Progressive Architecture

January 1977 A Penton/IPC Reinhold Publication

24th annual P/A Awards
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Progressive Architecture

January 1977

Editorial: To choose the very best

The 24th Awards Program: Introduction

Architectural design: Split down the middle
A Buddhist retreat in the Santa Monica mountains of southern Calif.
A private residence in Fort Wayne, Ind.
Skylit underground linear city in a middle eastern country.
Prototype of a crematorium using solar energy.
A hospital addition in Baja California.
A weekend and summer solar house partly buried underground in Long Island.
An architect's own house in Sudbury, Mass.
A private residence sited on a knoll on 40 wooded acres in eastern Mich.
Solar energized second homes in Baja California for 12 Mexico city families.
Mixed-use complex on Pickering Wharf, Salem, Mass.
A private residence in Palos Verdes, Calif.
Rainbow Center Mall and Winter Garden in Niagara Falls, N.Y.

Applied research: Research, minus one
The Minimum Energy Dwelling Workbook.
Architectural Program for new Juvenile Services Center in Calif.
An analysis of Social Criteria for Housing Design.
Sun/Earth book: how to apply solar and climatic energies to buildings.
Architects' Court Testimony on D.C. Jail effects social change.
Life Safety Research and Design: fire and life-saving activity relationship.
Visitor Center Design Evaluation examines National Park Service facilities.

Planning and Urban Design: A new direction
Protecting Open Space: A guide to Selected Protection Techniques.
Recycling Streets: Part of National Endowment for the Art's City Options.
Mulberry Street Mall and Little Italy Special Zoning District in Manhattan.
Building Growth and Change, a citizen handbook.
The Yerba Buena Planning Ballot.
River Design: waterfront plan in downtown Dayton, Ohio.
The Birthday Book: A way for citizens to contribute to their environment.

Technics

Specifications clinic: Aesthetic evaluation of glass.

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Cover: Citations (red), Awards (blue), and a First Award (purple) are stacked in three categories, before an image from the First Award project (p.50). Designed by John Morris Dixon, with George Coderre.
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We begin the preparation of this annual competition issue about nine months before publication. (I'm tempted to say eight months to avoid mystical or arch parallels, but nine is more accurate.) And the first crucial step is to draw up a list of potential jurors.

Despite what skeptics may think, there is no preordained "in group" that we tap for our juries. We would not simply invite our favorite professionals—even if our staff could agree on such a group. Nor would we just invite those with the biggest reputations—even if such a list could be drawn up in these times. We are looking for a group of eight—a number that evolved over the years for reasons that are still quite valid—with a variety of expertise, both special and general.

For our various categories of entries, we need experts in planning and research, as well as architectural design; and we need a range of experience within each—in both public and private planning, for instance, in housing design, health facilities, commercial development, and building technology. And, ideally, we want people from each of these professional categories with authoritative knowledge of the other areas as well. Beyond that, we want geographical dispersal (no two architects from the same city) and we want to include women and other groups now under-represented in the design professions.

This jury selection process is subtle and not without risks. It sometimes leads us to individuals none of us have ever met before. Since we want only jurors who can collaborate judiciously, without crippling preconceptions, we prefer to invite people we know, but we do accept opinions on temperament from trusted third parties. We have ruled out some of the most creative figures in the professions because we expected them to behave like zealots, seizing on submissions that matched their ideals and dismissing all others out of hand.

Consider this year's jury: Sarah Harkness is one of the most experienced and respected women in the architectural profession, a founding partner of TAC, now much involved with strengthening the AIA Design Committee; John Dinkeloo has significantly revised building technology through the work of Roche, Dinkeloo & Associates and its predecessor firm, Eero Saarinen & Associates; Charles Gwathmey and his partner Robert Siegel won two out of the ten AIA Honor Awards in 1976; Craig Hodgetts, who has taught a lot (now at UCLA) and built little, has won, with his partners, two First Awards in P/A competitions.

The two planning jurors brought with them extensive knowledge of architecture—Raymond Affleck as ranking partner of Arcop, which has designed Place Bonaventure in Montreal and other landmarks in Canada and the U.S.—Ernest Bonner holding degrees in architectural engineering and business, as well as planning.

Alan Green knows research from the sponsor's point of view, as head of Educational Facilities Laboratories, but he is also an architect, who founded an architectural research center at Rensselaer Polytechnic Institute back in 1965; Edward Ostrander came to architectural research through social psychology, but he has worked on real architectural commissions from programming to final design.

It is impossible to witness the work of such a jury without developing great admiration for them—and for the hundreds of professionals who prepared submissions. Entries that represented thousands of hours of presentation were subjected to about 120 juror-hours of scrutiny. There may have been a chuckle of recognition now and then, or even a sly comment, but nothing was rejected without earnest examination.

It is impossible to go through such a process without some misgivings, and this year's architectural design jurors had such nagging second thoughts that they agreed after the fact to reinstate five submissions they had put aside in their final hours here. We have deliberately avoided identifying these five, since that would effectively devalue those citations and counteract their intentions. Instead, we urge you to read the jurors' comments, the most pertinent of which we have culled out for you.

There is, naturally, a temptation to peruse the winning entries in this issue and skip the verbal justifications. (Our reader surveys confirm this.) But if you'll read the discussion, I'm sure you will come away with valuable perspectives on the winning entries, the jury's serious concerns, and the state of architecture.
Letters from readers

Views

Pacific breeze

Amid persistent reports that Modern Architecture is dead, it was indeed refreshing to see the spotlight of architectural fashion focused on a group of designers who are not yet convinced that the wave of the future is the quotation of the past ("The Silvers," October P/A). For those of us who have begun to find all those overcomplicated plans, tortuous curves, stucco walls, pipe rails and Regency moldings a bit stimuli-fing, the vast, scaleless surfaces of Pelli's Pacific Design Center were a proverbial breath of fresh air. And despite Mr. Papademetriou's subtly pejorative characterization of the "Silvers" as "mainstream," I can't help feeling that their commercial work, which satisfies the demands of corporate clients for efficiency, flexibility, and profitability, is every bit as significant as the extravagant suburban villas to which we have been overexposed in the architectural media.

The presentation of the "Silvers" as a California phenomenon, however, is surely misleading. The continuous glass skin which characterizes Pelli's and Lumsden's work, for instance, can be seen in early projects for glass skyscrapers. Such a pedigree, and all his assistant agent types, and learning how the payoffs really take place. The secret Swiss bank accounts and hush-hush transactions are no fairy tales!

The cut-throat tactics coupled with undistinguishable acts by our noble architectural colleagues deserve scrutiny by the AIA, or by somebody not influenced by the big firms whose sustaining dyes support it. The Jewish boycott is in full swing in Saudi Arabia, resulting in a bully frolic to watch, as the big firms scramble to hide any reference to their completed Jewish projects and principals.

Not being prepared to finance the mounting expenses in exchange for the high risk adventures involved, I packed my bags and rode out the Beirut Boulevard, noted for kidnappings, with the added thrill of the first bursts of artillery fire. With an enormous sense of freedom, I left the festering fields of ghoulish deeds and calculated acts of dishonesty. It is with no regret that we now avoid the Middle East with dedicated relief.

Harry Barber's experiences as related by Suzanne Stephens' super story only scratch the surface of reality. It is high non-fiction and accurately reported. Harry, look me up through P/A and let's get together and reminisce.

Frank Success III

Pseudonym

Yale Arch. '61

(cassmate of Harry Barber)

The October 1976 Middle East Checklist is more than 1001 Paradoxes. As I scanned the list I could only think of how many participants had been influenced by The Bauhaus, and when the anti-Semitic winds blew hot, The New Bauhaus.

Two quotes from Sibyl Moholy-Nagy remind us that our vision broadens slowly. "We saw the road clearly before us toward a final goal, and we did not want to admit that we stood already in the shadow of a world tragedy that would mutilate and our time." And then, quoting her beloved husband, "'Somehow I have to make it clear that there is such a relationship as guidance and being guided is it industry that follows vision, and not vision that follows industry.'"

Alas, poor vision; I knew him well.

James Micic Bright

Christian, Bright, Pennington & Associates, Architects and Planners

Corpus Christi, Tex.

Caution, lights

Congratulations to Henry Lefer for the comprehensive and well-balanced "state-of-the-art" story on high intensity discharge light sources ("The bright lights," P/A, Oct. 1976). We are particularly pleased with the insert showing and describing our own solution to the visual problems of office environment.

In further reference to the cautionary quote from this writer (p. 92), I would like to cast some additional light (HID or otherwise) on a real problem facing the consumer of man-made light today: It is an irrefutable fact that a state of great confusion exists in the marketplace. The lamp manufacturers are pushing HID's as a panacea for each and every application; fixture manufacturers advertise HID fixtures, conveniently disregarding glare problems; many specifiers turn their backs on color rendition problems and get carried away by such catchy terms as "gold colored light" (Those who remember the Bond classic "Goldfinger" would recall that too much gold killed the blonde!).

In short, Professionals in the lighting field need more knowledge and judgment than ever before, and the public needs more than a grain of salt when digesting all the HID fairy tales floating about the land.

Jules G. Horton, PE, IAID
President
Jules G. Horton Lighting Design, Inc.
New York, N.Y.

Middle East skirmishes . . .

Alas, what a story of my classmate through Suzanne Stephens' staggering tales of Harry Barber's adventures in OPEC land in your October issue. During my travels in the Middle East in a scouting mission for my firm I regrettably failed to bump into Harry, a rarity, since everyone generally meets everybody at some point in time. Harry's experiences bring back vivid memories of all that horrible unprofessional behavior which jolted my senses on numerous occasions. The appalling discomforts of travel, lodging, and lack of decent food weren't nearly as bad as the incomprehensible arrogance attached to missed appointments, complicated deals, and lie by lie promises. The dusty streets of Riyadh, masked intrigue in Baghdad, long hours of waiting, waiting, waiting in Damascus can rattle the bones of one who is not preconditioned and patient. The stretched out appointments were not all bad, because they did give me an opportunity to learn in detail how desert worms are fumigated, and how many brassieres would be secretly imported to Saudi Arabia this coming year.

My biggest thrill was meeting the top Prince and all his assistant agent types, and learning how the payoffs really take place. The secret Swiss bank accounts and hush-hush transactions are no fairy tales!

"Let my people go."

How are Mid-East projects glamorized in the October P/A? This is discriminatory architectural journalism in the raw. Multimillion dollars attracted Bostonian prostitute architects. Not architecture. They have vowed via contract to discriminate against the staffing of Jews, etc. in order to be retained and get rich quick.

In April 1933 the Gestapo occupied the Berlin Bauhaus. The Bostonian architects are descendants of the Bauhaus. They forgot. Have you forgotten also?

Jeffrey S. Fleisher

Vice president, Student Association
Boston Architectural Center
Boston, Mass.

These are serious allegations against this journal and some unnamed architects. They represent widely held apprehensions, so deserve to be aired, but are not authoritative. By publishing these projects, P/A did not, in fact, discriminate—in an area where the writer apparently feels we should have. As for the "vows" of those Bostonian firms, we personally know Jews in the firm he apparently refers to who have not been demoted or banished.

There are architects in Boston, close to the writer, who left Germany in the 1930's. They could explain the difference to him—or they could explain the parallels—if substantial—To us at P/A. —Editors

More light on the patient

Your information on lighting, presented in the hospital room equipment section titled Around the Patient (P/A, Sept. 1976) contains a number of errors.

You suggested that, "fluorescent or quartz [continued on page 10]"
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Circle No. 339, on Reader Service Card

Views continued from page 8

Lights distort skin color less... First of all, fluorescent sources can distort all colors to a great degree, particularly when the "cool white" industry standard is used; only deluxe and other special lamp colors offer a requisite spectrum. Secondly, the "quartz" is misleading; you must mean "tungsten-halogen." Thirdly, as compared to what do they "distort... less?"

In your next sentence you state, "They also cost less to operate than incandescent light. However, tungsten-halogen (quartz) is incandescent lighting. In any case, the difference in operating cost between highly specialized applications of this nature is not always linked to the source type.

You go on to say, "Attaching rheostat devices to a fluorescent system is extremely expensive. Please note that rheostats are resistance devices that have not been used for years and years; you must be referring to electronic dimmers. In our practice, limited dimming of fluorescent lighting for specialized uses does not necessarily carry a prohibitive expense.

James L. Nuckolls
President, International Association of Lighting Designers
President, Design Decisions division of Syska & Hennessy,
New York, N.Y.

[Some of the errors cited involve common us.

views vs. technical—incandescent to mean only conventional incandescent, rheostat to mean any kind of dimmer—but we do appreciate the attention of a recognized lighting expert to some of the details of this article. —Editors]

Monumentality: an author responds

(In response to Views letter from Donald Gral Nov. P/A, p. 15, concerning the Federal Tax Court):

Thomas Jefferson, still unsurpassed in this country in the advocacy of simple, subservient and responsive government, was also a pioneering importer of Roman style for this government's buildings. To see such architectural monumentality as inappropriate for our government's buildings is to confuse government service and humility with government transience and consequence.

The permanence and the moral authority of our democracy are the qualities that suggest fact, badly need) expression in public buildings. The monumentality wanted is that which will "enduring evidence" (my dictionary's definition of those qualities. Some architects, obviously, have been unable to give such evidence with being overbearing or "architecturally uppity." Despite their failures, an appropriate monumentality is both desirable and—as Lund has proved—possible.

Stanley Abercrombie
New York, N.Y.

Photo credit due


Exaggeration

A new underground garage for the former Mie Biltmore Hotel (P/A Nov. 1976 p. 24) will park 274 cars—not 274,000 as reported.
The Crocker Bank's Operations Center for Northern California in San Francisco hums with activity 24 hours a day, seven days a week. Some 1,300 people work round-the-clock operating the electronic data equipment required for modern banking. The building is served by six Dover Elevators with Computamatic® control. This modern elevator control system monitors traffic demand and dispatches cars for efficient handling of the vertical transportation requirements. For more information on Dover Elevators, write Dover Corporation, Elevator Division, Dept. B, P.O. Box 2177, Memphis, Tenn., 38101.

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Progressive Architecture

News report

Left: Top row—Hande Suher (Turkey), Jane Drew and Monica Pigeon (England), Mertsi Laurola (Finland); Fourth row—Bola Sobande (Nigeria), Denise Scott Brown (U.S.A.), Hanne Kjerholm (Denmark); Third row—Nelly Bellizzia (Mexico), Joyce Whitley (U.S.A.), Nobuko Nakahara (Japan), Indira Rai (India); Bottom row—Alison Smithson (England), Marie Gangneux (France), Anne Tyng (U.S.A.), Gae Aulenti (Italy), Helena Polivkova (Czechoslovakia), Eulie Chowdhury (India). Right: Her Imperial Majesty, the Shahbanou of Iran, greeting Joyce Whitley; Solange d’Herbez de la Tour, president of UIFa, stands at the left and Indira Rai, at right.

Conference speakers not shown are Ellen Berkeley, Mona Mokhtar, Laleh Bakhtiaz, Noushin Ehsan, Nasrine Faghih, and Leila Motamed.

Iran’s Congress of Women Architects

Ramsar is the resort town along the Iranian Caspian coast where the International Congress of Women Architects met in mid-October to discuss "The Identity Crisis in Architecture."

Twenty women architects and planners from 14 countries were present as official guests of the Iranian government, and an estimated 165 members of the UIFa (L’Union Internationale des Femmes Architectes) also attended bringing to 25 the number of represented countries.

The congress was held under the patronage of Her Imperial Majesty Shahbanou (Farah Pahlavi) a former student of architecture, who gave the opening address. It was the third International Congress of Architects to be held in Iran: the first was in 1970 and the second in 1974, both primarily for men with few women included. It also was the fourth international meeting of the UIFa, organized in 1963.

This congress was an achievement for the Iranian women who planned, organized, and led the event. Nektar Papazian Andreff, the oldest woman architect in Iran (possibly in her 40s) served as Honorary Congress Chairperson, and Azar Faridi, an Iranian architect trained in Scotland, was Secretary General.

Indisputably, the most noteworthy women at the congress were the Iranians. Their number alone was remarkable (reportedly more than 80 registered with the Ministry of Housing and Urban Development); they were young but extremely articulate, with clear points of view and great confidence; and they looked aristocratic.

Though the woman’s role in architecture and planning was recognized as an aspect of the "Identity Crisis," this clearly was not a meeting of feminists. The women of Iran generally asserted they had no professional problems as women. Those from some of the developing countries (Turkey in particular) strongly resisted the notion that women designers might have a special role to play within the architectural profession.

There seemed to be a fear that the identification of a unique role would restrict women as architects or planners. The most assertive voice on the subject of women’s rights was from Denise Scott Brown of the United States who assailed the "Sexist Star" system and called for quotas and other measures for righting wrongs.

Significantly, in recommending a program of periodic meetings, this congress suggested they should be carried forward "not necessarily strictly as a feminine endeavor, but preferably as a joint professional effort with our male colleagues in the series of International Congresses of Archi-
News report

Architecture already scheduled in Iran."

A major concern in exploring the identity crisis was the relationship of the built environment to its social and physical context. Discussion centered on the fact that most of the architectural and planning work in Iran today is with the participation of foreign, primarily western, firms. To the young Iranian architects, the cultural traditions of the country thereby are being lost. As noted by Mina Marafat, a 25-year-old Iranian graduate of Miami University of Ohio, architects trained in the developed countries "often divorce the architect from recognizing the needs of the population."

The quality of "identity" was defined by a resolution of the congress as "unity and persistence of character" and was recognized as "vital to a sense of well being." Further, the congress agreed that this quality needs to be included in man-made forms through a regenerative rather than an imitative process.

Differences of opinion were voiced as to the nature of the crisis and appropriate solutions. For Laleh Mehree Bakhtiar of Tehran the problem was spiritual: "By gaining consciousness we have lost the art of prayer. Until we come to know the Truth within, the Self, our art forms will continue to vicariously suffer from our own identity crisis."

Anne Tyng of Philadelphia saw the crisis as true "not only for architecture but also for the human species." Alison Smithson of Great Britain admitted no real crisis. She related identity to invention, asserting that "it is by invention alone that a new identity can be created to fit absolutely into a complex, many layered situation. . . ."

Hanne Kjerholm of Denmark and Anna Bofil of Spain both argued that creativity and imagination must be the main transforming element of our environment. Others suggested citizen participation.

Little in these discussions clearly identified the social context of the "crisis"; the sense of urgency was absent; few spoke of the impotency of professionals confronting the onrush of development; few expressed concern for the mixed goals which must be achieved if social needs, economic necessities, and political aspirations are to be fitted within a physical frame.

Ellen Perry Berkeley of the United States reminded the congress that "Architects in America. . . . are not designing housing of any considerable quantity, and 'mobile homes' continue to be produced; . . . architects put a great deal of effort into certain buildings, but these may be mainly for 'show.'"

Indira Rai of India pointed out, "When we talk about the need for adequate housing on an all-India level, we talk in figures ranging from 60 million to 90 million units. How can we tackle so vast a job? and how soon?"

Mina Marafat concluded, "Architects want to disclaim much of that which is going up now in Tehran." But she charged (and rightly) that by shunning responsibility, the architect remains passive and subservient to the class that can afford to purchase his craft.

The congress recommended that the papers be published within six months and that a two-stage research program be undertaken to better identify the nature of the problem and develop a collective approach for creating a quality environment in a specific place, to be selected. [R. Joyce Whitley]

Ms. Whitley, vice president of Whitley & Whitley of Shaker Heights, Ohio, is a planner and was one of the 20 invited speakers. She served on the 1976 P/A Awards Jury.

Hyatt Regency Washington bridged by 130-ft-long girders over the entrance.

Hyatt’s DC hotel is worth a yawn or two

When the Hyatt Corporation announced a $42 million, 900-room Hyatt Regency Hotel in Washington, the news was greeted with great anticipation and excitement. In execution, however, the bold design for which the hotel chain is so well known failed to materialize this time. Like much of the architecture in this federal city, the Hyatt Regency is disappointingly second-rate. Acceptable, but dull.

The architects, Welton Becket & Associates, must have believed they were designing another office building or shopping center. The chain’s trademark atrium lobby—spacious and filled with light—is, in this case, cramped and dark. The skylit roof, supported by three mammoth 8-ft-deep steel beams running from ground level to the fourth floor and crisscrossed by what must be tons of bracing, seems to be more steel than skylight.

Then there is the color. The entire building is done in what is described as tan brick (closer to glamorized concrete block) with bronze-framed windows in a standard pattern.

Finally, there are the elevators—usually jewellike in Hyatt Regency hotels. In Washington, these have been reduced to black boxes with a single row
of lights under a back window. One runs up the front of the building, with a view of a nearby fire station and garage; the other two are hidden in a corner at the edge of the atrium and their view is of the wall and the top of the skylight.

The building does offer some excitement. The entrance to the S-shaped structure is accentuated by a 130-ft-long bridge at the 9th and 10th floors. But again, the two huge steel girders holding it up are overpowering, like those in the atrium directly below. The restaurant at the top does offer an excellent view of the U.S. Capitol dome two blocks away, and from all early reports, the food is quite good.

What went wrong? Perhaps the fault is with us for having such great architectural expectations. Still, the Commission of Fine Arts, which oversees much of the design in Washington, reportedly threw up its collective hands over the design. "We can't design their building for them," one commissioner allegedly said after the commission kept asking for more changes, and the building kept getting worse.

If Hyatt wanted a dull building, they should have hired the master of "dull" architecture, Robert Venturi. Then it would have been dull but exciting. This is just dull. [Carleton Knight III]

Connecticut honor awards

Six firms have won honor awards in the Connecticut Society of Architects annual awards program. In the residential category the two winners are Peter Kurt Woerner of Guilford for a house in Guilford, and Charles Brewer of New Haven for a house in Woodbury. Three firms received awards in the renovation/restoration category: Robert Gantner of Willimantic for restoration of an 1825 stone house in Willimantic; Gilbert Switzer & Associates of New Haven for an addition for The Professional Arts Group of New Haven; and Gwathmey/Siegell Architects of New York for converting a barn in Greenwich into a family residence.

The firm of Douglas Orr deCossy, Winder & Associates of New Haven won the award in the commercial/institutional category. Jurors were Warren Cox, Peter Blake, and N. Michael McKinnell of Boston.

Six Atlanta firms win honor awards

The Georgia Association of the American Institute of Architects has presented honor awards to Heery & Heery for the Mary Kay Cosmetics Distribution & Training Center and for the City Exhibit at the High Museum of Art; to Thompson, Hancock, Witte & Associates for the Jones Bridge Headquarters of the Simmons Company; to Nicholas Carter Seay Architects for the Down Under Club, Cameron's Crossing; to Karel R. Pruner for the hairstyling studio, Innovations; to Thompson, Ventulet & Stainback for Omni Inter- [continued on page 25]
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"Treasures of Tutankhamun"


The 55 pieces, many of gold set with semi-precious gems, are displayed in clear plastic cases in all-black rooms; each object gleams in its own area of light. The installation, by Gaillard Revnel and George Sexton, includes mural-size photos of archeologist Howard Carter's 1922 expedition which discovered the treasures.

The show recreates the subsequent ten-year excavation by presenting the objects in the order they were found in the four-chamber tomb. The Metropolitan Museum of Art, New York, which heads the consortium of museums sponsoring the Tutankhamun exhibit, recently has opened its own new galleries housing a vast Egyptian collection. The galleries and installation were designed by the architectural firm of Kevin Roche, John Dinkeloo & Associates of Hamden, Conn., under direction of Arthur Rosenblatt, the museum's vice director for architecture and planning.

The galleries were redesigned with new rose-colored granite floors similar to those of ancient Egypt; new lighting and cases—some large walk-in types which allow viewing without barriers of individual glass cases—and new ceilings and walls that make use of limestone, wood, and linen to provide background for the collection, much of it never before exhibited.

[continued on page 28]
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Second annual P/A Ad Awards

A jury of four architectural designers has selected 24 winners in Progressive Architecture's second annual Advertising Awards Program. The winning ads were picked from among 320.

The winners are International Contract Furnishings; Knoll International; Herman Miller; The Pace Collection; Vecta Contract; Dow Badische; Emhart's Russwin Division; and PPG Industries.

American Plywood Association; Celotex; W.R. Grace & Co.; Koppers; Olympic Stain; Tremco; Zero Weather Stripping; and The American Gas Association.

Johns-Manville, Holophane Division; Sterner Lighting Systems; Bethlehem Steel; Helios Tension Products; U.S. Steel; Unistrut; Andco Industries; and Clearprint Paper.

Charles Biederman, advertising and promotion executive with the General Electric Company, served for the second year as jury moderator.

Jurors were architects Jules Gregory of Uniplan, Princeton, N.J., Alan Schwartzman of Davis, Brody & Associates, New York, both fellows of the American Institute of Architects; Robert Wilson, who has his own practice in Stamford, Conn., and is a vice president of the AIA; and Lawrence Lerner, president of SLS Environetics, New York, N.Y.

A seminar will be held Jan. 21 at the Plaza Hotel, New York, at which the jurors will hold a panel discussion commenting on their choices. The awards will be presented at this event to the 24 winning companies and their advertising agencies. This awards program was instituted by P/A publisher Philip Hubbard Jr. last year to continually improve the communications value of architectural advertising.

Doing it Wright

In order to generate the $1 million needed to restore the Frank Lloyd Wright Home and Studio of 1897–99 in Oak Park, Ill., the Home and Studio Foundation sponsored the second Oak Park house tour (with a symposium) in mid-October. Present for the occasion were the non-Taliesin affiliated members of the family, Lloyd Wright and son Eric Wright, architects for the restoration of the home and studio, as well as for Unity Temple. Also present was granddaughter of FLW, actress Anne Baxter who this observer wished had been involved in the symposium. (Although the subject was various experiences at Taliesin, Anne Baxter's own observations of her grandfather and his architecture would have been interesting. Certainly the symposium could have benefited from her articulateness as well as her sense of theatrics.)

Seeing the privately owned Oak Park houses was somewhat of a revelation, albeit with mixed response. One wants to applaud the owners for allowing people to tromp through living rooms and peer into nooks and crannies. On the other hand the way most of the houses were furnished in various stages of kitsch and mish-mash modern totally destroyed the sense that these houses were designed by Wright. One began to sympathize wholeheartedly with Wright's own autocratic stance on the subject.

On the other hand a visit to the Home and Studio where restoration has begun to take place totally affirmed the value of The Architectural Experience. It's nice to have it. Johnson's Wax offices and labs in Racine of course still keep the experience intact, but even here erosion has begun to take place: A brass handrail has been installed around the concrete parapet overlooking the main clerical room to conform to OSHA standards. Plastic simulated wood-grain booths have been installed in the small theater/coffee room. Changes are allegedly approved by Taliesin. In the lab tower, the open labs are being partitioned again to conform to various safety standards—which promise to obliterate the sense of continuity of space between cantilevered floor and full floor and between each floor and the central stair core. Wright must have known about "small" changes: erosion eats away at the gestalt bit by bit until only memory is left. [SS]

NEA announces grant guidelines

Guidelines for the Challenge Grant Program, in which each federal dollar must be matched by $3 from other sources, have been announced by the National Endowment for the Arts. The program has been developed to strengthen private funding sources. Further information and applications may be obtained by writing Challenge Grants, National Endowment for the Arts, MS 500, Washington, D.C. 20506. [continued on page 32]
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Plywood offered economic as well as aesthetic benefits. Shiplapped 3/8" T1-11 siding in a simple design needed only semi-skilled labor for installation. Spandrels were detailed to utilize 1/2- and 1/4-sections of a standard plywood sheet. And as sheathing for the floors and roof, plywood extended its cost savings into the structural system as well.

For design ideas and information, write American Plywood Association, Department PA-017, Tacoma, Washington 98401.
Noguchi sculpture for Atlanta park

The latest, and everyone agrees the most popular, addition to the Henry Law Olmsted-designed Piedmont Park in Atlanta is a play sculpture by Isamu Noguchi. With funding from numerous private and public donors, the $200,000 multi-unit play environment was completed earlier this year. Elements of the work are geometric-shaped slides and climbing walls, swings, and see-saws. "Playscape" was part of the "Art in the Park" project of Atlanta's High Museum of Art and the City of Atlanta.

Deco-rating Houston's skyline

The latest addition to Houston's developing skyline is the suburban Galleria complex in Post Oak Central, a 400,000-sq-ft office tower by Gerald D. Hines Interests. Architects for the project are Philip Johnson & John Burgee, New York, and S.I. Morris Associates, Houston.

Related to Post Oak Central is a separate six-level, 1600-car parking garage with tunnel connections on the first level to the tower retail space. The current project is the first phase of a development in which Post Oak Central will remain a dominant feature.

The Johnson/Burgee solution is an elegant response to a middle-of-the-market office building. At a height of 318 ft, it is the tallest of suburban towers, and its stepped profiles at the 12th and 22nd floors create a strikingly prominent image.

Beyond this, the Johnson/Burgee office appears to have restated the remembrance of Art Deco urban architecture. With its rounded corners and stepped profile as well as its definite striping in chrome and black we are reminded of the decorated heritage of "The Moderne." Also, Philip Johnson—whose work often is filled with witty allusions—appears to be tipping his hat to his younger colleague on the West Coast, Cesar Pelli, by the specific treatment of the "peel away" entrance of Post Oak Central.

[Peter Papademetriou]
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News report

Report from Milan

MILAN FURNITURE FAIR—SEPT. 18–23
Each year, for five days in September, the entire Italian furniture industry gathers in Milan to exhibit its new products. Space at the Milan Fair is at a premium and costs run high, especially for those exhibitors who want to be located on the second and third floors of Pavilion No. 30 where most, although not all, of the furniture that finds its way into the United States can be seen.

This year marked the 16th presentation of the Italian Furniture Exhibition, with 1,900 companies participating. It was also the 6th International Furniture Exhibition, with 65 firms from 12 countries displaying their products. The exhibits, housed in 17 separate buildings, covered an area of 200,000 square meters (about 5 acres). Their range in quality was equally vast.

Also, 1976 marked the opening of Euroluce, the first International Lighting Exhibition. For the first time, 235 producers of lighting fixtures were grouped together in their own pavilion. This new focus on the lighting segment of the furnishings industry indicated its strong position in the total market.

General observations by visitors to the Fair (limited, regrettably, to those speaking English) were fairly consistent. "Nothing new, nothing we haven’t see before . . . but, oh, how beautifully it is done!" There seemed to be genuine disappointment in the absence of any one outstanding piece of furniture. Excitement was derived, instead, from refinements in manufacturing techniques. The undersides of furniture claimed almost as much attention as the uppers.

A trend—if one was looking for trends—could be observed in the use of knocked-down furniture; there were examples in both high- and low-priced merchandise. One manufacturer showed "cash and carry" furniture for the home, seating units constructed of simple frames with removable upholstery.

Furniture designers showed a preference for wood and leather, rejecting materials such as chrome, glass, and plastic—standbys from an earlier period. They also showed a leaning towards rich, patterned fabrics: one manufacturer used Gobelin tapestry on a contemporary furniture line; another used a velvet print from a well-known clothing designer; still another favored printed suede.

The International Office Exhibit—a vast display of office equipment and furniture that covered three separate pavilions—showed that European manufacturers, much like the Americans, are concentrating their efforts on open-plan furniture systems. But in this area, the Americans can be said to be leading the way. None of the systems exhibited showed signs of concern with task and ambient lighting, acoustical paneling, or concealed raceways for power conduits. Nor were there any complete systems available in fine woods, of the sort we now offer to meet the needs of middle management.

Perhaps the most exciting aspect of the Milan Furniture Fair was to be found outside the fairgrounds, the discovery of beautifully designed shops devoted to contemporary furniture and lighting. These shops—with windows displaying desks, sofas, and chairs—line the fashionable streets and appear alongside of chic clothing boutiques, and all cater to the same clientele. Enterprising exhibitors at the Fair offered visitors convenient transportation to these shops, where space was more inviting and products exhibited to greater advantage. [Edith Siroto]

Ms. Siroto, a business major from Hunter College, has been in and around the furniture industry in New York and Chicago for the past 16 years.
From Kartell, a component system designed by Anna Ferrieri.

Molded table and chairs from Kartell.

Vertical chair designed by Massironi for Manzano.

A new open office furniture system from ICF DePadova.

Knock-down chair, which comes in a box, from Castelli.

Knock-down chair with slipcover produced by Castenedolo.
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News report continued from page 39

Personalities

Barton Myers, principal of Barton Myers Associates, Architects and Planners, Toronto, Canada, has been elected a member of the Royal Canadian Academy of Arts.

Raymond Kappe, FAIA, director of the Southern California Institute of Architecture is the recipient of the California State Council, AIA, award for excellence in education.

Howard R. Lane, AIA, Encino, Calif., has been named president of the California Council, AIA.

Andrew D. Seidel has been named assistant professor of policy analysis in the Department of Environmental Design, School of Architecture and Environmental Design, State University of New York at Buffalo.

Ted Curtis has been named director of facilities planning and operations at Kent State University, Kent, Ohio.

Calendar


Feb. 2-7. Society of Architectural Historians annual meeting, Los Angeles.

Feb. 3-5. National Home Improvement Council annual convention, San Francisco.


Apr. 17-20. Environmental Design Research Association annual conference, Urbana-Champaign, III.


[continued on page 44]
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Location photography courtesy of The Watts: Chapel.

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Raymond, Spence, Robsjohn-Gibbings

Antonin Raymond, who traveled to Japan in 1919 with Frank Lloyd Wright to work on the Imperial Hotel and stayed until 1938 carrying on his own practice, died Oct. 25 at the age of 88. He was a native of Bohemia and came to the United States in 1914 after studying at the Polytechnic Institute in Prague. Among his buildings in Japan were the Gumma Music Center and American Embassy, both in Tokyo, the campus of Nanzan University, and the Reader’s Digest building in Tokyo. During World War II Raymond assisted the U.S. Army in design and planning.

Sir Basil Spence, 69, controversial for his modern approach to the rebuilding of Coventry Cathedral, which was destroyed by bombs in World War II, died Nov. 18 at his home. He was educated at George Watson’s College in Edinburgh and taught at the University of Leeds and at the Royal Academy.

Terence H. Robsjohn-Gibbings, London-born and educated at London University as an architect, died Oct. 20 at the age of 71. He came to the U.S. in 1930 and lived in New York where he established a career as a designer of furniture and interiors. An admirer of classical design and a collector of antiquities, he nevertheless championed the modern movement by witty criticism of the contemporary scene—including his colleagues’ work. Among his best-selling books: Goodbye Mr. Chippendale, 1944; Mona Lisa’s Moustache, 1947; and his last, Furniture of Classic Greece, 1963.

Interiors publisher Charles Whitney

Magazine publisher Charles Whitney, former publisher of Interiors magazine and publisher of Architectural Forum in the five years before it ceased publication in 1974, died in New York on Nov. 4 at the age of 73. He was born in Canada and came to the United States in 1925. In 1940 he purchased an interior design magazine, changed its name to Interiors and won numerous editorial awards. He also published Industrial Design magazine.

Passing of two pioneering developers

William Zeckendorf, 71, best known for providing the real estate package for the United Nations headquarters, died in his New York apartment Sept. 30. Born in Paris, Ill., he grew up in the Bronx and attended New York University three years. In 1938 he joined Webb & Knapp, a real estate development firm which rose from an estimated net worth of $127,000 to $75 million under Zeckendorf’s leadership before it folded in bankruptcy in 1965. Zeckendorf, however, remained as consultant to the successor firm, General Property Corporation. Zeckendorf hired a number of leading architects, among them I.M. Pei who designed Mile High Center in Denver, Place Ville Marie in Montreal, and Society Hill Towers in Philadelphia for him—along with the developer’s own windowless, cylindrical office.

William Kaufman, founder of the Kaufman Organization, died at the age of 80 on Oct. 26. He was noted for his progressive development of office buildings primarily along Third Avenue in New York, for which he commissioned works by such artists as Hans Hoffman and Beverly Pepper. He entered the real estate field in 1924 and was among the first to support the FHA founded in 1935.

Alexander Calder

1898–1976

“Calder’s Universe,” an exhibition on view at the Whitney Museum of American Art, New York, had been described as the “definitive retrospective” of the sculptor’s work. Its tour this year to three other museums will be all the more poignant in light of Calder’s passing on Nov. 11, 1976.

Calder was born July 22, 1898, in Lawnton, Pa. In 1926 he left for Paris and since that time has made his home in Saché, France, and has maintained a residence in Roxbury, Conn. He was graduated in 1919 from Stevens Institute of Technology with a degree in mechanical engineering, and he studied at the Art Students League, New York, from 1923 to 1926. Calder is best known for his mobiles and stabiles, many of which are incorporated in the public spaces and plazas of important buildings throughout the U.S.
1. Eclectic bank—The East Cambridge Savings Bank in Massachusetts wanted to expand but recognized the value of its symmetrical, vaguely Byzantine 1931 pink granite building. A design by Charles G. Hilgenhurst & Associates of Boston met the bank’s approval and construction is underway. The solution: a Palladian device linking the old to new by a curved passage. The provision of a gardenlike front court maintains the symmetry and unity of the existing façade.

2. Architects’ building—A six-story office building with a split-level office/residence on the top two floors entered construction last month in the Coconut Grove section of Miami, Fla. The structure is a design/build project of Antoniadis Associates of Miami which will have offices in the building, along with three other architects. The precast concrete structure was put in place in less than two weeks and the building will be ready for occupancy by spring.

3. LaCité in Montreal—Under construction on four blocks in downtown Montreal, Canada, is a $102 million mixed-use complex by Eva Vecsei in association with Dobush Stewart Longpré Marchand Goudreau. Uppermost in the design was orientation of the buildings, to create a maximum of sunlit spaces and to maintain the existing street scale. In the center of three of the blocks is a 30-story “skystep” residential tower with vertical transportation that meets a ring circulation system with retail shops, cinemas, health, and sports facilities below street level. The project includes a round, 25-story medical office tower and a Z-shaped 14-story hotel of 500 rooms.

4. Branch library—The North St. Paul Branch of Ramsey County Libraries in Minnesota has been designed by Setter, Leach & Lindstrom of Minneapolis to include a community room, which may be used apart from the library when desired. The steel structure is exposed inside; a continuous slot window above the stack area gives a feeling of openness but keeps to a minimum the quantity of glass. The double entry building is accessible to both vehicles and pedestrians.
About the only way to pick this lock is to select it.

Emhart High Security Locking System. A major advance in positive protection for buildings that breaks dramatically with traditional lockset design. Unique cross-cut key bit* and interlocking tumbler pins create astronomical odds against picking.

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* Patent appli
Maybe it was a restrained sign of optimism in the profession. From beginning to end, the 24th Awards Program seemed largely characterized by "ups." To begin with, submissions were up from last year—by roughly 160 entries—to 619. The jury was at least 85 percent convinced that the quality of the material was extremely high, and reflected well the new and varied approaches emerging in the environmental design professions. While the architectural design segment of the jury had its votes split on many occasions, their final decisions were reached in a spirit of agreement. On various issues, the sub-group of four had its detractors and its champions. John Dinkeloo, for instance, stated his strong disbelief in prefabrication and solar energy. Of the latter he said, "I'll be glad when ten years have passed, and everybody has gotten off this solar kick. They'll find out what a bunch of baloney it is, and get back to work." But Sarah Harkness countered with, "No, I hope we'll all be on it. Otherwise, I don't know where we'll be." Similar splits, with different advocates, came on remodeling/preservation/restoration, vernacular architecture, single-family houses, and housing (especially for the elderly).

Other jury segments, admittedly two jurors each, found more general agreement. With the entire jury reconvened on the second day to review winners proposed by the specialty judges, a perspective difference was noted. Clearly the highest priorities in both applied research and urban design and planning focused on "enabling," while architectural design narrowed it down—in the best sense—to "doing." As Craig Hodgetts put it, "I think the proper bias from the planning point of view is to be an enabler. You know, a designer can't conceivably have that attitude, because the designer has to be the person who brings the thing to a finish. Closure is the thing the designer's all about. You can design a system that a person can put together any way he pleases, but you've got to close." Ernest Bonner reinforced Harkness' viewpoint that as the scope of a problem increases, so do the constraints and the number of objectives. "If you try to handle the 49 different objectives of a complex problem, you reach a point where you can't cope with it," he asserted. "Yes, but I think you can establish priorities," said Charles Gwathmey, "and that's what a good designer does." Harkness summed it up when she remarked, "Ernie is saying that in their part of this process they went into it in an open-ended kind of way, and when you're judging design the way our part of the jury did, it is a much more closed, purist point of view. You were looking to set up possibilities, for things others could go on with. Everything from our side is kind of an end in itself, except that many are also applicable in principle to other problems. We chose pretty pure statements, and that means that the projects had pretty pure clients."

The jury.
This year *Progressive Architecture* sought to assemble architectural design jurors who would represent very different aspects of the professional spectrum in terms of types of practices, attitudes, and experience. And that is what *Progressive Architecture* got. On almost every issue the jury was divided: on emphasis on formal concerns over the social ones; in recognizing originality and innovative experiments rather than solutions that have already proved acceptable; the decision to recognize houses over larger scale projects. It is not surprising that most of the voting reflected the split: so much so that initially the jury decided to only premiate seven entries in the architecture category.

After reconsidering this decision however, they unanimously reversed their position. In the face of a strange rigor they sensed had developed in coming to some sort of agreement, they felt they had excluded some projects of real merit. So the jury reinstated five projects from the final round of contenders. Despite their deadlocks on many entries, the issues discussed relate directly to some of the major conflicts plaguing the profession today.

**Gwathmey:** The state of the submissions reflects the state of the building context today. Many submissions played it safe. They were really accommodations to the programs and not interpretations that could transcend those programs. It is interesting that the simplest, most eloquent project we selected was a monastery, very small in scale with each single piece absolutely legitimate to the whole circulation, ecology, environment.

**Dinkeloo:** I'm disappointed in the quality of the submissions. The recession has made everybody much more cautious in their approach to architectural problems. You can't play a game well if you play it cautiously. The feel of something exciting makes architecture—and that means that the result is exciting for people to live in. The ones we selected were the relatively exciting solutions to architectural problems. It is hard of course to try to evaluate a project in two days judging. While making these fast judgments one hopes one isn't voting just on excitement, and being carried away by a presentation.

**Harkness:** I don't feel disappointed in the quality of the submissions. We've passed by an awful lot of good architecture and I feel a little regretful. We were looking for newsbreakers, pacemakers, innovators, and so forth. There is a tendency to go past the really good architecture. One thing we all noticed was that more could have been done with alternate energy systems. There could be a whole new guide for a very practical kind of design. It could alter all kinds of things. At least we're beginning to see it. We've seen some of it, and next year should see more projects reflecting current research. It would make me feel quite happy if we weren't seeing form for form's sake, but form for other very solid reasons.

**Hodgetts:** There is no way to be honest finally about this judging process because it is a synthetic situation. It depends on many variables: who decides to submit projects, the constitution of the jury. Another taxing part of the process is to be faced with the diversity of styles, of intentions, of new canons being proposed (and there were many new ones, not immediately comparable to each other). The scope and range of design in fact seems to be increasing. Not everyone is taking the same path. To some extent that diversity invalidates this procedure because at the end we were comparing apples and dresses. Yet it is very exciting that there are different intentions—all equally valid.

**Gwathmey:** We're really talking about buildings that have all sorts of implications—where the diagram for the particular buildings is applicable to other programs. As far as the categories go, though, the housing one is really desperate. And the recreational category would seem to offer an opportunity to do something, yet the solutions were mundane.

**Hodgetts:** We were trying to look at these projects from the point of view of their inherent quality of design and solution to problems they were addressing. We stuck very close to
that—perhaps that is a purist point of view but it did keep clear of local aberrations. Quality has a lot to do with caring; it has a lot to do with attention to detail, maturity of spirit.

**Harkness:** But there are constraints you can’t rise above, and it often happens that as buildings get bigger or the complex gets bigger there are more constraints and less individual control.

**Hodgetts:** The quality is based upon whatever set of schematic decisions were made which are carried forth faithfully, with great skill and love. I want to be in a place that makes me feel like I’m in a special environment.

**Gwathmey:** For example, elevated bridges with skylights per se don’t guarantee the viability of an urban center because they connect to a store across the street. The quality of life in the object and in the environment—and the order the architect brings to it—must be considered.

**Craig Hodgetts**

**Harkness:** When constraints start hitting you from all angles, especially in large scale urban schemes, the result is not going to come out quite so pure.

**Dinkeloo:** It is interesting that most of the projects we saw and gave awards to are small-scaled. We have too many houses. If this is architecture, let’s forget it.

**Hodgetts:** But there was a lack of projects of any scale that had stimulating quality. To that extent we are really victims of the submissions. The houses have content; at least they have ideas.

**Harkness:** It is easier to make a sensational house than other kinds of buildings.

**Dinkeloo:** The individual house has no place in American culture anymore.

**Hodgetts:** Rather than “no place” it has a rare place.

**Gwathmey:** The house has always been a critical reference point in design. It is a complex building. Architects learn by doing them.

**Dinkeloo:** That point overemphasizes houses, especially the expensive, individualistic type.

**Hodgetts:** But the expensive individualistic house is more of a cultural index than a lot of other building types.

**Gwathmey:** The best houses, to my mind, are the ones that are more general.

**Hodgetts:** I disagree. An expensive house can afford to be an important benchmark. They should be as idiosyncratic as possible, illustrating very specific ways of relating to all kinds of different things. But the house should lead to some notion. You certainly don’t see it in the multi-family housing entries we have here.

**Gwathmey:** We are tending to make value judgments about private houses that we don’t make about other building types. All sort of architectural criteria focus on something like the house because it is the most known type.

**Hodgetts:** Let’s say it’s the item that society as a whole has the least general concern about in terms of dictating what the form should be. The architect has the most freedom there. So it is troublesome from the point of view that there is no mainstream way of designing it.

**Dinkeloo:** Giving awards to houses is overdoing it.

**Harkness:** It is like giving awards to toys instead of the real thing.

**Hodgetts:** OK, there is a need for “commodity” building, architecture without the capital A, but it is not award material. Society needs a certain stable and comfortable frame-

**Charles Gwathmey**

work, but it is not the architect who needs to do that. Architects can stimulate, they can focus on certain very important things. To me the role of a jury involves that too. Instead of focusing on things which are available in the environment in general, I want to talk about things which are exceptional.

**Gwathmey:** I think this jury process ought to be for provocative innovative projects, and if something is done better than it was done before that ought to be documented.

**Harkness:** Do you have to have an “idea,” or can you do something that might have been done ten years ago, and are doing it well? Why not continue to do something that you did ten years ago?

**Gwathmey:** What makes architecture a great place is where ideas are working, where there is speculation.

**Hodgetts:** At the basis of these discussions is our idea of the architect and what he is doing to fulfill his role. Is he a technician who moves forward with a lot of craft and aesthetic sensibility, a curator, or a space explorer?

**Dinkeloo:** You can’t judge the explorer, because then he is no longer an explorer.

**Harkness:** Then you have to decide whether to give awards only for innovation or for good design.

**Gwathmey:** We’re looking for a good solution to a problem; a loyal solution to a stated problem.

**Hodgetts:** We are looking for quality.

**Dinkeloo:** We’re looking for more than competence though.
A retreat in the Santa Monica mountains responds to the contours of its hilly site while affording a variety of public and private spaces to its occupants.

Program: Provide a residence for 24 persons who share a common interest in Buddhism but want to continue pursuing their own occupations in the outside world. The energy-conserving complex should offer a well-defined hierarchy of public and private spaces and be built of simple construction.

Site: About six acres in the Santa Monica Mountains outside of Los Angeles.

Solution: From a pavilion at the top of a knoll connecting to a road, 24 cells, 225 sq. ft. each, snake down the mountainside. Each cell has its own bath and storage and opens onto an enclosed garden. At the top of the knoll the cloister contains public spaces with the library, meeting room, rectory, and kitchen on the main level; tool shop, darkroom, laundry, and sauna on the lower level; plus three levels of studies. The cloister is fan-shaped to gain added exposure to the sun. Solar panels of flat black metal wool fan out from the southern facade. Air passes through the metal wool and then rises to storage bins filled with rocks located just below the rooms of the south wing. Water pipes in the bin of rocks provide heat to the studies and cells. Water trickling down the slope past the enclosed garden is collected in a large pool at the bottom of the central path. It is returned to storage tanks by high velocity wind-powered pumps.

Materials and construction: Concrete cast-in-place retaining walls, enclosing walls of the compound, and storage heat tanks; wood frame construction for the cells and upper floors of the cloister.

Jury comments

Harkness: It seems to suit the terrain and the residents with its very monastic quality. It is kind of austere and yet very much part of the land the way that monasteries in Greece are.

Hodgetts: Actually it is very sophisticated.

It is very aesthetic, very studied, very, very careful . . . it seems to be learning from Stirling.

Gwathmey: The spine and the mode of execution is very good.

Hodgetts: The more I think about it the better it gets.

Credits

Architect: Bernard Maquet.
Client: The Arama Fellowship, Los Angeles, California.
Fan-shaped cloister (left) with courtyard (below), has two levels on the south wing, three levels on the north.

**LEGEND**
1. Cell
2. Study
3. Visitor
4. Kitchen
5. Dining
6. Meeting
7. Library
8. Darkroom
9. Sauna
10. Shop
Michael Graves

A house as a painting? Hermetic sign system with a closed communication only for architects, or a masterpiece of architecture? A house in Fort Wayne, Indiana, addresses these issues.

Program: Provide accommodations for a family of three. Clients desired two bedrooms with a study that could be converted to a bedroom if needed.

Site: Three-quarters of an acre in a wooded suburban subdivision in Fort Wayne, Indiana.

Solution: In order to achieve a sense of privacy, the 2500-sq-ft house seeks to establish an interaction with the natural landscape so that the formal gestures are seen as fragments of a larger organization of which the landscape is an integral part. Although the house is small it is conceived as a succession of "centers" linked in a spatial continuum extending from the building "fragments" into the landscape. This continuum provides a necessary hierarchy of public and private domains for its occupants inside and outside.

Facing the street are kitchen and garage walls linked by a screen wall in which an opening for the driveway has been carved. The drive ends in a court formed by house, garage, and garden. From there one enters the house on an axis of three skylights that pierce two floors. On the left, past a glass block partition, is the living room which receives most of its natural light from a large skylight above the fireplace. On the reverse side of the fireplace is the sitting room which, like the living room, has windows only in the wall facing the garden. This wall is pulled out at an angle from the house's volume. Upstairs a terrace, off the bedroom, occupies the space between that wall and the cubiform volume of the house.

Materials and construction: Wood framing; painted stucco walls; interior partitions of wallboard; wood flooring.

Jury comments

Hodgetts: This is romantic but it still has its roots in the architectural tenets of the 20th Century.

Gwathmey: I love the art of this because of its complexity: it is based on a complex set of issues in terms of color, in terms of articulation, inside and outside. It is an appliqué treatment but you don't feel that it's an appliqué because the façade and the interior become the same kind of context.

Harkness: These [the mural-like polychrome façades] are lovely, no question about it; but isn't it mostly just pretty colors? I don't know what it does for the actual building; what is going to happen.

Gwathmey: I think the intent is they are combining technology and fresco and the idea of notation at the same time. I think it is a fairly complex notion of surface. This is the sort of sign formation that has been typical in architecture—taking a whole façade and making the windows, doors, the architectural components, as well as the surface part of an integrated painting, in fact, or a sculpture. Now this is carrying the whole notation system and the notion of color into a very intensive reference system which is internally consistent.

Harkness: If the building were built and had been painted, then we could judge the façade as a work of art, quite separate from the building. Separate because I don't know what the building is and what I do see is more a painting than a building.

Hodgetts: This is so remarkable that it is mind-shattering.

Dinkeloo: I wish I could have done it.

Harkness: You're judging it as a mural.

Gwathmey: It has a very creative plan.
Gwathmey: No, I'm voting for it because it is more than just a façade, it is a work in three dimensions, even to the point of the carving of the trees, which is pretty unreal.

Harkness: This requires an intellectual appreciation of it.

Hodgetts: It is a remarkable object, though a sticky place for me is that the language, experiences, and references this house makes are about architecture and directed to architects. It is extremely erudite, historical, academic, and disciplined—all those good things. However, it remains alienated to me, because one experiences it as an abstract thing.

Gwathmey: Are you talking about the façade or the space?

Hodgetts: The things that give it its prominent characteristics are the paintings, the murals—the façade. To a certain extent you can read the space, but the other experiences within it, those literary experiences, seem to be what the architect cares more about. The dialogue with architecture is what is limiting architects right now. It is a very hermetic discussion—and I admire it. I admire it enormously. This house is very, very beautiful.

Gwathmey: The concept is antagonistic to me, because I find the idea of conceiving three-dimensional paintings and fragments antagonistic to my notion of volumetric clarity. But the architect is rigorous with this certain point of view. The expertise, density, and involvement of this person in this system that is being developed, really developed, is noteworthy. For a building to become a three-dimensional painting is not necessarily unique but it is unique in our time. It may be specific and singular with no prototypical implications, but as an object it is total, it is a consolidated thing; it is not half-way.

Dinkeloo: It can either be the greatest house in the world or the lousiest, according to how far this architect can carry it from this point on.

Credits
Architect: Michael Graves, principal; Linda Joy Cohen, Caroline Constant, Steven Harris, Thomas Navin, Sylvia Smith, Tom Szumlicz, Peter Lokhammer, Christopher Bene, Gordon Smith.

Modemakers: Steven Harris, Caroline Constant, Tom Szumlicz.

Clients: Mr. and Mrs. Dennis Crooks.
A skylit underground linear city uses modern technology with design ingenuity to solve complex problems of site, climate, and program.

Program: A “conference city” for a middle eastern country in a hot dry climate. To be included are a conference center, 30 guest houses, and a residence for the president of the country, plus circulation, parking, and a tropical garden.

Site: 82 acres on the Arabian Gulf.

Solution: Except for the Conference Center which rises five stories high, a 4860-ft-long, 270-ft-wide linear spine is placed 90 ft below grade. The main element of organization, the spine, contains the two-level circulation system connecting all the major elements, including the below-grade houses. This spine is covered by a large glass roof, shaded by movable screens on its southern edge. Screens lift up to adjust their angle to the path of the sun.

The point of entry for admissions is at one end of the spine next to car drop-off and parking. The “grand hall” occupying the lowest level of the spine, is landscaped. Houses are grouped along this floor in units of two to allow both the personal and service transit systems to serve two houses in one stop. A system of movable glass walls and adjustable screens within the houses allow a wide variety of enclosures to be possible from solid walls to open terraces. The conference center at the far end has a long span structure to allow flexibility in its partitioning of spaces.

Materials and construction: A steel frame structure with main trusses spanning 270 ft on 90 ft centers and secondary trusses 30 ft on center provides basic structure. Structure of the houses and the conference center will either be reinforced concrete or steel construction. Research is also being conducted on the use of industrialized building systems. The foundation and method of excavation is also under study: architects speculate excavation may be a combination cut and fill with a slurry wall. The movable screens, resembling large structural bays constructed as space frames, are held at guiding arches. The surfaces (for artwork) will be panels highly perforated to reduce windload.

Jury comments
Hodgetts: We found something that we love, it’s outrageous, completely outrageous. But it has a logical craziness.
Gwathmey: I love it. All the houses are underground, the roofs tilt up to make billboards—with some nice graphics—and meanwhile the houses are sitting among water and trees, the things they don’t have there.
Dinkeloo: It is beyond Venturi.
Hodgetts: It’s incredible.
Dinkeloo: It is one of the few projects here with any scale.

Credits
Architects: C.F. Murphy Associates, architect-engineers; Helmut Jahn and James Goettsch, project team.
Client: withheld at architect’s request.
Model photographer: Edward F. Hoppe
Renderer: Voy Madeyski.
A through conference hall and grand hall looking north (above), east (below).

Guest house, north elevation.

Guest house, first floor plan.
A young architect explores the use of solar energy for the ultimate transitional phase in the life cycle.

**Program:** A prototype for a cremation facility using solar energy with operating capacity comparable to conventional equipment. Ancillary facilities to be included, albeit in schematic design form.

**Site:** Site to be determined from insolation contours (260 BTU's/sq ft/hr or more), microclimate, proximity to population center of one-half million people with a cremation to burial ratio of 1:5. A dozen such sites are being studied in the southwest.

**Solution:** An array of 22 heliostat mirrors are grouped in banks of increasing elevation to track the sun with a pair (per mirror) of photoelectrically activated motors. The heliostats direct a constant beam of sunlight to a parabolic concentrating mirror. Warped mirror segments of the concentrator focus a beam of sunlight into the aperture of the furnace where a target plate and air intake heats the cremation chamber. Between cremations (which take one-and-one-half hours) a heat exchanger intercepts the beam to boil water for a steam turbine that turns a 20 kw generator. Power for a back-up system of radiant electrical cremation is stored in the batteries for cloudy days. The furnace operates when the sun is above 30 degrees in elevation—varying from four-and-one-half to nine-and-one-half hours a day at the solstices. An average of four cremations per day can take place.

The heliostats, concentrator, and cremator form a north-south axis that bisects a circular compound. The compound is formed by a berm with the entry on the north through a grove of trees in cross axis to the heliostats. Ancillary buildings—housing, office, restroom on one side of the entrance and storage on the other—frame the entrance and gardens with a "stoa" of columns. The casket is carried through the forest of heliostats to the rotunda for a brief ceremony. Sunlight entering the oculus of the rotunda moves across the catafalque. At a certain mo-
ment the casket is carried up a ramp to the crematory building where it is loaded into the furnace. The crematory building has two levels: the porch, committal chamber, and furnace on the upper; the steam turbogenerator and batteries on the lower level. **Materials and construction:** Concrete columns support heliostats; concrete piers carry the steel framework of the concentrating mirrors which are silvered plate. The target plate is silicone carbide. Ancillary buildings will be poured concrete with marble facing; the furnace, refractory brick.

**Jury comments**  
**Gwathmey:** Despite the subject matter this is imaginative, unique, and very organized. It has a rigor or thinking about it and making it that one can respond to. It is a vision; it takes one into the realm of the idea.  
**Hodgetts:** Here is an exotic notion, and the design of it is very straightforward, elegant, systematic. It is using elements that are deterministic in a very poetic way . . . there is no slack.  
**Gwathmey:** It has a very architectural idea in its landscape.  
**Harkness:** It is not altogether a new idea; people have been proposing this for steam engines, manufacturing electricity, solar energy on a big scale. So it’s not exactly an invention.  
**Hodgetts:** What is generally seen as a technical solution is here being seen as something that generates architectural space. It is a poetic manifestation of a coming technology. This is what architecture should do. Not mystify anything, not conceal it, not make a block box. It takes a natural phenomenon and makes it tangible. It is a very remarkable thing.  
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**Harkness:** I certainly wish it were doing something else. It sets the whole business back by its “James Bond” kind of attitude.  
**Gwathmey:** Why is it more “James Bond” than making a place to study solar energy?  
**Hodgetts:** The Finns have designed classical crematorium designs which are always admired.  
**Harkness:** This one does seem morbid, whereas an ordinary crematorium would not be. It brings you to thinking of things like sacrifices.  
**Hodgetts:** I prefer to be incinerated by the sun rather than an oil burner.  
**Gwathmey:** If you can just talk about the sort of formal problem-solving, it has solved a problem creatively with a provocative visual idea. Of all the entries, this is the most abstract and very genuine as an idea. It sort of gives you hope that there are still people thinking.  
**Hodgetts:** It takes solar energy and makes architecture, space, and poetry. It makes it into a place . . . into something perceptual with deep cultural roots.  
**Gwathmey:** By discussing the program we are making a value judgment about the program. Talk about prototypes, models, references, and language—this person created a language and transcended a design problem. This is making a place which is as surreal as the idea of life or sun or man.  
**Harkness:** I just wish it was a different purpose . . . the purpose unfortunately clouds the issue.

**Credits**  
**Architect:** Frederick Fisher.  
**Client:** Interdisciplinary Group for Ecology Development and Energy, Santa Monica, California.

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*View through heliostat array to Rotunda and Crematory building, (left).*
A hospital addition in Baja California solves its family care program well while presenting a coherent diagram from which its parti is generated.

Program: Provide 20 individual suites of varying sizes for a small medical office building adjacent to a small community hospital. Since different types of practices will be located there, ancillary facilities such as radiological laboratory and optical services are needed, as well as a restaurant and pharmacy to serve both buildings. Site: About ½ acre, adjacent to existing hospital in suburban setting in Tijuana, Baja California. Solution: The building’s 25,000 sq ft is divided into three functional areas. The spine, which accommodates major horizontal and pedestrian movement plus waiting spaces, is oriented west and sheathed in glass block to minimize solar penetration and heat gain. The commercial ground floor spaces are oriented towards the major street and to places of easy public and private access. The office block has five suites on each of the four floors, with a varying building depth to allow for three size configurations. Horizontal organization is developed around fixed wet cores to allow for expansion of single offices into larger suites. Materials and construction: Spine is exposed steel frame on a 10-ft grid supporting a thermally insulative glass block curtain wall. Ground floors are concrete block bearing walls with poured concrete roof; the office block is conventional steel frame, with concrete block end walls and a glass curtain wall on the east elevation. Mechanical services are contained in a shaft parallel to elevator and distributed to offices through horizontal raceway located above corridor space. Waste drainage and a/c piping is in wet cores. Spaces are heated and cooled by individual units with condensers located on roof of spine.

Jury comments
Gwathmey: This is an excellent project. It’s correct diagrammatically, in terms of a building organized on a circulation scheme. It is clearly two sided, weighted in terms of elevations, orientation, and plan organization. The design expresses a clear concern with having a sequence of transparent planes. The connecting link to the other building is a space rather than a solid: the notion of adding buildings to other buildings is really crucial and the space between them counts. This scheme does it elegantly. Hodgetts: That’s the word that typifies much of the way this is designed—even in terms of the presentation. It is extraordinarily elegant and sensitive. It is also very disciplined. Gwathmey: It is a billboard which is a building which is a volume… it’s terrific to see you can do that. Dinkeloo: It’ll never be built. It will take at least 20 years. Gwathmey: Even the articulation of the glass block walls forms a skin separate from the circulation so you are aware both horizontally and vertically of the space you’re in. It is the first time we’ve seen a building that is vertically dense and still keeps the volumetric intent. Harkness: I don’t feel as if it is much of a building. Hodgetts: If you look at that building in terms of those elements that make it a building—elements that one touches or sits on like handrails, you find it has all those things in this scheme. It’s a considerate building.

Credits
Program: A weekend and summer home to contain an indoor swimming pool, exercise area and sauna, a green house, three fireplaces, roof terraces, tennis court. The entire house, 4500 sq ft, is to be solar heated and is to ensure privacy for the client, a single man.

Site: A flat featureless potato field of two acres in Sagaponack, Long Island.

Solution: Inspired by the potato barns of the surrounding countryside, the architects have buried the first floor of the house under a berm. The berm is partially carved out to create a protected courtyard. The earth for the berm will be obtained from excavation for the building and the sunken tennis court. A traditional loggia with vaulted ceilings provides horizontal circulation through the house, and separates public spaces within from the courtyard without. Subsidiary spaces on the first level are carved out of the berm which is treated as poché. Natural light enters the living room through a skylight which penetrates the second floor; a greenhouse adjoining the indoor pool receives light in a similar manner. The second floor vault is constructed of curved laminated timber beams and supported by concrete wall, steel columns. Solar panel framing is steel; roof is clad in sheet copper.

Credits
Architects: Alan Chimacoff and Steven K. Peterson; principals; Barbara Littenberg, associate.
Consultants: Goldman & Sokolow, solar and mechanical engineers; Travis Price; solar architectural consultant; Wiener & Thaler, structural.
Client: Paul Guilden.

Jury comments
Gwathmey: It's an object in a man-made court... in a field totally without character, flat, and spaceless. The idea of the berm is to build up a context.
Harkness: It is an interesting idea.
Gwathmey: The model is too over-simplified in terms of its own articulation; the building relies on the fantastic quality of those drawings. The drawings are really worked out. My impression is that it is very serious, though it doesn't come across as a real project. I don't know why I say that...
Hodgetts: You mean it looks like it has more fantasy in it than it does fact?
Gwathmey: That drawing... the whole imagery of the lower plan looks like a very old building...
Hodgetts: It is rich in many of those implications, the variety of water forms is very interesting too.
Gwathmey: It takes more than a house to identify "a place" and in this case the solution creates a site object as well as an internal object—a court and the house. When I look at this plan, however, I get that sort of palace-basement feeling.
Hodgetts: It seems extremely facile; there is great facility on the part of the designer. But the technology seems to be managed with grace. I like that interchange between the concrete base and the light technological top. Still I'm suspicious about how facile it is.
Gwathmey: You're not being fair. The other entries, which are more graphic, are a lot thinner in nuts and bolts attitudes.
Hodgetts: I don't feel any passion for it, that's what bothers me. But it is very well done. It is a very nice blend of technically worked out attitudes and a certain romanticism.
Harkness: It's serious, but also its got some new ideas.
An architect explores literary and romantic allusions as a generator for the form and space in a small house in Sudbury, Massachusetts.

Program: A house for the architect, to offer variety of spaces, each space with its "own perverse and mystical quality."

Site: One-and-a-half acres of a gently sloping site in Sudbury, Mass. surrounded by a forest and an orchard. The house will be part of a development of 16 houses with a "sheep meadow" of shared communal land.

Solution: The house is 750 sq ft in size with the bedroom oriented east. Designed to support the "narrowest style of life," it makes an allusion to Romanesque churches in its massing and organization of spaces. One enters the kitchen dining area in the solid portion; beyond is the translucent greenhouse-like "nave"; appended to that is a clear glass "chapel." The bedroom and bath are on the second level.

Materials and construction: Concrete block and brick walls; translucent acrylic sandwich panels for the "nave," plate glass for the "chapel."

Jury comments

Hodgetts: It's consciously Marie Antoinette, a very tiny quaint little house. For me it is a terrific blend of something very contemporary and eclectic or romantic. However, it is not romantic in the 20th-Century sort of way. The house more or less defies 20th-Century protocol and goes in another direction, saying "maybe really the first 50 years were a big mistake; now let's try something else." The aesthetic premises are not governed by a machine aesthetic. It looks handcrafted.

Harkness: I think to superimpose this kind of stage set idea is artificial: if the people had built this themselves like the owner-built houses in the Northwest or in Vermont, this kind of thing could then be a lot of fun.

Hodgetts: But you then are thinking the architect is imposing it on a client... that when a client comes to an architect, the client wants the scalded, moralistic absolutely reductive piece. Do you think a client wants to have a house that is right or does he want a house that's sort of inventive?

Gwathmey: Why would the client go to an architect, if he didn't want to extend his set of references?

Harkness: You can extend your references to a certain extent, but the most important person is the one who lives in the house.

Gwathmey: Then that means you only do what you know. And you only live the way you've known. It is a sophisticated design. However, I don't love the art of it—I like the space of it—but in a way it is a kind of cartoon abstraction. This is a fantasy which leaves no speculation from my point of view. It isn't mysterious, or based on a complex set of issues in its articulation inside and out, as some other schemes we've seen. It is really clear spatially yet very unclear as a façade. The two are not interrelated: this is appliqué.

Hodgetts: But I have the sense that it might be preferable to live in a clear space and have the references extend that...

Gwathmey: I don't disagree. I have the same conflict about this interrelation.

Hodgetts: It has to do with the notion that somehow content is or is not inextricably connected with structure, forms, space and this house divorces the two. It sees content and personality and intention as something which is perhaps not totally bound with this space. The space is a simple little cottage with a skylight... straightforward. But in terms of its elaboration of that space it has a fine sense of texture, definition, and materials which is unconventional in modern terms of putting those things together. It is picturesque but not conventionally so. It does have a Little Bo Peep quality about it—but it does it with authority. It is also strikingly original.

Harkness: I think it is sort of a joke. Do you actually build three-dimensional jokes of this size?

Hodgetts: We build jokes on the West Coast—often bad jokes. This is a good joke.

Credits

Model photographer: Michael Miller.
Latest in a numbered series, House X accommodates a family in four blocks separated by intersecting passages.

Program: The architect's statement divides "program" into two categories: "form" and "content." More conventionally defined, the program called for a variety of living spaces (see Solution), bedrooms for parents, each of three children, and a maid, all with private bath, two garages, swimming pool, and tennis court. Site: North slope of a knoll on 40 wooded acres in Eastern Michigan. Solution: "The form begins in a fundamental duality: transformation from a simple cube or four simple cubes to a more complex state; decomposition from a complex entity to a more simplified state... There is no priority of readings, " the architect states. "There is no sense of completeness. There is no rhetoric." The four blocks of the house are organized around two intersecting routes. These volumes rise with the terrain and step outward from the passages, implying incomplete spiral or pinwheel forms. Uses of the four blocks (clockwise from upper left in axonometric): screened cage (glazed in winter) and poolhouse over garage; children's and maid's rooms, with family room, over garage, dining room, study, and parents' suite with private roof terrace; kitchen and living room. Enclosed passages in an L link all units except the screened cage; one axis extends south to pool (top of axonometric) and north to tennis court.

Jury comments
Hodgetts: I see the house issue (see p. 49) as breaking into two lobes: one lobe is something that functions as a place to support life and family and all that, and the other—which this house represents—is something to support the intellectual resources of the architectural community—if that's not too cumbersome to say. Dinkeloo: What you're saying is, "If you can find a sucker, let him have it." Harkness: The scale isn't convincing, if you have a thing that looks like a city, and it turns out to be a house. Gwathmey: But why isn't a house, in terms of its complexity, a microcosm of a city?
Hodgetts: It might conceivably be very exciting to live in. Dinkeloo: But you don't have to live in it. Too often we do things that are intellectual studies that don't mean anything to the person who has to spend the rest of his life there. Harkness: It's like living in a piece of sculpture, so then you have to judge it as sculpture. Gwathmey: Why is it like living in a piece of sculpture? Harkness: Because it's block upon block, wall upon wall, frame upon frame. Gwathmey: I think there is something to be said for eliminating all familiar notations. I mean, this is the ultimate in abstraction. It's a sort of rigorous intellectual game that's finally buildable.
Hodgetts: It's not either so abstract or so radical as its rhetoric. It's probably, once it's built, just another house. Harkness: You mean you can live in it. Hodgetts: I think so. Sure, absolutely.

Credits
Architect: Peter Eisenman, AIA, New York.
Associate architect: Leland Taliaferro.
Assistant: Noel Quesada, Mark Cigolle, Anthony Pergola, John Nambu, Livio Dimitriu.
Consultants: Robert Silman Associates (Ding Carbonell), structural; Arthur Spaet & Associates (Arthur Fox), mechanical; Nicholas Quennell, landscape; Stephen H. Falk, cost consultant.
Modelmaker: Anthony Pergola.
Model photos: Dick Frank, Noel Quesada.
Renderers: Livio Dimitriu, David Buege.
Cabo Bello, at Baja California's south tip, will provide 12 second homes for families agreed on energy self-reliance.

Program: Provide second homes for 12 Mexico City families who have agreed to live on the amount of energy their project can derive from the sun and wind. No polluting wastes are allowed to emanate from the project.

Site: A rocky ridge overlooking the Pacific Ocean at the southern tip of Baja California, Mexico.

Solution: Built on a three-part base of two levels, the 12 units are divided into tower homes and patio homes. The tower homes consist of a bedroom and bath on ground level, with living, kitchen, and bath on the upper level. Living areas of both tower and patio units can serve for sleeping if needed. Patio units, endemic to Mexico, have two bedrooms and two baths on the second level, and living room, dining room, kitchen, and bath on the ground floor. Electricity will be generated by windmills flanking the parking area, and rooftop solar collectors will produce hot water. A closed sewage treatment system will allow no wastes to be emitted by the project.

The energy self-sufficiency and non-polluting features of the development are seen as symbols of the clients' determination not to exploit and ruin the unspoiled Baja peninsula.

Jury comments

Hodgetts: It's very much a Salk Center kind of thing. I think the primitive direction of the concept is what is most appealing to me. It's a very essential, very minimal shelter idea; a wild and romantic kind of landscape.

Gwathmey: Except that the front buildings have a terrifyingly different relation to the site than the others. If you line up buildings on an axial situation with a view that is really the organizing device, you would think that the houses, not the cars in the parking lot, would be splayed, or if you stepped it down the hill on that diagram, it would have been so much clearer.

Harkness: It seems to have no relationship to where it is; it might as well be on a flat field. How can you just absolutely believe the site?

Hodgetts: It is all very intentional. Many of these objections are on functionalist grounds, and I think this is reaching for something beyond that level of presence. It's looking toward a kind of primitive expression which I think in the 20th Century we've been to hasty to get rid of, and I admire someone touching base with. I think it's an important thing, with its flat plinth, ceremonial arrangement, and bare qualities; it's actually monastic. It's rejection of all normal technologic support systems seems without any hint of reactionary attitude, tongue-in-cheek, or any of those perversions of where the spirit ought to be.

Credits


Consultants: Structural, Andrew Nasser; mechanical and electrical, Kumar Patel.

Clients: Lic. E. Guillermo Salas, Guillermo Fernandez de la Parra, Ernesto and Enrique Rufo, and Ivar Waltars.
Pickering Wharf, Salem, Mass., is to be given new vitality through a mixed-use complex with a respect for traditional scale, expression, materials, methods.

Program: Provide a waterfront commercial, residential, and theater development on the former site of an oil company tank farm. Area is to attract not only tourists, but a successful year-round shopping and living community as well.

Site: 4½ acres on the waterfront in Salem, Mass.

Solution: An assemblage of free-standing gable- and hip-roof structures evocative in form, character, and materials of 18th-Century wharfside Salem. The buildings house a variety of street-level shops (40,000 sq ft), with housing above (47 one- and two-bedroom and loft dwellings), three restaurants, and a 20,000-sq-ft theater facility for a multi-media production. Many shops are designed for crafts, with residences directly above, to encourage Salem tradition of live-in shopkeepers. The theater will be both entertaining and educational, with winter activity primarily for school children.

Materials and construction: Buildings, clapboards, shingles, and brick; ground surfaces, granite cobbles, grass, brick.

Jury comments

Harkness: It's an extension, a continuation of what's happening in Salem, rather than starting something altogether new.

Hodgetts: That's disciplined as planning; I don't read it as mannered like some of the others, but as an alternative vocabulary.

Dinkeloo: I think it's too chi chi. You'd get architects in, and they'd want signs just so, and all that. In spite of my great regard for Venturi (I agree and disagree with him), you can't create these things; they have to create themselves. I think it'll end up a cute-sie-pie tourist trap, like Nantucket.

Hodgetts: Those things have always been designed. The thing which has put the bash on that kind of very, very small scale fine-grain development is the modernist ethic which says you have to use resawn this or that to make it "modern," which I think is less good.

Harkness: We're really talking about an old vernacular, an extension of a place with a great amount of history.

Credits


Client: Heritage Trust.
Boudov residence, Palos Verdes, Calif. is an addition to, and reinterpretation of, an existing house with an ocean view.

Program: Needing an additional bedroom and bath, plus dining and living spaces, the clients wanted to preserve the eccentricity of the existing house. In addition to an ornately paneled subterranean room, and "a wonderfully decaying lattice greenhouse," the site had a terraced fruit tree orchard and a view of the Pacific Ocean.

Site: Residential lot in Palos Verdes, Calif.

Solution: Existing living room was converted into the master bedroom with a new bath area, with new sundeck and living area added in the rear, with views of the orchard and the ocean. The front façade and roof of the house are cut back to reveal the new curved tile entry wall. Adjacent to the living room, the greenhouse will become a Jacuzzi bath, entered through a "locker-arch," in a wall which is designed to contain the library and other objects. The fireplace alcove on the lower level is designed to embody mystery and security patterned after Wright and Lutyens, and includes the entrance to the paneled basement room. It is the architect's intent to: "Recognize multiple and divergent design sources which, through juxtaposition, jar expectations and awaken the mind; exploit formal incompleteness, which suggests and prompts multiple interpretations; and create a sense of mystery, wonder, wit, and surprise for [the] inhabitants."

Jury comments

Gwathmey: This is a piece of vernacular architecture, but it's done in a way which is not recording history so much as making a sign about it.

Harkness: Whose vernacular?

Hodgetts: I think this should be thought of as communicating maybe some already known information in a very, very brilliant way. The drawings are remarkable. One has to admire the absolutely extraordinary commitment of the designer in producing work of that quality for a small renovation. And quality is what this jury's all about.

Gwathmey: This is much more integrated [than some others], and is establishing a new reference for the building. This becomes primary; it has some of the painterly aspects of one of the others, although it is thinner, conceptually.

Credits

Architect: Coy Howard, Urban Innovations Group, Los Angeles, Calif. Assistant, Sherwood Roper; Drawings, Coy Howard, Sherwood Roper, Kenneth Beck, Anna Thorsdottir.

Clients: Claire and Milton Boudov.
Rainbow Center Mall and Winter Garden provide an axis and a centerpiece for the renewed core of Niagara Falls, N.Y.

Program: To attract people and catalyze development of the largely vacant 82-acre downtown urban renewal area of this faded resort city, a strong link had to be made between the existing convention center (1974, by Philip Johnson) and the park at the brink of the falls. Needed was a commercial development with individuality that would draw tourists in season and residents of the area year-round. Funds were limited; street levels would have to be maintained.

Site: A tract 1500 ft long and 100 ft wide running from convention center plaza to riverfront park.

Solution: The focal element is the Winter Garden, a steel-framed cage 175' x 155' 105 ft high at the peak, clad largely in clear glass. Strategically placed midway between existing attractions at either end of the mall, the structure is linked by a two-level, heated, enclosed arcade to the Hilton Hotel (by Gruen Associates) and through that to the convention center. Designed to border several development sites, the Winter Garden and arcade have knock-out wall panels at two levels, so adjoining developers can tie into its all-weather interior, where mezzanines and platforms meander among pools, plantings up to 40 ft high. An information center, a small amphitheater, and restrooms are provided. The mall to the east will be a promenade between regular rows of trees; to the west, there will be a more naturalistic transition toward the overlook park. Two-story openings allow the mall to pass through the Winter Garden in fair weather.

Jury comments

Dinkeloo: It's spectacular in concept, but I couldn't see what it did for Niagara. It's not in the center of things.

Hodgetts: But the question is whether it successfully executes the role of centerpiece. It's got a profile which is certainly striking. It's a theatrical piece, but I think it's really well carried off. It looks Japanese, like one of those things you're always thumbing through in the magazines and saying, "Gee whiz." The other thing I like about it is that it has a structuralist kind of premise, which is—to my mind, at least—becoming too rare right now. And it's handled that premise very well, the way the cantilevered columns go up to carry the roof.

Harkness: In actuality, it might look a lot lighter than these photographs indicate.

Gwathmey: I think it's set on its site in the wrong direction. It has an axis across itself, so it's a slice, turned.

Hodgetts: But I think what it's doing is exposing that slice.

Credits

Architects: Gruen Associates, New York, N.Y.; Beda Zwicker, partner in charge; Cesar Pelli, partner in charge of design; Abbott Harle, partner in charge of technical development; Thomas W. Loosbrock, project architect; Gary Engel, director of design.

Consultants: DeSimone & Chaplin & Associates, structural engineers; Cosentini Associates, mechanical/electrical engineers; M. Paul Friedberg & Partners, landscape architects; Herbert Levine, lighting.

Modelmaker: Eastern Craft Models.

Model photography: Gil Amiaga.

Client: Niagara Falls Urban Renewal Agency.
Unlike last year's research jurors, who found P/A's entries "rather depressing," Alan Green and Edward Ostrander, after spending two days carefully examining this year's 45 submissions, came out from their deliberations feeling, as Green put it, "optimistic and enthusiastic about the work."

The jurors were particularly pleased to see a much greater and broader sponsorship reflected in the research efforts, and they were encouraged by the wide range of collaborative sponsorship seen in some of the submissions. They were happy about the wide variety of backgrounds represented by participants involved in many of the research endeavors. They were pleased, also, to see this variety reflected in so many team efforts, which they felt indicates clearly that research is beginning to move more into the mainstream of process and decision-making.

Green: There was a time when many of these submissions would probably have dealt primarily with post-occupancy evaluation. But now we can begin to see that the activities are moving beyond that. There are several submissions here that are actually providing the basis for totally new building types. We see other submissions that show that they have been involved in activities—actively—that have influenced court decisions. Others are testing codes and conventional standards in the light of user needs; they're examining and reexamining what we have always thought of as conventional wisdom in the light of new information. We could identify other aspects, but what is important here is the evidence shown by the entries of a broader set of research activities and opportunities than we've seen before.

Gratifying rejections

If the jurors were pleased about the wide range of activities represented by the submissions, they were equally pleased about the logical consequences of those circumstances. They felt compelled to reject entries that reported on activities which are now considered just a normal part of expanded professional services, and are no longer considered unique or contributing substantially to a body of knowledge. This situation, they felt, was an especially important indicator that progress in the field has been real and substantial.

Redundancy

The jurors were extremely concerned about the issue of redundancy of funding. There were several submissions, for instance, dealing with practically the same subject, and all sponsored by different agencies.

Ostrander: One of the things we're certainly coming into now is a kind of cost-benefit look at research. It is not wise from the standpoint of the taxpayers or the agencies expending the funds to reinvent the wheel each time. It is especially not wise when the same money could be used to contribute to something new, as against doing another guide-book, for instance, which has already been done.

The jurors agreed, however, that the problem of redundancy does not lie only with the researchers. While they felt that the researchers should be expected to "do their homework" to find out if they are investigating an area that has already been gone into, they admit that this may be more complicated than it may seem at first. One of the main problems, they felt, is that there is no central clearinghouse for research. And even though some organizations do perform this function as part of their normal activities, the communication between those groups is often not as effective as it could be.

Green: This isn't a problem that rests only at the foot of the
Redundancy is also an issue that should be dealt with by the sponsoring agencies. They should try to make very sure that what they are sponsoring is additive rather than redundant. The sponsoring agencies should have more interaction among themselves as to who is doing what and what the results are, so this is a burden that should be laid on both the sponsors and the researchers.

**Implementation**

In the jurors' final summation, they made it very clear that they took a "very, very hard line concerning implementation." They were concerned with finding affective research. They insisted that it be made clear, either in the research strategy, through the sponsorship, or through some hints indicated in the submissions, that the research efforts being presented were indeed going to be acted upon and were going to "make a difference." The judges tended to reject those submissions that showed little indication that they could or would be effectively implemented.

**4Ostrander:** If this research business is going to be important, if it's going to "live," it's got to be meaningful to somebody. Just to do an academic exercise, and then say "I did a study on man-environment"—that isn't enough anymore. To me, the important work in the field comes from those researchers who are "abridging," not from those who are sitting back in their ivory towers writing studies. It's been suggested to me that in doing really affective work one is put in the position of becoming subservient to the architect. But I respond to that by saying psychologists don't build buildings, architects do, and if I want to make an impact on the environment I have to work through the architect. The problem with many academic researchers is that they want to be king. Well, I don't want to be king. I want to make a difference. If a building is better because I was involved in it, that's the significance.

**Green:** P/A drew together two jurors this year who care a lot about action-oriented research, about research that will have clear avenues for improving the physical environment. We do not want to speak only to the researchers, however. We also want to speak to the architectural and planning practitioners. It is important that bridges between the researchers and practitioners be encouraged to cause some of the research findings to be brought into the decision processes. This means we're also speaking to the sponsoring agencies. We're saying that part of their sponsorship of research should also include a definition of strategy through which the conclusions, if they are valid, to the point, and to the original intent, will find their way into the marketplace. This speaks both to implementation and to the problem of communicating the results.

**Communication**

**Ostrander:** The importance of the clarity of communication cannot be stressed enough. An awful lot of research gets lost in transit because it is not presented in a form that makes it available to those who could use it. It's the burden of the researchers to be able to communicate what they have in a form that is understandable to designers, decision-makers, and policy makers. Research is understanding that there is a problem; it's getting evidence that bears on that problem; and then it's assembling and translating that evidence in a sensible manner... and then communicating it in a way so that it doesn't get misunderstood... so that it does get used. If any of these links are missing then the thing is futile. If I do research and bury it in some unknown journal with 87 statistical tables, then it never reaches the light of day and it doesn't change anything. The name of the game is to fact-find, and then communicate those findings so that better decisions can be made, be they policy decisions or design decisions. That's what it's all about.

**Non-research award**

In making the awards, the jury gave a citation to one submission which they felt did not actually represent a research activity, but which they thought represented a particular kind of activity that is important and should be recognized.

**Green:** We had one problem, and that was in recognizing the importance of the synthesizing/compilation type of activity. Among the submissions there were some very good examples of documents that gathered up extant information and findings, but which did not in themselves present new research. This kind of information can be very useful, however, so we have given a citation to one of these, *Sun/Earth*, which we felt was the best of this type of information-gathering compilation. For the future, we would suggest that P/A make another category to award—an information-documentation-dissemination award—to encourage more of this kind of activity.
Minimum Energy Dwelling Workbook provides a much-needed link between the basic and the highly technical publications on energy conservation.

Because decreasing gas supplies and an ever-increasing cost of gas is a problem shared by most utility companies, the Southern California Gas Company, in order to meet future requirements, has instituted the idea of the minimum energy dwelling. Although the majority of the material contained in the workbook is applicable to a variety of building types and constructions in most climates, the intention of the minimum energy dwelling project is to show ways existing technology can be used to reduce substantially the energy consumption in the medium- and small-scale single-family residence.

The workbook, which describes the method, is a collection of social, economic, and technical rationale used in formulating a minimum energy dwelling through the implementation of energy and water conserving techniques, and solar energy. It presents a comprehensive and concise study of energy and water conserving techniques, design methodology, materials, and fixtures selection, which can be easily understood by professionals and laymen alike. Because the research is based on an actual project currently under way, the user benefits from having the conservation techniques explained and applied in the familiar context of an actual building type.

Jury comments

Green: We were intrigued by the sponsorship here, which involves ERDA, a utility company, and a land-development group. It's in all of their own self interest that this thing be real and conclusive and feasible. Ostrander: Yes, the clients here would obviously force constraints of realism on the researchers, even though the researchers got themselves into this box of their own choosing. It's almost like saying that through the choice of clients, where each one brings a group of constraints, objectives, or criteria that have to be addressed, the researchers have put themselves into a situation where they can't fake out. If they only had to deal with a couple of them they might have been able to ignore something, but suddenly they're boxed in on all sides with time, money, materials, and site constraints... and suddenly this is research in the real world.

Green: Out of this is to come a minimum energy dwelling based on research concerning energy-conscious design. This research will be instrumented by carrying it into a couple of demonstration dwellings, data will be collected and fed back, and the prototypes will be improved upon, so the whole cycle is completed. In some ways this becomes a kind of a classic. Another reason I particularly liked it is because it does not lean on any one energy answer. The researchers go on the supposition that about 50 percent of the energy used in a small dwelling can be reduced or eliminated through more effective design. And beyond that they assume that another half of the remaining 50 percent can be accommodated by an intelligently used solar system, and only then do they use rather conventional techniques to supply the energy for the remaining quarter.

Ostrander: It's really a systems approach in that almost no stone is left unturned. It looks at the community, the individual, the codes, the policies, money, materials. So it is really looking at the big picture, and if it misses, it's going to be strange.

Credits

Architects: Burt, Hill & Associates, Butler, Pa.; P. Richard Rittelmann, principal in charge of energy conservation and solar systems; Christopher Johnson, project architect, David Hill, research and design, Robert Kobet, research and design.

Engineers: R. C. Firsching Associates.

Consultants: Mission Viejo Company Product Development Staff.

Client: Southern California Gas Company.
Environmental Design Group, Inc.

Design Guidelines for Intermediate Care Facilities for the Mentally Retarded change traditional ideas.

These design guidelines, prepared for the Massachusetts Department of Mental Health, were developed for the purpose of returning human rights to the mentally handicapped. The guidelines propose a new type of community-based residence that is non-institutional and as close to the normal home environment as possible. Because the mentally handicapped are usually denied the basic human rights of normal individual growth, both through the institutions that house them and through those who run the institutions, these guidelines spell out what a "normal" house should be. The guidelines specify design for the 12 activity spaces identified that make up a home; they define the needs and activities of the mentally handicapped in relation to these spaces, and provide prototype designs for care facilities, including both new buildings and renovations of existing structures. Finally, the guidelines also provide the means for testing the performance of the spaces.

Jury comments
Green: Here is an example of a state agency supporting research activity in the development of both design standards and design guidelines for a facility type that is clearly directed toward the implementation of a new program in meeting the needs of the mentally retarded. This research is the undergirding of the state's program to deinstitutionalize the mentally retarded. Rather than simply support the construction or rehabilitation of a number of mental health facilities—some of which may work, some of which may not—Massachusetts took the time and effort to see that a very adequate piece of research base was provided ahead of time. And this research also gives a good base for eventual post-use evaluation and assessment.

One of the concerns we have—and this issue comes up again and again—is the issue of redundancy. Here Massachusetts has invested in this research and has developed a body of information. We are terribly concerned that another state might go through the same process without awareness of what Massachusetts has already provided a good package of information. We just don't have public resources around to support redundancy.

Ostrander: One of the things that impressed me here is that they have costed out everything. The findings in the guidelines all obviously grew out of reality. This isn't fantasy; they didn't say "wouldn't it be nice if . . .". I presume this kind of dialogue was concerned with what is in relationship to what should be, which is the way it ought to be. In other words, they've collected data to help them arrive at solutions, rather than to dream up solutions. It's really not clear to me, though, what their research methodology was, and this sort of document should have given that background. All we really have here is what they concluded, and we can only assume that there was some fairly rigorous research methodology involved in these findings.

Credits
Project direction: Richard Krauss, project director; Myron Miller, director of guidelines development; James Batchelor, project manager.
Client: Mass. Dept. of Mental Health.
Sullivan Farbstein Associates
Meyer, Merriam and Associates, Inc.

This Architectural Program for a new Juvenile Services Center establishes a humane setting for troubled youths.

The purpose of this research report is to provide an architectural program, and the methods for evaluating that program once it is in use, for a Juvenile Services Center in San Luis Obispo, Calif. The center will house services for troubled youths; it will provide facilities for drop-in counseling, temporary shelter, and detention. But the principal value of the program is that its intention is to ensure a building that will support a humane, rehabilitative treatment philosophy that will be dramatically different from that of most other facilities of this type, which enforce confinement, control, and supervision.

This research identifies the client's and the users' behavioral objectives for the treatment program, developing them as design objectives and performance criteria. In addition, it lays the foundation for continued monitoring of the building process, through design and occupancy, by establishing an evaluation methodology which will assure design compliance and provide feedback applicable to this and future correctional facilities. Finally, the program elucidates the building requirements; it makes clear each step in the building process, including the decisions that must be made, as well as trade-offs and costs.

Jury comments
Ostrander: What we liked about this was that it showed not only the architectural program, in the sense of square footage and cost concerns, but it also showed the behavioral implications of that program. It's a combination of architectural and behavioral programs which clearly grew out of information-gathering. They articulated very nicely how they got there, as well as what they had, and it seemed to me it was a prototype that anyone could readily follow. If you're going to build a building like this you can write for this book and have a flying start... and that is great progress.

Green: It's also important in that it is a research activity that begins to establish a base for a new building type; it draws together what otherwise would be dispersed services for juveniles. I am intrigued, in that it is architectural research in support of a public policy concerning a program for the care of a particular group of people. It is a wise and very efficient investment on the part of the public agencies to put some resource into this kind of research. It means that a common body of information and guidance is developed so that we don't have to go through an endless cycle of fits and starts, matches and mismatches. One should commend the sponsoring organization for having the foresight to sponsor this, and for seeing that it was accomplished and communicated so well. We would hope that this might be made more visible and accessible to others who are coping with a similar building type.

Ostrander: They really got it all together; they are not only telling you what the hardware is all about, but what the behavioral implication of that hardware is. It's an ideal architectural/behavioral program in that it not only says here's a space that's 10 by 12, but it also says here's what may happen in that space, and if it does, you need this or that. It's putting arms and legs on what otherwise are cold data. It makes clear why things are done in the way they are done, and so it becomes a very impressive document that could not only guarantee the success of the building, but certainly increases the probability that the building will be used in the fashion which was originally intended.

Credits

Client: County of San Luis Obispo, Calif.; Hans Heilman, Donald King, John Stettler.
This analysis of Social Criteria for Housing Design compares user needs to codes and standards as a means of achieving a better 'fit' between people and their housing environments.

Because housing regulations play a critical role in initiating basic housing design concepts, this research was conducted to examine areas where existing regulations can be made more responsive to the residents' health, safety, and social needs.

The study was conducted in four phases. First, it analyzed current housing user-needs studies to determine what important social considerations research has found in housing design, and what specific findings research has uncovered about people's responses to these issues. The study then analyzed the ways building regulations respond to user needs through examining how regulations explicitly or implicitly impinge on design considerations having some social function. Following that, the study interrelates information concerning building regulations and user needs to see how well present regulations reflect increased user-needs information. Finally, the information learned is organized and presented in an easily understandable format that can be useful to designers, planners, policy makers, researchers, regulation writers, and those who enforce regulations. To date, several housing projects in Boston have already made use of the guidelines as part of their design program.

Jury comments

Green: This is work in progress, but we wanted to cite it because of the significance of a whole research activity that it has opened. This is a kind of a model for a type of research activity that could have terrific impact on decisions being made, on the readjustments of codes, of conventional wisdom, on building regulations in the face of changes in user needs and conditions today.

Ostrander: You could give this to a class, and say 'okay, these people were dealing with housing, but let's deal with institutionalized elderly, with mentally retarded ... here's the pattern.' If this were done with other building types suddenly we would have a set of books that would really be the basis for changing all kinds of codes. This is something that could make us rethink yesterday's rules, and so in that sense this is a super prototype. It isn't a bunch of esoteric stuff; it's really asking questions that a designer has to confront, and it seems to me it could be important in being the kind of thing lawyers could work from. Another thing that appeals to me with this is the format they use to communicate the findings; I'm sure it would appeal to designers because it really comes together in a very tight manner, it retrieves well.

Green: Giving this a citation is encouragement to do more of this sort of thing, to bring it to a conclusion, communicate it, and influence those who are developing codes and reexamining conventional wisdom.

Credits

Researchers: Architecture Research Office, Harvard University; John Zeisel, project director; Michael Ertel, project manager; Lindsay Hogue, James Hughes, assistants; William March, graphics.

Sun/Earth is a book published by Crowther/Solar Group Architects; it describes how to apply solar and climatic energies to buildings today.

This book, which has been purchased and is now marketed by the AIA Research Corporation, demonstrates the potentially leading role that could be played by architecture in the judicious allocation of energy. In describing how free energy sources, particularly solar and climatic energies, can be applied to homes and other buildings, the book brings together an abundance of information from diverse sources. One of the book's chief merits is that it not only introduces the unacquainted to energy technologies, but it also extends the knowledge of those technologies to those already familiar with their principles. The intent of the book is to instill an attitude of concern for the finiteness and sparing use of certain fuels, and to encourage the use of certain other energy sources. The book illustrates and explains the alternative energy systems that are appropriate to different geographic regions, and it presents all of the information in a graphically stimulating format which is designed to capture a broad-based readership while offering sufficient technical background for professional use.

Jury comments
Green: This work reinforces the validity and the importance of gathering up and presenting, in very usable form, background and general findings in a field, without necessarily being based on any fresh research. It's an activity we would like to see encouraged, but it doesn't really become research in any classic sense. One reason we like it is because it doesn't deal strictly with solar energy; it concerns all natural energy forces and has a certain comprehensiveness and interconnectedness that other work, when it's focused strictly on one thing, doesn't have.
Ostrander: We had several very fine compilations of information that would be of use to planners, designers, and policy makers. We would choose this one to recognize the validity of that kind of activity. It's a very fine graphic effort and it looks like the data are substantial. I would guess that a designer would read and use this.

Credits
Architect: Richard L. Crowther, AIA, Denver, Colo., author. Production staff: Richard L. Crowther, concepts and text; Paul Karius, graphics and text; Lawrence Atkinson, text and cover design; Donald J. Frey, PE, text and editing.
Client: Crowther/Solar Group, Architects.
Architects Richard Ridley and Associates worked with the Public Defenders Service to testify, on behalf of the inmates of the Washington, D.C. Jail, on the dilapidated and overcrowded conditions of that jail. After visiting the facility many times, conducting interviews, and studying prison code requirements, the architects were able to collect enough evidence of code violations to warrant closing the facility. But even though an ensuing trial resulted in a court order for the immediate relief of the inhumane conditions, the court order has not yet been fully carried out and the jail is still occupied.

Jury comments
Green: This illustrates how evaluative architectural assessments can be used to influence court actions concerning, in this case, inhumane environment. It's a classic case of architects communicating very clearly and very explicitly, and I would have imagined that this would have been terribly effective in a court case. We admit that it's pretty subjective, but it's significant for this kind of activity. As the courts become more and more influential in decisions about the environment, we professionals better be there to help.

Ostrander: One of the things that interests me about this is the idea of the architect as a person of action, who wants to make change, who gets the data, and then uses that factual stuff to hammer out the need for change. This might not be a design change; it might be an organizational change, and that's kind of exciting. Suddenly architects don't have to design buildings to effect change in human lives; they can help make the system work better by showing that something isn't working well for policy reasons, for instance.

Green: These architects have done such a good job of laying the message on you, in such a clunk clunk way that they lead you through the thing to where you have to say "well, that's true." One of the dilemmas with the behavioral scientists is that they would overkill you with 87 tables and when you got through them you would say "what does it all mean?" Here there's no question what it means.

Credits
Architects: Richard Ridley and Associates; Richard Ridley, principal in charge; Amy Van Doren, research; and Richard Dean.
Engineers: Brian Ford, mechanical engr.
Life Safety Research and Design examines relationships between fires and life-saving activities.

Most research concerning life safety deals with technological aspects of the environment, while little activity has been directed toward the human psychological/environmental relations. This research examines the behavioral process during fire emergency situations. The report illuminates the interaction between the physical setting of fire and the people engaged in lifesaving activities through an in-depth social-psychological analysis of emergency behavior patterns of individuals in fire situations. As case studies for the research, the recent fires in ten nursing homes were examined. The report concludes with the presentation of design guidelines for nursing homes; yet the implications of the research are greater, since the techniques it employs for analyzing behavior in nursing homes can be applied to other situations.

Jury comments

Green: At first blush this looks like more classic fire research—in this particular instance, in nursing homes. But what it does is to merge the physics of fire research and human behavior in fire conditions. It examines how people act, and therefore how design should be modified to reflect the behavior of the occupants. It's a little rough in some of the research methodology, but the idea of bringing together physical research and research on human behavior is an important idea.

Ostrander: These researchers have developed a strategy for defining the nature of the fire in terms of its location and spread. They've sharpened that tool, and now they're moving on to talking with other people and looking at data from other fires that would help them to understand the sequence of events that people experience during fires. At this point the research is in a modeling stage; it's at step two of what may be a three-step endeavor, so the next step is to get the data where the model is. What is really intriguing is that they did take the physical and behavioral information and connect it to go somewhere, and the dovetailing of those two areas is the quantum leap. From there you can start asking new questions, which could result in physical solutions to prevent the spread of fires. That would be part of the solution.

Green: Although several fire departments will begin to use these techniques in the near future, we don't have any evidence that any action will be taken based on these findings, so what happens beyond this point is still a little uncertain.

Credits

Architects: Lars Lerup and John K. C. Liu, University of Calif., Berkeley; John Suk Jun Burke, David Cronrath, David Greenwood, George Miers.

The Visitor Center Design Evaluation was commissioned by the National Park Service to examine its own facilities.

This research study, prepared for the Denver Service Center of the National Park Service, comparatively evaluates 12 National Park Visitor Centers. It is for the purpose of developing information that can contribute to more enlightened and informed visitor center design decisions in the future. To determine what constitutes a successful center, certain aspects were analyzed, such as spatial and functional relationships, maintenance issues, safety and security, the relationship of the center to its surroundings, visitor and staff perceptions of quality of the center, visitor patterns of use, building site selection procedures, and team design responsibilities.

The study employed a conceptual evaluation model consisting of the setting, including the structure and its immediate surrounding; the context, including the broader physical and thematic environment; the users, including visitors and park staff; and the design activity, including how and by whom design decisions are made. The kinds of information available to designers as a result of this study include the importance of design policies relating to site selection procedures and multi-disciplinary design teams; changing program and maintenance requirements as evidenced by the systematic analysis of building renovations and alterations over time; and empirical data on building users, their patterns of movement and residency time.

Jury comments

Ostrander: The thing that impressed us about this is that it is really a group of post-occupancy/post-construction evaluations based on feedback from some 3000 people. It was commendable of the Park Service to let it all hang out and be judged. Enough data and sites were analyzed to provide generalizations that would probably hold true to this particular building type. The research is very tight, competent, with lots of data; it's very substantial and it sounds like it's going somewhere. And it already exists in a form that can be directly used. It isn't a one-shot deal; the name of the game is "we want to learn from this so we can make a difference," so it's pragmatic research from the word go.

Green: It's not explicitly spelled out that the findings will be used to fine-tune existing facilities, but if it were, it would make us even more positive about this. We realize this is really the researchers' report to the client, but we would feel more positive if it had more evidence that the client would indeed act upon this information.

Credits


Client: Denver Service Center, National Park Service.
Planning and Urban Design

A new direction

This year's planning segment of the jury, Ernest Bonner, Planning Director for Portland, Oregon and Raymond Affleck, architect and partner of Arcop Associates of Montreal, spent nearly two days reviewing and evaluating the 90 entries in this category. Unlike some of the past juries, this one found most of the submissions to be of high quality, serious, and thoughtful in nature. As a consequence, they had the difficult task of deciding what directions were most important and picking the best of the best.

There were many projects which provoked lengthy comment and discussion and there were some which, although they fit the jury's criteria, were not quite as rigorously thought out or communicative as others. But their criteria were clear and their conclusions and choices consistent.

Eventually seven projects emerged: four awards and three citations. These seven reflect, in many ways, a refreshingly pragmatic and potentially more useful series of planning documents than have been seen in the awards program in the last several years. But then, the jury can speak for itself.

Affleck: The quality of the proposals in planning and urban design was very high and while we tended to concentrate in the area of helping people help themselves for our awards and citations, we found that there were a number of excellent proposals in conserving natural resources, in the preservation of neighborhoods and the reuse of urban land. But we felt it would be wise to stress the high quality of the self-help submissions and the maturity that is now evident in this type of proposal.

Bonner: It's very consistent with our Western democratic notion of individuals operating on their behalf within some sort of larger public framework. It's becoming more and more obvious that if people don't help themselves, the public can't help them. I'm very encouraged by the change I sense in the profession with regard to these areas of concern and the methodology of the process involved. They are more realistic and if there are mistakes made, they will be less serious. People want a piece of the public action and they are capable of it. They just need ways to constructively and effectively operate in that way.

Affleck: It's old fashioned, an almost embarrassing faith in the democratic process, and a little like advocating Motherhood.

Bonner: In addition to the criteria of self-help, there is the idea of smallness. I would take the Burnham notion and just turn it around 180 degrees and say make no big plans. They take many, many years, much capital, and maybe two generations of people to build and occupy, as well as three or four generations of financial investment. They are not useful, they don't help us any. There is too much of an emphasis on the public. Rather, the real emphasis should be on the private sector and the planning game should become a game of decision-making where public bodies are trying to influence essentially private decisions on behalf of some larger public purpose.

Affleck: A major advantage of the small plan rather than the big one is that it is possible to cope with complexity. The large plans invariably resort to over-simplification to make decisions and contribute more to the destruction of a quality of life. It's a little like replacing the complexity of an existing neighborhood with two or three buildings on a plaza. Five years ago we would have seen a lot of those types of proposals, but fortunately, we haven't seen one this year. Within our criteria of self-help and smallness, there is a richness of possibilities for urban change that are quite optimistic.

Bonner: Another encouraging aspect that came through rather strongly in these types of submissions was the nature of communication. Those documents which claimed in their preface that they are slated for a general public were invariably better able to communicate their intent than those which didn't. I think it is critical in producing any guideline that communication be very direct and understandable.

Affleck: Another aspect I would like to comment on is some of the innovative techniques for planning which we have cited. They are indications of a further maturity within the planning profession and, I think, show a strong capability to contribute to this process of participation in a very operational, directed and well-crafted professional manner. Some of these transcend the notion of participation of five years ago in that they allow citizens to take the actions necessary to improve the environment.
**Award**

**The Society for the Protection of New Hampshire Forests**

**Protecting Open Space: A Guide to Selected Protection Techniques helps concerned citizens join the process.**

**Program:** To provide townspeople with useful information on how to protect open space; to help planners, local officials, and citizens choose and implement protection techniques appropriate for their needs; to provide an educational text for school use.

**Solution:** A handbook, divided into two sections, which discusses 13 open space protection techniques. The first contains one-page summaries of the different techniques with reference pages to the second part containing more detailed information. The various techniques are described by examples of where the technique has been used successfully, the method of how to do it, and any relevant legislation or laws.

**Jury comments**

**Affleck:** The mode of communicating with the public is extremely well done. I think the use of a scenario is very much within the tradition of architects and designers and is for me a much richer way to describe an idea than a legal statement that someone might find very confusing.

**Bonner:** I think the process of the whole thing is extremely well done and I only wish that every state or locality had this kind of document for open space.

**Credits**

**Authors:** Elizabeth Kline, project director, Martha Taub, research assistant. Vivian B. Kline, illustrator; John Zeisel, format consultant.

**Client:** The Society for the Protection of New Hampshire Forests and The Massachusetts Audubon Society

<table>
<thead>
<tr>
<th>MAKE MAP</th>
<th>WHERE TO GET INFO</th>
<th>REASONS</th>
<th>WHAT TO LOOK FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topographic Map</td>
<td>U.S. Geological Survey; aerial photos; field work</td>
<td>gives a good overall view of the character of the land</td>
<td>avoid building on steep slopes because of erosion; avoid building in valleys because of water drainage; avoid building in wet areas; fit building into landscape</td>
</tr>
<tr>
<td>Soils Map</td>
<td>Soil Conservation Service</td>
<td>gives ability of soils to drain water and to support weight of buildings</td>
<td>avoids erosion; avoids polluting waterways with sewage; avoids building on bedrock</td>
</tr>
<tr>
<td>Ground Water Map</td>
<td>U.S. Geological Survey; Water Resources Division</td>
<td>need good drinking water</td>
<td>avoid building on wetlands; avoid erosion; avoid building on low water table; avoid destroying potential water sources</td>
</tr>
<tr>
<td>Slopes Map</td>
<td>Topographic Map</td>
<td>helps determine where building is most suitable (least expensive, least disruptive of the land)</td>
<td>avoid building on steep slopes (15%); avoid building roads on more than 8% slope</td>
</tr>
<tr>
<td>Vegetation Map</td>
<td>Aerial photos; field work</td>
<td>provides habitat for animals; timber is important for paper; gives privacy and scenic beauty; can cut down on noise pollution</td>
<td>avoid building near sensitive plants; protect unique areas</td>
</tr>
</tbody>
</table>
Award

Jack Sidener

Part of the National Endowment for the Arts' City Options program, Recycling Streets studies a 'typical' neighborhood.

Program: To propose ideas and means for improving livability through the re-use of public streets and to publish a citizen's guidebook in order to communicate the ideas and techniques of neighborhood planning in a non-technical manner.

Site: A prototypical study.

Solution: An analysis that deals with generic problems such as bicycle paths, trees, play lots, and lights; traffic illustrated in a comic strip manner with drawings to show suggested treatments.

Jury comments

Bonner: A very, very good exposition. It is a simple but important and fundamental concept on how the street system is used, that it doesn't have to be there forever, and that it can be changed to accomplish this or that.

Affleck: It’s the type of thing that gives public groups who are interested in accomplishing certain objectives a way of looking and thinking about something. They will be helped by this. It gives some very graphic, clearly stated ways for minor interventions. It’s proposing to do the most with the least and it’s very strong.

Credits

Architect: Jack Sidener, Berkeley, Calif.
Client: National Endowment for the Arts, Architecture and Environmental Arts Program.
This is the simplest device of all, a little curbing and landscaping, completely alter a traffic path, and create a people refuge.

while we want the safety of reasonably lighted streets, we've been provided with ungracious and unpleasant fixtures. Existing lights can be shielded to reduce glare, or better, replaced with more human-scaled, better colored, lights.

TO LIMIT TRAFFIC IN YOUR OWN NEIGHBORHOOD:
First, with the help of your city engineer, prepare a map of all the streets and other public property, and ask him to help you estimate the amount of traffic. Walk and drive, talk to your neighbors, and if you can, and the city planning department will help you, send around a questionnaire to see what problems and assets people feel they have. Show these on maps, and add some photos if you can, of some of the best and worst things.

...put the two maps together, and if you're lucky you may find that by taking advantage of some assets, some of the problems might be solved. At this point, take this map to your planning director, and ask for his ideas on what streets may be modified to carry less traffic, and which peripheral streets may have the "capacity" to handle more traffic.

OUR NEIGHBORHOOD SURVEY

- more space in front of the nice shop?
- more traffic?
- close some street ends for parking and places for the elderly to sit!
- and make some of the ugly wide streets narrower! We don't need so much paving!
The Mulberry Street Mall and the Little Italy Special Zoning District deal with special ethnic neighborhood problems.

Program: To physically improve and strengthen the existing character and uses of the neighborhood and help to economically stabilize the area.

Site: Little Italy, several square blocks in Lower Manhattan.

Solution: A document in two parts. The first part deals with Mulberry St. and the process of encouraging its pedestrian uses. The planning group, after surveying the several blocks involved, proposed façade treatments, outdoor street uses and landscaping. Then, with community approval, drew up final plans and helped the residents raise funds for the project from public and private sources. The plan was implemented over the summer of 1976 and Mulberry St. closed for pedestrian use during the weekends. The second part of the document was concerned with the area as a whole and its growth and change. The proposed legislation of the area, covers five points: 1) a limit on the height of new structures; 2) the need to maintain the street line permitting open space development only at rear of buildings; 3) rehabilitation of existing residential buildings; 4) mandating of retail uses on street level; 5) requiring street planting and improvements for any conversion, alteration, or new construction.

Jury comments

Bonner: It is a program of regulations together with a small, well-tuned and directed set of public and private expenditures which make an immediate visual and physical impact on the area and an immediate change in the psychology of the people in the area. I think it is really aware of how you have to approach this type of urban problem to be effective.

Affleck: It is an example of a small scale, people-involved proposal that deals inch by inch with a neighborhood, in a way that human complexity and a change in quality can be coped with.

Credits

Architects: Urban Design Group, Department of City Planning, New York, N.Y. Raquel Ramati, Director; Michael Parle, Deputy Director; Patrick Ping-Tze Too, Rita Bormiol, Project Designers; Susan F. Orsini, community coordinator; design team: James Castelluzzo, John Hart, Renee Kemp, Merry Neisner, Frank A. Nicotelli, Peter Pfeiffer, Clifford Rodriguez, Kanubai Vyas, Dora Zhivotinsky; administration: Elizabeth Erri, David Greenberg, Brunilda Mesa, Shirley Seidman. Zoning text: Norman Marcus, Counsel; Pares Bhattacharji, Andrea Kremen, Fred Zaunderer.

Client: New York City Planning Commission, Victor Marrero, Chairman; Little Italy Restoration Association, Oscar Ianello, President.
Section through new infill

Street elevation of new infill

Signage

Should not obscure windows cornices columns

Window Signs max 30% of Window area

Projecting signs min 10 ft above curb level
Guiding Growth and Change a citizens handbook defines the issues and discusses options for new growth.

Program: To provide government officials, developers, teachers, and interested citizens with information about the nature of growth and planning for urban, suburban and rural areas of Massachusetts.

Solution: A handbook, intended as an introduction and resource guide which contains narrative chapters describing how various kinds of growth and change occur, as well as resource chapters describing tools and approaches to use. Beginning with a definition of terms, the book moves through a discussion of what factors cause growth, and ends with a discussion of some 20 subjects ranging from zoning and subdivisions to wetlands protection, landbanking, and phased growth ordinances. Included at the end of each chapter is a resource list for additional information.

Jury comments
Bonner: It deals with a very complicated subject, but very adequately, and I think it is very effective in giving people ways to act. I think a lot of ordinary people could pick it up and find it very useful.
Affleck: I think it is extremely well done; a very commendable effort in providing this kind of help. It uses a direct approach of readable texts, clear graphics, and a number of examples.

Credits
Author: Sarah Peskin, project director; James Colman, Elizabeth Kline, project co-directors.
Consultants: Alan Goodheart, Sarah Peskin, graphic design and illustration.

The money market is a term used to describe who is willing to lend you how much, for what, and when.

Farmland in Massachusetts is rapidly being converted to other uses. In 1950 some 2,000,000 acres were being farmed while today this number has dwindled to only 700,000 with no reversal of the trend in sight.

A by-pass is a road that goes around instead of through a built-up area. Often this hurts in-town business and spurs development near the by-pass on connecting roads.

A renewable natural resource is never used up. New trees can grow to replace those we cut down. Water falls as rain, percolates into the soil, comes up in wells, is used (but not used up), goes back into the ground through sewers and septic systems, returns to streams and lakes, evaporates, forms clouds and eventually falls as rain again. Land is also renewable indefinitely if it is not abused.
The Yerba Buena Planning Ballot gives the public a voice in decisions for a controversial urban renewal project.

Program: To provide an effective way for citizens to make decisions, register opinions, or select ideas from the multitude of proposals already made.

Site: Market St., downtown San Francisco.

Solution: A ballot, divided into three parts, as a means of expressing preferences on the most important facets of the projects. The first outlines the major alternative planning concepts; the second articulates 13 policy statements dealing with how the project should be planned, financed, and administered, the third is a section containing a map and a selection of land uses from which people can devise their own schemes for the site.

Jury comments

Bonner: The public's legitimate role in planning is establishing the values and making value choices; but it is the most difficult thing to do, since values are so nebulous. There are explicit, fundamental values associated with each of these alternatives, and they are asking the citizens to make that kind of choice. I thought it was really a great idea and I think much more of this could be done. It is in no way a threat to the quality of design.

Credits

Architects: Community Design Center, San Francisco, Calif. Charles B. Turner, Jr., Project Planner and Director; Lawrence Adams, Designer; Andrew Beckerman, Designer.

Consultants: John Keane, graphic designer.

Client: South of Market Residents.
Riverdesign makes use of a variety of techniques to gather ideas from citizens about their proposed waterfront plan.

Program: Master plan (for 4.5 miles of the Great Miami River in downtown Dayton, Ohio) which will serve as a guide for future development of the river corridor.

Site: The riverfront in Dayton, Ohio.

Solution: Various data-gathering techniques were invented in order to involve citizens and gather their ideas. A storefront office was set up downtown, where passing pedestrians could walk in off the street. A riverwalk picnic was held, after a two-hour tour with a 50-group citizens' committee, to the tune of a gypsy violinist. An input booth was set up at River Festival to collar stray ideas. Six live, hour-long television programs were aired on the local channel and viewers were asked to call in their ideas—which were plotted on maps or added to lists. Many of the ideas were discussed by the planners, others were sketched and presented on the programs.

Jury comments

Bonner: It asks people to enter into some design decisions in a way that is calculated to get more attention. TV is the medium of a lot more people than even the newspaper. It's immediate and it's understood. You call up and you can see somebody walk over and put a pin on a map right where you said something ought to be done.

Affleck: It seems a quite sophisticated use of a powerful medium to involve people. It's a little hard to see what the result will be environmentally, but that is not what we are citing them for. Rather, it's an important effort, well worked out, to involve planners with their true clients, the users.

Credits


Consultants: King and Gavaris, Hydro Engineering; Mary Ann Rumney, Brenda Huffman, graphic design; Hammer, Siler, George, Market Research; WOET-TV, Dayton, Ohio, University Regional Broadcasting, Television Production; Jefferson B. Riley, Brenda Huffman, renderers.

Client: Miami Conservancy District, in cooperation with the city of Dayton, Ohio, Montgomery County, Ohio, and the River Corridor Committee of the Dayton Area Chamber of Commerce.
Developed as part of the Bicentennial, The Birthday Book is a way for citizens to contribute to their environment.

Program: To design a way for individuals and citizens' groups to participate in enhancing their neighborhoods through small-scale physical improvements of the public spaces.

Site: Boston, Massachusetts.

Solution: A catalogue of gifts from which people can choose—trees, shrubs, planters, trash receptacles, water fountains, bike racks, play equipment, and more. It is a do-it-yourself workbook for lay people. The books are distributed free and Boston 200 helps citizens choose sites, cuts red tape for permits and licenses, provides matching funds, and assists in whatever way is necessary to see that the project is carried out. So far, $39,000 worth of gift projects are in place or underway.

Jury comments
Affleck: It's imaginative, a warm and humane proposal. Again, I don't think that we are able to judge the results, but what we are citing is the method used to involve people in their own environments.

Bonner: I think it's a great way for an individual to assume public responsibility, at a scale and in a way that an individual can actually accomplish something.

Credits
Architects: Arrowstreet Inc., Cambridge, Mass. and Jan Frankina. Myron Miller, project director; Jan Frankina, design and photography.

Client: Boston 200 Corp. Katherine Kane, director; Barbara Wise, program director.
1. Decide where you would like to have a tree or shrub planted—and how many.

2. Call us and we'll give you detailed advice on species available: exact size, and where your tree can be planted. It costs $20 to plant a six-inch diameter tree in a park and $165 to plant it on the sidewalk (a concrete has to be broken). For private paws, a smaller, less expensive tree may be used.

3. We'll survey the site and help you make the best choice.

4. Our contractor will dig holes and plant your tree or shrub.

5. Finally, we'll provide you a detailed fact sheet on the most appropriate procedures for maintaining your tree or shrub. When to prune, feed, water, etc.

**Trees**

Commemorate the noble tree with the Boston 200 and the Green Boston Department's Liberty Planted Program. We can plant a tree for your personal seating, as a gift of public land, on the sidewalk, or parks, or in your own yard. Or, you can have your Liberty Tree on the Hibernian Boston Commons where the Freedom actually stood.

**Street Furniture**

We can add a fountain to your park, adjacent to your tennis courts or playground—or as a water wonderland! We have adult-size, and kit-size fountains. Study, secure. From $300, including installation.

**Bollards**

Help guide people where they should walk. And keep cars where they belong. Bollards are for sideroads, bus stops, and pedestrian areas for defining the sidewalk in front of your office or store or securing your neighborhood plan. They can rack off cross-walks, uponto bike chutes in this area. They come in different sizes and as painted and unpainted. Made of metal or plastic, called a Heras barrier.

**Benchs**

How many times have you thought about having a bench on your street—so you could sit in the shade, watch your kids, or the playground while your kids are playing? Put one on the sidewalk near your house, outside of your door, or in the playground where you can watch your kids.

We have backless benches to walk on, or seats with arm and back rests to lounge. Benches that hook onto walls where side-walks are narrow. Benches that can be used with a concrete water bowl. Benches around planters and benches to build in. We've selected the best available: safe, durable, beautiful, and weather-resistant, and we've added to the City of Boston.

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1. Decide where you would like to have a tree or shrub planted—and how many.

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Aesthetic evaluation of glass

Alvin D. Skolnik, FCSI

Appraising the anticipated distortion in large lights of tempered or reflective glass by viewing small samples is not possible; full-scale mock-ups provide answer.

The increasing use of high performance glass has created a greater need for full-scale mock-ups to permit realistic aesthetic appraisals. Most architects are familiar with the distortions evident when large lights of heat strengthened or tempered glass are used. These distortions are even more apparent with reflective glasses. It is not possible for an architect to appraise the effects of anticipated distortion by viewing small samples of the glass being considered. It is equally impossible for him to describe these effects to his client unless a full-scale mock-up can be viewed under conditions which will simulate the in-place color and flatness characteristics.

The mock-up: Ideally, the mock-up should be erected at the job site or a closely similar environment, and oriented as the final building will be. It should be a full-scale reproduction of vision and spandrel area modules; built to the same tolerances expected for the final building construction. Adjacent components (such as framing members) should be accurate as to their color and finish. The glass manufacturer should be asked to furnish units which represent their normal range of manufacturing tolerances with respect to color variation, reflectance, flatness, coating uniformity, and light transmission.

Color evaluation: The human eye distinguishes millions of variations in color. Due to the "chameleon-like" behavior of reflective glasses, it is important to make observations over a period of time under changing environmental conditions. Both transmitted and reflected light must be considered. Where tinted glass is used, the transmission and reflection will have a different appearance than if clear glass was the substrate. With reflective insulating glass units, there is a variation in appearance which results from the different surfaces which may be coated. Double images are apparent when the No. 3 surface is coated, although this may not be objectionable on high-rise buildings.

Flatness evaluation: Because there is a tendency to look at reflective glass rather than through it, distortion is more important than in non-reflective units. However, each manufacturing process leaves its own distortion pattern and each glass substrate will exhibit its own distortion characteristics. Heat strengthened and tempered glasses distort to the extent that even in non-reflective units a mock-up would be helpful for aesthetic evaluation where large lights are involved. The degree of reflectivity and the nature of the reflected objects are influences. Trees, sky, and clouds are less critical than reflected adjacent building elements. Normal expansion and contraction, structural loading, sash twist due to construction tolerances on framing members, and stress induced through the glazing media are all factors which contribute to distortion. In insulating glass units, variations in barometric pressure will cause changing patterns of distortion.

Mock-ups have proven their worth as a means of more accurately predicting the performance characteristics of window walls. They have also been accepted as a device for evaluating the appearance of architectural concrete as well as many other building elements. In the aesthetic evaluation of glass, a full-scale mock-up will enable the architect to better visualize the appearance of the building, will make it easier for him to explain the design to his client, and will help to create an environment which tends to prevent misunderstandings.

Author: Alvin D. Skolnik, FCSI is Director of Research and Specifications for Skidmore, Owings & Merrill, New York.
Today's building will live its life in a different world. Life costing (rather than initial construction economies) become a primary concern. This means that thermal considerations must receive more and more emphasis in architectural design. Building materials will need to be an integral part of interior climate systems.

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All of these innovative products are covered in the Thermal Products section of Sweets Architectural File. Or, write for our new book, *Kawneer Thermal Barrier Products*, Kawneer Architectural Products, Dept. C, 1105 North Front Street, Niles, Michigan 49120.
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Nearly two decades have passed since the late Frank Lloyd Wright's comment on Follansbee Terne was first published. No comparable product has ever received such an endorsement from such a source, and we reprint his statement here in the belief that time has not lessened its fundamental impact or its relevance to contemporary design.

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Imaginative new conceptions in architecture can frequently trace their origin to a basically simple idea. One of the oldest types of roofing, terne metal, thus lends itself to many dramatic new applications in the contemporary idiom. Because of its inherent adaptability in both form and color, Follansbee Terne permits the visible roof area to become a significant part of structural design. Thus by re-discovering and re-interpreting a time-tested material, we make out of the very old the very new. I have furthermore found terne superior to other roofing metals in economy, color-adherence, heat-reflection, permanence, workability, and low coefficient of expansion.
A major area of judicial concern has centered on the time period within which a suit for malpractice must be instituted under the applicable statute of limitations in the jurisdiction in question.

We have previously reported (It's the law, Oct. 1976, p. 98) upon a decision of the highest court of the State of New York which rendered unclear the appropriate rules to be applied in this area (Matter of Paver & Wildfoerster), and which decision appeared to enlarge the area of potential architectural liability. The Court in the Paver decision held that even though a malpractice action had traditionally been considered one sounding in negligence calling for the application of a three-year statute of limitations, in an arbitration proceeding, the six-year limitation, for contract actions governed. We pointed out that the language of the decision was so broad as to create some probability that it might be extended to legal actions as well as to those in arbitration.

Several weeks after the determination in the Paver case, the Appellate Division of the Supreme Court of New York rendered two decisions (Sears Roebuck & Co. v. Enco Associates, Inc. and Steiner v. Wenning), which limited the application of the Paver case to its facts. In the Sears Roebuck case, the parties had entered into an architectural contract in May 1967 for the design of a system of ramps to be integrated into the parking facilities of the plaintiff's new store. The contract was the standard American Institute of Architects form. The construction was completed in the spring of 1968, and in April 1970, the plaintiff observed cracks in the ramps. An action for $1,350,000 was initiated against the architect in June 1972 whereby the plaintiff contended that the determination of the Court of Appeals in the Paver case mandated that the six-year statute of limitations be applied to this case.

The Appellate Division of the Supreme Court first considered whether the action was one for architecture malpractice or for breach of contract. The Court Stated:

"If the services relate primarily, if not exclusively, to the profession involved, the gist or gravamen is malpractice, unless they fall within the recognized exceptions. The services here rendered, unlike those of carpenters or masons, were clearly professional. By training and by law they are peculiarly limited to those who qualify by accredited academic studies in the discipline and by subsequent governmental licensing. Their end product, the plans, no less constitute the practice of an honorable profession for which, if done negligently, responsibility attaches in similar vein as it does to a lawyer whose contract or will is unprofessionally drawn, or to a physician who misdiagnoses or malad ministers. The aggrieved client or patient has his remedy in negligence, not in contract."

The Appellate Division then considered the application of the Paver case to the facts before it. It pointed out that in resorting to arbitration, as distinct from legal action, the traditional and constricting rules applicable to actions at law in negligence have been contractually waived by the parties and that the parties by virtue of their contract, may resolve by arbitration what they could be time-barred from doing at law. The Court went on, further, to point out that in squaring Paver to the appeal before it, it was not necessary to squeeze the facts into the Paver mold "for, properly understood, it is limited to the facts."

In the Steiner case, the second decision of the Appellate Division, the parties had entered into a contract for the preparation of plans for the design of a one-family house. The house was constructed in 1965, and legal action against the architect was commenced in 1969. The contract included administration of the construction contract by the architect. The Appellate Court, in affirming the order of the Trial Court dismissing the action as being time-barred under the applicable statute of limitations, stated:

"Pre-Paver, there was little judicial doubt that the plaintiff's sole recourse was in malpractice. If so, the action is time-barred. The question remains whether Paver has opened the floodgates or has so eroded or blurred the former confines distinguishing malpractice from contract as virtually to render the six-year statute applicable no matter how tenuous the claim of any continuing obligation on the part of the professional. In our opinion, it does not. Paver holds that where the parties, by contract, provided for arbitration, and resort has been had to arbitration, the arbitrator is not then bound by the former constricting rules segregating breach from delict. Hence, the arbitrator could proceed to adjudicate the parties' claims and determine liability under either doctrine."

The decisions discussed will be welcomed by the architectural profession as they seem to have slowed the judicial trend toward expanding the area of potential architectural liability.
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Books

American Temples and Palaces

Temple of Democracy: The State Capitols of the USA
Reviewed by Walter C. Kidney, former P/A associate editor.

For nearly two centuries American architects have been drawn, like moths to a rather smutty flame, by the opportunity to design a state capitol. They have usually been singed in the process. The architect of the Pennsylvania capitol actually ended up in jail, while the interior decorator—who on aesthetic grounds deserved it more—was convicted but not sentenced. Elijah Myers, who had the getting and fulfilling of public commissions down to a science, eventually died of nervous prostration. Many others had to endure campaigns of slander, demands for belated alterations, the snarls of their disappointed fellow architects, and asinine mischances such as that at Arkansas. There, while the architect was recovering from typhoid, some helpful soul staked out the foundations behind the still-standing walls of the old penitentiary grounds; when the walls came down and the architect came back, the capitol foundations proved to be some 50 feet off axis from the approach avenue.

You can see that this is a rather rich book. Architectural history, political and social history, and anecdote are blended together, as the narrative swings trapeze-fashion across the country, picking up new capitols in chronological sequence. It is all most interesting, imparting mixed feelings of aesthetic pleasure (now and then), amusement, and a certain gentle disgust.

Several things are a pity:
That there was not more. Not all capitols, of all periods, are mentioned; not all the important information was given; and there should have been about three times as many illustrations. These lacks are due to the market for the book, surely not to the resources the authors acquired.

That some touches of doctrinaire modernism enter a discussion of buildings so prevailing classical. I feel that some of the buildings, and their architects, are underrated.

That what may be called the adverbial vice is present: “When money ran out [at Washington] Walter [the architect] calmly returned to Philadelphia.” How do we know he was calm? There are many passages like this that are said in such a way that they can represent the known facts, guesswork, personal bias, or even an inert filling for a sentence considered too bleak without them.

And yet, this is a very interesting book.

The Twilight of Splendor: Chronicles of the Age of American Palaces

Whitemarsh Hall, Ca’ d’Zan, Vizcaya, San Marino, and Shadow Lawn were five palatial American mansions built between the coming of the income tax and the onset of the
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William W. Akin, 196 pp., illus., . $15.95

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By Martin Green, 196 pp., illus., . $15.95

This book focuses on the period between 1934 and 1940, the author shows that a relatively small group of young, brilliant, energetic designers created the first time a national style that was uniquely American. In five years this style captured the shape of vision and everything in the American home, including the house itself.

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Books continued from page 100

Depression. None, so far as I can tell, passed even briefly to a second generation of the family. One is a semi-ruin, the others are owned by institutions. One, built for some $10 million, sold at sheriff’s sale a decade later for $100.

Insofar as a family is in a position to dictate the sort of house it wants, the house may be inexplicable without a knowledge of the family. Architects and decorators impose arbitrary schemes much of the time, but a strong client has the chance to be creative in his own right. True, a mansion—at least when conceived as a palace—is built for public show as well as habitation, and the quirks of its inhabitants are smoothed over in the name of regularity and symmetry, yet some trace of personality may remain. The image of Versailles—a royal residence, a capitol, an entertainment center, a sample fair for French luxury manufactures, a residential megastructure—pulls one way but American bourgeois domesticity pulls the other. And mansion-builders, to complicate matters, may climb rapidly in the world, dragging with them or attempting to shuck off aspects of their old lifestyles.

*The Twilight of Splendor,* then, takes the natural course in giving you the lives and careers of the mansion-builders as well as supplying the usual academic data of names, dates, styles, costs, etc. for the houses themselves. It is itself a rich book, a sampling of many kinds of historic material chosen for its immediate purpose. Its treatment is very "literary," very conscious of the chance for an elegant cadence to a narrative theme, and at times the prose becomes gritty with brief (and cited) quotations, but the information—which is what counts—is there in abundance nonetheless. The author is objective about his rich, avoiding the common temptation to serve up stale gossip in a sauce of salivation or venom. He is also very good on the actual creation of the houses and on the creators themselves: Trumbauer and Abele, a high school dropout and a black, designing palaces for the rich but not attending their parties; Duveen, a Mephistopheles; Suarez and Greber, supplying the environment; Allard, Alavoine, and Allom, creating interior architectures.

To this writer a truly palatial house raises a question going something like this: Was the house in scale with its inhabitants? A big Shingle Style house, with its many shapes and kinds of windows, implies a rich, personal, and complex family life, housed comfortably, amply, and precisely. A palace, on the other hand, is a symmetrical box, full of studied harmonies and calculated effects, and the question really is whether those who lived in it enjoyed it, felt comfortable with it, filled it with their way of life, or whether they merely rattled around in it. Of the five mansions given here, perhaps only Whitemarsh Hall was inhabited by a family with the true palace temperament: the Stotesburys built and entertained lavishly, had their house blessed by a Cardinal, and seemed willing to pay for grandeur. The Ringlings at Ca' d'Zan skimped on their house though they too entertained well. James Deering put his all into the creation of Vizcaya, by far the most lyrical of the five, but seems not to have known what to do with it once he had it. The Huntingtonians at San Marino seem merely to have accumulated things. And the Parsons at Shadow Lawn built a showcase and never entertained. Not a very good score.
The finished surfaces are the key; or rather, how they're surfaced. Because starting with the walls—then coordinating the partitions, baseboard units, ducting, enclosures and even the furniture—you specify surfaces from one source. Borden.

For you, the process is beautifully simple. For the permanent walls, you're able to pick from more than 700 famous Guard® wallcoverings. Then we assist you in matching or coordinating Borden films for the rest of the interior components, prefabricated for you by the source of your choice.

The result is a decorative, low-cost, easy-care interior that will stay new looking for years.

Ask us about it. Interior styling—with economy—has a new look. And we think you'll like what you see.

Guard® wallcoverings decorate the permanent walls (A), columns (B) . . . and planters (C). Borden laminate films coordinate on partitions (D), heating/air conditioning units (E), column enclosures (F), furniture (G), even a special tack board material (H).
Pella is concerned with helping to conserve that part of America's energy that goes into heating and cooling our residential and commercial buildings. The right windows in these buildings, the "Energy Tight" kind that Pella manufactures, can help cut energy losses. And when you save energy, you're saving money, of course. The following charts and graphs demonstrate how, but first, a quick refresher course in the "language of energy".

**British Thermal Unit (BTU)**
A BTU is a unit of heat energy — the amount needed to raise the temperature of one lb. of water one degree Fahrenheit.

**R Values**
R Values refer to the resistance a material has to heat flow. Higher numbers indicate greater insulating capability.

**U Values**
U Values refer to the total heat flow through the complete heat barrier from room air to outside air. Lower numbers indicate greater insulating capability.

**SC — Shading Coefficient**
The amount of solar energy (expressed as a ratio) which passes through a specified material.

**SHGF — Solar Heat Gain Factor**
The amount of solar energy impinging on a material (expressed in BTU/sq. ft./hr.).

**Degree Day**
The number of days in the heating season times the difference between an inside temperature of 65° and the average outside temperature.

An example of how the R Value of certain materials relates to the U Value is contained in the following chart of typical building materials and materials used in the manufacture of windows.

### Heat Loss by Conduction
Heat may be conducted out of buildings during winter through walls, ceiling, doors and windows.

Heat loss may be reduced by improving insulation in ceiling and walls. Choosing wood windows glazed with a low heat transfer system will reduce losses still further.

The following graphs illustrate the differences in heat lost in dollars per season for each 100 sq. ft. of window area. U Values used in calculations are based on winter conditions.
addition to conduction losses, buildings also lose heat to infiltration ... cold air entering through cracks around doors and windows. This is where weatherstripping and precision manufacture to exacting tolerances become important. In this chart we compare 20 windows meeting 10 different industry standards (Class B and A) with 20 all Double-Hung and Casement Windows. Each group of 20 windows has 280 lineal ft. of crack. Heat loss through filtration for one OX-34 Pella Sliding Glass Door is also included. Test was calculated at 0° with a 25 mph wind.

Pella's exclusive Double Glass Insulation System and optional Slimshade® (shown below) greatly improve the energy efficiency of Pella Windows.

**More Insulation for Less Money**

Only Pella makes a double glass window with a full 13/16" dead air space between the panes. And the greater the space between panes (up to about 1"0), the greater the insulation value. As a result, Pella's Double Glass Insulation System actually outperforms ordinary insulating glass and costs less per window. Add this fact to Pella's many other "Energy-Tight" features and you have a truly superior energy saver.

**FREE CATALOG.** For more detailed information, use this coupon to send for your free copy of our 28-page, full color catalog on Pella Clad Windows & Sliding Glass Doors. See us in Sweet's General Building File. Call Sweet's BUYLINE number or look in the Yellow Pages, under "windows", for the phone number of your Pella Distributor.
No glazing system is all things to all people. That's why Tremco gives you a choice.
A glazing system can’t solve every design problem. Tremco gives you several systems—each designed to satisfy different design priorities without compromising appearance or performance. The Tremco Vision Strip, POLY-WEJ, Dry Glazing and WEJ-Grip systems can handle all or most of your glazing requirements. Occasionally, however, you may face very special glazing conditions. Then your Tremco man can help you combine Tremco glazing components into a special item that will do the job.

The Vision-Strip System is designed to satisfy a broad range of glazing requirements. Tremco Pre-Shimmed 440 Tape provides a continuous shim that cushions the glass around the full perimeter and prevents pressure points and squeeze-out. A continuous heel bead of MONO sealant prevents leaks at tape corners and sash joints. The Tremco Vision Strip shims full interior perimeter and provides a trim, clean line. These three components combine to give leak-free security in a broad range of applications.

The POLY-WEJ™ compression glazing system is a combination of wet and dry components that is ideal for solving the inherent problems of stick curtain walls, rain screen walls, or offset strip windows. The pre-formed, highly adhesive POLY-shim® tape provides a continuous shim for even windload transfer. The POLY-WEJ neoprene gasket is engineered for high dimensional stability and held to close manufacturing tolerances to deliver trouble-free compression glazing. Maximum security for the whole system is assured by using MONO at all critical points.

WEJ-Grip is a clean line, two-piece system consisting of a gasket and locking wedge. Both pieces are extruded from ozone-resistant virgin neoprene which remains flexible at even the coldest temperatures. WEJ-Grip meets or exceeds the NAAMM performance requirements for water infiltration and structural performance for design loads of at least 40 PSF. Because WEJ-Grip cushions the glass against normal movement, shock and vibration it is the ideal system for large lights that are subject to high wind loads. The two-piece design provides easy straight-in glazing from the interior. Overall, WEJ-Grip gives you a clean, architecturally attractive appearance with a narrow sight line.

Tremco stands ready to work with you through design and specification stages. Call on our 48-plus years’ experience in designing high performance leak-proof systems. Job-proven sealants like DYmeric®, Lasto-Meric® as well as MONO®. The liquid polymer, Tremproof® waterproofing. And our roof edging system, Tremline®. Tremco, 10701 Shaker Blvd., Cleveland, Ohio 44104. Tremco (Canada) Ltd., Toronto, Ontario M4H 1G7.
Progressive Architecture

Products and literature

Electric eye sink control can be used on new or already installed sinks to automate operation. Water is said to flow automatically when hands interrupt the electric eye beam—stops when hands are removed from the sink. Aquatron features preset water temperature and adjustable pressure regulation when used in conjunction with hot/cold mixing valve. The unit is said to be unaffected by sunlight or room lights. Qualco. Circle 100 on reader service card

Energy consumption analysis. The program uses locally gathered information on weather conditions, building construction, and mechanical systems for each individual building. This information is merged with the data base enabling managers to isolate variables of wall construction, mechanical systems, and control systems to derive optimum energy efficiency recommendations for any building. Information about the program is available from Johnson Controls, Inc. Circle 101 on reader service card

Washing machine hook-up center lets plumber tie faucets, pipes, and drain outlet together in one package. Colors of the ABS plastic go all the way through, can't chip or rust. The hook-up center comes in black for wood grain paneling and white for dry wall or vinyl covered paneling. Lyons Industries, Inc. Circle 102 on reader service card

Petitt Ply chairs. Designed by Don Petitt, chairs have molded plywood frame, molded urethane in upholstered seat and back over structural plastic seat and back inner shells. Thonet Industries, Inc. Circle 103 on reader service card

Tilt-out square tube files. Part of Modular Storage System, the unit provides a vertical filing system for multiple width sheets, 30 to 66 in. within the same cabinet. A high-rise handle provides lifting action. Divided into honeycomb-type square tube compartments, which are said to increase filing capacity, eliminate binding, and keep surface contact of graphics to a minimum. Files are available with a choice of 28 tubes 4½ in. sq or 112 tubes, 2½ in. sq. All tubes are aluminum reinforced to prevent sheet damage. The Plan Hold Corporation. Circle 104 on reader service card

Conference tables. Tops have 6 in. radius corners and a 2¼-in.-thick rounded edge, and come in veneers and solids of walnut or oak. A modified boat shape and rectangle are the standard designs of the 6700 series tables. Legs and frame are available in mirror-chrome, satin-chrome, bronze finish, or solid. Mueller Furniture Corporation. Circle 105 on reader service card

Automated filing system. The Minitrieve Ltd. is a compact automated pushbutton office filing machine providing document storage and retrieval. Closet size, its filing capacity ranges from 1440 in. to 4500 in. for letter size documents and from 1152 in. to 9600 in. for legal size. The largest model has a storage capacity equivalent to more than 27, 5-drawer lateral file cabinets. Average cycle time to retrieve and restore a bin is only 17 seconds. The number of file bins per machine ranges from 32 to 100. Supreme Equipment & Systems Corp. Circle 106 on reader service card

Solar swimming pool heating system. Components of the unit include black plastic collector panels, valves, piping, and either a manual or automatic control system. It can be attached to new or existing pools. Electronic controls of the system automatically compare pool water temperature with that of the solar panels. If the panels are warm enough to increase the pool water temperature, water from the pool passes through the panels, where it is heated, and returns to the pool. Aluminum Company of America. Circle 107 on reader service card

[continued on page 112]
THE COMPUTER PROGRAM
THAT NOW DOES MORE TO
SAVE ENERGY AND MONEY.

The new, improved E CUBE 75 produces an accurate, three-part Life Cycle Energy Analysis at low cost. With many new features it computes the hour-by-hour energy requirements of your building or planned building for an entire year—taking into account all weather, design, operation, and occupancy factors.

Air Side Systems Simulations. E CUBE 75 can now handle Variable Air Volume (VAV) systems directly. It also offers expanded treatment of Multizone, Dual-Duct, and Reheat air distribution systems. The energy consumption of various air side systems can be predicted—you can compare their performances and costs, and pick the one that’s best. Other improvements make E CUBE 75 more complete and easier to use.

Energy Systems Simulations. E CUBE 75 can simulate many different energy systems—from central stations to rooftops. It projects all costs, so you can choose the system or combination of systems that will work most efficiently and most economically for you.

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ENERGY CONSERVATION
UTILIZING BETTER ENGINEERING

American Gas Association
Products continued from page 110

SunPanel is a solar collector designed to capture energy from the sun and convert it to hot water heat for domestic, commercial, and industrial use. Cut-away view of flat-plate collector shows product's two tempered glass cover plates, all-copper absorber plate, 3 in. of treated fiber glass insulation and all-copper fluid-carrying tubing system. Permanently attached mounting supports simplify handling of collector during shipping and installation, then function as brackets for attaching the unit to its framing. Libbey-Owens-Ford Co.

Circle 108 on reader service card

Emergency lighting fixture

Emergency lighting fixture is self-powered unit intended primarily for wall mounting. Its case contains a calcium-lead battery, a solid-state automatic charger, and a solid-state transfer circuit. Controls include an a-c “on” light and a test switch to simulate a-c power interruption. Add-on volt-meter is optional. Fixture measures 5½”x8½”x2¼”, base is black enameled, and frame has a walnut woodgrain finish. Yorklight Electronics, Inc.

Circle 109 on reader service card

Wundurwal is fully prefabricated and consists of formed steel panels, steel posts, and components for constructing sound barriers, property dividers, or security fences. Panels, which may also be used for complete structures, have a baked-on enamel finish over a bonderized and galvanized undercoat. Available in heights from 4 to 16 ft, the panels may be altered at job site. Herbst Brothers.

Circle 110 on reader service card

Lighting. A 1000-watt Tungsten Halogen floor lamp has marble base, chrome rods, and either black or white reflectors. Lighting Associates.

Circle 111 on reader service card

Americana indoor/outdoor mat

Americana indoor/outdoor mat. The mat pile is fibrillated (split fibers) ribbon polypropylene. The red, white, and blue fibers are solution-dyed for colorfastness, according to maker, the 100 percent pure black vinyl backing has special textured surface that tightly grips both resilient and non-resilient floors. Sizes include 17”x28”, 3’x4’, and 4’x6’. Continuous mats can be ordered in 3’x30’ or 4’x30’ rolls. MML/Whitecliff.

Circle 112 on reader service card

Woven wire cloth for interior and exterior architectural designs may be used as wall panels, office and room dividers, elevator cab interiors, doors. Architectural Mesh can be installed with bolts, spot welding, or slipped into wooden or metal frames. It is available in 24 standard specifications fabricated from stainless steel, brass, and/or aluminum. Company will also design and produce specifications to meet particular design needs of the architect. By using a variety of wire dimensions and strip widths and imparting different crimps to the metal, the mesh is woven into many patterns in rigid panels. Cambridge Architectural Mesh.

Circle 113 on reader service card

Air diffusion grille. Designed for use in prisons and other institutions where security measures are necessary, it is assembled with heavy duty components of either steel or aluminum. Maker states that without special tools, it is almost impossible to remove grille elements and, when installed as a permanent fixture, the grille itself becomes immovable. Environmental Elements Corporation.

Circle 114 on reader service card

Acoustical door system consists of a flush type acoustical door, a set of seals, and heavy-duty supporting track and hangers. The door itself is 4-in. thick and features 14-ga cold rolled steel faces spot welded at the perimeter to acoustically treated stiles and rails. Across the interior, the steel faces are spot welded to channel type reinforcing members. Between the reinforcing members, the face sheets are backed by non-combustible sound deadening boards. The center of the door consists of non-combustible sound insulating filling materials, interlaced between the frame and reinforcing members. The doors come with a coat of prime paint on all metal surfaces. Richards-Wilcox Mfg. Co.

Circle 115 on reader service card

Lampak™. A self-contained emergency lighting power pack for fluorescent fixtures is designed to mount inside the fixture, but outside the ballast channel. It can physically be placed between or alongside the 40 watt tubes in a typical fluorescent fixture, or even between the legs of a “U” lamp. Unit features fully automatic 90-minute operation, a combination test switch/charge rate pilot light, sealed lead battery, and a solid-state temperature compensated charger. The power pack is constructed of high impact, flame-retardant thermoplastic. It is UL approved. Dual-Lite, Inc.

Circle 116 on reader service card

Moving walks. Standard UT-Trad-O-Lator walks are wide enough for two adults to ride abreast and move at 120 ft per min., for a carrying capacity of 10,000 passengers per hr. Safety equipment conforms to the ANSI-A17 code. The preengineered pallet-type moving walks have opaque or transparent balustrades, carry passengers and luggage safely for up to 500 ft., and are engineered for use in airports, healthcare facilities, industrial and office complexes, shopping malls, sports centers, Otis Elevator Co.

Circle 117 on reader service card

Colorful lavs. Using the “Decobon” process developed by Promedal, S.A. of Geneva, Switzerland, the lavatory bowls are made of a new type of acrylic laminate that does not delaminate under service conditions. These are being shown in the United States by M.S. Jones Ltd.

Circle 118 on reader service card

Operable skylighting system. Electrically operated skylight features a system that allows roof to be cracked open during rain to prevent condensation without letting water in. Roofs can be designed with any skylighting or roofing material. Galvanized steel box beam framing is standard, with aluminum stainless steel or Con-Ten members also available. Rollamatic Roofs, Inc.

Circle 119 on reader service card

[continued on page 114]
We resist heat, sound, glare, burglars & bullets.

Laminated Glass Corporation . . . specializing in laminated safety glass since 1948. We're a little smaller than some companies in our business, but we offer just as complete a laminated line . . .

VISTA-SAFE® — bullet-resistant glass up to 2½” thick.

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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 stairs 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.

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ELIASON® Easy Swing® DOORS

Self Closing - Double Action for SERVICE, TRAFFIC OR CONVENIENCE DOORWAYS

LWP 3: 6061-T6 Aluminum Alloy .063” thick, Satin Anodized finish, Std. Windows, Fasteners and Hinges included. Easy to install, easy to use. Useful for Patient Care, Food Service, Variety, Discount, Department Stores. Thousands used in Supermarkets.

LWP 4: Same as “LWP 3” except with decorative high pressure laminate both sides. Decorative doors are practical with protective accessories. Door illustrated has 24” high Base Plates and two sets of Bumper Strips.

SCP 6: A Solid Core Door 3/4” thick, illustrated door has Anodized Aluminum, Top Panels, 18 gauge steel center panels (SS front, Galv. rear), 14 gauge high carbon steel kick plates. Write for options and other Solid Core Door models. Applications same as “LWP 3”, a heavier door but same easy action.

SCP 8: A Solid Core Decor door. Illustrated door has 18” high Base Plates and Edge Trim (18 gauge Stainless Steel). Decorative High Pressure Plastic Laminate above Base Plates to top of door both sides. For Food Service and other areas where Solid Core Decor doors desired. Write for other models and options.

SCP 11: Gasketed, Solid Core Door 3/4” thick, illustrated door has Anodized Aluminum top Panels and 48” high 18 Gauge Stainless Steel Base Plates. For Refrigerated areas, Work Rooms, Processing and Cooler to Processing. Write for options and accessories. Ask about 1½” thick Foam Core Doors.

The above illustrations represent just a few standard door models. All Easy Swing Doors are shipped complete ready to install. Write for your free door catalog today listing hundreds of options accessories and other models.

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Kalamazoo, Michigan 49003 U.S.A.

No. 307, on Reader Service Card

No. 306, on Reader Service Card

No. 327, on Reader Service Card

No. 319, on Reader Service Card
Products continued from page 112

Smoke detection/alarm operates on a photo-electric system that sets off an alarm when it senses a smoke density of 2 to 4 percent per ft. It also sounds the alarm of other detectors wired to the system located in other rooms. The unit is designed to be built into ceilings or upper walls and operates on standard household current. It is equipped with a light-emitting diode that indicates it is functioning. The unit's textured white shell is injection molded ABS thermoplastic. Nute- 
tone Division, Scovill.
Circle 121 on reader service card

Heating system. The product is called ESWA, which looks like a roll of wallpaper made out of plastic. It is incorporated into the ceiling by simply unrolling it in some cases, states maker. The system consists of thermostatically controlled, flexible heating elements. The elements consist of narrow strips of foil hermetically sealed in a plastic envelope. They produce radiant heat which provides an even temperature at all levels throughout the room. The system is designed primarily for space heating within the ceiling but may also be used in walls, floors, or any other surface. Heating elements are available in a range of lengths from four ft to 24 ft and widths from 12 to 48 ins. Nailing strips spaced 12 in. or 16 in. apart run the length of the elements. It has been tested by Underwriters Laboratories and conforms to the National Electrical Code. Ele-
ments operate on 240, Elixir Industries.
Circle 121 on reader service card

Textolite laminates. A wide variety of patterns, woodgrains, solid colors, and textured surfaces (113 in all) have been especially assembled in this collection with the architect and specifier in mind. General Electric Company.
Circle 122 on reader service card

Literature

Resilient flooring products. A full-color 16-page catalog illustrates all colors and patterns available for vinyl asbestos and asphalt floor tiles, feature strip, and cove base. Also included is general information on sizes, gauges, uses, in-
stallation, light reflectance values, and brief specifications. Azrock Floor Products.
Circle 200 on reader service card

Stacking chairs. Three different lines of company's stacking chairs are compared in terms of weight, dimensions, ganging, ease of stacking, construction, durability tests, available accessories, and suggestions for use. Brochure. Steel-case Inc.
Circle 201 on reader service card

'How to Design and Build a Solar Swimming Pool Heater,' is an illustrated 46-page booklet. It discusses in depth the physics of the solar heater, the economics of solar pool heating; construction of the heater and recommended designs; and operation and maintenance. Copper Development Association, Inc.
Circle 202 on reader service card

Telephone centers. Brochure illustrates and describes installations of the latest acoustical telephone booths. Dimensional and construction information, booth materials, telephone mount-
ing heights (standard and drive-up wheelchair), and booth mounting methods on walls, posts, and pedestals, are described. Booths included are industrial, contemporary, outdoor/indoor, walkup, seated, drive-up and wheelchair mod-
els. Acoustics Development Corporation.
Circle 203 on reader service card

'HPF High Pressure Sodium Book.' is a guide to the application of energy-efficient high pres-
sure sodium luminaires. It illustrates the types of units that are available and gives specification and technical data. Holophane Division, Johns-
Manville Sales Corp.
Circle 204 on reader service card

Keep the fiddler off your roof
with Hickman protection.

When roof products fail, someone has to go up and fiddle around with make-do patching or expensive repairs. It's better to start off right with genuine Hickman quality and protection from one edge of your roof to the other.

EXPANSION JOINT SYSTEM
is a one-time, one-cost, maintenance-free instal-
lation utilizing the Hickman patented compres-
sion clamp. Heavy alumi-
num extrusions are free-
floating, allow four-way expan-
sion and contraction. High vertical sections stay well up out of the water.

SAFEGUARD GRAVEL STOP
is the original three-piece system with the patented compression clamp and waterproof fasteners that lock down felts, lock out water. Nobody's ever found a failure. Yet Hickman quality costs less, installed, than other systems.

PERMASNAP COPING
controls water with unique gutter/chair at each joint. Adhesive bonding and snap-
on design greatly reduce installation costs. Coping can tie into reglet where roof meets parapet.

HICKMAN REGLETS
flash roofs to walls or parapets. Patented compression system clamps felts, ex-
cludes water. Three easy-to-install types: thru-wall for unit masonry; in-wall for cast-in-place concrete; to-wall for exist-
ing construction.

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114 Progressive Architecture 1:77
Spectra-Glaze®. Factory-finish glazed concrete block catalog includes complete data regarding fire ratings, insulation, and sound loss factors, USDA and OSHA compliance for permanent, sanitary surfaces and cove base, scored and design series for a choice of texture, form scale, and pattern. The tile is available in 48 colors. Details of building and finishing in one operation are given, and full color installation pictures are shown. The Burns & Russell Co. Circle 205 on reader service card

Modular, self-locking fascia and flashing systems are described in 8-page brochure which illustrates the features, includes design ideas, detailed application drawings, suggested CSI Format, Division 7 specifications, performance specification, and installation drawings and instructions. Tremco. Circle 206 on reader service card

Color coatings for playing surfaces are said to be ideal for playgrounds, basketball and tennis courts, marking walkways, safety zones, and bike paths. Literature offers free quart samples, gives playground design ideas, reports of studies on the psychology of color and audiovisual presentations on the psychological motivation of color. Allied Chemical Corporation. Circle 207 on reader service card

Cor-Ten brochure (ADUS 88-6659-1) replaces all information on the aspects of the weathering steel used in architectural applications. The 17-page booklet stresses what may be encountered when Cor-Ten steels are fabricated and/or used in various architectural situations, gives technical data, suggests fabricating and handling methods. U.S. Steel. Circle 208 on reader service card

Court wall and ceiling systems. A four-page Manuspec provides proprietary specifications and general description of “Bailwall,” and its components, and outlines the on-site requirements for surface preparation, installation, and cleaning. Base, intermediate, and final finishes are also detailed. Finestone Corporation. Circle 209 on reader service card

Finishes/stains/sealers. Literature explains how an oil and resin polymerizing process finishes, stains, seals, and stabilizes wood, concrete, masonry, brick, tile, marble, and terrazzo in one application. Watco-Dennis Corporation. Circle 210 on reader service card

Masonry insulation. Lightweight, free-flowing, granular vermiculite treated for water repellency for block and cavity walls is shown in brochure which gives “U” values, coverage chart, and specifications. W. R. Grace & Co. Circle 211 on reader service card

Ceramic tiles illustrated in brochure include those for facing and paving, for interior and exterior use, and glazed and unglazed. Standard size module is 4”x8”. Technical data is also included. Product is available throughout the United States, Alaska, and Hawaii through Gall International. Circle 212 on reader service card

Steel framing in residential, multi-family, and light commercial construction is shown in brochure which also includes information on basic stud runner and joist units, accessory products and technical data in chart form. United States Gypsum Company. Circle 213 on reader service card

Open office plan. Included are work surfaces of various sizes, end, back and side panels, numerous storage and filing units, and built-in lighting systems. All components are available in either open pore lacquered oak or walnut, and back panels can be wood or acoustically upholstered. Also available are oak or walnut drawer fronts for the steel equipment files. Brochure is a double-gate-fold design with two facing sections which work together. One half features full-color pages of various installations, the other half of the brochure consists of concept drawings of many other possible work station solutions. These are presented as both floor plans and perspective line drawings and range from small work stations to complex space solutions. Ep-Pinger Furniture, Inc. Circle 214 on reader service card

Fact oste-finish glazed concrete is included. Product is available throughout the United States, Alaska, and Hawaii through Gall International. Circle 215 on reader service card

California home; Designer: Russell Forester, La Jolla, 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.

California home; Designer: Russell Forester, La Jolla, California; Cabot's Stain Wax on all interior woodwork
Contract carpets. Full-color, 44-page brochure includes full specifications, technical data, complete color lines, installation photos. Wide range of custom and running line woven Wilton and Velvet, custom and running line tufted, printed, tufted running lines in custom colors, custom and running line of Berbers in tufted, woven Wilton and Velvet. Philadelphia Carpet Company. Circle 216 on reader service card

Home solar heating/cooling controllers are illustrated in full-color catalog which describes line of solid state logic and switching controllers for home solar systems. Diagrams show how heat is circulated; also shown are the wiring of the house thermostat, auxiliary heater, and collector and storage temperature sensors. Solar Control Corp. Circle 217 on reader service card

Work stations/open office lighting. Two six-page color brochures cover work stations specifically designed for word processing workers and a system of indirect and task lighting for open plan offices. Westinghouse. Circle 218 on reader service card

Cement-fiber roof deck, wall panel and formboard. PetriCal is manufactured from chemically treated long northern aspen wood fibers bound with portland cement. The precast units are manufactured from measured quantities of wood fiber and portland cement mixed and molded under pressure, then cured and kiln dried. Structural deck provides lightweight, noncombustible, insulating, and acoustical material in addition to the durable structural characteristics. Brochure gives technical design data. Cornell Corp. Circle 219 on reader service card

Admixtures. Brochure contains data and illustrations on the three basic types of Pozzolith admixtures: Normal, Retarder, or Hi-Early. Master Builders. Circle 220 on reader service card

‘Where to Buy Hardwood Plywood and Veneer’ directory has been revised and updated. It contains an order checklist for use by specifiers, provides information regarding manufacturers of cut-to-size, stock panels, prefinished panels, laminated block flooring, and specialty items. hardwood Plywood Manufacturers Association. Circle 221 on reader service card

Noise control book. A 12-page publication written for apartment building designers, offers basic information on the types, control, and measurement of noise as well as results of acoustical tests on several plywood construction systems. A report on field construction versus laboratory tests is also included in book. American Plywood Association. Circle 222 on reader service card

Joists. Literature gives descriptive data and shows typical details of five series of joists that cover a variety of uses ranging from residential and light commercial to carrying heavy loads with long spans. Trus Joist Corp. Circle 223 on reader service card

Contract carpeting of du-Pont Antron III is heather-toned level-loop or ribbed texture and comes in two weights. Especially for heavily trafficked areas is a blend of acrylic and nylon fibers. Each carpet is available in a wide choice of colors; all have built-in static control. Catalog sheets are available to architects and designers. Walter Carpet Mills. Circle 224 on reader service card

Vinyl-Rail line of plastic coverings for handrails is illustrated in color catalog. Product is an extruded thermoplastic covering for metal and wooden handrails. Brochure gives profiles and colors, and describes design considerations, assembly details, and installation instructions. vinyl Plastics, Inc. Circle 225 on reader service card

Wood windows. The 36-page catalog includes trapezoid and triangle windows and tells how to specify them. A line of patio doors is also shown. Detailed information on sizes, openings, priming, and prefinished, grids and divided lites is given. Request Catalog 5 from Marvin Windows. Circle 226 on reader service card

‘Contract Carpet Selection and Specifications Guide’ describes company’s performance certification program, lists performance certified carpet lines by mill customers, and explains specifications necessary for carpet selection. It also outlines traffic level classifications covered by the program. Dow Badesich Co. Circle 227 on reader service card [continued on page 121]

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The Library of Urban Affairs
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to obtain membership information and an application.
An important international architectural competition for the design of a 100,000 square meter national library building to be constructed in Tehran, has been announced by the Government of Iran. Conducted under the rules of the International Union of Architects, this will be a single-stage competition, open to any registered architect, to any architect entitled to practice architecture in his own country, or to any team led by such an architect. Two-hundred thousand dollars in prizes will be distributed as follows:

- **$50,000—FIRST PRIZE**
- **$25,000—SECOND PRIZE**
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The first prize winner will receive a commission to design the project.

By decree of His Imperial Majesty, the Shahanshah of Iran, the proposed new library has been officially designated The Pahlavi National Library.

The new library will be prominently located in Shahestan Pahlavi, the future city center of Tehran, now in an advanced stage of planning.

The Pahlavi National Library, planned by a group of national and international experts and consultants as a model national library, is expected to be one of the most advanced national libraries in the world. The planning which has gone into the preparation of the building program, together with the importance of the site in the Shahestan Pahlavi, combine to make this an architectural competition of outstanding importance and significance.

Architects who meet the qualifications outlined above may register for the competition and request the competition documents by forwarding a registration fee of $70.00 (U.S.) together with a certificate attesting that they are registered architects, or are entitled to practice architecture in their own country.

The registration fee may be paid as follows:

1. By check drawn to the order of the Pahlavi National Library Project, International Architectural Competition, or

2. By bank transfer to: Account No. 1126, Pahlavi National Library Project, International Architectural Competition, Bank Melli Iran, Aryamehr Square Branch, Tehran, Iran.

The check, or a copy of the bank transfer slip, should be sent with the registration request to the Pahlavi National Library Project, Committee for the International Architectural Competition, Aryamehr Square, 9 Bisotun Avenue, Tehran, Iran. The registration period extends from January 22 to April 19, 1977. Program documents will be mailed to registrants between April 4 and May 1, 1977. Deadline for receipt of all entries is January 20, 1978. The program for the competition will be available in both Persian and English. All entries must be in English.
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Appointments

Michael A. Yaros has been named associate of Yaros Associates Architects Planners AIA, PA of Miami, Fla.

Thomas F. Lynch has joined Winsor/Faricy Architects, Inc., Saint Paul, Minn.

William H. Gantz has been made an associate of Eugene J. Mackey & Associates, Architects, Saint Louis, Mo.

Gerard Peer, Harold Ogburn, and Paul Poetzsche have been named vice presidents, associate partners of Wolf Associates, Architects, Ltd., Charlotte, N.C.

Anthony Caine has been appointed an associate of Steven Winter Associates, building systems consultants, New York City.

Charles R. Ince, Jr. has joined the staff of the AIA Research Corp., Washington, D.C., as a full-time consultant.

Richard L. Engler, AIA has been appointed executive vice president, director of operations for Folse/HDR, New Orleans office, and Justice Facilities Design Center of Henningson, Durham & Richardson.

Karen Northcutt, Brent Daggett, and Larry Mouri have joined EDAW, Inc., Newport Beach, Calif.

Geoffrey L. Rausch and Jack R. Scholl have been named partners of the Environmental Planning and Design Partnership, Pittsburgh, Pa. and Miami Lakes, Fla.

Anne Hersh has been named a partner in the firm of Joseph A. Connell, AIA of Corning, N.Y., now called Connell & Hersh Architects.

Vahe Sahakian has been made an associate of Rapp Fash Sundin/Inc., Houston and Galveston, Tex.

Olga E. Petters has been named a vice president of Caudill Rowlett Scott, Houston, Tex.

Thomas W. Gunn, AIA, MRAIC was elected president and member of the Board of Directors, Zeidler Partnership Inc. Architects, Detroit, Mich.

Frank R. Glass, AIA has been named vice president, director of business development for Theodore M. Heesch, Inc., Architects, Planners, and Interior Designers, Houston, Tex.

Walter F. Pate, AIA has been named associate of Thompson, Hancock, Witte & Associates, Inc., Atlanta.

Leslie A. Black has been elected principal and executive director of design for Chase Architectural Associates, PC, Syracuse, N.Y.

Mitchell A. Goldman was appointed head of the health facilities division of Otis Associates Architects, Northbrook, Ill.

New addresses


Carson, Lundin & Thorson, PC, 880 Third Ave., New York City 10022.


Kennard, Delahousie & Gault, 4929 Wilshire Blvd., Los Angeles, Calif.


Western Miller Associates PC, 2 Park Ave., New York City 10016.

David Jay Feinberg, AIA, Suite 210, Cutler Ridge 1, 10700 Caribbean Blvd., Miami, Fla. 33189.

Acoustics/Noise Control Consultants, 420 Lexington Ave., New York City 10017.


Archimedia, 105 E. Cary St., Richmond, Va.

New firms

C.E. Hunter, AIA and Kent R. Keirsey, AIA have established The Hunter/Keirsey Partnership, Architects, 4171 N. Mesa, Suite C215, El Paso, Tex. 79902.
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Faculty: The DEPARTMENT OF ARCHITECTURE CORNELL UNIVERSITY is seeking candidates for the Assistant or Associate Professor level for a teaching position in Technology starting fall 1977. Candidates should have ability to program FORTRAN and some knowledge and background in computer languages and operations, thermodynamics and fluid dynamics and the design of mechanical systems. Professional experience working with architects and an education in architectural design is highly desirable. Teaching responsibilities include an environmental architectural design course stressing fundamental concepts, including HVAC, acoustic and lighting systems. This course will serve as a preliminary, computer-aided design course. In addition, a team-teaching responsibility is required in the environmental systems portion of an advanced computer-aided design course in environmental design. Applications and supportive materials must be received by 1 February 1977 and should be directed to: Professor Mario L. Schack, Chairman, Department of Architecture; College of Architecture, Art & Planning; Cornell University; Ithaca, New York 14853.

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Faculty: The Department of Industrial Design, The Ohio State University, Columbus, Ohio, 43210,
Faculty: The School of Architecture and Environmental Design, University of Texas at Arlington (Fort Worth), seeks new faculty for the 1977-78 academic year in the areas of Architectural Design, Landscape Architecture, or Design, and City and Regional Planning. A minimum of three to five years professional and teaching experience is required. Salary and rank commensurate with background. Equal Opportunity Employer. Contact Charles Walliscleu, Development Chairman, c/o Department.


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