing of pocket calculator accessories, support literature and prerecorded programs as well as a description of the company's Users' Library of calculator programs. Hewlett-Packard Company. Circle 221 on reader service card

Portable panels. Catalog illustrates typical user situations in full color. A "surface swatchcard is included which shows the 75 different surfacing materials and colors offered. Standard Sho-Wall panel is available in some 8550 different variations. Panels are modular units made in many different sizes and are designed to be used singly or in joined configurations of any number. They connect without tools or accessory parts or fittings. Custom surfacing is also available. The Brewster Corporation. Circle 222 on reader service card

Floodlights. Designed for quartz, incandescent, or high-intensity discharge lamps, floodlight uses include indoor and outdoor sports arenas and stadiums, parking lots, tennis courts, parks, and airport loading ramps. Luminaires are pictured in brochure, which also includes photometrics, dimensions, and scaled diagrams of mounting accessories, and a chart to calculate operating costs. Westinghouse Electric Corp. Circle 223 on reader service card



#### **Progressive Architecture**

## Notices

#### **Appointments**

William B. Remington, director of public relations for Hellmuth, Obata & Kassabaum, Inc., New York City, has been named a vice president.

William Chafee has been appointed director of urban design for the regional transportation district in Denver.

Leslie Kichin and Mary Ellen Letterman have joined the Chicago office of Perkins & Will as vice president/ principal interior designer and interior designer respectively. Wim Swaan and John D. Haines have been named partners and vice presidents working in the New York area offices.

Jay S. Pettitt, AIA has been appointed director of architecture for Albert Kahn Associates, Inc., Architects and Engineers, Detroit. William L. Demiene, AIA has been named chief architectural designer.

Peter C. Darin has been named a vice president of Smith, Hinchman & Grylls Associates Inc., Detroit, Mich. The following are new associates of the firm: Arthur J. Dempsey, Lami A. Taweel, J. Richard Pinnell, Kenneth M. Mitchell, Arnold Mikon, George A. Seley, James P. Gallagher. Raymond J. Guernsey has been appointed an associate of Johnson, Johnson & Roy Inc., the firm's environmental planning division.

Earle S. Alexander, Jr. has been named managing partner of Pierce, Goodwin & Flanagan Architects, Engineers and Planners of Houston, Tex.

Anthony F. Saifuku has been appointed senior associate of Stanley Tigerman & Associates, Ltd., Chicago. Timothy P. Sullivan, Robert E. Fugman. Judith Aprati are associates.

Raymond H. Martin has been named a senior vice president and E. Bruce Appling and Harold Ingram vice presidents of Caudill Rowlett Scott, Inc., Houston, New York, Los Angeles, and Beirut. William A. Feathers has joined the firm as manager of business development.

Neuhaus + Taylor, Architects and Planning Consultants of Houston, has appointed Robert J. Young, AIA to the Interior Architecture and Graphics Group as operations and administration director.

## Renovation can mean Transformation to income-producing space!

## **Renovate with Style** ...with NYL WALLCOVER

Show your clients just what can be done, now, for lagging occupancy. You can create fresh interiors that will attract new tenants.

Older buildings benefit especially from Vicrtex: structural flaws can be minimized or even eliminated, and wall irregularities covered-beautifully!

- Over 85 original Vicrtex patterns, thou-
- sands of colors
- The industry's only 5-year guarantee
  Superior impact-scuffing resistance
- 'Protective Barrier' fights soil, cleans
- with soap & water Class "A" fire rating
- Mildew resistant

Get the new Vicrtex guide, VINYL WALLCOVERINGS-QUESTIONS & ANSWERS

Phone or write for your copy, today!





964 Third Avenue, New York, N.Y. 10022 • (212) 355-3080 Mill: Wharton, N.J.

#### DISTRIBUTED BY:

VICRTEX SALES DIVISION, New York, Atlanta, Chicago, Dallas, Los Angeles, San Francisco. Boston. Minneapolis, Montreal, Toronto / HOWELLS, INC., Salt Lake City / PAUL RASMUSSEN, INC., Honolulu

## FREE file on large laundry systems

Send today for this informative file on what's new in large MILNOR<sup>®</sup> laundry systems, including:

- Details on the Hands-Off Washing System which saves labor, fuel, water, downtime and money
- Equipment specifications
- Drawings of alternative materials-handling systems
- Information on water and heat recovery systems, central supply systems and MILNOR's AMPSAVER
- Laundry planning checksheets for different types of institutions.
- Information on a movie of a Hands-Off Washing System installation in action
- Name and address of your nearest MILNOR dealer



#### PELLERIN MILNOR CORPORATION

P. O. Box 400, Kenner, La. 70062 (a suburb of New Orleans) 504/729-7381 Sold and serviced by leading independent dealers the world over

# response card today

What's new in large laundry systems.

#### New addresses

Crissman & Solomon Architects, 44 Hunt St., Watertown, Mass. 02172.

Desmarais + Tornay, 980 Cherrier, Montreal, Canada H2L 1H7 and 5999 Manatee Ave. West, Bradenton, Fla. 33505.

Arnott MacPhail Johnstone & Associates Ltd., 2275 Albert St., Regina, Saskatchewan, Canada S4P 2V5.

Shizuo Najita, 527D Keolu Dr., Kailua, Hawaii 96734.

The Zeidler Partnership Inc. has opened an office at 836 Cliffs Dr., Ypsilanti, Mich. 48197.

Duane V. Fairchild Architect AIA, 1840 The Alameda, San Jose, Calif.

John Keegan Associates Architecture and Planning, 100 W. Great Falls St., Falls Church, Va. 22046.

Logsdon & Voelter Architects, 3000 S. 31st St., Temple, Tex. 76501.

Dale Crawford & Associates Architects, 117 Jefferson N.E., Albuquerque, N.M. 87108.

O'Brien/Atkins Associates, 433 W. Main St., Durham, N.C. 27701.

#### **New firms**

Jonathan Brandenburg Monroe has established Monroe Design Associates, 83 Washington St., Marblehead, Mass. 01945.

Grim, Niemeyer & Stick, Plaza 16, E. Lancaster Ave., Ardmore, Pa.

Tracy Price Associates, consultants, 1888 Century Park East, Century City, Calif.

John Milton Anderson, ARA, Architect, 197 W. Chestnut St., Burlington, Wisc. 53105.

Gary A. Barker, AIA, 723 N. 31st, Billings, Mont. 59101.

Dana J. Florestano, AIA and Matthew A. Berg of Berg Construction Company have formed Florestano & Berg Corp., 6214 N. Carrollton Ave., Indianapolis, Ind. 46220.

Theodore Kessler Architecture/Planning/Interiors, 481 Park Ave., Leonia, N.J. 07605.

Richard H. Gregory and Robert L. Rogers, AIA have formed Gregory & Rogers architecture, planning, environmental relations, 100 Ardmore St., Blacksburg, Va. 24060.

Rama Pr. Mukhopadhyay and William Rodriguez have formed Rama, Rodriguez & Associates, 86-84 78th St., Woodhaven, N.Y. 11421.

Robert Swatt Architect AIA, 3155 College Ave., Berkeley, Calif. 94705. Lawrence Marek Architect, 881 7th Ave., Rm. 405, New York, N.Y.

Circle No. 338, on Reader Service Card

## HOLMSTEN







the rough grade to the finished rink in operation.

If you are planning a new rink. . . or rink modernization. . . or have a rink problem of ANY kind, contact us. America's most experienced ice rink engineers are available for consultation.



