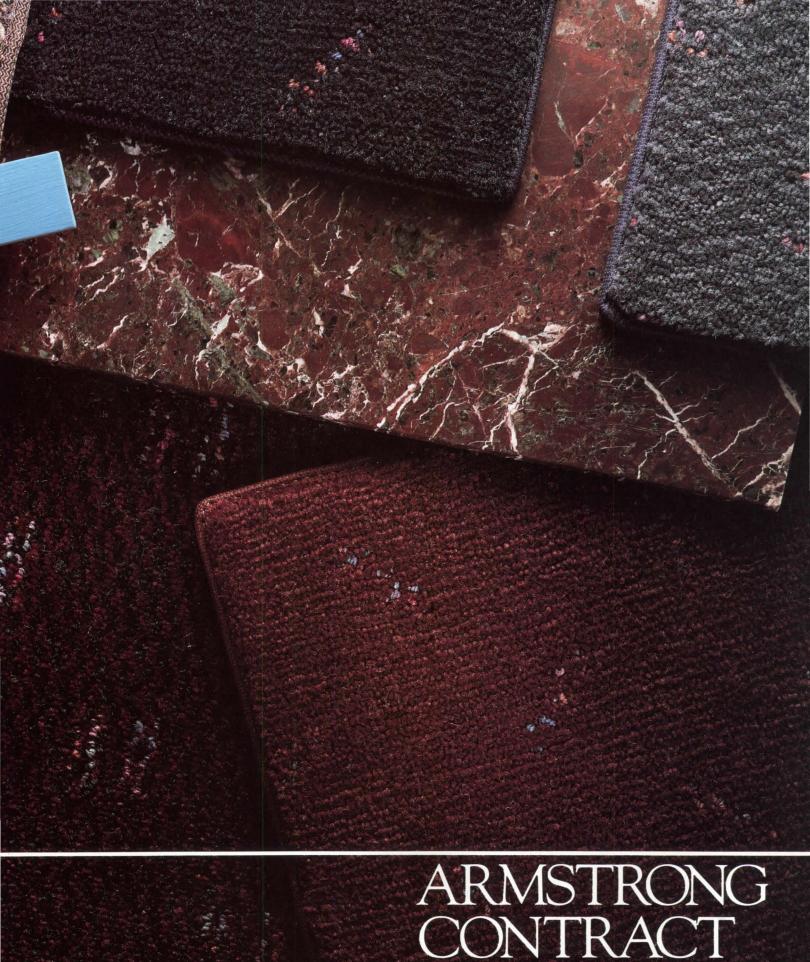
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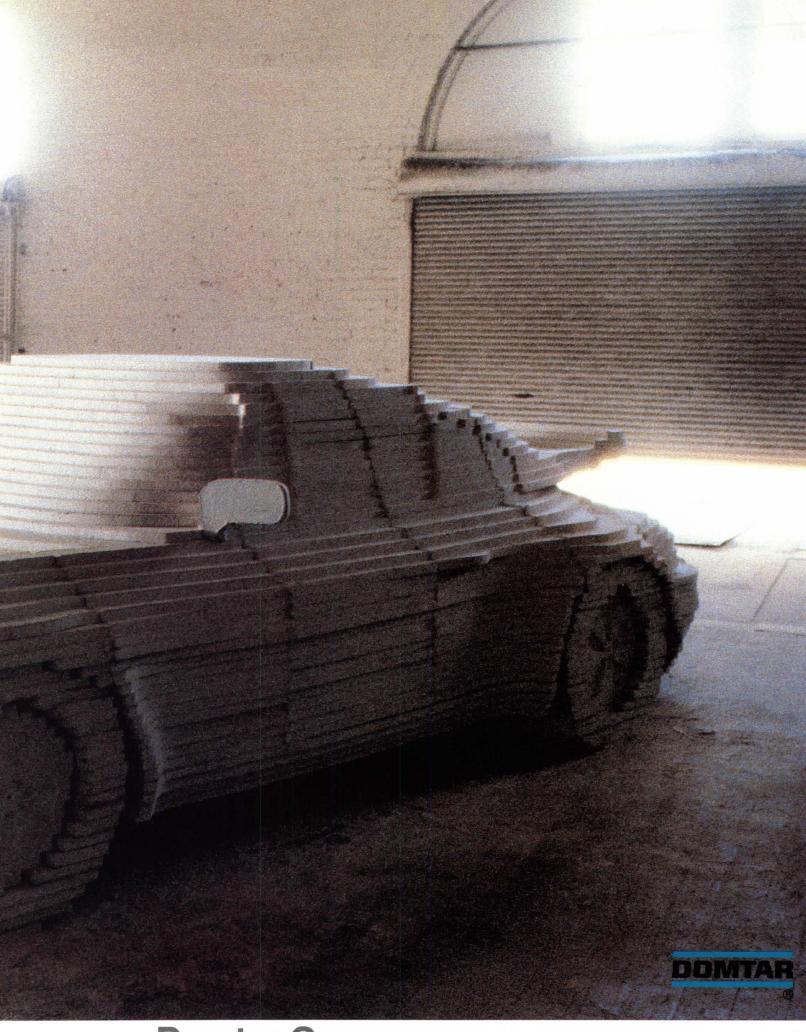
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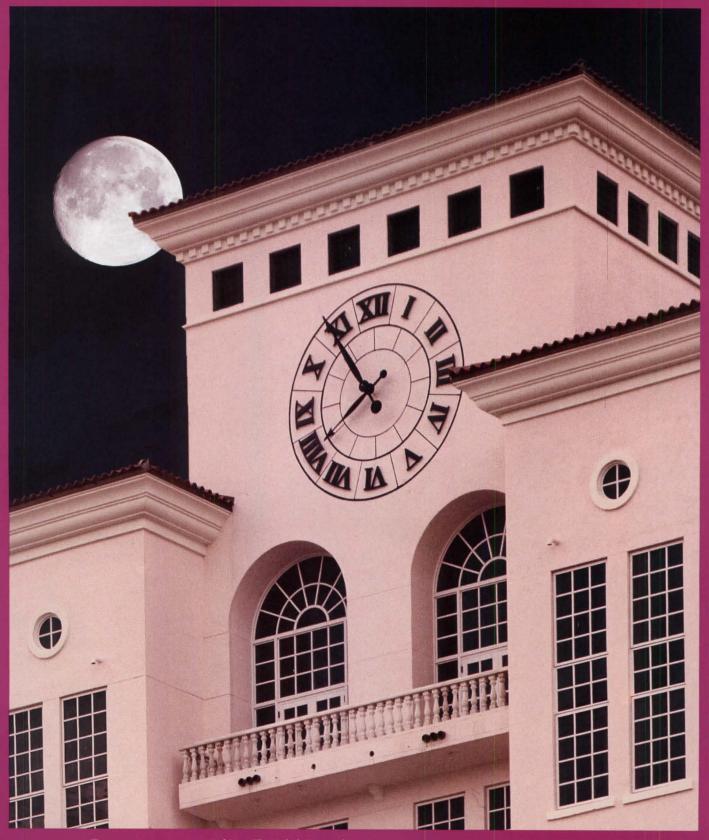


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### Cover

Chemotherapy atrium, Cedars-Sinai Comprehensive Cancer Center, Los Angeles, by Morphosis Architects/Gruen Associates (p. 67). Photo: Grant Mudford.





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### Honors to the Old Guard

The joint award of the 1988 Pritzker Prize to Niemeyer and Bunshaft challenges the trends of recent decades. BY naming Oscar Niemeyer of Brazil and Gordon Bunshaft of the U.S. joint winners of the \$100,000 award this year, the Pritzker Prize jury captured more attention than at any time since the program's inception nine years ago. On a well-illustrated two-page spread, *Time* magazine called Niemeyer, who is 80, and Bunshaft, 79, "unrepentant old Modernists." (Also see News Report, page 25.)

Following last year's choice of the 73-year-old Kenzo Tange, this Pritzker jury seemed to be doubly emphasizing two messages. Notwithstanding earlier awards to younger architects (list at lower left) the present jurors seem committed to recognizing elder figures, even if the honoree's key works are decades old; and they are reiterating a commitment to Modernism, from which the prize has never strayed far—although the choice of Johnson for the 1979 prize must have been after the AT&T design was unveiled.

This year's announcement came only days after an AIA Convention where speakers treated Post-Modernism as a defunct movement and Deconstructivism as old news, even before it got the official blessing of a Museum of Modern Art show. The choice of winners was clearly a rebuff to these styles and other current design attitudes, but it was also a reminder that movements in architecture do not begin and end that quickly or neatly; if Niemeyer and Bunshaft can win such recognition this year, architects such as Graves and Gehry may have more admirers 25 years from now than some trigger-happy critics expect.

While the Pritzker choices seemed to confound some of my younger colleagues, I was neither totally surprised nor at all dismayed. I can remember the heyday of both Niemeyer and Bunshaft, and recall how fresh and positive their examples seemed in those times.

Of the two, Niemeyer peaked earlier, doing some of his best work in the 1940s, and was already a leading figure in the early 1950s, when I was in architecture school; the Niemeyer works we admired in those days were light and buoyant, with supple curves, trapezoids, and parabolic shapes leavening their basic Corbusian fabric; the effect is not unrelated to the current schemes of such recognized architects as Rem Koolhaas or Arquitectonica. It was only in the late 1950s, when Niemeyer got into the design of monumental buildings for Brasilia, that he seemed to go astray, wrapping cartoonish colonnades around otherwise humdrum blocks; yet in his Paris Communist Party headquarters of 1965, he turned out a disciplined work of Modernism that looked forward toward the Modernist revival of Paris in the 1980s.

Although Bunshaft, like Niemeyer, worked on a pavilion for the New York World's Fair of 1939, it wasn't until the completion of Lever House in New York in 1952 that he—and with him, his firm of Skidmore, Owings & Merrill—was catapulted to international fame. And that was followed by numerous other landmarks such as the Connecticut General headquarters near Hartford and the Pepsi-Cola building and Chase Manhattan tower in New York. Some of us were turned off by a more monumental Bunshaft style that surfaced when he got high-budget institutional commissions such as the Beinecke Library at Yale (1963), the LBJ Library at the University of Texas (1971), and the grim-visaged Hirshhorn Museum on Washington's Mall (1974). But simultaneously, Bunshaft was designing handsome office buildings such as 140 Broadway in New York (1967) and American Can in Connecticut (1970). His last works—the Haj Terminal at Jeddah airport and the National Commercial Bank in Jeddah—are among the best American-designed buildings of the 1980s, the Haj Terminal a P/A Award winner and both buildings winners of AIA Honor Awards.

As a member of a corporate firm, Bunshaft never had the clearcut individuality of figures such as Niemeyer. His position allowed him wide influence over design at all offices of S.O.M.—which he exercised for decades—but also required him to abide by company rules, which meant that he eventually had to retire from practice—though not until his mid-70s—while Niemeyer has not yet had to quit.

Both of these architects are strong-willed, and both are intensely proud of their monumental works that many of us admire least. They are stubborn survivors of the period when Modernism was struggling for acceptance as an architecture for big business and big government; they contributed mightily to that battle and designed influential buildings, which still command our respect. Congratulations to them both!

Previous Pritzker winners, 1979–1987: Philip Johnson (U.S.), Luis Barragán (Mexico), James Stirling (U.K.), Kevin Roche (U.S.), I.M. Pei (U.S.), Richard Meier (U.S.), Hans Hollein (Austria), Gottfried Bohm (W. Germany), Kenzo Tange (Japan).

The 1988 Pritzker Architecture Prize jury: J. Carter Brown, Director, National Gallery of Art; Ada Louise Huxtable, author and architectural critic; Kevin Roche, architect, Hamden, Conn.; Jacob Rothschild, Chairman, National Gallery, London; Ricardo Legorreta, architect, Mexico City; Fumihiko Maki, architect, Tokyo; Giovanni Agnelli, Chairman of Fiat, Turin.

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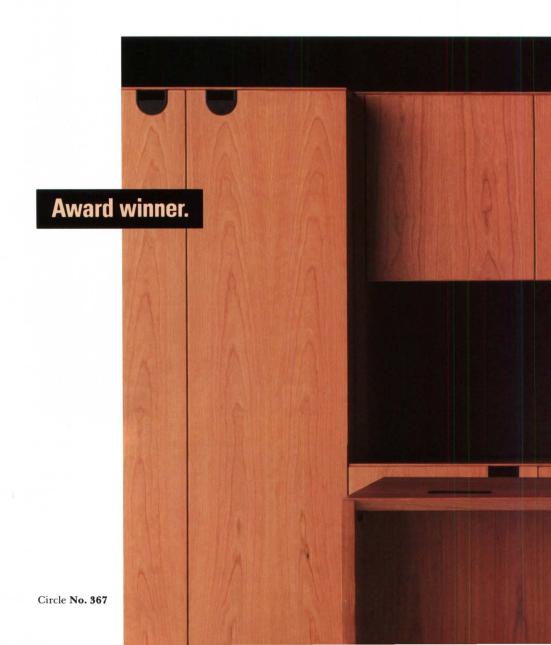
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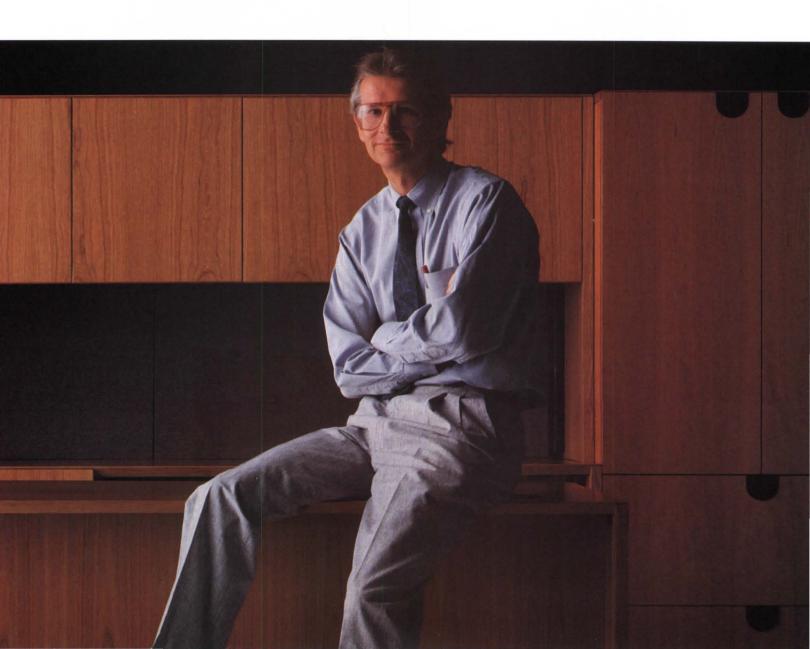
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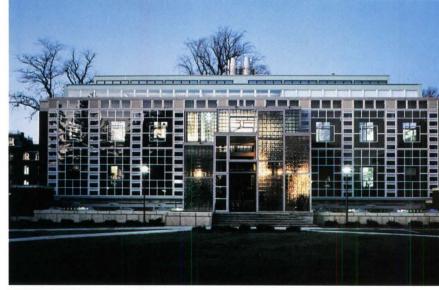
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### Category 1 Completed/Existing



FIRST PRIZE (Above) Perry, Dean, Rogers & Partners Project: Vassar College, Seeley G. Mudd Chemistry Building, Poughkeepsie, New York





SECOND PRIZE (Above and left) Krueck & Olsen Architects Project: Steel and Glass House, Chicago, Illinois

### **HONORABLE MENTIONS**

(Not shown)

EDAW, Inc.
Project: Lathouse at Central Park — Dulles Corner, Herndon, Virginia

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### Category 2 Planned/Pending/In-Works



**FIRST PRIZE** 

(Above) George E. Brewer Project: Coral Cabana (a vacation home) Eleuthera, Bahamas

### **SECOND PRIZE**

(Left and below) Shope Reno Wharton Associates Project: Shope Residence, Westport, Connecticut





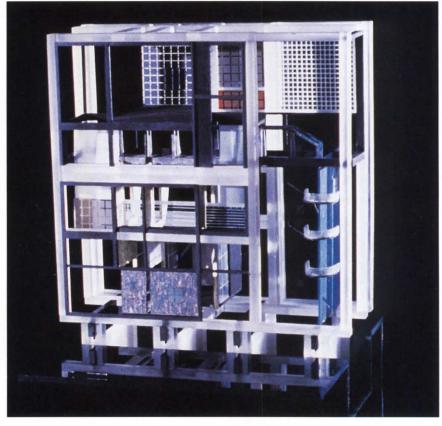
THE INHABITED WALL

FIRST PRIZE (Left and below) Studio "411" University of Texas at Arlington School of Architecture Project: "The Inhabited Wall"

HONORABLE MENTIONS (Not shown) Craig D. Newick/Linda Lindroth, Collaborators Project: Camera Obscura: The Camera as Physical Space

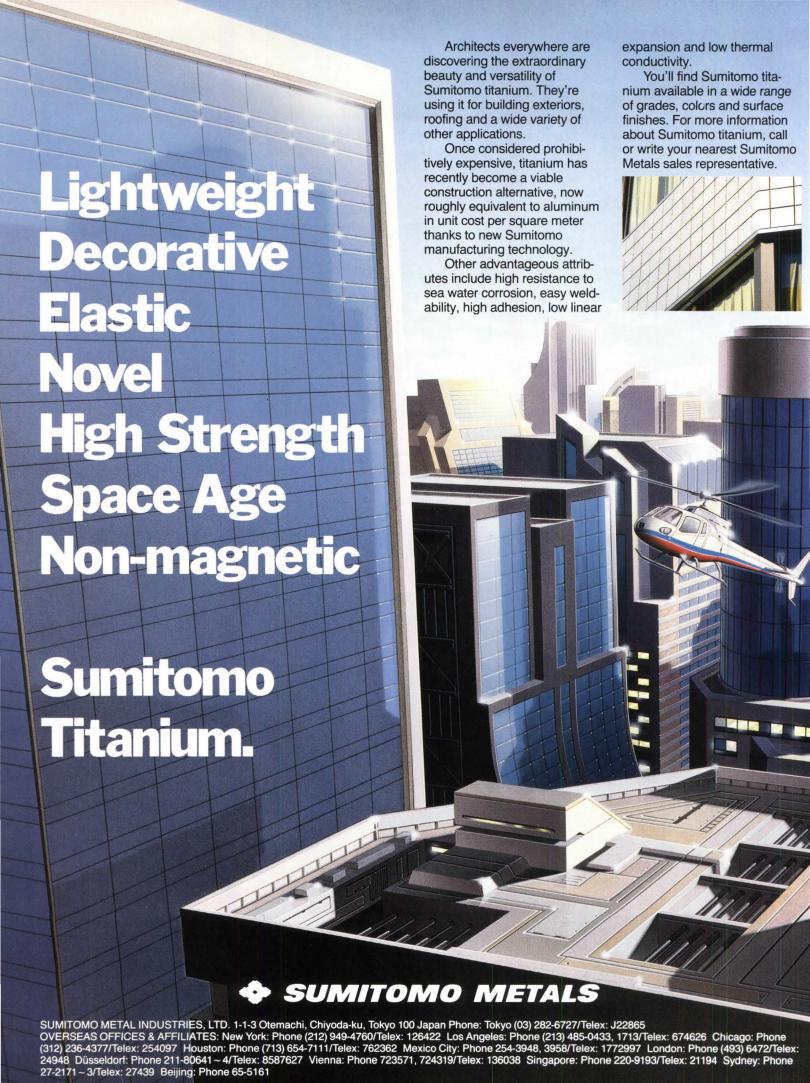
James Carpenter Design Associates, Inc. Project: Transparent (Luminous) Bridge

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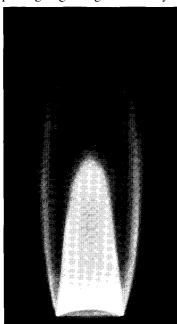
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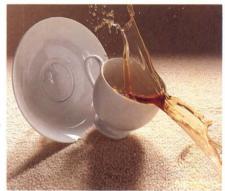


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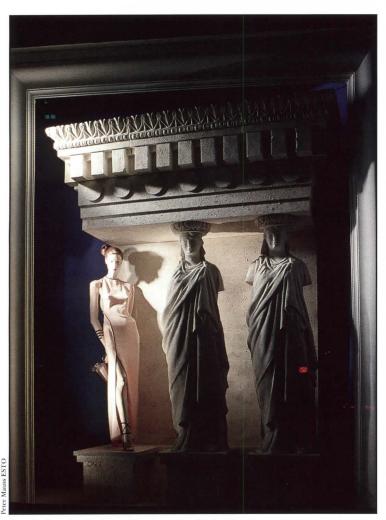
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Bergdorf window by Robert Stern, on view for the AIA Convention.

### AIA/NY: **Window Shopping**

Ten architects were paired with cutting-edge fashion designers to create eye-catching displays for Bergdorf Goodman's windows during the AIA convention. Many of the windows also showcased home furnishings designed by some of these architects for Swid Powell. One of the most arresting displays was Robert Stern's Classical porch, where a mannequin clad in a Geoffrey Beene gown stood in for a caryatid. Also featured were Michael Graves, Roger Ferri, Wendy Evans of I.M. Pei & Partners, Allan Greenberg, Charles Gwathmey, Hugh Hardy, Richard Meier, Tsao & McKown, and Robert Venturi.

### **AIA Convention in New York: News and Reviews**

A record 15,870 attendees turned out for the 1988 convention of the American Institute of Architects in New York. The convention program met with stiff competition from the city itself, which tempted conventioneers away from official business with special exhibitions, events and, of course, architecture. P/A's coverage is broken down by subject, beginning with the AIA program (page 24) and continuing with exhibition reviews (pages 26, 28) and a separate report on the Harris poll, the "hard news" of this convention (below). Look for "AIANY.

### AIANY: Poll on the Future

At the convention's penultimate moment, American pollster Louis Harris unveiled the findings of a survey conducted for the AIA. His poll was split in two parts: a telephone survey of 1254 adults selected randomly, and a more focused survey of 201 "knowledgeable leaders" from many fields.

Harris reported that: "By a 2-to-1 margin, the American people are convinced that 'Architects often make the differ-(continued on page 30)



Three Chicago area projects by Perkins & Will are shown in progress, page 37. These include a skyscraper, a public works facility, and a civic center, shown above.



New National Gallery in Ottawa.

### **National Gallery:** Bombastic, but

Twenty years after Habitat, his modular, for-everyone-a-garden, housing prototype designed for Expo 67, Moshe Safdie has returned to Canada. Within the last six years, while resident in Boston, the Haifa-born architect, a graduate of McGill University, has been awarded no fewer than four glamour jobs in Canada, including the Musée Nationale de Civilisation in Quebec City (just completed), a large addition to the Musée des Beaux Arts in Montreal (beginning construction), and a ballet opera house in Toronto (just commissioned, P/A, May 1988, p. 21).

But the biggest, brightest symbol of Safdie's reentry is the National Gallery in Ottawa, which officially opened on May 21 (its companion, the Canadian Museum of Civilization by Douglas

(continued on page 26)

### **Pencil Points**

Peter Eisenman and Jaquelin Robertson have dissolved their partnership. Robertson has joined Alexander Cooper + Partners, New York.

The Louisiana Architects Association, assisted by the AIA, has started an Architect's Employment Clearinghouse. The monthly publication will reach 5500 architectural firms that employ two or more architects, or 74.4 percent of all AIA members. Write the Association, 521 America Street, Baton Rouge, LA 70802 for rates and more information, or call (504) 387-5579.

Gwendolyn Wright, scholar and author of Designing the American Dream, has replaced Robert A.M. Stern as director of the Temple Hoyne **Buell Center for the Study of American Architecture at Columbia University.** 

British scholar Joseph Rykwert has been appointed chairman of the Ph.D. program in Architecture at the University of Pennsylvania.

The J. Paul Getty Trust has set up a new grant program for the conservation of historic properties throughout the world. Nonprofit organizations that own nationally listed properties accessible to the public are eligible.

Tecno, the Italian furniture manufacturer, is a recipient of the first European Design Prize, awarded by a consortium of design centers in the **European Economic Commu**nity and coordinated by the **Danish Design Council.** 

**Helmut Jahn's United Airlines Terminal at Chicago O'Hare** International Airport (P/A, Nov. 1987, pp. 95-105) was awarded the 1988 R.S. Reynolds Memorial for distinquished architecture using aluminum; presentation took place at the AIA Convention.

Beyer Blinder Belle, New York, has set up a new charitable trust in the name of James Marston Fitch, the firm's Director of Preservation and founding director of the nation's first preservation program at Columbia University. The trust will fund grants for the study of preservation problems.

### **AIANY: Social Issues Again**

After admitting that he has become adept at discussing subjects about which he knows nothing, keynote speaker Isaac Asimov attempted to convince his audience that the future of architecture was underground. Those few inclined to agree with him were surely convinced otherwise by two days in the labyrinthine bowels of the Jacob Javits Convention Center. (A stationers convention laid claim to the more spectacular upper halls, which presumably helped Javits Center win its 1988 AIA Honor Award.) Speakers complained about drab meeting rooms with lighting too inflexible for slides.

But there were other problems caused by the venue. The notorious convention center unions staged a work stoppage when students tried to set up their own exhibit per prior agreement; they had to pack it up and take it away. And the Center shortened the agreed-upon schedule, forcing the convention to relocate to the Hilton for its final day.

Theme sessions on art in architecture produced mainly platitudes. But sessions on affordable housing, suburban development, and zoning regulation were both well attended and genuinely informative. The sheer number of "social issue" sessions—and the passage of a resolution calling for a National Affordable Housing Act—indicates a welcome shift away from the style wars that have dominated recent conventions.

Indeed, social programs such as housing emerged not only as the profession's obligation but as its last-and best?-defense against increasing irrelevance. Asked to comment on the fact that architects are responsible for only two percent of building worldwide and ten percent in the United States, pollster Louis



The AIA host chapter party at the World Financial Center's Winter Garden at Battery Park City.

Harris (see story, page 23) replied, "What an opportunity! You've got 90 percent to go.' What Harris sees as opportunity, other speakers called crisis. Drawing an analogy to the fate of high-profile industrial designers who were the stars of the 1930s, critic Tom Hine of the Philadelphia Inquirer warned that "anonymity could be just around the corner" for architects. Brendan Gill of The New Yorker, addressing the AIA Fellows at their dinner, echoed that message. In the next century, he said, we'd need "not prima donnas, but an army of anonymous architects," a rather odd request to make of that audience.

The program's one major snafu involved honorary chairman I.M. Pei, who apparently was not invited to address the assembly until late in the convention planning. By that time, Pei

was unavailable (although he did have an hour free for the press).

Many sessions coached architects in how to cope with the coming recession, with an emphasis on marketing professional services. According to consultant Joan Capelin, who presented the findings of a new marketing survey conducted for the AIA (full report due out this summer), nearly 25 percent of all convention programs this year were dedicated to marketing, public relations, or advertising. Capelin reported that while 85 percent of the survey's respondents recognize marketing as important to their success, most do not regard their marketing efforts as satisfactory.

Finally, New York's Mayor Koch, as always, had the last word. His colorful if questionable arguments against government regulation attributed San Francisco's deficit to that city's stringent development restrictions. Of his own constituents who would like to see development curbed, he said, "The last one in wants to close the door. It's easy to be a populist." But, he continued, "It is not credible to believe that government can be the arbiter of taste."

Asked about New York's chronic homeless problem, Koch mentioned the 10,000 beds provided by the city each night, then lambasted the courts for deciding against the city in the Joyce Brown case. "The rights of people who work in the city are regrettably secondary," he argued. "People have a right not to be accosted by panhandlers." He offered to send a copy of his prepared speech—unused as he ad libbed-to anyone who sent in a self-addressed, stamped envelope, but we wouldn't advise that. You really had to be there. Daralice D. Boles; Reported by Mark Branch, John Morris Dixon, Jessica Elin, Thomas R. Fisher, Vernon Mays, and Valerie Kanter Sisca.



A traveling exhibition on the Grands Projets of Paris, installed at the Beaux Arts Customs House by architect Philippe Robert, was one of several attractions tempting architects away from the AIA Convention.



The new design for Columbus Center (center) by David Childs of SOM emulates the 1931 Century apartment building (far right).

### The New (and Improved?) Columbus Center

In design terms, there's a world of difference between Moshe Safdie's ill-fated proposal for Columbus Center in New York and the new design by his replacement, David Childs of Skidmore, Owings & Merrill, New York. Where Safdie's design was aggressively Modern and monumental, Childs's complex borrows from local landmarks, most notably the twin-towered Majestic and Century apartment buildings on Central Park West. Safdie's triangulated towers hugged Columbus Circle, casting an enormous and much criticized shadow over Central Park; Childs has pulled his towers back and widened the distance between them to 65 feet-a full street width—thereby reducing the shadow's length and density.

Then there is the matter of size. Childs's design is 75 feet shorter and 500,000 square feet smaller than Safdie's. An additional 350,000 of the remaining 2,242,000 square feet has been shifted from office to residential use, a move that not only contracts the building bulk through smaller floor-to-floor heights, but reduces the peak-hour strain on local sidewalks and subways. Childs has also added a midblock residential driveway, and he has pulled all loading docks off the street to the block interior in response to community concerns.

These improvements notwithstanding, it is tempting to say that the new design is still too big, that the paired towers, which have been shifted to the west edge of the site, will break the city's typical pattern of towers on the avenues and cast a heavy shadow north and west (where no one is looking yet).

But the central criticism of this

development has always hinged on the way in which the developer and architect were selected, not what design they had to offer. Proper procedure, and not design, was the issue at stake in a lawsuit brought last year by a coalition of civic groups, which charged the city with violating its own zoning laws in the request for proposals, by granting an automatic 20 percent zoning bonus. The city is appealing the suit, which it lost last December, and Mayor Koch now maintains that the new "asof-right" design makes the suit moot. It remains to be seen, however, whether the courts fall for this argument. Daralice D. Boles



Lever House, by Gordon Bunshaft.



Oscar Niemeyer's 1958 Supreme Court of Brazil, in Brasilia.

### Not One, **But Two Pritzkers**

Oscar Niemeyer of Brazil and Gordon Bunshaft of Skidmore. Owings & Merrill are the recipients of the 1988 Pritzker Architecture Prize. The \$100,000 prize was split between the two winners for the first joint award in the Pritzker's ten-year history (see Editorial, p. 9).

Niemeyer, who collaborated with Le Corbusier on the 1943 Ministry of Education and Health in Rio de Janeiro and served on the committee that designed the 1952 United Nations Headquarters in New York, is best known as the architect for the key buildings of Brasilia, his country's capital city, where he continues to build.

Bunshaft is most famous for a collection of office buildings built in the 1950s, which defined corporate Modernism in America. These include the 1952 Lever House, now a historic landmark, and the 1960 PepsiCo headquarters, both in New York. Bunshaft's later work tended towards the more bombastic. baroque Modernism of the 1974 Hirshhorn Museum and Sculpture Garden in Washington or the 1971 Lyndon Baines Johnson Library in Austin. His most recent projects include the 1981 Haj Terminal at Jeddah International Airport and the 1983 National Commercial Bank in Jeddah, the last project he designed before retiring.

Like last year's laureate Kenzo Tange of Japan, the 81-year-old Niemeyer and 79-year-old Bunshaft are honored more as historical than contemporary figures. "The Pritzker Prize confirms that these two illustrious architects will have a place in history," says jury secretary Bill Lacy. The selection of not one but two Modernists-safety in numbers?-also suggests a desire on the part of the jury to endorse the style with which these architects are so completely identified. Daralice D. Boles

### **Chicago Library Entries Unveiled**

The five entries in the Chicago Public Library design/build competition have silenced once-vocal opposition (P/A, Jan. 1988, pp. 27–30). Doubts that the finalists would produce exciting designs have been erased by their markedly different proposals.

For the competition, architects paired up with developers and contractors to submit not only designs, but budgets to the 11member selection committee, which contains only one practicing architect. The winning team must deliver the library on a turnkey basis by the summer of

Three of the five designs are emphatically Modern. In a bold



Five Chicago Library designs, by Arthur Erickson (above) . . .



Murphy/Jahn . . .



Lohan & Associates . . .

design by Arthur Erickson Architects, Vancouver, for developer John Buck, three connecting precast concrete buildings span the elevated train tracks that bisect the site. Plans include a winter garden and a park with an amphitheater, offering badly needed public space on this southernmost stretch of Chicago's once-vibrant retail strip, State Street.

Murphy/Jahn's design for Tishman Midwest Management Corp. also creates dramatic public spaces inside and outside. (continued on page 26)

### Library (continued from page 25)



Hammond Beeby & Babka . . .



and SOM.

Jahn's largely glass façade gives a wink to the famous Chicago grid street pattern with its oversized grid overlay. Stiltlike columns support the main building, which jumps the el. At grade Jahn has placed geometrically shaped, freestanding shops.

The crisp, clean-lined design by Lohan & Associates, for the developers Metropolitan Structures, centers on an expansive, naturally lighted Great Hall enclosed by a four-story glass wall along State Street.

Two design entries exhibit a Post-Modern or contextual flavor. A design by Hammond Beeby & Babka for U.S. Equities Realty recalls the Classical style of the original central public library, now a cultural center. Except for some exaggerated ornamentation-including glazed pediments—this design looks like public edifices used to look, with towering arched windows, polished granite walls, grand entrance and lobby.

Skidmore, Owings & Merrill's design for Stein & Co. weighs in for contextualism with a plan strongly reminiscent of the old retail buildings along State Street. Architect Adrian Smith went for a restrained, dignified look with a limestone and granite facade and grand atrium lobby. A Modernist touch leaves an odd impression, however; the differentiation of interior functions is expressed on the façade with different window treatments on each side of the entrance.

The selection will be announced June 20. Lisa Goff The author is associate editor of Crain's Chicago Business.

[As P/A went to press, the proposal by U.S. Equities with Hammond, Beeby & Babka, architects, was selected.]

Gallery (continued from page 23) Cardinal, is far behind schedule). A 600,000-square-foot beau geste sitting on the banks of the Ottawa River, the gallery occupies a dramatic, historically charged site, which plunges down to the water. Across an inlet to the south looms the Victorian, Gothic Revival splendor of Parliament Hill. The mansard-roofed Chateau Laurier hotel is visible in the distance, across a large, sloping park. Running parallel to the river is the street that gives the gallery its address-Sussex Drive, Ottawa's embassy row.

Safdie responded to these richly layered surroundings with a low, L-shaped building linked by overhead bridge to a separate curatorial block. Although simply laid out along two converging main axes, and conceived as a microcosm of the city, the gallery is in reality neither easily legible nor citylike. From the outside, it presents itself as a large, graniteclad box with an overlay of vestigial historical references. This decorated shed is overaccessorized in some places, underdressed in others.

Safdie made his big move on

circling the entrance pavilion, climbing the ramp, and admiring the view from the Great Hallbefore sighting a single painting or sculpture. There's no integrated relationship between Safdie's grand entry sequence and the galleries to which it leads.

But if the system of circulation is all circuitous, the galleries dedicated to Canadian and European art are peaceful and quiet. Mirror-lined, skylighted shafts piercing the vaulted ceilings diffuse soft, natural light through two floors of galleries, the light deflected to the walls by hundreds of small prisms. (Photoelectric cells mounted in the light shafts control motorized blinds to adjust the light level.)

There are times when something kinetic and complex starts to happen—when you find yourself looking directly through a porthole at the inside of a light shaft, for instance, or from a gallery through a half-gallery into the ceremonial ramp. Experiences such as these are rare, however. Past the ramp and Great Hall, the architecture seems to run out of steam, inside and out. The building wants to be fundamentalist and sub-



The Great Hall and colonnade of Moshe Safdie's National Gallery.

the south façade, which is anchored by an octagonal, glazed entrance pavilion. A skylighted, colonnaded ramp connects this lobby to the pavilion of glass pavilions, the Great Hall. Elevated and skewed for panoramic views of the nation's capital, its form echoing that of the parliamentary library across the water, the Great Hall is part crystal cathedral, part airport

The big gestures are there, all right—but where's the art? One of the disturbing things about the gallery is that a visitor could easily pass a quarter of an hour

lime—profoundly simple—but ends up, instead, feeling flat. Taking a back seat to art is a legitimate position, but blandness has its limitations too. An entire dimension of detailing would seem to be missing, and it doesn't really matter whether that's by intention or oversight.

In the absence of followthrough, pragmatism may be the National Gallery's chief virtue. Safdie's responses to a long and complicated program were serious and sensible. For every gallery wing, a garden. For every curator, a window with a view.

Yet for all its bold gestures,

the National Gallery is a fencesitter. It's neither urban and tight-to-the-street, nor resplendent on stately grounds. The gallery's faceted pavilions, skylights, and ceremonial façade project the same sort of ambivalence, reading as reluctant analogs to the Ottawa skyline. It's as though Safdie, a vociferous critic of Post-Modernism, couldn't bring himself to overt symbolism, resorting instead to coy figuration. That's why the Great Hall appears both bombastic and limp. Adele Freedman

The author writes on architecture for The Globe and Mail of Toronto.

### AIANY: 10 (11?) on 10

In addition to the many other preparations undertaken for the 1988 AIA convention, the hosting New York Chapter staged a modest show on New York architecture. Each of ten architecture critics was asked to select ten projects of the past ten years that represented significant trends.

The result, a room of blackand-white photos accompanied by a panel of explanatory text from each critic, won't win any awards for exhibition design, but it does counter the notion that membership organizations only promote their members. For several critics—notably Suzanne Stephens of *House* & Garden and Brendan Gill of The New Yorker—took the opportunity not to praise but to censure such notorious "dogs" as the Marriott Marquis Hotel on Times Square by John Portman & Associates or Warren Platner's gaudy renovation of the Pan Am lobby behind Grand Central Station. New York Times critic Paul Goldberger campaigned against "gigantism."

Village Voice critic Michael Sorkin indulged in some dubious self-promotion, featuring a poem and project of his own making, while Joseph Giovannini, also of the *Times*, promoted "deconstructionism," the movement of the moment. Interior Design editor Stanley Abercrombie stuck to his field, while remaining critics Kurt Andersen of Time, Douglas Davis of Newsweek, John Morris Dixon of P/A, Mildred Schmertz of Architectural Record, and Carter Wiseman of New York magazine, clustered around new and old favorites such as Battery Park City-the most frequently cited designand the restoration of Central Park. The total comes to 11 critics, but who's counting?

Daralice D. Boles





Louis Kahn's design for the Lawrence Hall of Science at U.C., Berkeley.

### AIANY: Losers Due

The theme of "The Experimental Tradition: 25 Years of American Architectural Competitions, 1960-1985," could be summed up in a 20-year-old headline, "Four Biggies Lose." For the fascination of this exhibition, which opened during the AIA convention at the National Academy of Design (through August 21 and traveling thereafter), is not who won but who lost competitions for the Boston City Hall, the Yale Mathematics Building, Roosevelt Island Housing, and seven other controversial commissions.

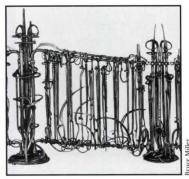
"The original ambition," writes curator Hélène Lipstadt in the catalog, "was to seek unpublished designs equivalent to Eliel Saarinen's second-prize Chicago Tribune Tower entry." In her search, Lipstadt unearthed an early, little-known collaboration between Michael Graves, Richard Meier, and George Nelson for the Franklin Delano Roosevelt Memorial Competition of 1960. She found Louis Kahn's 1962 design for the Lawrence Hall of Science at the University of California, Berkeley, one of the "biggies" behind the headline, in the files of that competition's winners, Anshen & Allen.

Designs such as Robert Venturi's proposal for the FDR Memorial, or Mitchell/Giurgola's early contextual design for the 1961 Boston City Hall Competition, support Lipstadt's claim that design competitions are a "leading indicator" for architecture. The show demands a lot of the visitor, whose knowledge of recent architectural history dates, trends and personalitiesis severely tested, but it rewards close scrutiny. Kahn's FDR Memorial design alone is worth the price of admission.

Daralice D. Boles

### AIANY: Architectural Art

"Architectural Art: Affirming the Design Relationship," on view at the American Craft Museum in New York until September 4, is an ambitious survey of the relationship between contemporary art and architecture. The exhibition, which was curated by architect and historian Robert Jensen and sponsored by Haworth, Inc., is organized into four components. The first, a historical preface, illustrates examples of architect/artist collaborations from 1900 to 1972. The second features the work of 11 contemporary artists and, in one of the show's most rewarding aspects, offers not only photographs of completed installations but also actual examples of finished work and studies. The third component examines four site-specific collaborations. The



Freestanding Architectural Screen by Albert Paley.

fourth features four eight-footsquare collaborative works designed specially for the show by artist/architect teams selected with the help of the New York Chapter AIA.

Curator Jensen's intent was to illustrate what he calls the "critical mass" of architectural art that has evolved since the abandonment of the separate-but-equal doctrine of Modern art and architecture, with its reductive insistence on the primacy of the object. Nowadays, argues Jensen, the two fields engage in a dialogue. Consequently, his criteria for including works in the show were: that they date from after 1980; that they be sitespecific; and that they participate in the function of a building or space while maintaining their own integrity.

The extensive and eclectic range of artworks presented in the exhibition, however, fails to clarify the viewer's (and, one senses, Jensen's) confusion as to just what architectural art really is. These works may have been conceived for their contexts, but many of them look more orna-

mental than architectural. The murals, tapestries, and tile installations in this show, while they may do much to enhance a space, would look just as good in a gallery as in the buildings for which they were commissioned.

Even when the subject matter is architecture, as in Helena Hernmarck's tapestry or Richard Haas' murals, representation far outweighs commentary. The notable exceptions are the pieces designed for Battery Park City in New York, which are largely abstract, sculptural works with a strongly architectural component, or glass artist James Carpenter's venture with architect Edward Larrabee Barnes at the chapel for the Christian Theological Seminary in Indianapolis. But we are asked to evaluate these examples on the same basis as the glass-sculpture "frieze" by Dale Chihuly created for-but poorly related to-the renovated



Cornice figures for a San Francisco tower, by Muriel Castanis.

Rainbow Room and Club at Rockefeller Center. In this show, the difference between the integral and the applied is virtually ignored.

The exhibition's literal-minded approach also excludes a lot of art that really does explore architectural issues in a provocative way. Mary Miss and Siah Armajani are represented only by their collaborations with architects. Richard Serra's and Robert Irwin's works, which should be mandatory study for all architects, are nowhere to be seen.

Finally, the four commissioned collaborations only underline the uneasiness with which both artists and architects approach such efforts; the examples here are mainly self-conscious, overwrought structures with superfluous-looking artworks attached to them. Ultimately "Architectural Art," in its implicit insistence that artists can only explore architectural questions within the context of a building, answers few questions for either artists or architects. Pilar Viladas

### Pittsburgh Corning Awards Announced

Recognition has been given to ten entries in the Pittsburgh Corning Corporation's PC GlassBlock Architectural Design Awards Competition. Submissions were invited in three categories: completed/existing projects, planned/pending work, and conceptual designs. There were First Prize awards in all three categories, with Second Prize and Honorable Mention awards in two categories each.

First Prize for completed projects was awarded to Perry, Dean, Rogers & Partners for the Seeley G. Mudd Chemistry Building, Vassar College, Poughkeepsie, New York. Second Prize in that category went to Krueck & Olsen Architects for a steel and glass house, Chicago (P/A, Dec. 1981, p. 63); Honorable Mentions were awarded to EDAW, Inc., for the Lathhouse in Central Park, Dulles Corner, Herndon, Virginia, and to Leers, Weinzapfel Associates for the Photographic Resource Center, Boston University, Boston.

First Prize in the pending category was presented to George E. Brewer for Coral Cabana, a vacation house in Eleuthera, Bahamas. Second Prize went to Shope Reno Wharton Associates for the Shope Residence, Westport, Connecticut.

First Prize in the conceptual category was awarded to Studio "411," School of Architecture, University of Texas at Arlington, for their project "The Inhabited Wall." There was no Second Prize in this category, but Honorable Mentions went to James Carpenter of James Carpenter Design Associates, for the "Transparent (Luminous) Bridge"; to Craig D. Newick/Linda Lindroth, Collaborators,



Seeley Mudd Building, Vassar College.

for their project "Camera Obscura: The Camera as Physical Space"; and to Douglas Oliver for "A Study in Façades."

Cash awards for the categories had been set at levels that recognized the effort directly involved with developing entries in the different categories. Winners in the completed category received (continued on page 30)



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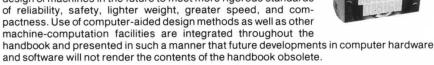
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Poll (continued from page 30) confidence game, emerging in second place behind doctors but ahead of corporate executives and lawyers. "What is more," said Harris, "architects evoke higher than average confidence among those with a postgraduate degree, among business executives, and among those earning \$50,000 and over a year—in other words, the best informed and most prosperous sectors of society." And, we might add, the heart of the client market for most architects.

The 201 club were asked what will be the single most important contributions architects can make in the 21st Century. Their top answer, "designing livable cities," was selected by 31 percent of all respondents but 70 percent of the architects interviewed. "Designing good buildings" earned second place, followed by "making housing available to everyone" cited by 3 in 10 and "creating productive work places," a subject Harris is pursuing in a poll for Steelcase.

These respondents were then asked which of 14 phenomena were likely to have a major impact on the built environment in the next century. Neck-and-neck at top of the list were the urbanization of the suburbs and renovating built America, followed closely by changing demographics, the information revolution, and America's competitiveness in the global economy.

Some subjects of great interest to architects scored low: Liability, for example was cited by twice as many architects participating in the survey as nonarchitects. Conversely, government leaders and financiers considered automation and the materials revolution of far greater concern than did architects. The energy challenge drew no more than 32 percent of the entire sample and an even lower 25 percent of architects.

The trends list used for the survey was developed by the Institute for Alternative Futures as part of the AIA's three-year Vision 2000 program. That program is intended to help the AIA direct its constituency towards a "preferred" future. Harris himself stepped into the breach with a conclusion that shifted from scientific observation into advocacy. Architects, he said, are "a special force for decency. You are . . . expected to take the lead in creating the environment in which all, including the least, can flourish." In short, he argued, this poll is a call to action this profession cannot afford to ignore.

Daralice D. Boles



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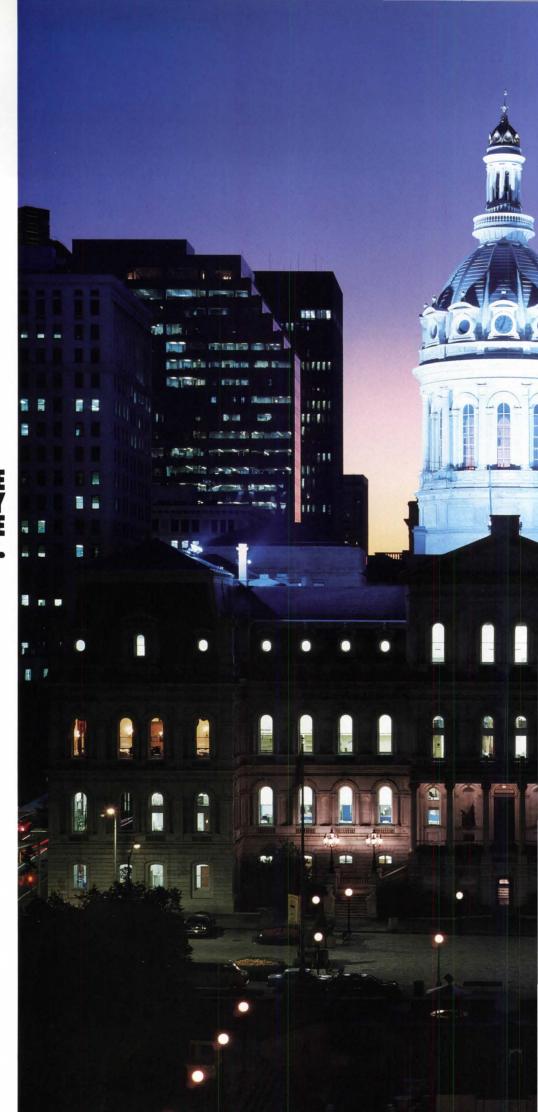
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      - 40 pairs of soft leather driving gloves



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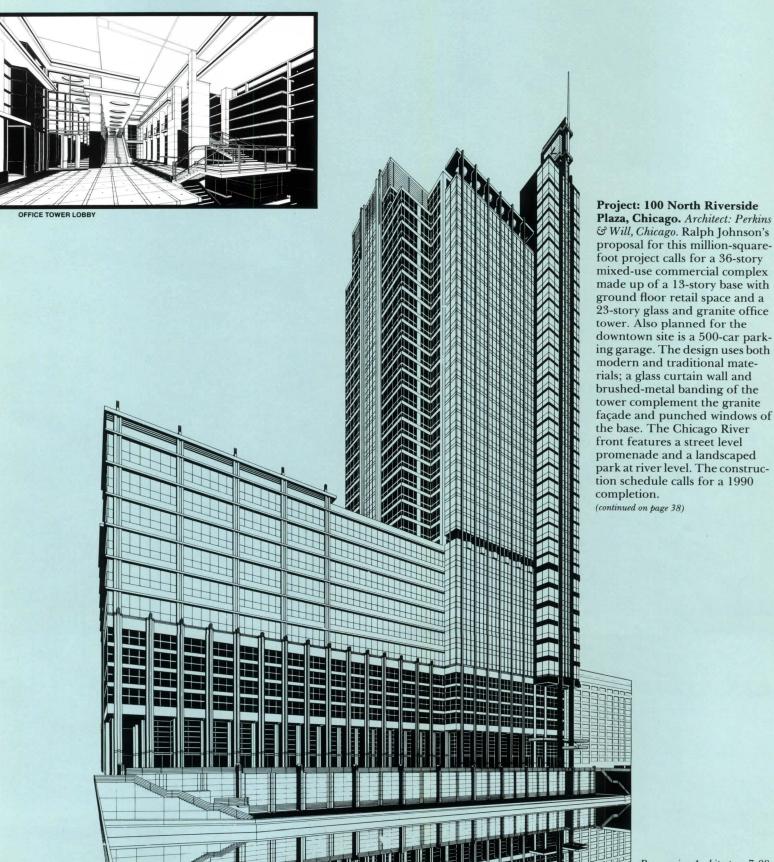
- 10 winners will receive 4-piece Cordura luggage sets perfect for business and personal travel
  - 20 winners will receive American Classic Ray-Ban sunglasses from Bausch & Lomb.
- 40 winners will receive genuine soft leather driving gloves available in men's and women's sizes.

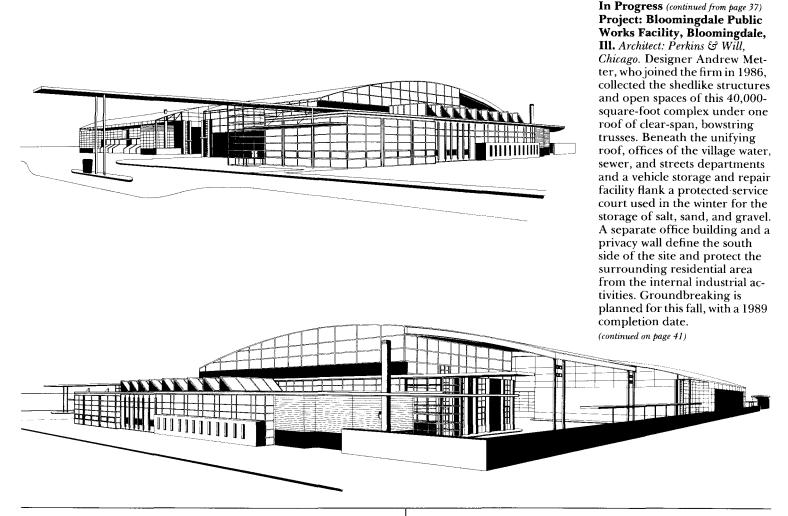
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To receive a free entry form and complete sweepstakes rules, send a stamped, self-addressed envelope to: Sweepstakes Entry, P.O. Box 8045, Beachwood, Ohio 44122. Residents of Vermont and Washington are not required to stamp return envelope. You may also enter by printing your name, age, address, business name and address, and the words "STYROFOAM...The Best Proven Value" on a 3"x5" card and mailing it to: 40th Anniversary Sweepstakes, P.O. Box 8045, Beachwood, Ohio 44122.

the 1989 Daytona 500.

A public works facility designed by Andrew Metter and an office tower and village center designed by Ralph Johnson show the range of work under way at Perkins & Will.







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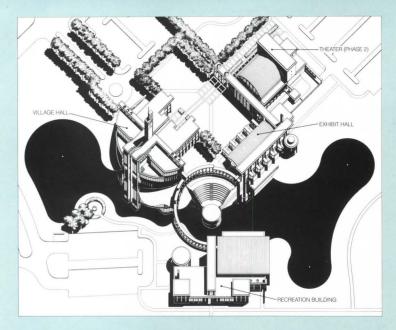


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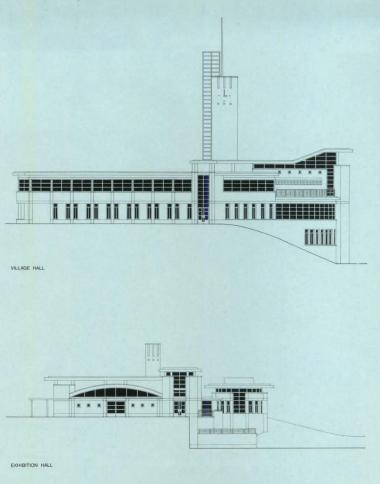
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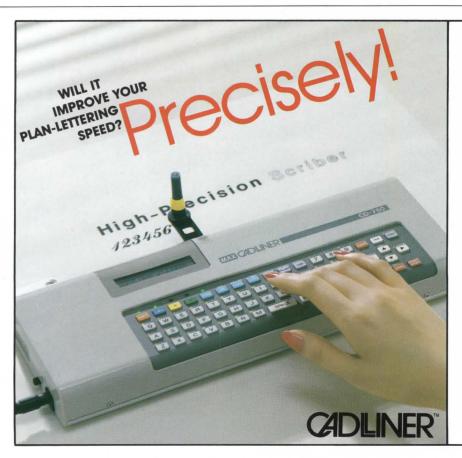
They will send you a condensed version of the Roofing Report on EPS and a copy of their 100% R Value Performance Warranty. They feel all roofs should be covered this way. It's the assurance you get that an AFM roof won't leave you cold in the next century.



In Progress (continued from page 38) Project: Village Center, Orland Park, Ill. Architect: Perkins & Will, Chicago. Designer Ralph Johnson hopes his civic center will replace the nearby shopping mall as the town center. Occupying 12.5 acres on the 95-acre site, the formal rectilinear village green is surrounded by the village government hall, the exhibition center, and a future theater.

A circular covered arcade links an outdoor amphitheater to the recreation building. An existing water retention lake will be the focus of future development. The first buildings, constructed of steel frames, three colors of masonry, and metal spandrel panels, will be completed this



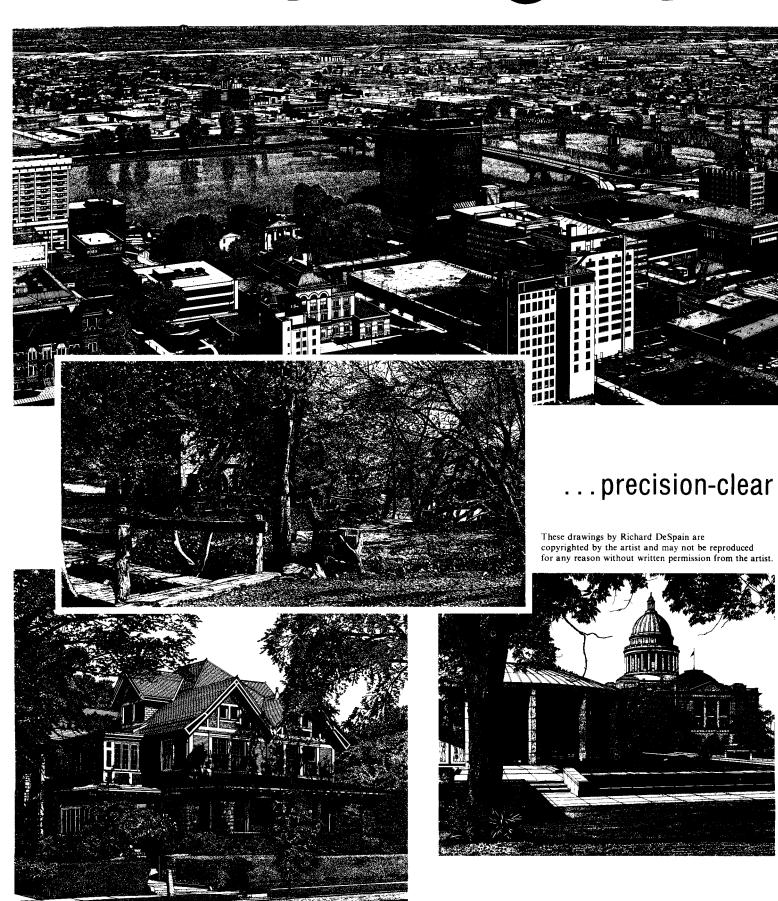


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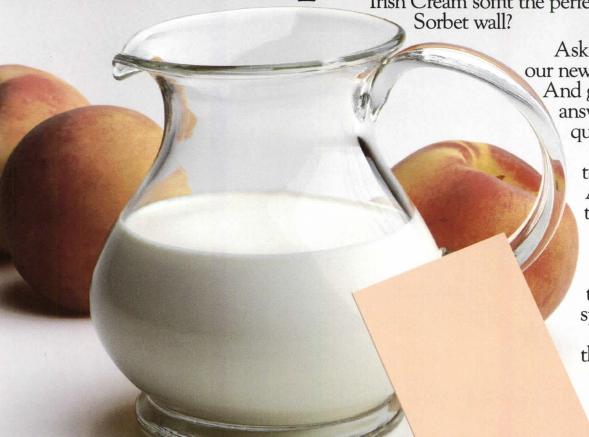
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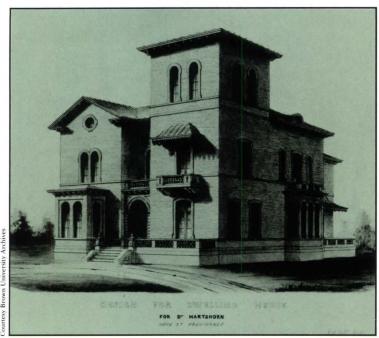
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### P/A Calendar



Thomas Tefft, Hartshorn House, 1854. Tefft show, National Building Museum, through October 31.

### Exhibitions

Through July 17

Arquitectonica. Galerie d'architecture Arc en Rêve, Bordeaux, France.

Through July 17

Civilized Life, with designs by Steven Holl, James Wines, Michael Kalil, Martha Schwartz, and others. Art Awareness Gallery, Lexington, N.Y.

Through July 31

The Architecture of Richard Morris Hunt. Los Angeles County Museum of Art, Los Angeles. (See P/A, May 1986, p.

**Through August 14** 

Viollet-le-Duc: Architect, Artist, Master of Historic Preservation. National Building Museum, Washington, D.C.

Through August 21

The Experimental Tradition, 25 Years of American Architectural Competitions: 1960-1985. National Academy of Design, New York.

**Through August 26** 

Otto Wagner: Drawings. University Art Museum, University of Minnesota, Minneapolis. (See P/A, April, p. 28.)

**Through August 30** 

Deconstructivist Architecture. The Museum of Modern Art, New York.

**Through August 31** 

Sheet Metal Craftsmanship: Progress in Building. National Building Museum, Washington, D.C. (See P/A, May 1987, p. 22.)

**Through August 31** 

Drawings by Le Corbusier. The Art Institute, Chicago.

**Through September 4** 

Architectural Art: Affirming the Design Relationship. American Craft Museum, New York. (See p. 28.)

**Through September 18** 

The Outdoor Chair. The Cooper-Hewitt, New York.

**Through September 15** Frank Lloyd Wright: In the Realm of Ideas. National Museum of American History,

Smithsonian Institution, Washington. (See P/A, March, p. 37.) **Through September 25** 

Creating the Early Federal City. Octagon Museum, Washington,

**Through October 31** 

Schindler House: Design and History. The Schindler House, West Hollywood, Calif.

**Through October 31** 

Thomas Tefft and the Cultivation of Architectural Taste in America, 1845-1860. National Building Museum, Washington,

July 14-August 31

California Lifeguard Towers, including designs by Hans Hollein, Richard Meier, Frank Gehry, and Michael Graves. Kirsten Kiser Gallery, Los Angeles.

July 14-October 2

The Architecture of Frank Gehry. Whitney Museum of American Art, New York. (See P/A, Nov. 1986, p. 26.)

July 16-September 5

Chicago Architecture 1872-1922: The Birth of a Metropolis. The Art Institute, Chicago. (See P/A, Dec. 1987, p. 23.)

July 16-September 4

Frank Lloyd Wright and the Johnson Wax Buildings: Creating a Corporate Cathedral. Walker Art Center, Minneapolis. (See P/A, April 1986, p. 27.)

July 19-October 16

What Could Have Been: Unbuilt Architecture of the 80s. Cooper-Hewitt Museum, New York.

August 25-October 31

That Exceptional One: Women in Architecture, 1888-1988. The Octagon Museum, Washington, D.C.

### Competitions

August 1

Submission deadline, West Coast Gateway International Design Competition. Contact West Coast Gateway, 11300 W. Olympic Blvd., Suite 730, Los Angeles, Calif. 90064.

August 26

First Stage Submission Deadline, Olympic West Competition. Contact Olympic West Competition, 11444 W. Olympic Blvd., Suite 1100, Los Angeles, Calif. 90064 (213) 312-3600.

August 30

Submission deadline, Sixth Downtown Development Awards Competition. Contact Margaret DeWitt, Downtown Research & Development Center, 1133 Broadway, Suite 1407, New York, N.Y. 10010 (212) 206-7979.

August 31

Entry deadline, Suffolk County Vietnam Veterans Memorial Design Competition. Submissions due Nov. 11. Contact SCVVMC Competition Liaison, Veterans Service Agency, 65 Jetson Lane, Central Islip, N.Y. 11722 (516) 348-5485.

September 6

Submission deadline, 36th Annual P/A Awards Program. Contact Awards Editor, Progressive Architecture, 600 Summer St., P.O. Box 1361, Stamford, Conn. 06904. (See page 17.)

### Conferences

August 3-6

Design Independence: Shaping the Future, American Society of Interior Designers' National Conference, Washington, D.C. Contact ASID, 1430 Broadway, New York, N.Y. 10018-3399 (212) 944-9920.

August 4-6

The Structure of an Architectural Interiors Firm, San Francisco. Contact AIA Interiors Group, AIA, 1735 New York Ave., N.W., Washington, D.C. 20006 (202) 626-7300.

August 30-31

Workspace 88, Moscone Center, San Francisco. Contact Workspace 88, Western Merchandise Mart, 1355 Market St., Suite 325, San Francisco, Calif. 94103 (415) 558-8544.



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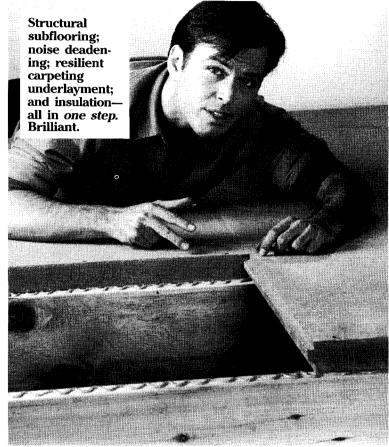
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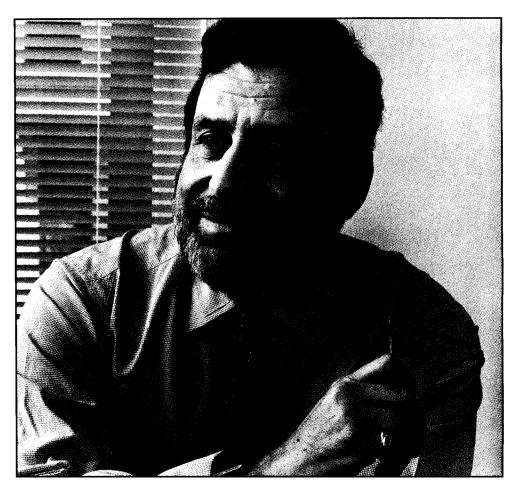


Circle No. 335

66 None of us studied architecture expecting to be defendants in a lawsuit. Most architects are creative people they may or may not be businessmen, although the better they are in business the better it is—but few expected to be defendants in this changing profession. It's something that has affected me personally, and, I expect, the growth of many architectural firms. It's caused me concerns, maybe burned me out, in spite of the fact that we've won every one of our suits.

In the middle '70s to the early '80s, I felt insurance was the biggest problem architects faced-that and litigation. And it's a continuing problem, no question about it. But I think that today DPIC Companies is with us for our entire future. Although we had only had two other insurers in 69 years, we really moved away from our previous insurer without any hesitation. DPIC was the first insurer that ever discussed loss prevention. And they were the first insurer that ever gave a damn about how we practiced architecture. That makes us very comfortable. Because, really, they are the most important partner in this firm. They provide us with the assurance we need to know they are going to be there. They assist us in undertaking contracts and procedures necessary to try to keep out of trouble in this litigious world. They provide us with legal counsel when there's a problem brewing. In fact, we took advantage of their Early Warning program just this week.

I feel very good about them. ??



Marin Daid Dalin

Dave Dubin is a principal in Dubin, Dubin and Moutoussamy, a 75-year-old architectural firm based in Chicago. He is past president of both the Chicago and Illinois AIA. We value our relationship with his firm and thank him for his willingness to talk to you about us.

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### PA Practice

POE: Craig Zimring and Polly Welch describe the methods and benefits of evaluating completed buildings.

Specifications: Walter Rosenfeld discusses the problem of product substitutions.



### **POE:** Building on 20-20 Hindsight

Shortly after a new California prison opened, the warden requested \$3.2 million in change orders to make the kitchen functional. But before authorizing this expenditure, the California Department of Corrections and Kitchen Capital Expenditure Managers, working with one of the authors (Zimring), performed a Post-Occupancy Evaluation (POE) of the facility. Rather than faulting the architects, they discovered that there were some problems with specifications of food equipmentfood carts were hard to get through the doors-and that the prison staff did not know how to operate the innovative cook-chill equipment. Based on the results of the study, the corrections department was able to reduce the change orders to \$800,000—a \$2.4 million saving from a single study. The POE also resulted in rewritten guidelines for planning, operation, and development of a prototypical kitchen design and equipment list for future prisons. The prison staff was enthusiastic that they had a role in developing the solution.

The Stubbins Associates (TSA) had a two-phase commission from a major engineering firm to design two 500-person research buildings. The client was interested in using open office landscaping in their new buildings even though their existing buildings contained enclosed offices. TSA persuaded the company to explore this change by building and staffing a 30-person prototype in a nearby office building. TSA performed a POE of the prototype facility and found serious complaints about lack of privacy and difficulties maintaining the high security levels needed for classified research. As a result of the POE, it was decided to use enclosed offices in the new buildings

TSA also performed a POE several months after the first phase of the building was oc-(continued on page 56)

### **Specifications: Specbusters**

In preparing project specifications, it is only realistic to recognize that as soon as the documents leave the office and make their way into the construction world, they will probably be attacked, and, if possible, subverted or circumvented. The same competitive forces that invigorate our economy make the selection of contractors and products a battlefield of sorts that must be traversed very carefully by the architect who is trying to control a project.

While these forces are also at work during initial product selection, the architect and specifier are usually able to handle this phase more easily because the players are fewer and their ultimate authority is more obvious. By doing the necessary research and investigation of products before deciding, by naming at least three acceptable products for each use, and by working with manufacturers' representatives during the documentation period, the specifier can establish a sound basis for such decisions and a strong position from which to defend these choices.

A strong position is also generally needed to fend off subsequent attempts to change or vary what the documents require. Persistence and ingenuity (valued characteristics in salespeople) are regularly applied to affect product purchases in favor of the aggressive manufacturer or distributor. And for contractors, saving money often means making money, an effort that seldom ceases. While the architect's responsibility is to the work, others are actively pursuing a better bottom line in their own interests. Breaking the project specifications is often the means or the result.

Foremost among the methods used is the straight-out cost attack. There is almost always a product that can be bought or installed more cheaply than the one specified. Seldom will the (continued on page 60)

### **Practice Points**

The U.S. Supreme Court has supported the authority of architects to determine what constitutes "or equal" in specifications. The court declined to consider an appeal of Whitten v. Paddock, a case in which a lower court had ruled that contractors could not decide which suppliers qualify as "or equal."

**Elementary schools continue** to be a booming market for architects, said Dr. Stuart Rose at the AIA convention. Los Angeles County, for example, gets 3000 new students every month. Complicating the situation is the fact that few architects have had much experience designing schools during the past 20 slow years.

Lump-sum fees are used by architects more often than any other billing method, according to a survey by Professional Services Management Journal. Forty-three percent of firms use lump sum fees; 22 percent use a percentage of construction cost.

Restroom facilities are not usually provided to both sexes according to need, says the Washington State Department of Transportation. Their study indicated that women spend 75 percent more time per use in restrooms than men, and recommends a 60-40 female-to-male toilet fixture ratio, instead of an even split.

An interlocking relationship between the design/build partners and the supervising architect of the ill-fated L'Ambiance Plaza in Bridgeport, Conn., was criticized by the state's Department of Public Safety, which said that an independent supervising architect, whose presence on the job was required by a state finance authority, was in fact a subcontractor for the architects of record.

POE (continued from page 55) cupied. They found that columns in the secretarial area limited the number of work stations that could be placed there. Although the engineering firm had originally intended simply to use the same plans from Phase I for Phase II, the POE convinced TSA to move the columns, reorient the offices to make them more energy efficient, and make numerous other small improvements. The POEs of the prototype and the Phase I building saved several million dollars in energy and renovation costs and helped lead to four additional major commissions for TSA from the engineering firm.

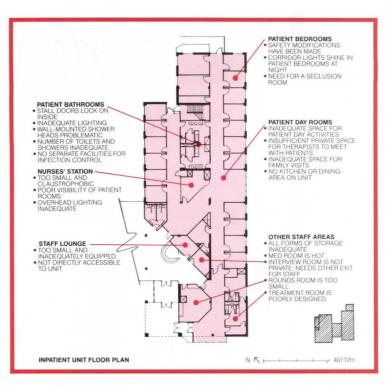
Although success stories such as these are becoming more common, relatively few architecture firms have embraced POE. Most activity is by large building clients such as IBM, Westinghouse, U.S. Postal Service, Health and Welfare Canada, California Department of Corrections, and others who have incorporated POE into their building procurement and management process. POE now affects billions of dollars of construction annually.

Architects have been put off by the arcane, scientific mystique and jargon that have surrounded POE, and by the difficulty in funding POEs. Recently, however, evaluators have gotten cannier about producing actionoriented studies that address clients' and architects' needs, that are clearly and graphically presented, and that can be accomplished within modest budgets.

### **POE Benefits and Pitfalls**

POE can be an effective way for architectural firms to achieve such important goals as extending their relationship with the client after the project is completed, getting feedback from past projects to increase office expertise, and addressing potential shortcomings in buildings before they become serious problems. POEs also help in gathering specific information and, perhaps more important, serve as the basis of discussion with the client and within firms about goals, strategic plans, and design methods. Firms that do POE on a regular basis have found that:

POEs improve client relations. Firms such as Kaplan/Mc-Laughlin/Diaz of San Francisco, The Stubbins Associates of Cambridge, Massachusetts, CRSS of Houston, and Brooks & Associ-



ates of Tucson often perform a study of a project after completion, at their own expense, as a value-added service. They have found that POEs provide an opportunity to demonstrate a long-term commitment to the project and to talk to the client after the formal contract period has ended. These POEs typically include interviews with senior administrators in the client organization, interviews with some typical occupants, walk-through observations by architects or consultants, and sometimes formal questionnaires distributed to department heads or representative occupants.

The POE has resulted in clients requesting additional architectural services—often interior space-planning-to accommodate organizational anomalies discovered during the POE. Most of these firms say they emphasize POE in their marketing because it reflects a continuing interest in the client.

As in the California prison example, many of the client's concerns discovered in a POE can be easily corrected because they can often be traced to improper installation or reflect misunderstandings about how to use the building. This type of fine tuning is particularly important to a firm's reputation because clients may become focused on an unbalanced HVAC system rather than their general satisfaction with the building. In addition, most architects want to know whether the building met the client's needs before listing that client as a reference for future work.

Some architects worry that a POE might expose flaws in the building that the client had not otherwise seen. This is a valid concern. One POE by an architecture firm discovered unrecognized major problems in installation of the HVAC system that led to litigation against the mechanical contractor. However, architects who do POEs argue that the client would eventually discover serious problems. They find that POE provides an opportunity to deal with shortcomings in a positive manner before they become serious. Often the client remembers the attempt to correct difficulties more than the original problem. Architect/attorney Gerald Gameil Weisbach, a partner in Natkin & Weisbach, San Francisco, observes that POEs allow architects to express a continuing interest in a building that is important in establishing a good relationship with the clients.

POEs head off later problems.

Weisbach notes, however, that the evaluator who is performing under contract has potential liability exposure if he or she does not discover a problem with the building that causes the client harm later. Weisbach recommends that if the standard AIA special or designated services forms are used, a very explicit scope of services should be attached for the POE (and should be equally explicit about the issues, systems, or areas of the building that will not be included), since unlike architectural design, POEs have no history of practice to establish a

"Your friends never sue you,"

savs Weisbach.

standard of care. This is useful advice given the inexperience of most clients with POE.

POEs provide information useful on subsequent projects. Herbert McLaughlin, a partner in Kaplan/McLaughlin/Diaz, evaluated a private psychiatric hospital in Marin County as preparation for designing a new hospital for the same client. He discovered that unlike the patients he was familiar with, the patients in the private hospitals spent their day walking around: Sometimes they circled widely, avoiding all social contact; other times they would walk by the edge of activities and observe; occasionally they would walk right through and participate. This concept of a choice of routes and a progression of levels of involvement became the basis for the firm's design of the subsequent facility and helped provide the concept for two other acclaimed projects: an office building and a jail.

POEs can also help refine standard details and design vocabulary that may be repeated in other projects. POE is particularly well suited to refining features over time. As architect Michael Kraus says, "Developers of spec office buildings are most interested in lobbies, elevators and bathrooms." POE can have a role in fine-tuning these features and in understanding when custom design is necessary.

**Doing POEs** 

The action orientation to many current POEs is a departure from the social-science approach that has been employed for two decades. Whereas most POEs had focused on the interests of the evaluators, action-oriented POEs address the needs and perspectives of decision-makers. Earlier POEs primarily addressed whether the final building has met the original programmatic objectives; actionoriented POEs also examine how objectives and organizational goals have changed. This helps the architect and client reflect on whether administrative policies need to respond to altered realities. This more dynamic model of POE is in many ways similar to architectural practice where clear communication with the client is critical and where criteria and goals never seem to stand still.

How to fund a POE. Whereas some POEs are internally funded by architecture firms, the growing acceptance by large building clients suggests a poten-(continued on page 58)

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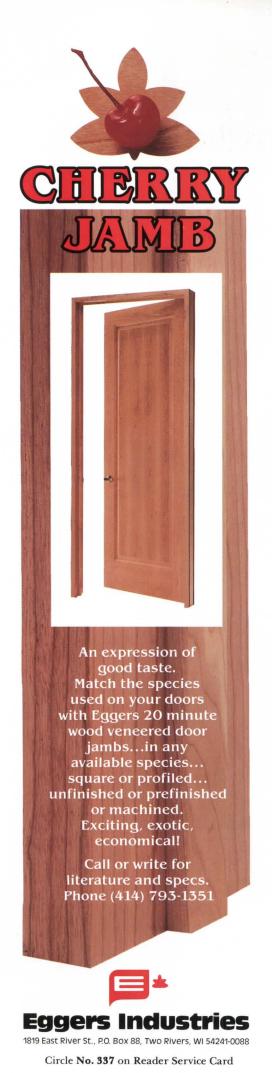
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POE (continued from page 56) tial market for promoting POE services to clients. Clients who pay for POEs often have several things in common: They are developing a series of buildings and see the value of refining the product; they are facing considerable uncertainty, where the rules are changing and they cannot rely on past experience or conventional wisdom; and they are in an organization open to information.

For instance, the California Department of Corrections (CDC) has begun one of the largest public construction programs in the world. After not building new prisons for over 50 years, they are spending \$4 billion to more than double the capacity of the state's prisons. It was not difficult to sell them an ongoing POE program to test prison designs and prison components because they see their design process as one of refining prototypes.

Who will use the information and how? POE is a useful part of a broader strategy to gather information that can be of help to all steps of the building process: planning, pro forma analysis, programming, design, construction supervision, and management. The evaluator therefore needs to consider who makes decisions of various kinds and how decision-makers are accustomed to receiving information. Detailed information about the efficiency of area per bed may interest a hospital program planner, but the administrator may be more concerned about costeffective ways of improving the wayfinding system.

The action-oriented evaluator begins the POE by temporarily setting aside his or her preconceptions and listening to the clients' needs. Key issues include clarification of their background and formal and informal responsibilities, what past reports or studies they have found useful (and why), any past positive or negative experience they have had with evaluation, and the specific uses to which the POE information will be put.

What kinds of information (and how much) do decision-makers need? Many early POEs were like shooting in the dark; sometimes you hit the target but you used a lot of ammunition. In order to satisfy the often tight budget constraints of action-oriented POEs, evaluators are questioning carefully what is needed to meet the client's requirements. The question is how little information

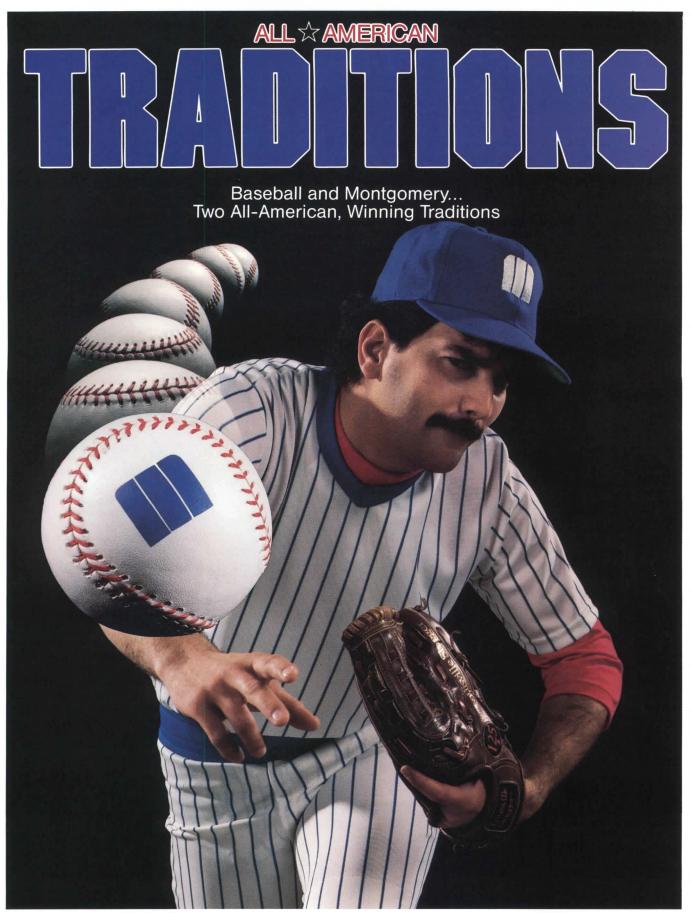
can you collect and what methods are most appropriate. A brief walk-through by experts and representative interviews may be sufficient to evaluate one place. When the intention of the study is to generalize to other settings, times, or user groups, then methods such as questionnaires or standardized observation schemes that allow more control and comparability are appropriate.

How can information be gathered with minimum time and money? Many people assume that handing out questionnaires to building users is the most efficient way for an evaluator to get a lot of information in a short amount of time. While it may require relatively little effort to administer, a comprehensive questionnaire is very costly to develop and time-consuming to analyze. Many POEs can be conducted with less formal techniques, utilizing resources within the client organization or architecture firm. Information is being gathered by organizations all the time anyway and that presents opportunities to piggyback evaluation needs. Staff in institutional settings such as hospitals or prisons, for example, conduct many routine checks of clients and facilities and are often willing to record information when provided simple checklists.

Organizational archives are another source of information. Jim Wise, an environmental psychologist, used film from security cameras to evaluate which bank designs were most prone to bank robberies (see P/A, Jan. 1986, pp. 138–139). In organizations that complain of too little meeting space, a review of conference room reservation logs often reveals patterns that yield solutions less costly than constructing more meeting rooms.

Perhaps the greatest impediment to broader acceptance of POE among architects has been the assumption that they must have specially trained staff to do an evaluation. While some aspects of POEs, such as questionnaire writing, do require specific training, most architects can develop good interviewing and observation skills by refining the communication skills they use in everyday practice.

Some techniques are deliberately low-tech to allow broad participation. The touring interview developed by Robert Shibley, a partner in the Caucus Partnership (Buffalo) and his colleagues at Victoria University (continued on page 60)



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POE (continued from page 58)

in New Zealand has been used in many action-oriented POEs. In the touring interview, small groups of building users are walked through portions of the building they are familiar with and are asked open-ended questions such as: "What goes on here? What works or doesn't work?" These responses are used to stimulate discussion in a follow-up small group meeting that can be used to clarify the users' responses and generate suggestions for the building or future buildings.

Also, knowing when to use other people as resources can be critical to efficient POE development. Expert consultants may be very useful, for example, in a half-day building walkthrough to identify critical issues. Public Works Canada has used teams of specialists, composed of architects, engineers, psychologists, and scientists, to walk through a building and provide a preliminary analysis of how well the building performs that then becomes the basis for future investigation. Interaction among the team often stimulates discussion of issues that might have escaped the notice of a single consultant.

Health and Welfare Canada, with the Boston consulting firm Building Diagnostics, Inc., trained facilities managers in hospitals to be the manpower for conducting POEs. An important side effect of this is interesting the staff in its implementation.

How can evaluation results be presented so they are interesting and useful? Many early POEs were difficult to read because they had been written in the traditional style and format of academic papers. Findings that are going to result in action must be easy for decision-makers to absorb at a glance. In a POE of a community mental health center for the Massachusetts Division of Capital Planning and Operations, the consulting firm of Welch & Epp Associates used annotated floor plans and histograms to make the results of their studies interesting and persuasive to future mental health policy-makers as well as to the health center's on-site facility management staff.

The likelihood of findings being implemented can be increased by such techniques as publishing the findings in the organization's newsletter or creating wall posters. When evaluations point to administrative as well as environmental changes, the findings might be presented in staff training sessions. Some architecture firms use lunch meetings for in-house training as an opportunity to discuss what was discovered in a particular building and what implications it has for the firm's future design work.

As POE has been increasingly utilized by architectural firms, its emphasis has become more practical and action oriented. Whether a firm uses the results to overtly market its success and concern for clients or for inhouse education of its staff, POEs acknowledge the importance of accountability between client and building user. Craig Zimring, Polly Welch

Mr. Zimring is an environmental psychologist on the architecture faculty at Georgia Institute of Technology. Ms. Welch heads the research firm Welch 

∃ Epp Associates in Arlington, Mass.

Specifications (cont. from page 55) owner be offered full credit for such cost reduction. Often the product proposed is not of appropriate quality. Always the architect must balance cost and quality, protecting the owner, the project, and his or her professional responsibility (read "liability") in the process. Clearly there are legitimate and appropriate cost reductions to be made somewhere on almost every project. However, substitution proposals need to be received cautiously, inquiries made conscientiously, and cost-benefit analyzed carefully before the architect assumes responsibility for the new product.

Unfortunately, the construction period is not the best time to be considering substitutions. The team that put together the drawings and specifications has usually been diminished if not disbanded. There are many other pressing practical and administrative matters requiring the architect's attention. It is not easy to assess quickly all the implications of changes. Time is one of the contractor's leverage points: "We can't get what you specified in time, so if you insist on it instead of accepting this substitution, you will be holding up the work." Requests for this type of change usually come late so that the architect is being asked to bail out the hapless (?) (continued on page 62)



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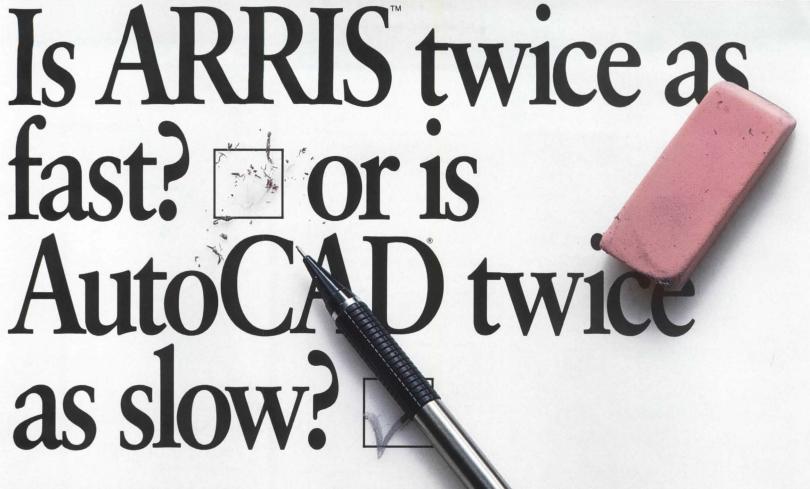
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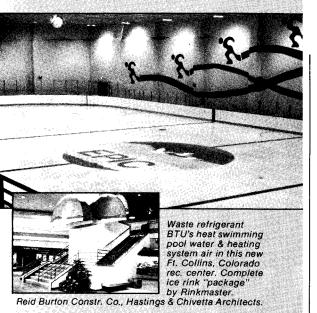
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Specifications (cont. from page 60) contractor who apparently didn't plan ahead. Under such pressures, research time is very limited, and the quick decisions are often the ones that cause headaches later. "Instant" changes should not be accepted easily and certainly not without at least requiring that resulting modifications to other work will be at the contractor's, not the owner's, expense.

But this substitute product is "just as good," it will be claimed. And maybe it is. The burden of proof, however, must be on the new product's proponent, not the architect. "Show me" is the right response. That means someone else should be locating successful installations for inspection, developing comparison charts of characteristics and manufacturers' data for review, and providing references and guarantees for the architect's close scrutiny. Ultimately, the architect is the judge of the new product's suitability. Under AIA A-201 General Conditions, the architect has clear authority to reject work that does not conform to the contract documents (Article 4.2.6, 1987 Edition). Several high court decisions have upheld this right, and both suppliers and contractors may need to be reminded of it.

Where public work is concerned, pressure to lower standards in favor of price or "spreading the work" to local suppliers may be a factor. The door opened by the often-mandated "or equal" clause can be held politely ajar or blown off its hinges, depending on the architect's determination. What is equal functionally may lack appropriate design character, a factor that does not usually weigh heavily on cost-conscious authorities. The threat of litigation is often more real and persuasive when public money is involved and the architect may be under great pressure to back down. Still, the same principle applies: accept the substitute and you accept responsibility for it as if you had originally specified it. The architect has the authority to decide.

It is far easier to resist all these approaches if the specifications have been carefully drawn. But where loopholes exist, count on their being exploited. If performance requirements are not spelled out, standards not indicated, or options in type or finish not given, interpretation is left to others rather than the architect. Lengthy disagreements can follow. Abbreviated, short-form, (continued on page 65)



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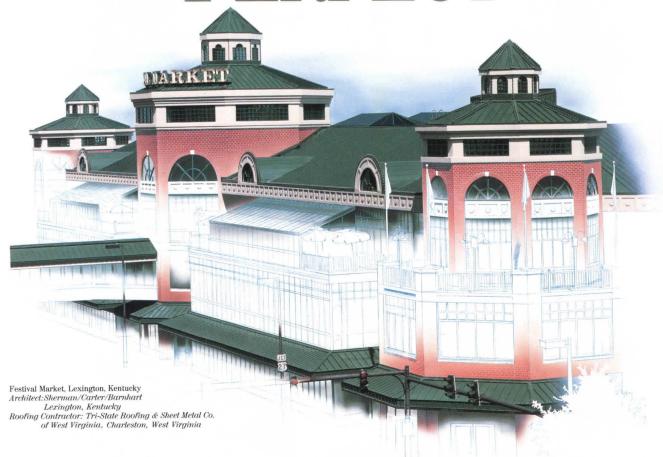
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Specifications (cont. from page 62) and outline specifications are especially vulnerable to critical omissions when used for upset pricing or smaller construction projects. Costs aside, the specifications for one square foot of a material are essentially the same as for a thousand square feet of that material similarly applied. And where the architect is unclear, hesitant, or uncertain, the more aggressive participants in the process will move in strongly.

Why does all this matter? Can't the architect just design buildings and leave these details to others? Aside from issues of liability for failures in this litigious age, most architects want to be proud of the work they do. An excellent building doesn't just happen. It is the product of many hours of thought, talent, planning, and hard work of many kinds. When all that is carefully prepared gets out of control, buffeted by economic and political forces not directed toward the same goal, the architect needs to act. Dealing with substitutions and alternate methods is part of seeing that the work turns out the way it was intended. Walter Rosenfeld

The author is a consultant in construction specifications and project management in Newton, Mass.

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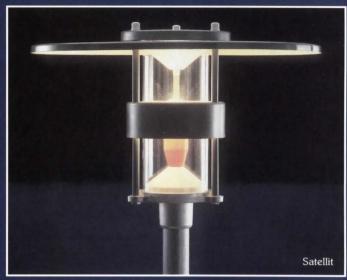
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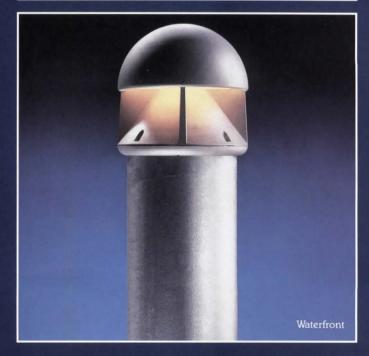
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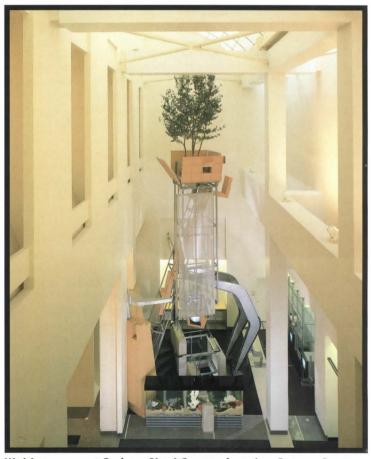
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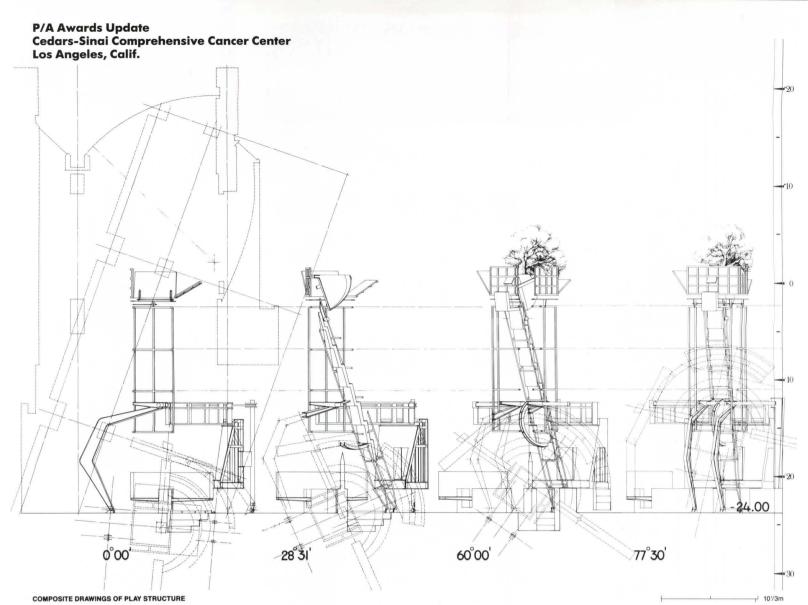
### Progressive Architecture

# The Road to Recovery

The special needs of cancer patients are addressed in an outpatient treatment center, designed by Morphosis Architects/ Gruen Associates, that proposes an alternative both to currently available treatment sites and to accepted notions of health care facilities design.



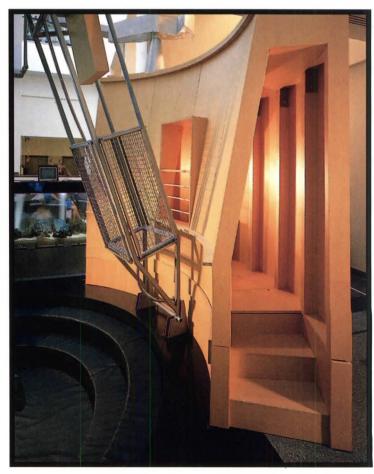
Waiting room at Cedars-Sinai Comprehensive Cancer Center.



THE idea of a 24-hour cancer center was one whose time had not only come, but was long overdue, according to the Cedars-Sinai Comprehensive Cancer Center's founder, Dr. Bernard Salick. A Los Angeles nephrologist, Dr. Salick had pioneered the idea of 24-hour accessibility in a successful string of kidney dialysis centers in Southern California, but realized that a similar need existed for cancer patients when one of his daughters was stricken with the disease.

She was treated (successfully) on an outpatient basis, but the system had a major drawback: Outpatient centers were open only on weekdays, from eight to five. A patient who needed tests or treatment "after hours" was forced to check into the hospital, an often unnecessary and always costly choice, or to go to a hospital emergency room, where the wait for test results and treatment could often be agonizingly long and difficult for both patients and their families. After experiencing this ordeal firsthand, Dr. Salick was determined to offer another alternative, and earlier this year the CCC opened at the prestigious Cedars-Sinai Medical Center. Salick Health Care, Inc., the company of which Dr. Salick is Chairman and CEO, built the center, staffs it, and operates it, and Cedars-Sinai receives a percentage of the profits. Since this is a flagship facility (several more are in the works around the country), Dr. Salick wanted its architecture to be distinctive.

A man of self-described "traditional" taste, Dr. Salick was nonetheless intrigued by a newspaper article that discussed the work of Morphosis. He subsequently hired the firm to design a dialysis center, a job that led in turn to the CCC commission, for which the architects operated in a joint venture with Gruen Associates, and which won a Citation in the P/A Awards program (P/A, Jan. 1987, pp. 112–114). Dr. Salick, who admires Morphosis for producing work that is "nontraditional but not threatening," wanted a building that was "dramatic but warm," one that would make patients' visits (which can last up to 20 hours at a stretch) more pleasant.





Good design or no, a cancer treatment center is by definition not a terrifically pleasant place. The treatments, especially chemotheraphy, are physically and emotionally grueling, and patients can develop strong aversion reactions to just the thought of the treatment site. UCLA professor George Rand, whose evaluation of the CCC appears on page 72, recalls a conversation with Nurse Supervisor Jo-Ann Luongo, who offers a graphic example of such a reaction in a teenage boy who makes regular trips to the CCC from the San Fernando Valley: "[He] breaks into a cold sweat when the car reaches the crest of the mountains. By the time it reaches Beverly Boulevard, he is puking, and he is still miles from the Center." How does an architect design, programmatically and formally, a place that carries such serious emotional import for its users?

For Morphosis partner Thom Mayne, the answer was not to be found in conventional health care design, which is slick and neutral, nor in the more recent trend toward hospital environments that aim for a "homey" look. "If frightening things go on here," Mayne contends, "then the architecture should reflect it." Mayne wanted the CCC's architecture to be tough enough not to condescend to patients, and uplifting enough to reflect their own courage in struggling to recover from their disease. What he calls the "clinic-ness" of the design reflects his belief that the CCC is a place where patients undertake the job of getting well.

### **Underground Architecture**

Whatever the architects' intentions, their job was made even more difficult by the CCC's site. Nestled among three buildings of the 1.5-million-square-foot Cedars-Sinai complex, the CCC was, at the Cedars' board's insistence, to be practically "invisible," and any part of the building that did show was to match the materials of the existing structures exactly. Furthermore, the CCC's reuse of an existing radiation therapy wing on the basement level of Cedars-Sinai determined the location of the CCC's patient floor. How do you design uplifting architecture if it is underground?

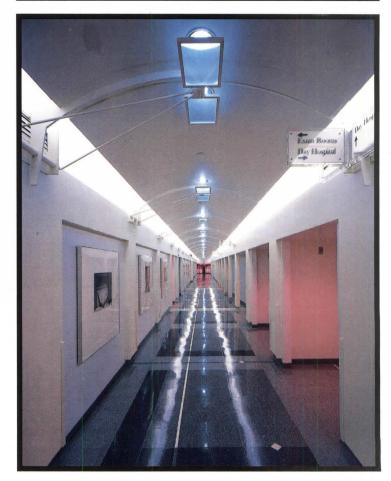
Morphosis and Gruen's answer to that question is an eloquent one. All that is immediately apparent to CCC visitors is its fingerlike entrance/admitting wing, which is faced on one side with Indian sandstone (definitely not on Cedars' "matching materials" list, but very effective). Inside, a cool, white corridor, with granite floors and upholstered steel benches, announces that this is no ordinary medical facility. At the end of the corridor, a balcony overlooks the 45-foothigh waiting room, set 24 feet below grade on the main patient floor, and illuminated by a half-barrel-vault skylight. Its layered and "carved" walls, akin to those used by Morphosis at the Kate Mantilini restaurant (P/A, Oct. 1987, pp. 88-92), further diffuse light through the space. Its centerpiece is a typically Morphosian sculpture, a 24foot-high steel and wood play structure, topped by a tree that refers back to the "plaza" level of the entrance. This waiting area is located near the exam rooms, doctors' offices, pharmacy, diagnostic, and laboratory sections of the CCC.

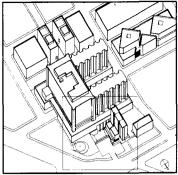
The other major space in the Center is the chemotherapy atrium in the northeast corner of the main floor. A long, graceful space topped by a barrel-vaulted skylight, it is flanked by individual treatment cubicles, in which patients undergoing treatment can have as much privacy as they need, while nurses are stationed at either end of the room. The space, in its proportions and regular bay rhythm, looks a bit like Otto Wagner's Postal Savings Bank, and large, square windows offer views outside along the north and south walls.

Throughout the CCC, a minimalist color palette and Morphosis' signature details (mechanistic light fixtures, elegantly geometric floor patterns) make for a consistently and refreshingly atypical health-care environment. And their masterful use of indirect lighting and daylighting often makes you forget that you are underground. The CCC has a generous, gracious quality that is missing from other medical facilities, but that graciousness is achieved at the cost of space efficiency, a factor that Dr. Salick readily admits is expensive. But he believes the benefits outweigh the costs: "If you've engaged the patient, then you've succeeded," he says. "People who are not usually engaged by architecture love this place." *Pilar Viladas* 

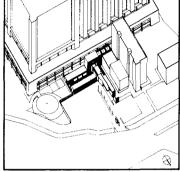




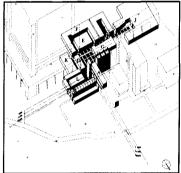




EXISTING SITE AXONOMETRIC

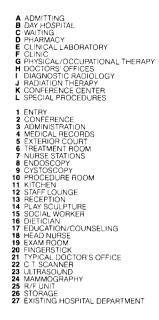


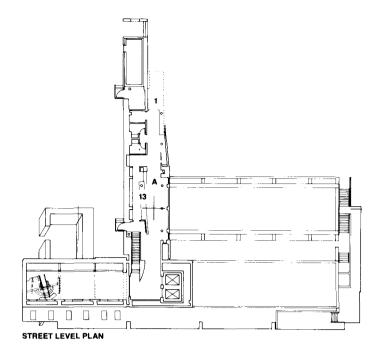
CANCER CENTER AXONOMETRIC

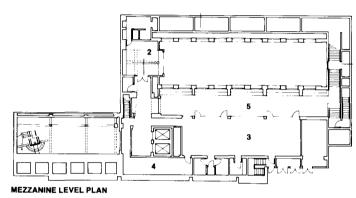


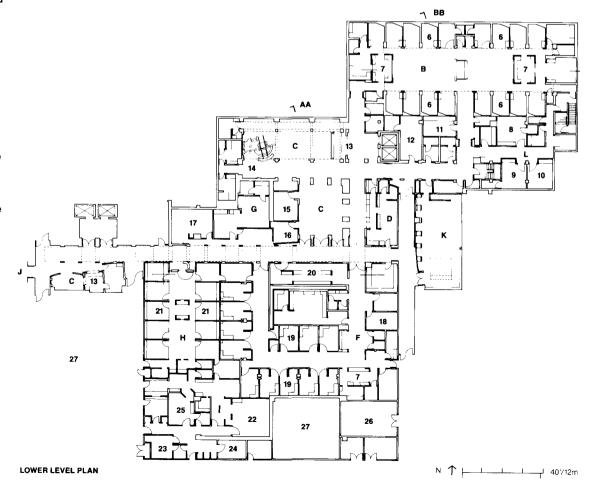
DIAGRAMMATIC AXONOMETRIC

The CCC's entry (facing page, top) is a slotlike space with granite floors, upholstered steel benches, and specially commissioned artworks, part of a program organized by art consultant Merry Norris. The dramatic, sloped soffit of the conference center (facing page, middle) integrates lighting and air handling. The corridor just south of the waiting room (facing page, bottom) is brightened by clever use of indirect lighting (above the curved soffit) and elegant custom wall and ceiling fixtures, making visitors forget that they are in fact underground.









#### Evaluation

The Comprehensive Cancer Center testifies vividly to the importance of designing the environment in which a major life crisis—the diagnosis and treatment of cancer—occurs. Morphosis's work goes beyond the mere sorting out of functional and space planning requirements to address the deeper psychological needs of patients and those who care for them. The CCC's architectural subtext unflinchingly confronts the horror and Janus-faced ambiguity of the disease. While it offers an alternative to the accepted streamlined, technologically based aesthetic of hospital design, it also forgoes the currently popular approach of the "living room" environment, with all its mock friendliness. Rather than attempt to distract patients from their trauma, the architects use a tough, deconstructivist strategy to instill confidence in patients' ability to fight the disease.

The CCC's design is based on the premise that there will never be a nice cancer center. Here, people receive bad news and subject themselves to treatments that are physically and emotionally stressful, and without avarantees of success. "They don't come here to enjoy the environment," says CCC social worker Nivea Young. "They are here for a cure."

When asked how they feel about the building, patients tend to be negative. For example, they interpret the facility's underground location as "one level below the basement," a sign of the generally low regard in which they think cancer patients are held by the hospital administration. However, this negativity does not discourage the staff, who tend to view it as an opportunity, not a liability. "At least they express emotions," explains Ms. Young. In the end, it is more effective than the usual hospital environment that encourages them to withdraw into the isolation of their own illness."

Patients develop a lovehate relationship with a treatment environment, despite its inadequacies; they become resistant to any form of change. Several patients in the new facility claim to prefer treatments in the old one. "In fact," says Ms. Young, "they were in one large room, and it

was pretty horrible. When one got sick, the others and their families just sat and watched."

In the new treatment room. patients can actively regulate the degree of privacy they require while under the variable effects of eight to ten hours of chemotherapy. If the CCC's unorthodox design sometimes provides unwelcome distractions for some patients, it also offers an alternative to the usual antiseptic environment which, while it keeps patients calm, also socializes them to adopt a passive "sick" role.

The complex geometry and denatured color palette used by Morphosis is initially interpreted as "hard" by patients and staff alike. But most patients eventually experience it as a positive environment, and the staff remarks that the architecture is never dull.

Nonetheless, they perceive problems. For example, dressing rooms are located off the main corridor for x-ray diagnosis, forcing patients in hospital gowns to wait in the same area as other patients or their families, who are in street attire. Noise is also a persistent concern, because of the lack of sound-absorbina materials. Patients are encouraged to try to manage their own psychological stress, but unexpected or uncontrollable sounds can violate the meditative silence desired in treatment areas. And at a time of severe physical and psychological stress, seemingly innocuous sounds can take on a sinister aspect: the incessant ringing of a telephone can become unbearable to the patient who interprets it as an unanswered plea for help. On the other hand, some patients may be reassured by the ambient noise that signals the nearness of other people.

While there are still rough edges to be smoothed, the CCC stands as a much-needed experiment in health care design. Its openness and expansiveness are achieved at a financial cost that may seem too high for many facilities that are understaffed and overcrowded, but these are the very qualities that may prove most beneficial to patients and staff at ambulatory cancer care centers.

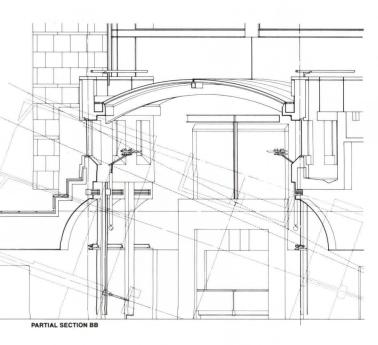
#### George Rand

The author is a clinical psychologist and professor at the Graduate School of Architecture and Urban Planning at UCLA.



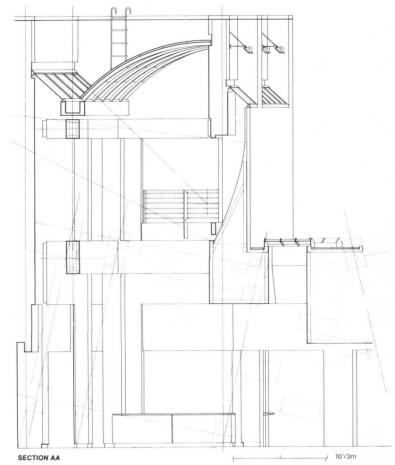






From the parking lot, very little of the CCC is actually visible, following the wishes of the Cedars-Sinai Medical Center board that the new Center be "invisible," and the location, for logistical reasons, of the main patient floor underground. A discreet canopy identifying the CCC and an austere, painted steel sculpture that houses a night bell and guard's bench lead to the narrow entrance/admitting wing (photos, above and facing page, with existing Cedars-Sinai building behind). This wing is faced with Indian sandstone, unlike the exterior of the chemotherapy atrium (facing page, foreground), which could not rise above the concrete plinth of the existing Cedars-Sinai buildings, and which had to match that concrete exactly.





Project: The Cedars-Sinai Comprehensive Cancer Center, Los Angeles, Calif.

Architect: Morphosis Architects/ Gruen Associates, Los Angeles, Calif. (Morphosis: Thom Mayne, partner in charge; Steve Johnson, project architect; Kiyokazu Arai, Tony Bell, Barbara Helton-Berg, Craig Burdick, Robin Donaldson, Eric A. Kahn, Susan Lanier, project team; Mara Hochman, Tom Lasley, Lou Perron, Alexandra Rudeneau, Chris Uebel, assistants. Gruen: Ki Suh Park, partner in charge; Robert S. Barnett, project architect; Dennis Bottom, Layla Batter, Ellen Miller, production team; Michael Enomoto, construction supervisor; Teresa Sanchez, construction coordinator.) Client: Dr. Bernard Salick, Salick Health Care, Inc., Beverly Hills,

Site: the northeast corner of a large medical center campus, bordered by Beverly and San Vicente Boulevards. Program: 53,000 gross sq ft of outpatient facilities for cancer treatment, including chemotherapy treatment rooms, examination rooms, pharmacy, clinical laboratory, diagonostic radiology department (and the renovation of an existing radiation therapy department), doctors' and administrative offices, and

waiting rooms.

Structural system: ductile steel frame on spread footings, concrete framing and earth-retaining system. Major materials: precast concrete panels; Indian sandstone; painted steel; copper; gypsum board; composite granite tile flooring; painted steel; stainless steel (see Building Materials, p. 126).

Mechanical system: constant volume, double duct system with constant volume mixing box and hot water coil.

Consultants: Kurily & Szymanski, structural; The Sullivan Partnership, mechanical; Engineering Design, electrical; Engineering Technology, Inc., civil engineering; Medical Planning Associates, James Staublin Planning & Design, medical; Emmet L. Wemple & Associates, landscape; KMA Designs, interiors; Merry Norris Contemporary Art, art consultant; Berry Sampler Graphic Design, graphics; Andrew Barkin Sound Design, audio-visual.

General contractor: Cal-Pac Construction Co. (Peter H. Segel, president; Craig Heller, vice president, operations; Anthony J. Esperoza, senior vice president; John Parenteau, senior project manager). Costs: withheld at client's request.

Photos: Grant Mudford.

### P/A Portfolio On the Sidewalks of New York

In three relatively modest commissions in their home city, **Kohn Pedersen Fox Associates show** how to complement the urban context.

WE associate the prolific firm of Kohn Pedersen Fox Associates with major office buildings that alter the face of the cities they adorn-buildings such as 333 Wacker Drive in Chicago (P/A, Oct. 1983, p. 78) or the Procter & Gamble headquarters in Cincinnati (P/A, Oct. 1985, p. 71). And projects the firm now has under way will be visible on the skylines of Seattle, Chicago, Pittsburgh, Philadelphia, Boston, London, and Frankfurt.

Their work completed to date in New York has been of more modest scale (larger buildings are under way), but KPF's way of responding to context is particularly applicable to buildings that fit respectfully into the urban fabric. The three recently completed Manhattan projects shown here not only fit in with the forms, scale, and materials of their neighborhoods, but they also look like local versions of their building types—like a New York apartment house, a New York office tower, and a New York loft building.

The firm's senior design partners, William Pedersen and Arthur May, who were responsible for these three buildings, talk much about how their architecture expresses the aspirations of its occupants and how it relates to the physical history of its place. But their sensitivity to urban context extends as well to the fine points of zoning ordinances: For two of the three buildings examined here, KPF simply used traditional New York "wedding cake" zoning creatively, sparing their clients the all-too-common struggle for exceptions; for the apartment house, they made pioneering use of a new alternative Quality Housing ordinance, which requires unusually complex negotiations and higher-level city approval, but encourages just the kind of sidewalk-hugging, urbane structure the firm prefers. New York's demanding zoning is too often an excuse for architectural mediocrity, but KPF deftly turns the rules to their own design pur-

Notwithstanding the derivation of design from context, and the mark of two different design partners on these works, they show an unmistakable KPF design character. This derives from the use of unabashed ornament, strong axes, and symmetrical—or at least regular—disposition of elements, and distinctive silhouettes. Though detail may be used in Mannerist ways, there is always an apparent striving for harmony and appropriateness rather than shock or irony. Arthur May's detail is more likely to draw on Classical sources-Italian Mannerist or Georgian, for instance; William Pedersen's recalls mainly 20th-Century precedents—Viennese Secession or Art Moderne—and is more likely to have stainless steel inserts than traditional moldings. In work by any of the KPF partners, details are consistent with actual construction; what looks like a joint usually is in fact a joint—not just a compositional device.

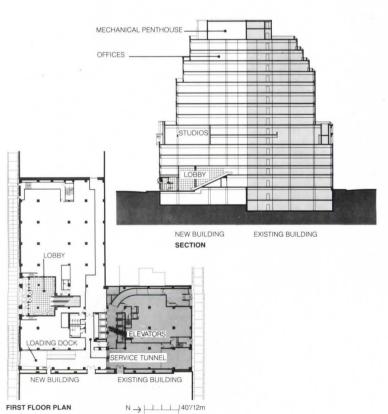
The three buildings examined here exemplify KPF's approach to building in the city. While it is a peculiarity of the firm that most of its buildings have been bigger and more conspicuous than these, few embody their intentions more successfully. John Morris Dixon

> With its cascade of setback planes abutting the sidewalk, its strongly articulated bays, and its emphatic entrance bay, KPF's ABC Phase II restates traditional architectural themes of Manhattan's **Upper West Side.**









**ABC Phase II** 

**Actually the third American Broadcasting Company build**ing by KPF on one Manhattan city block, "Phase II" on West 66th Street is joined to "Phase I" on West 67th (drawings, left). Since these buildings replaced older nonconforming structures on otherwise residential blocks, great care was taken to make them respectful neighbors.

Like the earlier phase, the new building steps back within the "as-of-right" volume dictated by New York's old zoning ordinance. The architects stepped this phase back at two-story intervals to allow double-story areas of window, divided by mullions at 2'-6" intervals, recalling the tall windows of the neighborhood's landmark studio apartments.

The façade (preceding page and facing page, top) combines hard buff brick with two varieties of pink granite (Stony Creek and Milford) found on New York landmarks. Design partner Arthur May modulated the 225-footlong façades using such Mannerist devices as the play of blind panels against windows and the shifting of sill and lintel heights. The client's ABC's are announced in playful but discreet panels of stone, visible both along the street and straight on.

Inside, the back-to-back phases use an elevator core also built in stages. Passengers ascend to a second-floor elevator lobby, using escalators in the new building, a ramp in the earlier one, leaving the first floor to the movement of equipment, scenery etc. Although not responsible for building interiors here, KPF participated in the design of the lobby, with an aluminum panel wall system that incorporates TV screens.

Yet another ABC building is now rising just to the west (model photomontage above) using the greater zoning allowance of its through-block site. Designed under the direction of partner William Pedersen, this one reverses the proportions of the buffand-rose palette, thus reducing the suggestion of a monolithic ABC citadel.





Project: American Broadcasting Companies, Phase II, New York. Architects: Kohn Pedersen Fox Associates, New York. Sheldon Fox, partner in charge; Arthur May, design partner; Judy Di Maio, senior designer; Myron Sigal, project manager; James Outen, Thomas Holzmann, job captains; Megan Walker, David Diamond, designers. Client: Capital Cities/ABC, Inc. Site: 21,330-sq-ft parcel on West 66th St. near Central Park. Program: newsroom studio support; broadcast operations and engineering; satellite stations, cafeteria. Gross area: 258,230 sq ft.

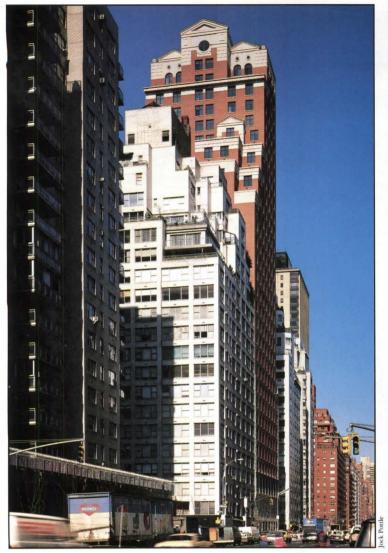
Structural frame: conventional steel frame on concrete foundation. Major materials: modular brick, 1-inch insulating reflective glass, aluminum curtain wall system, granite, marble (see Building Materials, p. 126).

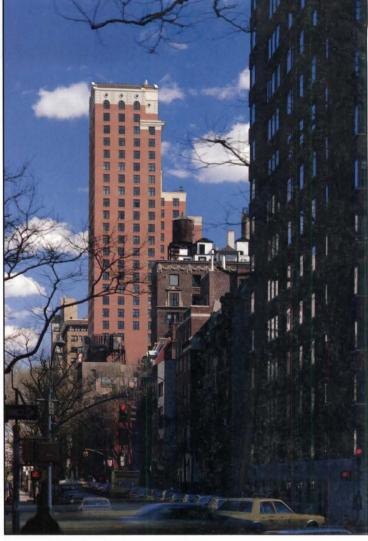
Mechanical system: high intensity cooling for studio, perimeter hotwater heating.

Consultants: Buckhorst, Fish, Hutton & Katz, landscape; Cioppa Rosen, interiors; Weiskopf & Pickworth, structural; Jaros, Baum & Bolles, mechanical.

General contractor: Morse Diesel. Costs: not available.

Photos: Chun Lai, except as noted.





BEDROOM UPPER FLOOR PLAN

ELEVATOR LOBBY RETAIL SPACE FIRST FLOOR PLAN

188 East 70th Street Looking at first glance like a fine New York apartment building of the 1920s, more at home with the traditions of East 70th Street (above) than the 1950s glitz of Third Avenue (above left), this building is actually one of the first products of Quality Housing ordinance of the 1980s.

These guidelines call for street walls, not plazas, and provide common spaces for residents—in this case recreation and nursery areas occupying the whole second floor. Among other provisions, these rules exempt corridors from floor area calculations if they have windows.

The use of limestone base and trim on a brick volume revives a New York apartment house tradition, though it is difficult to execute under New York's labor rules (P/A, Oct. 1987, p. 105). Details here show a discreetly Mannerist play with scale and rhythms.

Windows are remarkably consistent 5' x 7' units, with transom bars—their large scale reducing the apparent bulk on the exterior, providing unexpectedly grand opening for the rooms inside. Walls are given visible depth with window recesses 8" deep, rather than the typical 4" (onebrick) depth. Notably successful at the ground floor (facing page, top) are the cast aluminum shop window and door frames.

A lobby with marble floor and mahogany columns (facing page, bottom) sets the tone for residents. Secondfloor common facilities include a reception space with a pyramidal skylight in the L of the tower plan. The 100 apartments are not large units, but have 9-foot ceilings and central air conditioning (no under-window sleeves). Most of the living rooms (typically 13' x 24') have broad sides to the exterior, and most kitchens have big windows. Several units have deep, parapeted, south-facing terraces at building setbacks. In all, there are 17 different floor plans in 31 stories. "That's why," says design partner Arthur May, "apartment houses don't look like this anymore."





Project: 188 East 70th Street, New York.

Architects: Kohn Pedersen Fox Associates, New York. A. Eugene Kohn, partner in charge; Arthur May, design partner; Rick Clarke and Jody Sayler, senior designers; Gary Stluka, project manager; Russell Patterson, job captain; Vlad Zacek, designer.

Client: Trafalgar House Real Estate, Inc.

Site: 7531-sq-ft lot at corner of Third Ave. 50,000 sqft of air rights transferred from neighboring parcel.

Program: 100 apartments, firstfloor lobby and commercial space, second-floor nursery and community space. Gross area: 162,416 sq ft. Structural system: cast-in-place

concrete.

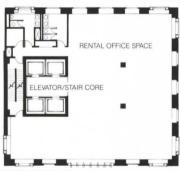
Major materials: limestone and brick, cast aluminum windows (see Building Materials, p. 126). Consultants: Severud Perrone Szegezdy Strum, structural; Cosentini Associates, mechanical.

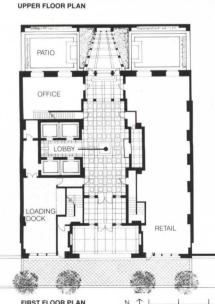
General contractor: George A. Fuller Co.

Costs: not available.









**Heron Tower Located on East 55th Street** near Park Avenue, amid some of Manhattan's most strident new towers, this small office building has a strong, sober identity (top left). Yet seen along the street (facing page, top) it joins neighboring building fronts to define a wall.

Like ABC Phase II, this building follows New York zoning rules closely, with setbacks to stay within a sky exposure plane. The front follows the Classical precedent of concentrating mass at the corners, with areas of curtain wall rising above the broad central portal to a gap between two turrets at the top (above). The transition from an embedded façade at the sidewalk line to a freestanding tower is made by adapting the tradition of the brick party wall for the sides of the tower, then mixing the side and front vocabularies to form a sculptural top.

To give presence to the relatively small building, the architects have incorporated large-scale details such as the grille above the entry, the

cleft granite blocks around it, the lighting globes, and the quoins—so large the windows notch between them. The characteristic KPF window, with panels recessed on either side of the central light, expresses the reassuring thickness of the walls.

The lobby (facing page, bottom) is lined with marble and granite, which gives way at a cornice line to simple painted plaster. The visual highlight here is a trompe l'oeil back garden calculated to suggest a block-deep space within a mere 25 feet of backyard depth (plans, left). Light courts to either side of this visual tour de force make basement space rentable for offices.

Toward the front, the Heron Tower faces the plaza of a larger midblock tower across the street (facing page, top), gaining advantages in terms of visibility and tenant amenity. In return, this tower gives that plaza its most appealing enclosing wall.

The building's elegant freight entrance is shown in Selected Details, page 135.





Project: Heron Tower, New York.
Architects: Kohn Pedersen Fox
Associates, New York. A. Eugene
Kohn, partner in charge; William
Pedersen, partner in charge of design; Myron Sigal, project manager;
David Leventhal, senior designer;
Bun-Wah Nip, job captain; Alexander Bergo, Nathan Bibliowicz, Tae
Choi, Jan Gorlach, Ernest Guenzburger, Joel Sanders, design team.
Client: Heron International and
Strategem Realty Group.

Site: midblock on East 55th Street, near Park Ave., commercial neighborhood of mixed height; small plaza across street.

**Program:** rental office building, 144,000 sq ft.

Structural system: cast-in-place concrete.

Major materials: granite, brick, aluminum curtain wall (see Building

Materials, p. 126).

Mechanical system: heat pump.

Consultants: Buckhorst, Fish, Hutton & Katz, landscape; SeverudSzegezdy, structural; Cosentini Asso-

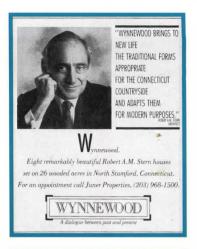
ciates, mechanical.

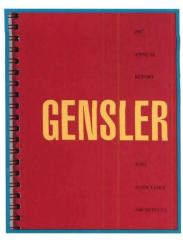
General contractor: Lehrer/

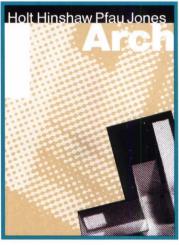
McGovern, Inc. Costs: not available.

Photos: © Peter Aaron/ESTO, except as noted.

## The Big Sell









As client expectations have changed, architects have had to adapt with different types of marketing strategies and tools, some of which are discussed on the following pages.

THE marketing of architectural services was once a relatively informal process, a matter of knowing the right people and perhaps belonging to the right clubs. Such things, of course, still are done. But a variety of factors-more savvy consumers, more careful managers, a more assertive public, a more competitive profession—have weakened the oldboy networks and forced a more formal, structured approach to architectural marketing. What is surprising is not that this has happened, but that in a marketing-oriented economy such as ours, it has taken so long.

A majority of architects—85 percent according to a recent AIA poll—recognize the importance of marketing. But an equal number express dissatisfaction with their marketing efforts. One reason for that, says Joan Capelin of Capelin Communications, may be the confusion in many firms between marketing and public relations. "Firms seem to be taking a tactical approach to marketing, rather than a strategic one," she says, "substituting a few public relations techniques for a planned approach to marketing.'

If that is true, it may be because marketing responsibility within firms is often dispersed. The AIA poll shows that, while 90 percent of principals take an active role in marketing, only 40 percent list it as their primary role. A recent survey conducted by the Professional Services Management Journal seems to reinforce those findings; only 35 percent of the architectural firms responding to the survey had a full-time marketing person (compared to 48 percent for engineering firms and 64 percent for A/E firms).

The size of firms and client organizations has a lot to do with those figures. The PSMJ poll reveals that firms with over 200 staff members are more than four times as likely to have a full-time marketer as firms with under 20 people (82 vs. 18 percent) and that firms with government clients are

somewhat more likely to have a marketing staff than those that do strictly private work (58 to 50

The cost of marketing per employee tells a different story. According to the AIA poll, firms in New England average \$1800 per employee, while those in states such as Texas average \$3800 per employee. Those figures show one of the dilemmas of marketing: In economically depressed areas, marketing becomes relatively more expensive and yet more important than ever to maintain. Says one marketing director from Texas: "We spent 7 percent of our revenues on marketing in the good years, and are spending 10 percent in the bad.'

The pages that follow are divided into two sections. The first four pages discuss various marketing strategies through profiles of four firms: Kohn Pedersen Fox Associates, Robert A.M. Stern Architects, Gensler & Associates, and Holt Hinshaw Pfau Jones. The next five pages cover marketing toolsbrochures, newsletters, reprints, books, video, computer simulation, and exhibits. It is clear from these examples that there is no one right way to market, and that the strategies a firm adopts and the tools it uses depend upon its identity and goals.

That does not mean that design firms have readily embraced the professional marketers. In the AIA poll, only 15 percent of the firms used outside marketing consultants, and in the PSMJ survey, the majority (66 percent) of full-time marketing staff were clerical people or administrative assistants supporting the architects in the firm who meet with clients. It would seem from those figures that the profession is far from the rather cynical idea that what matters is good marketing alone, not good product. Architects' healthy regard for their own professional work is, in a sense, good news for marketers, for here is a group that still has something of value to sell. Thomas Fisher



Holt Hinshaw Pfau Jones use a variety of ways to reinforce the firm's distinctive design approach in its marketing and presentation materials. The firm designed and had fabricated a cardboard box (2), which it uses to package various marketing materials: proposals, reprints, press releases, slides, and posters. The box not only allows the rapid assembly of materials customized to the interests of a client, but speaks to the firm's use of ordinary materials and off-the-shelf products. The collage of duotone and halftone images on this material also recalls the firm's work, with its overlapping layers and apparently ad-hoc compositions. When making a presentation to clients, the firm employs a variety of media and techniques. In a presentation of a proposed mobile stage for a ballet company (1), the firm used collages, detailed working models, and a series of perspectives that showed how the project would work and how it might be experienced by people. In other presentations, the firm reinforces the machinelike qualities of the work with drawings that use layers of Zip-a-tone rather than hand rendering.



In a young firm such as Holt Hinshaw Pfau Jones, marketing demands the kind of ingenuity that they bring to it. HHPJ have succeeded with a marketing tool common to many young firms—competitions—having twice won P/A Awards and recently won the competition for the Astronauts Memorial. They also have used such simple tacks as throwing an annual summer party where as many as 1000 people attend. "We spend half of our marketing budget on the party," says Marc Hinshaw. "We don't use it to hard sell; we clear our boards of all of our own work. But it is a way of breaking the ice with new clients." Less conventional, but no less effective in terms of publicity, have been the firm's efforts at designing set pieces for art exhibitions on outdoor furniture and lifeguard stations, for example, or working with Andersen Corporation in a demonstration project to rehabilitate Alcatraz.

Having a clear direction and self-image has helped the firm's marketing. The technological ad-hocism that characterizes the firm's designs also informs the hardedge collage techniques of its drawings.

The firm's clear self-image also has enabled the firm to begin targeting clients who would respond to its work and who intend to build. When a prospective client asks for information, HHPJ find out as much as they can about the client's needs and assemble a variety of materials, including a cover letter, proposal, reprints, clippings, project lists, and slides, in a cardboard box that they designed and had fabricated. "Whenever possible," adds Hinshaw, "we try to bring the prospective client to our office first, where our design process and graphic product can be experienced first hand."

"It is hard to sell good design," says Hinshaw, "and it is also hard to reconcile good design with marketing," which still seems to them "like taking our medicine." But he quickly admits that that medicine is an essential part of a healthy firm.

Thomas Fisher

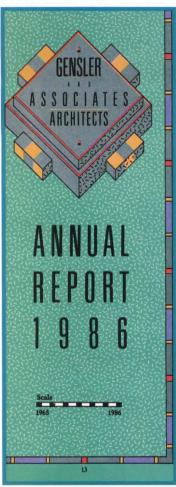
The marketing strategy of Gensler & Associates, one of the largest architectural firms in the country, is surprisingly simple. "Around 80 to 90 percent of our business," says Arthur Gensler, "is repeat business or referrals from clients, contractors, suppliers, or real estate people with whom we have worked before." Keeping in touch with those people, including over 7000 former clients, is thus an essential part of the firm's marketing strategy.

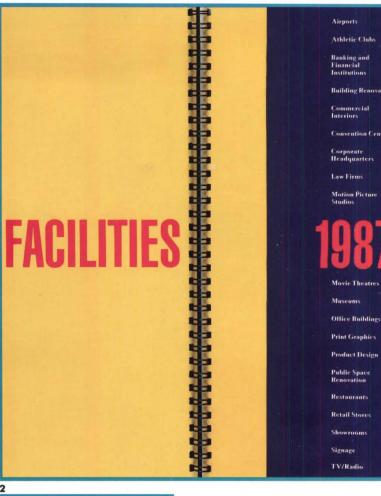
One aspect of that strategy involves sending out frequent mailings, which include an annual report and promotions brochure, and a magazine-type newsletter called the Gensler Report, which contains generic information as well as a discussion of the firm's work. Another aspect involves encouraging employees to become involved in marketing. "We do have marketing coordinators in each office," he says, "who help support and focus our efforts, but we encourage all of our people to participate in community activities and nurture their relationships with clients. We have 625 marketers, not just one or two."

Presentations to potential clients are kept very flexible. The firm does not have a single brochure, for example. Instead, it combines project fact sheets, relevant Gensler Reports, and magazine reprints into a package tailored to the interests of each client. The same flexibility is applied to interviews. "There is no set format," says Gensler. "It depends upon what the client feels comfortable with."

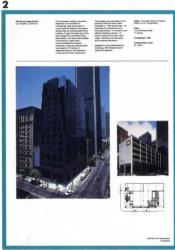
Here, too, Arthur Gensler has some strong opinions about what not to do. "We don't use CAD or video in our presentations," he says, "because it comes across as being too canned. If anything, we are going low tech, moving away from using dissolves in our slide presentations."

That all reflects the firm's emphasis on communicating with and understanding clients. "We are not selling stars," says Gensler, "but a package of services, so it is important in interviews to listen to clients and to ask questions." Thomas Fisher







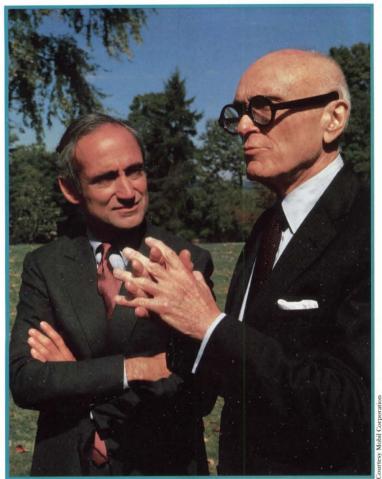


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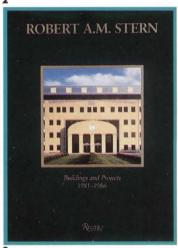
graphic design department that designs many of the firm's promotional materials. Some of these are intended for use by particular branch offices and others apply to the entire firm, but all of the marketing tools have a consistent graphic image to reinforce the idea that the firm is run as a single unit. The annual reports were begun as a way of keeping in touch with past and present clients and informing them of the firm's various activities. One of the annual reports was designed in the form of a map (1) showing the location of Gensler projects and listing the firm's clients; another was designed as a ring-bound booklet (2) with foldout flaps listing clients, projects, and market share of the various branch offices. The firm also produces fact sheets of many of its projects (4), which include color photographs, plans, data, and a description of the project. The most impressive marketing tool is the Gensler Report (3), a thematic newsletter that addresses the issues involved in designing a particular type of project in generic terms. While the firm's own work is illustrated, the em-

phasis is on information.

Gensler & Associates has a







Stern has no in-house marketing staff, but then he has Philip Johnson (shown in 1 with Stern in his television series "Pride of Place"). Johnson recommended Stern to Gerald Hines, who commissioned a vacation house. The Houston developer then uraed his suburban office division to hire Stern for his first commercial office commission in Framingham, Massachusetts. The architect's "office

brochure" is a hefty Rizzoli

monograph (3). Stern's parallel career as scholar and author gives him still greater visibility, whether as director of the Temple **Hoyne Buell Center for the** Study of American Architecture at Columbia University (a post he has just left) or as author of a series on New York architecture (2). "When people consider credentials, they take into account many things," comments Stern. One developer used a photo of the architect in an advertisement in The New York Times (page 84, top left), and Stern himself serves up the sales pitch for that development of luxury houses through a tape recording in which he discusses his design in the context of "modern traditionalism" (4).

"I don't market architecture." says Robert Stern of Robert A.M. Stern Architects, New York. "I never send unsolicited materials. I wouldn't hire a doctor who came to my office and volunteered. Some architects that I admire do differently. But I've been lucky."

Is it luck? Hardly. Stern may not make "cold calls," but he's mastered all other means of communicating with wouldbe clients. Articles about Stern vie with articles by Stern in consumer sourcebooks from **Architectural Digest to House** & Garden to New York Woman ("Robert Stern Does the Hamptons"), NY/NJ/CT Real Estate ("Architect to the Upscale"), and, most recently, the nouveau Millionaire magazine ("Robert Stern: Architecture's Living Legend"). Digest gets the best results, says Stern, but publication in the professional journals may reach architects looking for a joint venture partner.

Then there are Stern's series of three books on New York architecture, one of which was nominated for a National Book Award; two Rizzoli monographs; and many lectures, not to mention the Bergdorf Goodman window design (see page 23), the Swid Powell plates and candlesticks, and the San Remo brooch featured in the Smithsonian Institution's Christmas catalog. "I try to let the world know about me," says Stern. He can't always trace a new commission to its source, but "nothing hurts. People don't always want to tell you how they found you. I'm a public figure."

That makes him the ideal marketer, not only for Robert A.M. Stern Architects, but for developer and corporate clients looking for name recognition. "I am considered a standard for good housing," acknowledges Stern. "I don't have the horror that other architects profess for being used as a marketing tool." Stern draws the line, however, at product endorsement. "Unlike some architects who advertise shoes they don't design, I'm presenting my own work." In ads the client paid for. Daralice D. Boles

If there is any firm in the country that stands as a symbol of marketing success, it must be Kohn Pedersen Fox Associates. As the principal primarily responsible for KPF marketing, A. Eugene Kohn says, "I market with enthusiasm; I'm convinced that the people who get the job are those with a high energy level, who get the client turned on, excited. I don't think of myself as a salesman; I'm an architect who loves what I do, and therefore I have an advantage when I go out to talk."

**Energy and enthusiasm are** not the only ingredients in the firm's marketing, of course. Kohn acknowledges that marketing has gotten easier as a direct result of experience and good exposure. But along with the reputation comes what he sees as a potential pitfall: complacency. He is well aware that the firm has to continue to develop fresh new goals and approaches. "But we can't, in building new ideas, forget the basics," Kohn cautions.

Keeping in touch with potential clients is one of those basics, and Kohn has a proven track record at phoning, writing, and lunch dates, among other methods. He also points out the need to treat junior people at the client level with equal regard; some day these will become the upper echelon somewhere and will be a deciding factor in future commissions.

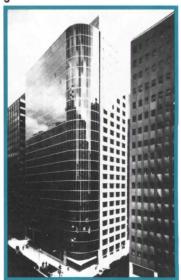
When going after a project, **KPF** tries to evaluate its strengths—and its weaknesses—as they relate to the project; and they measure themselves in relation to their competition, if they know what firms are in the running. KPF tries their best to see themselves as the potential client might, to avoid any misconceptions in advance.

**KPF** has long advocated prior research for any upcoming interview/presentation. When time permits, the firm researches the client, the site, and the building type in order to tailor the presentation to the specific job. Kohn tries to build a story, not just a slide show, "about people, approach, and product" into each presentation they give. Jim Murphy



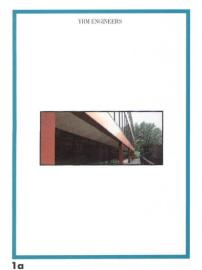




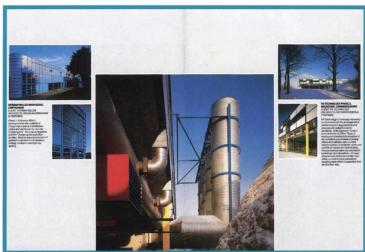


A basic part of the KPF marketing philosophy is the key role the principals play in each job. This is firmly rooted in the clients' minds from the early meetings where (1) both the principal for marketing and business (A. Eugene Kohn) and the principal who will design this particular job (William Pedersen) are present. This is not just a show, but a commitment to provide continuous principal involvement throughout the project.

In addition, Kohn sees any good exposure as beneficial to the firm and has experience in many public appearances, TV interviews, and magazine and newspaper articles. He is extremely visible and finds himself in conversations like the one he had with England's outspoken Prince Charles at a recent conference on cities in Pittsburgh (2). Exhibitions are another form of exposure, and the firm was honored last year with an unusual show at the Royal Institute of British Architects in London (3). A recent book published by Rizzoli is also a prominent display of KPF work (4). "A lot of successful marketing is personal charm, and success itself," Kohn acknowledges.



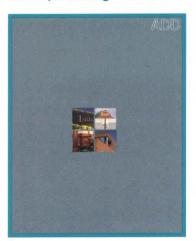
1b



#### **Brochures**

Brochures are among the most common marketing tools for firms, yet they can vary considerably in their organization and design. Discussed here are general brochures and brochures organized by discipline or building type.

YRM Partnership Limited is a U.K. firm that has a series of brochures covering its various disciplines (1). The brochures are inserted loose in a folder, simplifying the updating of the material and the customizing of a package to send to specific clients. Organizing a brochure by discipline allows a firm to market its various services separately. All of the YRM brochures have a similar format, including a white



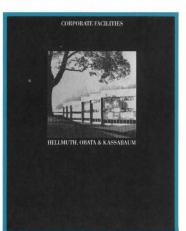
descriptive text.

cover and spreads showing

various projects with adjacent

**HOK** has created a series of brochures based on the various types of projects that the firm designs, such as corpo-rate offices, health care facilities, and criminal justice facilities (2). For a large firm with a diverse practice in a number of specialized mar-





kets, organizing information in this way is useful. All of the brochures have the same format: The covers show a line screen image of a relevant building by the firm, and the inside covers contain brief descriptions of the firm's capabilities and scope of services, and a list of clients. The front and back covers unfold to become a four-page poster with blocks of text and a band of photographs keyed to the

project identifications along the bottom of the page.

General brochures can work well for a small to mediumsize firm or one that has no particular specialty. Such brochures also can complement other, more targeted marketing material by providing a broad overview of a firm. The brochure of ADD Inc. (3) hints at its multiple purpose with photographs of parts of four buildings on the cover. The inside spread contains an asymmetrical arrangement of images and blocks of text describing a variety of buildings designed by the firm.

#### **Newsletters**

Newsletters offer a way of updating both past and prospective clients on a firm's work with a greater frequency than is possible with brochures. They also can provide a greater variety of information about staff, for example, or about more generic issues. There are four types of newsletters discussed below, those organized around specific projects, a particular theme, a technical issue, or a series of articles as in a magazine.



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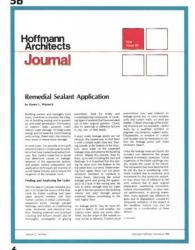
The Maguire Group puts out a magazine as its newletter, complete with a masthead, table of contents, and illustrated articles (5). While a publication such as this can be difficult to sustain and expensive to produce, it does confirm that the firm is substantial and does convey information about projects in a way that is familiar to clients. It also is a type of publication that clients are more likely to keep.

Hoffman Architects are among a few firms that produce a technically oriented newsletter (6). Each issue takes up a particular technical area and discusses the various problems and solutions in a generic fashion; often a glossary of terms also is provided. The last page offers news about the firm. While not every firm would want to market its technical capabilities so strongly, this type shows the



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thematic lines (4). The format is lively, with blocks of text offset by pull quotes, drawings, rendering, and candid photographs. This approach allows the firm not only to show proposed and completed buildings, but to familiarize clients with its staff and the design process.



extent to which newsletters can serve to educate clients.

The most common type of newsletter is that which focuses on a firm's projects. Typically these newsletters are four to eight pages in length with black and white photographs, making them less expensive to produce. Dagit Saylor's Works (7) is a good

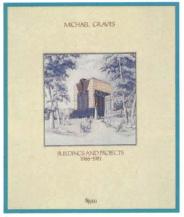
example of this genre, with clear and concise discussions of projects, accompanied by model photographs and drawings. The firm also uses the newsletter as a vehicle to announce new promotions or other changes in the office.

RTKL produces a newsletter close in size to a tabloid and usually organized along

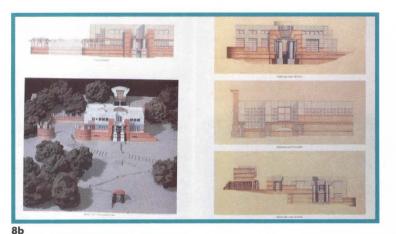




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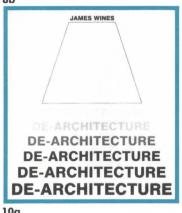


The substantial increase in the number of books published about architecture in the last decade has been a boon for many firms. One of the most popular types of books is the paper-bound project compendium, such as this review of Michael Graves's work (8). These books typically consist of a brief introduction, extensive coverage of projects through photographs and drawings, and a minimum of text. A more



#### **Publications**

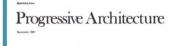
The endorsement of a third party is an essential part of marketing. One of the best ways to secure that is through publication either in magazines or books.



**Publication in a trade** magazine can confirm in a client's mind the professional standing of a firm, while consumer magazines provide a way of reaching clients more directly as readers. Most magazines offer, at a fairly modest cost, reprints of articles, which allow a firm to get a sizable number of copies and to eliminate the distraction of other stories. It is best







if reprints are ordered in ad-

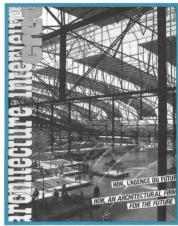


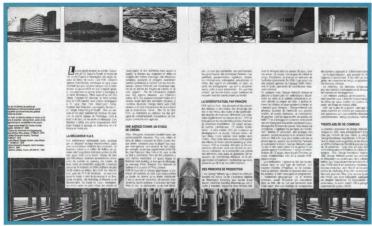
wait to see the article before ordering. If a project appeared on the cover of the magazine, that makes an ideal cover for the reprint (12). However, a cover sheet is normally added to a reprint, and a photograph can be added to it at little or no extra charge (11).

elaborate version is more text-oriented and offers what is in effect a history of a firm, such as this book on SOM (9).

D min

One of the classic uses to which firms put books is as a vehicle for explaining and expanding upon the theory behind their work. A recent example of that is the book De-architecture by James Wines of SITE (10). These books are much less common and more difficult to produce, but they also have historically had a much greater impact on the careers of their writers. Such books also can provide clients with a clearer understanding of a firm.





12b

Howard Building Downing College, Cambridge

## Proper Classicism

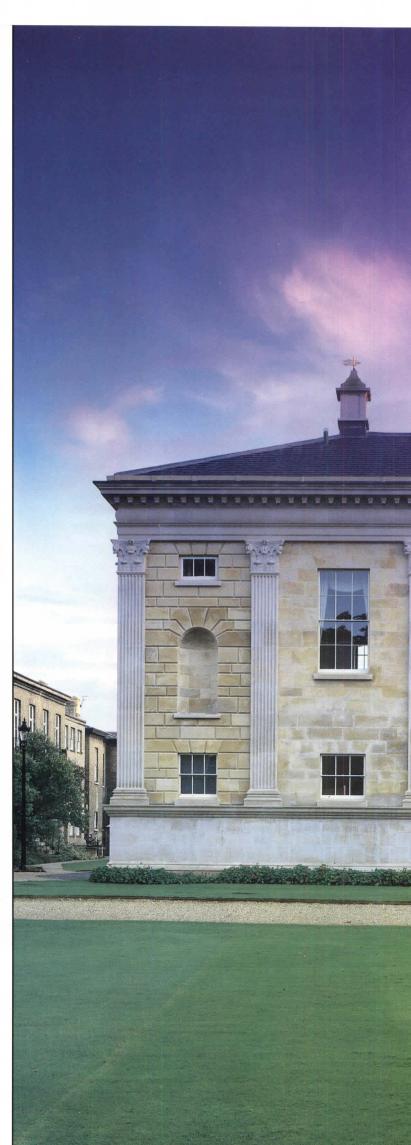
The Howard Building at Downing College, Cambridge, is a recently completed work of controversial British Classicist Quinlan Terry. Its publication in the British weekly AJ (The Architect's Journal) last March was accompanied by a spirited debate, substantially reprinted here, between critic Gavin Stamp, who finds the design contrived, and Sir John Summerson and Leon Krier who come to Terry's defense, although with qualifications of their own.

#### Critique by Gavin Stamp

In his article "Recent building in Oxford and Cambridge," published in *The Architectural Review* in August 1952, J.M. Richards complained that, "the buildings put up by the older universities and their component colleges in recent years . . . have almost no contribution to make to the art of architecture and only reflect the artistic barrenness and timidity of academic taste." <sup>1</sup>

This condemnation of Oxbridge architectural traditionalism had a profound effect and helped ensure that, over the next three decades, *Cambridge* colleges became desperately anxious to commission avant-garde buildings that would be well thought of by critics.

Although the architectural climate has now changed again, Cambridge remains conservative and behind the times, so the decision in 1983 by Downing College to commission a new building in the Classical style was remarkable. To a degree it was also courageous, although, as the college's architectural historian, Cinzia Maria Sicca, argues: "This has shown once again its lasting commitment to Classicism." It was, nevertheless, "a daring decision since no other Post-Modern, Classical building has been attempted in either Oxford or Cambridge."<sup>2</sup>





Completed last year, the Howard Building at Downing College has been seen as a key monument in the current Classical Revival, which is being energetically promoted in certain quarters—especially as it has been designed by the self-appointed doyen of living Classical architects, Quinlan Terry. What is unfortunate is that criticism of this building has been entirely concerned with its polemical significance: it is either praised or condemned solely because of the employment of a Classical style. What has not been asked is what matters about a building in any style: does it succeed in its own terms? Is it any good as architecture?

The Howard Building is a detached block . . . at the west end of what is now the dominant axis of the college, which runs from the porters' lodge, past the chapel at the north end of the campus originally designed by William Wilkins in 1805. The immediate neighbors of the Howard Building are not buildings by Wilkins, however, but are later additions to the college.

Immediately to the east is the end of the west range of the campus added in 1873 by E.M. Barry in a remarkably faithful continuation of Wilkins' Greek Revival manner, while the principal façade of the Howard Building encloses a twentieth century addition to the college: Kenny Court. This court is formed by the back of the wing of the chapel range, designed by Sir Herbert Baker before the Second World War, and by two blocks added by Baker's successor Alex Scott in 1960-61. One such building by Scott in Downing was described by Richards as, "a pleasantly unassuming Classical effort, although one would have liked still better a replica of Wilkins."

#### Neo-Classical character ignored

The Howard Building, similarly, is no replica of Wilkins'. What is immediately striking about it is that its architect has yet again indulged his affection for Renaissance precedents and has ostentatiously ignored the Neo-Classical character of the buildings that gave Downing College such an important place in European architectural

It is true that Baker, in enlarging and reorientating the college, made his etiolated Classicism as much Renaissance as Greek in inspiration, but he conformed to the pattern set by Wilkins by having an Ionic order of precisely the same height. Indeed what unifies all the buildings of Downing College, whether they are by Wilkins, Barry, Baker, Scott or even by W.G. Howell (designer of the strange Brutalist "primitive hut" senior combination room behind Wilkins' dining hall) is that they all rise from the plinth level or stylobate. The Howard Building does not, however. Its principal façades are articulated by a Corinthian order that stands on a continuous and discordant high pedestal. This is an act of architectural bad manners with no apparent justification and, perhaps, one more characteristic of the Modern Movement, which its architect is usually so keen to condemn.

It is clear that Terry intended the Howard Building to be appreciated in isolation and that the important architectural statement is the extravagent north façade. This is a seven-bay English baroque rather than Palladian composition in the manner of a country house. The center bay is stressed by a central pediment, by an elaborate Mannerist doorcase, and by having the pedestal break forward to carry engaged composite columns, rather than Corinthian pilasters. Sicca informs us that this combination is "directly based on the precedent of Bramante's cloister of Santa Maria della Pace, Rome..."

That, however, is as far as the comparison goes. Terry's use of the orders is static, merely dividing up a façade in a conventional and essentially ornamental manner, inviting recognition of precedents. Bramante's use of the orders is dynamic and appropriate, for his composite columns actually support the roof above the first floor of his cloister while the Corinthian pilasters are grouped around piers to form free-standing structural elements. All Terry has done is to look at the details and not at the architecture.

Those who would defend Terry against the unjustified charge that he designs Palladian pastiches argue that his originality comes from the adoption of different precedents that are unified by Classical grammar. "For Terry is no simple Classicist," asserts his hagiographer, Clive Aslet. "It would be nearer the mark to call him a Mannerist, because of his preference on the one hand for simple plan forms and Palladian proportions and, on the other hand, for the richest Classical detail. . . . "5

This is a narrow interpretation of originality but one Lord Burlington might have applauded. It is not the originality of a true Mannerist such as Michelangelo, or of Soane or Lutyens, who stretched and developed the Classical language and who abstracted or invented in a manner governed by the structurally expressive logic of the orders. For Terry, Classicism seems to be a matter of detail alone. And a revealing detail is his thoughtless, painful handling of the downpipes, which simply slice through the pedestal, so denying its visual and dynamic essence as a support of the order.

This concentration on detail rather than on an overall composition may well explain the characteristic deadness of Terry's Classicism. His buildings seem to be conceived in terms of literal precedents incorporated into elevation drawings . . . .

Indeed, [the] whole design [of the Howard Building] denies its setting, function and internal arrangements. The important approaches to the building are, or will be, from the south and the east. The door in the east elevation has become the principal entrance as it leads immediately to both cloakrooms and staircase; the north door in the center of the principal façade is likely to be almost permanently locked. It would have been logical to continue the pitched roof over the first-floor lecture theater to pediments at the east and west. This would have stressed the importance of those elevations when approached from either the porters' lodge in Downing Street, or the Tennis Court Road entrance to the college. Instead the roof is hipped and an ornamental pediment is placed over the elaborate but useless door in the north elevation. . . .

#### Indictable Classicism?

The greatest indictment of Terry's use of Classicism comes with an inspection of the rear or southern facade facing West Lodge Gardens. The Corinthian order and pedestal turn the corners from the east and west fronts and then suddenly and arbitrarily stop. In between is a five-bay astylar façade with a balustraded balcony supported on baseless Doric columns.

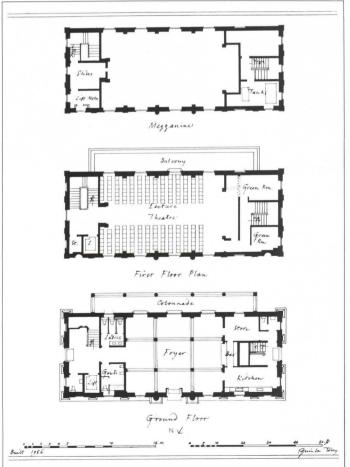
Here would have been an opportunity to respect Wilkins' Greek, but Terry, with typical preciousness, adopts the baseless Roman Doric that appears at the Theatre of Marcellus and which Palladio illustrated. It is intended that this Doric order will continue around three sides of the gardens to complete a new court: on the east side it will unify the irregular backs of the Wilkins and Barry range while on the west it will adorn a residential range designed by Terry for which planning permission has been obtained but for which no funds are yet available.

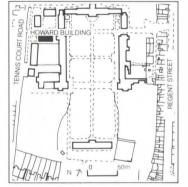
This painful divorce between the front and back of the Howard Building is not witty or appropriate, merely inept and gauche. It is all the more absurd as the two could have been integrated by the straightforward device of using interpenetrating orders, with the major Corinthian and the minor Doric orders both rising from the same level-had Terry been modest enough to continue Wilkins' plinth. Indeed he still could have kept his pedestal under the Corinthian pilasters by integrating the two orders on the precedent of Michelangelo's Capitol palaces. A more useful precedent was nearer at hand, perhaps, in Cambridge where at the old University Library C.R. Cockerell weaved together a major and minor order with understated authority and bold abstraction. . . .

### Disappointing interior

The interior of the Howard building is a disappointment, both because of an essential crudeness of detail and because of a lack of correlation with the exterior design. The Howard assembly room on the ground floor has a certain dignity because of the use of fine materials and because it is divided up by more of the free-standing Doric columns. But it is then painful to notice through the French windows facing the gardens that the Doric columns of the external colonnade are not a continuation of these but are at a lower level. Again, columns are seen as individual details rather than as an expression of a continuous dynamic structural and aesthetic system.







Terry discontinues his monumental order on the south façade (above), replacing it with a Doric colonnade that is to be continued around a future courtyard (shown in the site plan left). Plans (far left) reveal the building's "real" entrance on its east end. Sir John Summerson writes, "Through a modest entrance lobby we move into the main ground floor space. Its fourcolumn plan reflects the typical Palladian villa basement, though the central area is not square and, disappointingly, the columns do not relate horizontally to their counterparts, seen through the windows, that support the terrace."

#### **Howard Building**

... Neither is there authoritative control over proportions. These are often somehow awkward, while windows appear uncomfortably near floors or ceilings. Most disappointing is the first-floor lecture theater, which is the *raison d'etre* of the whole building. It is entirely lacking in grandeur and sophistication, although this is not for want of trying. What is surprising is that it has an open timber queen post roof "as in early Christian basilicas." Aslet quotes Terry arguing that this is to show it is "a genuine piece of building."

It might have had the dignity of such roofs as drawn in projects by Leon Krier but, instead, it seems crude and mean, especially in contrast with the elaborate architecture below and the expensive external stone carving with gratuitous urns above the pediment. The thin beams are supported on a wide projection of an elaborate heavy cornice over projecting Ionic pilasters. These have crude and ugly capitals. . . .

But the most damning piece of evidence of Terry's apparent inability to use the Classical language to control and integrate internal and external treatments is the number of imitation windows used on the façades. Of course, blank windows were often used by Georgian architects when the truthful expression of interior spaces would have disrupted external rhythm or symmetry, but such a device is used rarely and singly.

On the exterior of the Howard Building there are no less than eight false windows. Two of these are the last in the two series of large windows on the *piano nobile* which light the lecture theater on the north and south façades. The extensive employment of such devices suggests not only an essentially cosmetic approach to detail but also an inability to organize internal spaces so as to leave the most important volume in a dominant satisfactory position with regard to the exterior.

But there is worse, for four of these false windows are in symmetrical pairs; that is, they are not required for balance or to complete symmetries but could have been dispensed with. This is inexcusably frivolous. The conventional device for dealing with blank wall where no window is needed but where modulation is desirable is to use a recession or a niche rather than a sham device. . . .

### The pursuit of serious Classicism

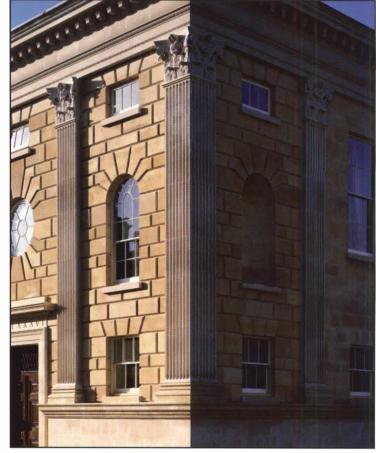
I must stress that I think there is absolutely nothing wrong with using Classical architecture today and that the Fellows of Downing College and their benefactor made, in principle, the right decision. . . . It would not have been necessary to devote so much space to a detailed criticism of what is, in fact, an awkward and amateurish essay in provincial English Baroque if it were not for the fact that Terry is so highly regarded by those who promote Classicism today. Architectural historians and critics seem to drop critical standards and forget unfavorable comparisons with precedents when contemplating his buildings, as Terry's work is of great polemical importance. Of course, after the interval of dominant Modernism, architects have to begin at the beginning again. Even so, such blinkered sycophancy will, in the end, damage the cause. . . . The important criticism of the Howard Building is not that it is Classical but that its Classicism is mediocre.

The Howard Building has, nevertheless, achieved some unexpected distinctions. By costing as much as 1,015,101 pounds to build (the contract was for 950,000 pounds), which for 495 square meters gross floor area, works out as 2,050.71 pounds/square meter, it has undermined Terry's own argument that traditional Classicism can be cheaper than modern architecture. It also makes the much reviled work of Baker and his office seem, in comparison, to be harmonious, dignified, and even not at all bad.

The author is an architectural historian and critic in London.

- 1 Richards, J.M. "Recent Building in Oxford and Cambridge," *The Architectural Review*, 112, August 1952, p. 73.
- 2 Sicca, Cinzia Maria, Committed to Classicism: The Building of Downing College, Cambridge, Downing College, Cambridge, 1987, p. 105.
- 3 Richards, op cit, p. 74.
- 4 Sicca, op cit, p. 105.
- 5 Aslet, Clive, Quinlan Terry. The Revival of Architecture, Viking, 1986, p. 2.
- 6 Aslet, op cit, p. 206.





The Howard Building is Classical, but the wrong Classical for this campus, says Stamp. Terry's precedent is Palladio, with Baroque flourishes, while the campus consensus is Greek Revival (top). The **Howard Building's high** pedestal, for example, breaks the norm established by 19th-Century architects in neighboring buildings. Stamp also criticizes the excessive use of blank windows. (Two are visible above: one, a groundfloor opening below the niche and the other, an arched second-floor window to the right of the door.) Stamp is supported in this criticism by Summerson, who also takes exception to the pediment pots but praises the polychromatic masonry (Portland for the carved work, Ketton for the plain ashlar). The shift to a Doric colonnade on the south façade (facing page) is censured by Stamp but praised by Summerson, who objects, however, to the Baroque balustrade.



#### Rebuttal by Sir John Summerson

Gavin Stamp is very severe on this building, I think because he sees it being promoted as a model for some kind of Neo-Renaissance revolution. He takes the war into the enemy's camp by asking whether or not the building succeeds "in its own terms." In short whether or not it can claim to be Classical under Vitruvian and Palladian law.

He finds that it cannot. The claim fails. Two major issues lead him to this conclusion; the first is an alleged lack of coherence between the front (north) and rear (south) elevations, and the second is the lack of correspondence between the exterior and interior.

Taking these objections in turn, I hold an opposite opinion to Stamp where the exterior is concerned. My own first view of the building gave me a rare shock of pleasure. Here was a façade with something new to say in a language that I happen to understand and love. The general proportions and the distribution of openings seemed absolutely right; the Corinthian order took my fancy—it has been carefully studied, I suspect on the basis of the antique model which Palladio used for the west front of S Giorgio Maggiore.

The pilastered seven-bay north façade is the showpiece. The center bay exchanges fluted pilasters for a pair of plain, half-round columns holding up a pediment with pots at the apex and angles. This bay is the widest by a trifle. The end bays are the narrowest, again by a trifle, which is typical Mannerist ambiguity. The upper range of windows pays subtle tribute to Wilkins, being the plainest Georgian except where the central window goes a step further towards the Grecian with its inward sloping architrave. The doorway in this bay is Borrominesque; a pretty design, beautifully executed. . . .

The end elevations continue the pilaster theme against the same rusticated pattern, but the last pilaster turns the corner and in closing the series it signals a change in mood, . . . [to] Neo-Classical rather than Mannerist. . . . This elevation could have been designed by one of Wilkins' contemporaries who had not gone Greek (in 1805 few had) though I must except the Baroque balustrade which, in context of the change of mood, strikes an uncanny note. Otherwise, I find nothing wrong in this stylistic shift which Stamp calls "inept and gauche," especially as it is understood that a new quad repeating the Doric terrace theme is proposed by the college. Changes of mood are often delightful. Think, for instance, of the change between front and rear of Lutyens' Marshcourt.

We go inside, . . . [and] upstairs into the space that is the chief element in the whole affair—a hall equipped as a lecture room and also as a theater for performances on a modest scale. Here I began to feel uneasy about the general constitution of the building. The hall is spacious and obviously useful but not, architecturally, in the class of the exterior elevations. It is on a "parish hall" level. The covering is a series of naked queen post trusses as found in the older building construction textbooks, supported on piers that make a faint show of being Ionic pilasters. Also, this hall does not fulfill the promise of the five-window series so prominent on the north and south fronts; it uses only four on each side, the fifth in each case being a dummy. There is nothing scandalous about dummy windows helping out the exterior expression of a Classical building, but Stamp has counted eight dummies and makes the valid point that some of these are wholly gratuitous (that is, they are not counterparts of real windows). . .

A tour of the building makes it clear that what we have here is a useful package of space, equipment and services presented in a wrapping that pretends to more ceremony and more aesthetic than is appropriate. Now, is there anything wrong with that? Stamp makes heavy weather of it. He does so because of the pretensions and because he sees the building being set up in certain quarters as a criterion of a new Revivalism. He calls the building "a lamentable failure." It is not that. But if it is offered as a model of design on the principles of Classicism it is not that either. . . .

Quinlan Terry's building is an academic curiosity and a very expensive one. It is a useful job that radiates charm and a remarkable talent.

It is in the right place—a university campus. As a subject for debate it will afford endless entertainment. And why not?

The author was curator of Sir John Soane's Museum, London, from 1945 to 1984. He is the author of The Classical Language of Architecture and other books.

#### Rebuttal by Leon Krier

I hold both Quinlan Terry and Gavin Stamp in the highest esteem and can confirm the latter's suspicion that I am one of those who suffer a degree of sycophancy towards the former. Neither could I dismiss offhand Stamp's accusations because, at first, they seemed to confirm the doubts I had had about the Howard Building when I saw the drawings two years ago.

However, when I saw Downing, despite my agreeing with many of Stamp's statements of principles and theory, I immediately liked the Howard Building. I liked Wilkins' much less than I had expected to from reading Sicca's book; and I found the Baker and Scott buildings no better than their poor reputation. . . .

When I reread Stamp's article I found myself disagreeing with most of his criticisms of the Howard Building and also with his appraisal of Wilkins, Baker and Scott, in fact with his whole line of argument.

#### Critical overkill

Several years ago Stamp wrote an eloquently positive article about Terry's work for *Architectural Digest*. In his latest article, however, he uses more than 30 derogatory adjectives and turns of phrase, enough to kill the reputation of a whole regiment of architects and making Terry appear thoroughly incompetent, moved by arbitrary fancies and hollow pretensions—in short, a traitor to the cause of Classicism. Why, I wonder, should so much intelligent argument on one hand and downright vindictiveness on the other be wasted on a man whom I find to produce pleasant, elegantly proportioned, well crafted and planned buildings?...

Having looked at the Howard Building in great detail I can at length refute Stamp's severest objections, but people who like that building and look at it candidly will do that for themselves. If applied universally, Stamp's criticisms would indeed have to condemn the majority of Classical buildings in Cambridge and the world. It is that kind of moralistic radicalism that established and maintains Modernism's intolerant reign.

But there is more. While systematically demolishing what Terry has designed and built at Downing, Stamp does not merely criticize and correct but, before our inner eyes, he replaces it with another design of his own whose philosophy I share in part more than I share Terry's, but with that imagined building he intends to spoil our pleasure of Terry's building and work and denounce him as a traitor to the cause of Classicism.

Stamp seems to say that there is only one way of conceiving of Classicism today and that all else is dead. I feel that such dogmatism is not only quite out of place but also misunderstands the broad scope and possibilities of Classical traditions. The battle of what true Classicism is or should be is as old as the idea of Classicism itself, and we are again right in the middle of it. I believe in an archaic form of Classicism. I try to realize those convictions in my projects and buildings. My writings and ideograms support the rationality of those convictions.

As theorists I value Laugier and Lodoli higher than Palladio or Terry. But to condemn Terry because he doesn't fit my own understanding of Classicism would be childish and absurd.

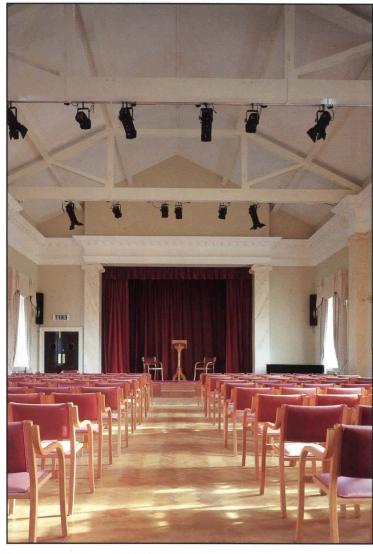
Stamp's position seems, on one hand, to be radically Lodolian and, on the other, an argument for the necessity of developing it beyond the Greeks, Romans, Palladio, Neo-Classicism and Lutyens, towards what he calls a progressive Classicism. To me it sounds like a contradiction in terms; and also like a high-minded *mise en garde* and reproach against all that is reactionary and backward looking. But I would say why not?

All these positions can produce marvelous buildings and cities and as long as they are committed to the Vitruvian paradigm (*utilitas*, *firmitas*, *venustas*), they will fit meaningfully into our cities, landscapes and mores.

The world is big enough for a Stamp and a Terry. In fact we can't have enough of them both.

The author is an architect living in London.







A round window (above left) lights the main entrance stair leading to the second-floor lecture hall. The hall itself (above right), with its timber queen post trusses, emulates the more archaic Classicism espoused by Leon Krier and others but fails, Stamp argues, to achieve the dignity of that simple style. The ground floor lounge (left) opens onto the colonnade.

Project: The Howard Building, Downing College, Cambridge, Eng-

Architect: Erith & Terry Architects, London (Quinlan Terry, Hugh Barrell, project architects).

Client: the masters, fellows, and scholars of Downing College. Site: west end of campus designed by William Wilkins in 1805, adjacent to 1873 Greek Revival academic buildings by E.M. Barry and 20th-Century buildings by Sir Herbert Baker and Alex Scott.

Program: lecture hall and reception rooms totaling 495 sq meters.

Structural system: load-bearing masonry walls, traditional timber

Major materials: stone (Portland for carved work, Ketton for plain ashlar).

Mechanical system: gas heating. Consultants: Pennington & Partners, consulting engineers; Gleeds, surveyors; C.H. Lindsay & Sons, mechanical engineers.

General contractor: Coulson, Cambridge.

Cost: £950,000; about \$1.7 million.

Photos: Timothy Soar.

# P/A Technics The Many Faces of Brick

Reliance on an ageold material, when used in new ways, poses no limits to the vast opportunities for expressive modern solutions.

OF all the materials available to man, few are imbued with the cultural history of architecture so absolutely as brick. Its role in the history of building is legend, dating back some 6000 years. And the survival of ancient structures from Egyptian pyramids to the Colosseum at Rome affirms the capacity of the humble brick to bear up under monumental loads and endure the vagaries of nature.

In modern times, the load-bearing potential of brick reached its practical limit with the completion in 1891 of Chicago's 16-story Monadnock Building which required a wall six feet thick at the base to support itself. Thereafter the function of brick shifted, in big projects at least, from workhorse to wallpaper. "We're basically selling a 4-inch skin," says Hugh MacDonald, acting director of engineering for the Brick Institute of America. But, to listen to some experts, architects have been slow to appreciate the details required to competently design a wall in which brick is merely veneer.

Michael Gurevich, a consulting engineer and instructor at Glen-Gery's Brickwork Design Center in New York, identifies two points where architects often lack understanding of brick cavity wall construction: water infiltration and movement. In seminars he conducts, Gurevich stresses the correct placement of weep holes, best type of ties (galvanized wire, rather than corrugated), and proper specification of flashing (he recommends against PVC flashing, which can deteriorate in as little as five years, depending on its thickness and degree of exposure to ultraviolet light during construction). Building with used bricks, he cautions, often reduces the extent of bond (due to old mortar clogging pores in the brick) and can result in porous joints. Designers also should account for movement in brick walls with adequate and proper expansion joints, flexible anchorage, and bond breaks. Movement can be an especially thorny problem when a wall's veneer, backup system, and framing are of materials with different coefficients of thermal expansion.

Perhaps the most touchy subject in the brick industry these days is the controversy over walls employing brick veneer over steel stud framing. "Some people feel it's a time bomb, because of corrosion," explains Bob Belden, president of Belden Brick Co. in Canton, Ohio. One of the most vocal opponents of the system is Clayford T. Grimm, a

masonry specialist and consulting architectural engineer in Austin, Texas. Grimm maintains that the brick veneer-steel stud wall system was introduced and promoted without adequate research, and is doomed-if not designed-to fail. In 1987, the Brick Institute acknowledged the debate by changing its recommended deflection criterion for such systems from 1/360th of the wall height to about half that (with additional recommendations for a wider internal air space).

While new methods of building with brick have evolved in recent decades, the material itself remains fundamentally unchanged from what was used centuries ago: clay burned to the point of incipient fusion. Today that clay might be chemically treated to prevent scumming or add color, but otherwise the changes are more of surface than structure. Manufacturers report more interest from architects in special shapes, ranging from water tables to radials. Sometimes the results challenge the limits of what constitutes a brick. New York architects Davis, Brody & Associates, for example, designed a hollow brick that stacks to form a screen for shielding large intake and exhaust ducts at a new research laboratory. "We tried to think of a brick in terms of different functions," says the firm's Vesna Juresko. Producers also report an increased popularity of sculpted brick reliefs, in which an artist carves a pattern or representational scene into "green" bricks that are coded, fired, and later laid in place.

While increased mechanization of brickmaking and sorting has raised production capacities, recent demand has not tested manufacturers' limits. Since 1954, brick shipments have numbered from 6.1 to 8.7 billion annually, with the exceptions of 5 billion in 1981 and 1982

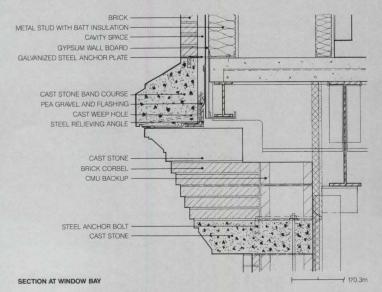
For designers, the rise of contextualism and interest in alternatives to the glass curtain-wall have made brick again a desired material. And because of its characteristic small module, brick offers the potential for a wide range of formal expressions. Whether they nod to the tradition of brick's weightbearing ability, whether they strip it of tectonic meanings and emphasize it as surface and texture, or whether they delight in its ability to make sensuous forms, contemporary architects find brick to be an enduring part of the art of building.

Vernon Mays









Project: Arts Center Offices, New Haven, Connecticut. Architects: Roth & Moore, New Haven.

The limitations of a fast-track construction schedule and a program for speculative office space did not preclude the design of a building façade that required more than minimal care to develop and craft to execute. "Our general intention was to introduce as much third dimension, as much detail, as much shadow line as possible," says David Thompson, an architect with the firm. "The prevailing thought is that steel-framed construction almost demands a flat treatment of the façade, and we wanted to challenge that idea."

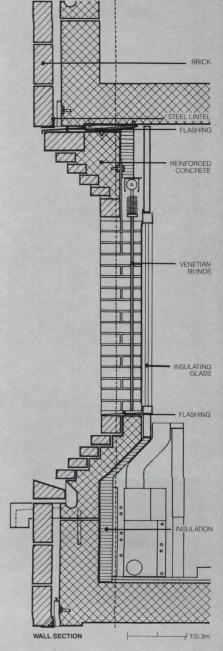
While the project relies on brick-veneer construction that is characteristic of 20th-Century technology, its traditional masonry detailing is not out of place in this former Colonial seaport. Details that include Flemish bond, diapering, dog-tooth banding, corbeling, and bearing arches provide a texture and variety to the façade without requiring custom-made shapes. **Even the bull-nose bricks** trimming the arches are standard products. During the design phase, early inclinations were to achieve the diamond-shaped diaper pattern with burnt headers, Thompson says. But the labor required to cull them from a larger lot of bricks would have increased costs, and the designers agreed the burnt bricks weren't dark enough to offer the desired contrast. The favored choice was an "ironspot" brick, high in manganese, with a natural slick finish that resembles glazing. Depending on the angle at which light strikes the wall, the diapering can stand out in flat or glistening contrast to the background of red Georgia brick.

Some compromises in the fast-track schedule were necessary to accommodate the combination of materials (and trades). But the results proved to Thompson that often architects are more limited by their impressions of what is possible, than by the reality of construction.

#### **P/A Technics Uses of Brick**





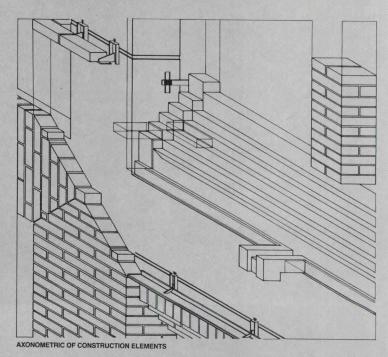


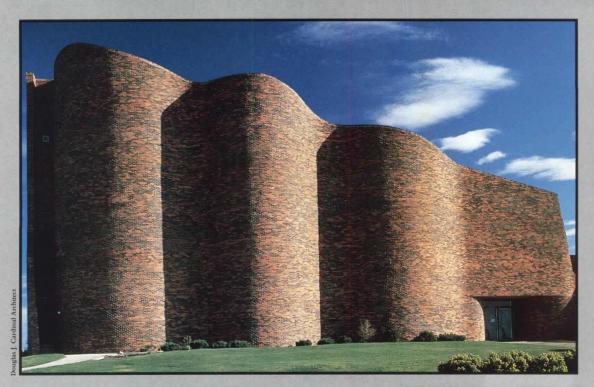
**Project: Ransila Office Build**ing, Lugano, Switzerland. **Architect: Mario Botta,** Lugano.

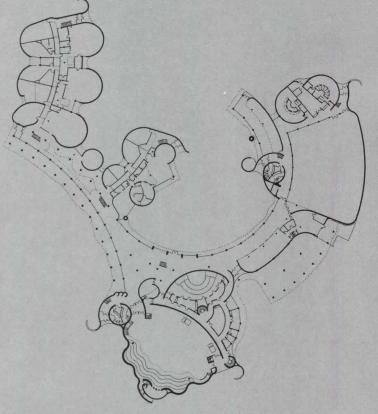
After establishing his reputation exploring the formal and light-modulating potential of concrete block, Mario Botta departed significantly from his oeuvre with this mixeduse retail and office building swathed sensuously in brick. Gone also was the emphasis on structural masonry that had typified his residential work. For here, even though Botta asserts that the "brick equals the wall," the brick functions largely as texturealbeit a skillfully detailed texture controlled with the exactitude of a surgeon. While the appearance, at first glance, is of a thick bearing wall, the structure is actually reinforced concrete. Botta alludes to that structural truth by carving away the brick façade and using brick on the underside of flat surfaces.

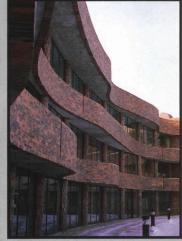
One of Botta's self-admitted inspirations is his former university design critic Carlo Scarpa, whose sensitivity in giving expression to materials made an indelible impression on the Italian-Swiss architect. Reinterpreting history through a modern aesthetic has been central to Botta's work, and his use of materials is intertwined with that sympathy for buildings of the past. As he told Stuart Wrede, curator of architecture and design at the Museum of Modern Art (Mario Botta exhibition catalog, 1986): "When I get close to an old construction I feel the need to have a tactile rapport with it, to verify its solidity, its constitution, its surface. It is part of man's primitive need to know and distinguish the various elements of his own space. This is why I try to express every construction and every kind of material for what it really is. There's no such thing as good or bad material; materials are either well used or ill used."







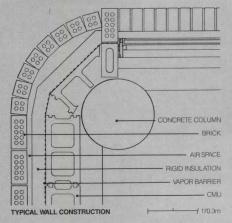






FIRST FLOOR PLAN

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Project: Grande Prairie Regional College, Grande Prairie, Alberta.

Architect: Douglas J. Cardinal, Ottawa.

This project, characteristic of a formal language that is Cardinal's own, demonstrates an exuberance about brick's potential. "One thing that's nice about brick is the small module and the fact that it's laid by hand," says Cardinal. "So it's possible to give buildings that sculptural feeling." By that he implies not only the freedom to build flowing, curvilinear walls, but the ability to control the textural aspects of the wall by "traveling" the brick. Masons on the job were instructed to tap each brick slightly ajar with the trowel, creating edges that protrude to catch light and lend the wall a tweedy texture. Occasionally Cardinal relied on cut bricks to facilitate tight curves, but he shies away from special shapes in favor of conventional bricks as soldiers, headers, or rowlocks.

Cardinal keeps a keen eye on variables such as color. In the Grande Prairie project, he worked closely with his supplier to assure both the desired shade and texture, specifying a variegated blend of earth tones that would suit the Canadian landscape and exude warmth during the frigid north country winters. In this project, Cardinal also requested the manufacturer to stack the bricks in unorthodox ways during firing to produce subtle color variations. He further directed the factory to "flash" the bricksthat is, to alter the kiln temperature so that some bricks were overburned and some underburned, producing more color changes and slight variations in dimension. "In other words, they buggered up the whole scientific process for me," he says.

Due to severe winter temperatures that can drop to –50 degrees in northern Alberta, construction of the exterior walls adhered to the rain screen principle. The wall was built, from inside to out, with concrete block, a vapor barrier, insulation, an air space, and brick veneer. "That gave the necessary R-value," Cardinal says.

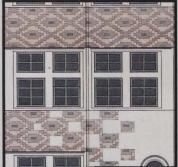
**Projects: Lewis Thomas Labo**ratory for Molecular Biology, **Princeton University, Prince**ton, New Jersey; Clinical Research Building, University of Pennsylvania, Philadelphia. Architects: Payette Associates, Boston; Venturi, Rauch & Scott Brown, Philadelphia. The notion of brick as veneer is exaggerated in these projects by delicate patterning that evokes a paper-thin quality. In the Thomas Laboratory (top), the patterned surface of the long façades reinforces the rhythms of the repetitive laboratory/office bays. Other patterns differentiate the ends and penthouse.

The preoccupation with patterns stemmed, predictably, from Robert Venturi. "Bob had an attitude of perception of the building. He thought of the pattern as a patchwork quilt," says Ron McCoy, project architect for the Princeton building. "The result was a kind of cut and paste, which gave the building an aggressive quality."

The search for bricks started more than a year before construction began. Once preliminary selections had been made, the architects built six sample panels on the campus to test their visual appeal and appropriateness to the site. Another 20-or-so combinations were tried in paper cutouts. "None of this was very scientific," McCoy says. Ratios of the color blends, however, were checked mathematically to analyze their relative brightness to each other. Specially molded bricks were used every 22 feet at control joints to emphasize, rather than try to obscure, the halfinch caulk lines."I wouldn't say we pushed the technology of brick construction, though we did push the opportunity to develop the pattern," McCoy says.

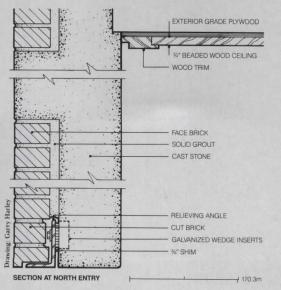
The Clinical Research Building at Penn (far right), due for completion this year, indulges in similar play with the building surface. Its exterior design is influenced by a need to connect the building visually and physically to the existing campus, from which it is separated by a service road.



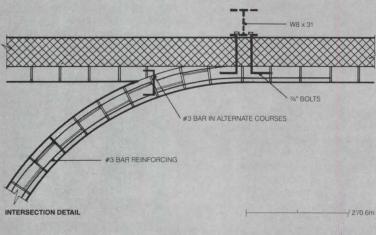


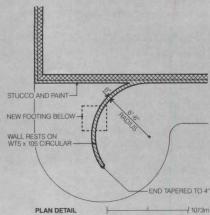












**Projects: Best Products Co.** showrooms.

Architects: SITE Projects, Inc., New York.

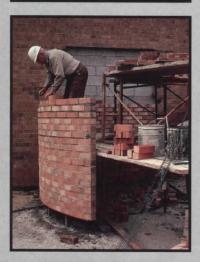
Nothing could stray farther from the elemental tectonics of brick-while talking directly about it—than the work from the collaborative team at SITE. Theirs is an architecture of critique. "And to critique architecture, you must use its words, which are the materials," says cofounder James Wines. "We think of all our materials as a component in a narrative, rather than a component in an abstract design. With brick comes an imbued sense of identification. It comes with a memory. It comes with an iconography. Brick means building. You can use it to make a wall, or you can use it to create an interaction between people and the building."

The projects illustrated here grew out of a feeling within the firm that Modernism was "opaque" and shop-worn, Wines says. While image, more than technology, was the point of the decomposing façades, there were nevertheless minor technical hurdles to overcome. How, for instance, to suspend bricks in midair? In the firm's Peeling **Project (left and construction** photos, right), in Richmond, Virginia, the splayed corner was built up on a supportive scaffold. Its stability depends on steel rods threaded through the bricks, which are laid with a high-bond mortar. The Indeterminate Façade project (next to bottom, right), in Houston, conveys the image of a building arrested somewhere between construction and demolition. In this instance, the local building department required wind tunnel tests of the piled and loosely cemented bricks before issuing a construction permit. The Inside/Outside Building (bottom right), in Milwaukee, challenges shoppers with its ambiguous boundaries and seemingly precarious brick walls, parts of which are threaded on steel rods. But whether people understand these commentaries misses the point, says Wines. "The notion of art is to strike a

common chord."



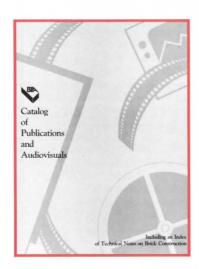








### Technics-Related Products



Brick-related publications and audiovisuals, including design guides, information for builders and buyers, slide presentations, films, and videos, are listed in this six-page catalog. Also listed are over one hundred "Technical Notes" brochures. The catalog is free; there is a fee for most of the items listed. Brick Institute of America.

Circle 216 on reader service card

A panelized brick system

employs 1/2-inch brick veneer, a formed polystyrene template, adhesive, and mortar in a fourstep process. Horizontal tracks hold the brick in place while the adhesive sets; the joints can then be mortared and tooled. U.S. Brick Systems.



The ThinWall® technique allows the construction of brick fences that are the thickness of one brick, thus saving materials and labor. Pilasters on concrete piers support the wall sections, which effectively act as steel-reinforced beams. Acme Brick Company. Circle 148 on reader service card

The R-Brick® panel system incorporates foam insulation and ½-inch-thick brick in a 16" x 48" lightweight panel. The panels are hung by a patented support angle clip that provides structural support independent of the adhesive bond. The system can be installed year-round. and is backed by a 25-year limited warranty. American Brick Company.

Circle 149 on reader service card

Easy-Spred mortar plasticizer can be used in place of lime when mixing mortar or stucco, thereby eliminating the need for protective gear commonly associated with lime. A seven-pound bag of this Bentonite-based product is roughly equivalent to a 50pound bag of lime. American Colloid Company.

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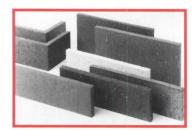


Reinforced panelized masonry uses conventional single-wythe brick along with mortar and steel reinforcement to create a clear-span member. The company's engineers will participate in the structural design of custom panels for new construction or for retrofits. Vet-O-Vitz Masonry Systems.

Circle 151 on reader service card

A technical specifications guide, entitled Better Brickwork: A Notebook of Practical Suggestions from a major brick producer contains eight pages of instructions on mortar joints, brick cleaning, and more. Charts showing material requirements and project dimensions are included, as are detail drawings, showing porch, fireplace, and retaining wall design specifications. General Shale Products.

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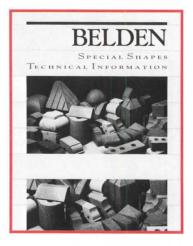


Mini-Brick®, a 7/16-inch-thick genuine brick product, is oneseventh the weight and thickness of a full brick and is installed like tile. It can be used on walls and floors. Four standard colors, two sizes, and corner pieces are available. Huntington/Pacific Ceramics.

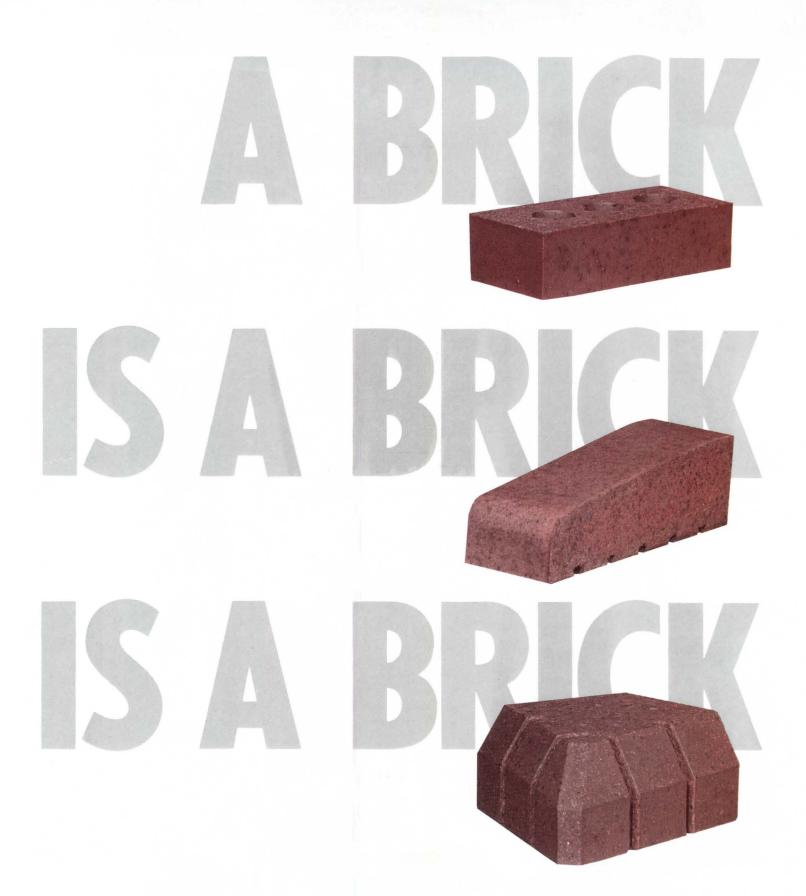
Circle 152 on reader service card

An eight-page sample brochure displays over 50 standard brick colors and textures available from this manufacturer. The brick meets ASTM's highest quality standards, and has on average fewer chips, less distortion, and less length variation than standards allow. Robinson Brick Company.

Circle 218 on reader service card



Special brick shapes are illustrated and discussed in a 16-page brochure which includes dimensions for radial brick arches, coring information, and a size guide. The brochure also explains how architects' customshape designs can be implemented. Belden Brick Company. Circle 219 on reader service card (See Technics, The Uses of Brick, p. 102)

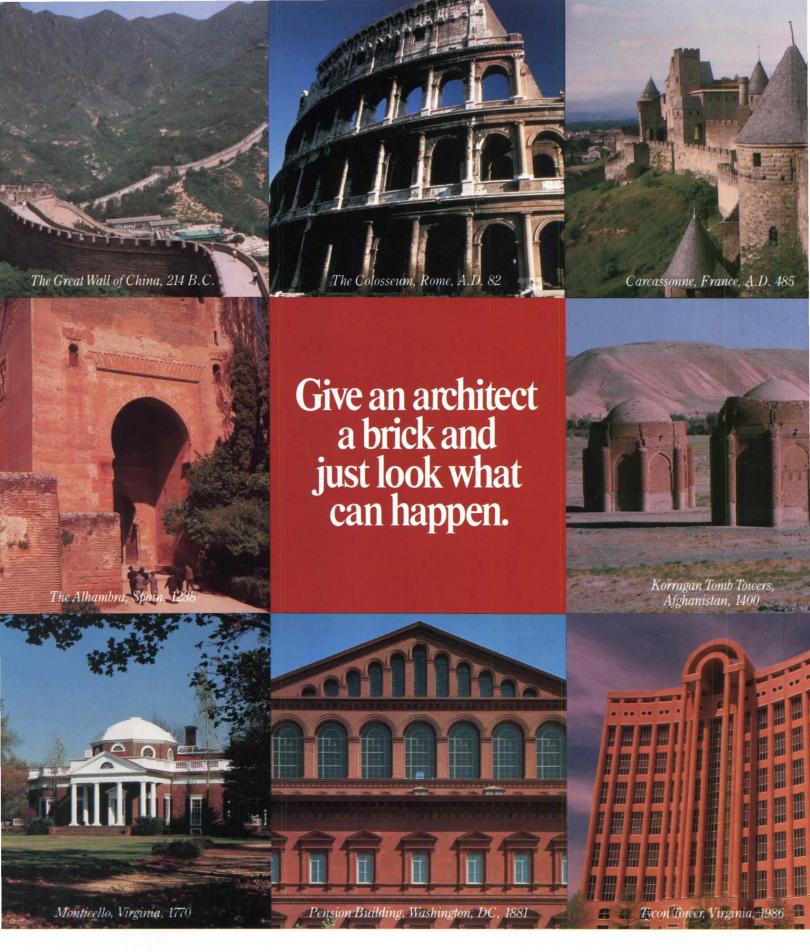


At Belden, brick is any one of over 200 choices of colors, textures, and sizes.

At Belden, brick is also an undetermined number of different shapes. Through the years, we've custom-made brick in hundreds of special shapes to meet individual design requirements. And because of the dynamics of architectural imagination, we expect to make hundreds more.

Accordingly, if you ask what shape Belden Brick is in, the answer will likely change from week to week.





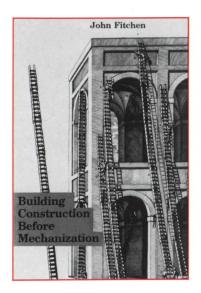
For 2,000 years, architects have worked wonders with brick. And no matter how innovative the design, brick has always provided the flexibility they need. So next time you have a great idea—use brick. And work a few wonders of your own.

If you can see it in your mind, you can build it with brick.

For more information write to: Brick Institute of America, 11490 Commerce Park Drive, Reston, VA 22091.

# Books

**Building Construction Before** Mechanization by John Fitchen. Cambridge, The MIT Press, 1987, 326 pp., illus., \$25.



# Construction History

History is neither mere chronology nor fact; history deals with development and its relationship to our current interests, and has to be rewritten time and again as new questions arise. The history of building technology appeared when contemporary concerns in architectural design demanded it, first as an addendum to architectural history, which deals almost exclusively with finished objects, and then in its own right as an examination of processes and methods of making.

**Building Construction Before** Mechanization belongs to this nascent field. The book's strength lies in its graphic descriptions of processes, while its weaknesses demonstrate how far we still are from satisfying our need to understand technology as design. But in spite of its shortcomings, there is much to interest the reader, particularly in the areas of Gothic and Egyptian stone construction, timber framing, formwork, and scaffolding.

The book is divided into thematic groups of chapters. The first group treats general topics: the role of the builder, the nature of building construction and sources of information about its former practices, and the physical and cultural forces affecting construction. The second deals with planning and preparing for building: jerrybuilding and the unending quest for standards of safety, and prior planning and the order and sequence of building operations. The third, short section discusses stresses in buildings and the problems they raise. Then come chapters on the means and materials used in the building process: falsework and lifting devices, rope and ladders, the builder's habitual implements, the role of wood in building construction, oversized blocks and projecting stones as aids in masonry construction, transportation in building construction, and the problem of ventilation. Finally there is a section on diverse

building processes: "native house building" and building Cheops' pyramid.

These topics, many of which appear here for the first time in popular form, are fascinating to read, but as the arrangement and choice of contents indicates, the book lacks a conceptual structure. No problem or solution types emerge from the discussion, no evolution is apparent, nor are influences traced from one period or culture to another. The book treats problems and processes of building anecdotally rather than thematically and hierarchically. Within the bounds of straightforward description of method, the book serves its purpose admirably, but where it attempts to interpret them and to elucidate background, it falls short.

A chapter on the safety factor, for instance, might discuss the evolution of structural mechanics and material technology in the 18th and 19th Centuries, which led to the inception of safety factors. This was a period in which the evolution of a technological mode of thought influenced the transition from premechanized building to our own era. It could, therefore, illuminate one of the factors leading to the demise of the preindustrial form of building process. But safety factors are not really discussed here at all. A short chapter refers first to the lack of data, which inhibited reliable quantification, then turns to Roman buttressing, and finally spends the entire second half lauding French Gothic structure. This is disappointing and it illustrates the lack in conceptual background.

By implication, the high point of preindustrial building technology is considered to be Gothic cathedral construction. Other preindustrial building techniques, especially the non-European, are frequently referred to by the derogatory term "native." This bias confuses the finished building with the process of its construction and reveals a formal rather than a technological (continued on next page)

Architectural Presentation by **Robert Greenstreet and James** W. Shields. Prentice-Hall, Englewood Cliffs, N.J., 1988. 166 pp., illus., \$22.00 paper. This methodically arranged book explains and illustrates the many drawing types and styles appropriate for presentations.

A Chronology of Western Architecture by Doreen Yarwood. Facts on File, New York, 1988. 353 pp., illus., \$29.95. Although the text of this volume is rather elementary, its organization and the over 1,000 drawings make it an interesting reference. The book follows a strict chronological format, unlike histories which group buildings by style.

Restaurants, Clubs and Bars by Fred Lawson. Van Nostrand Reinhold, New York, 1988. 332 pp., illus., \$69.95. Subtitled "Planning, Design and Investment," this Architectural Press volume not only provides technical data and design suggestions, but also includes chapters on the restaurant business itself.

**Design for Northern Climates** by Vladimir Matus. Van Nostrand Reinhold, New York, 1988. 218 pp., illus., \$34.95. Physical and psychological factors are considered in this scientific guide to cold-climate design. The book explains methods of statistically determining the impact of sun, wind, and temperature on interior environments.

**Bay Area Houses edited by** Sally Woodbridge. Gibbs Smith, Layton, Utah, 1988. 384 pp., illus., \$35.00. This chronicle of the "Bay Area Tradition" rooted in the work of Julia Morgan and **Bernard Maybeck features** essays by such notables as Charles Moore. New to the second edition is Sally Woodbridge's essay on developments of the last decade.

(continued from page 111) viewpoint. And as process and method are the book's topics, such a bias is of doubtful value.

There also is a lack of balance in the structure of some of the parts. The chapter on stresses discusses the forces acting on a building. They are treated in the following order: dead and live loads, aerodynamic oscillation, shear stresses, partial loads and kinetic stresses, lateral thrust in arches, seismic forces and lightning strokes, fatigue, the factor of safety, stresses during construction, thermal variation and shrinkage, and finally heat in the curing of concrete. The organization of this chapter and the hierarchy of the material it treats are unclear to anyone familiar with structural theory. First, loads, which are external forces acting upon a structure, must be distinguished from the internal stresses that they cause. These are confused, and both are termed "stresses." Stresses caused by dead and live loads, which are those the designer traditionally considers first, are not grouped together nor fully discussed. The dynamic force of earthquakes or wind, and its effect on materials and structure, and the stresses caused by temperature and moisture change are not treated with regard for their relative importance in either the building process or the finished building. Of the stresses caused by the manufacture of materials, only the problem of heat diffusion in cast-inplace concrete is discussed. Finally, the all-important question of stresses induced by foundation movement, that archenemy of building longevity, is only fleetingly mentioned in another context. It influenced building method far more profoundly than lightning or the phenomenon of metal fatigue, which became a building problem only in this century

A characteristic of technological thought that distinguishes it from other modes of thinking is the equivalent value accorded both system and detail. Both are crucial to the success of a method, and if details are wrong or incomplete, an incorrect picture of a method results. This unfortunately occurs throughout the book.

In the treatment of concrete technology, for example, many details add up to an erroneous picture. The interpretation of the practice of wetting the surface of fresh concrete is illogical: "Such measures prevent the formation of a surface crust that would lock the water in the green Construction of Roman barrel vault

interior indefinitely and arrest its consolidation." In fact, water is consumed by concrete curing as it is a chemical process. Therefore, by drying out, the surface would be prevented from curing rather than form "a crust." Thus, "locking water in," which is not possible anyway because of the porous nature of concrete, would only aid the curing process. Water evaporates from a concrete surface because of solar heat and that generated by the curing process itself. This water has to be replenished if the concrete is to cure properly, and so the surface must be sprayed and water absorbed into the material through its pores.

Speculating on the reason for brick courses interspersed in some Roman concrete, the book states that they "created planes of weakness that would have been serious were it not for the great weight and massiveness of the solid concrete they interrupt." The joints created by such changes in material are only 'weaknesses" for forces other than gravity loads, which are the largest forces normally encountered in low, massive structures. Weight presses horizontal layers together, otherwise every brick wall, with far less "great weight and massiveness," would be nothing but "planes of weakness." The suggestion that the bricks covered unfinished concrete after each pour so as to "insulate it from drying out too rapidly under the rays of a Mediterranean sun" makes little sense, too. Pours would normally have terminated only with sundown in a slave society and recommenced early the next morning, and wet straw would certainly have served as well and been far more economical to use. The brick courses may rather have been used as a device for minimizing the damage due to shrinkage by creating joints to control the inevitable cracking. Such controlled cracking may have also served to minimize destruction caused by seismic movement. The bricks, on the other hand, may have been an attempt at earthquake reinforcement, or merely decoration. All these possibilities and perhaps others, too, merit mention for the sake of understanding how decisions of process or method led to form. It is to understand the influence of technology on

form that we examine the history of building construction in the first place.

Such details may seem minor when taken individually, but they add up to a distorted picture. Incomplete information can also give rise to erroneous conclusions. One such case is the discussion of the "timbrel" vault, where hard tiles are connected by a high-strength, quick-drying adhesive plaster (which is not mentioned) to build extremely thin vaults. The claim is made that this type of construction "fundamentally changed the nature of vault action from a voussoir to a shear-resisting process." This presumably means that the vault no longer carried its loads in compression but transferred most of them to the adhesive plaster. The interpretation is fraught with ambiguity if we consider that such vaults invariably follow ideal catenary curves of thrust and that thinner vaults (not mentioned in the text) are made of a single layer of tile that precludes transfer of forces through shear in the plaster. It is also stated that the technique was perfected in the late 19th Century, presumably since R. Guastavino published a brochure on it in English in New York at that time. However, the fully developed technique had been known in Catalonia, Spain, ever since the Middle Ages, where large, flat vaults and intricate small ones over spiral staircases were numerous

The book leaves the reader feeling ambivalent. On the one hand, it collects and presents a great deal of fascinating information that is difficult to obtain from any other source. On the other hand, it is flawed in a way that frequently distorts what is described. It lacks a concept and manifests no development of what happened throughout building history. Above all, it is not a discussion of the evolution of problem solving (which is what technology is about), but merely a collection of delightful anecdotes. Tom F. Peters

The author teaches architectural technology and history of building technology at Cornell and the Technical University of Nova Scotia.





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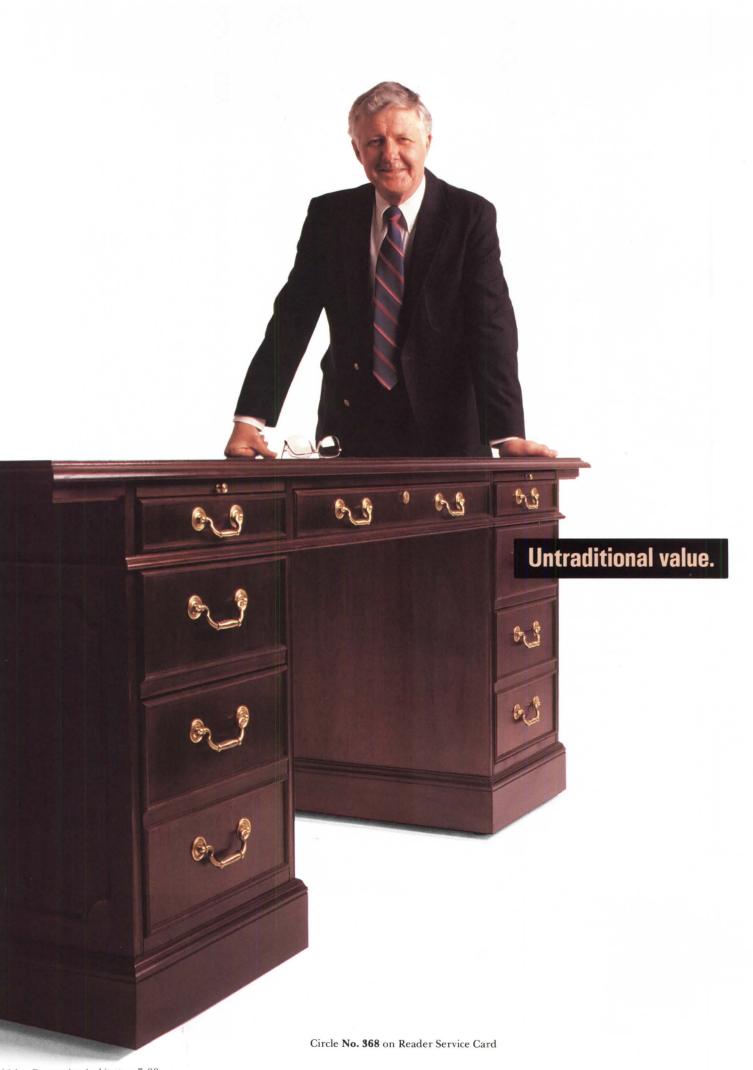
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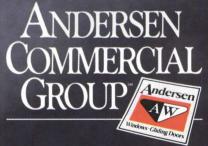
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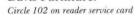
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Roy McMakin's four-drawer serving table is part of a new home furnishings collection. The piece measures 45 inches high, 46 inches wide, and 19 inches deep. Other tables, dressers, cabinets, and a bed frame compose the rest of the collection, which is surfaced in flat lacquered cherry- or mapleveneer. Domestic Furniture Co. Circle 100 on reader service card

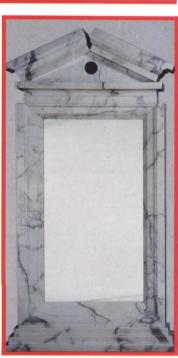
The Motion chair is designed to adapt to and move with the user's body and has only three adjustment variables: height, tension, and locking position. The back and seat are synchronized to retain stability as the user moves back in the chair. The chair comes in four models, each of which is available in two widths. Davis Furniture.





Fantomas, a 250-watt quartz halogen lamp, stands 72 inches high and is constructed of oxidized steel and copper. The sculptural shape is silhouetted against a background of light, which radiates in oblique directions. Ziggurat.

Circle 101 on reader service card



Aldo Rossi's mirror, Sillogismo, is made of white statuary veined marble, the same material used in Italy's most classic buildings and statues. The mirror stands approximately two meters tall; a smaller square design is also available. Up & Up.

Circle 103 on reader service card



The Roll Cutter, designed by P/A Furniture Award winner Sava Cvek, cuts roll tracing paper or vellum to any size and gives a clean 90-degree cut without a razor blade, mat knife, or scissors. The device also functions as a drafting tool for drawing parallel vertical lines and as a triangle guide for drawing parallel horizontal lines. Quadd Inc. Circle 104 on reader service card

The Virconomic operator's chair features a seat whose height is adjustable from 16 to 21 inches, an adjustable backrest, a five star tubular base, and dual wheel casters. Two frame colors are available, and the chair comes with or without armrests. Virco.

Circle 105 on reader service card

Hardwood laminate chairs in the Vantage line stack seven high for convenient storage. The Model 8730 offers contoured seats and backs. Cushions are removable for cleaning, repair, or replacement. A variety of options, including interlocks and bookracks, are available. Sauder.

Circle 106 on reader service card



Modular, hand-placeable retaining walls can be fabricated to site-specific dimensions at a cost less than cast-in-place concrete. Both models, bolt-to-deck or steel studs set in post holes, are prefinished at the factory for immediate use. No site forms are required, and the bearing strength varies with the site requirements. Magnalite. Circle 107 on reader service card

The Computerized Installation Detail Supplement (CIDS) package is a machine-readable catalog that will allow AutoCADusing architects to draw productspecific installation details in a matter of seconds. The templatedriven, product-specific program is an interactive graphics package based on AutoCAD® computer-aided drafting software. Advanced Architectural Services, Inc.

Circle 108 on reader service card

A 12-page color brochure illustrates the Design 4 Series stainless steel parking structure luminaire. The catalog discusses principles of garage lighting, product construction/design, photometric capabilities, installation, instructions/examples, product specifications, and ordering information. Quality Lighting.

Circle 200 on reader service card

The Repro 2436 contact printer employs a double Mylar vacuum system that ensures even vacuum over the entire printing surface. Positives or negatives on Diazo or Silver, paper or film, can be produced. For use with print sizes of up to 24" x 36", printer also functions as a light table, providing a low-glare, light blue illumination. Repro Technology Incorporated.

Circle 109 on reader service card



**Obround fluorescent fixtures** can be surface, stem, or cable mounted individually or in continuous systems. A low brightness parabolic baffle, a blade baffle, 3/4-inch parawedge louver, or a prismatic acrylic lens provides shielding. Suspended mountings are available in either direct downlighting or combined direct/indirect configurations. Coast Light Systems.

Circle 110 on reader service card

Color and texture options for the R-Wall exterior insulation and finish system are described and illustrated in a new brochure. The samples are designed for use as a finish coat but can also be used over sound cementitious surfaces to provide a textured surface. Ispo.

Circle 201 on reader service card



Embossed vinyl borders can be used to finish a wall covering, create a chair rail or molding, frame a door, or set off a cornice. Each pattern can stand alone or coordinate with the Geotech collection of textured wall coverings. Innovations.

Circle 111 on reader service card

Three new worsted wool jacquards, Victory, Aero, and Tracers, have a flame-resistant face. The grosspoint textiles feature outstanding wearability along with soil and water resistance. Anton Maix.

Circle 112 on reader service card

Dynamite Marble Grout works with Marble Set to provide a complete marble installation system and eliminates sagging grout joints. Eight designer colors complement today's most popular marble tile colors. SGM. Circle 113 on reader service card

Land Planner package for AutoCAD Release 9 includes programs for irrigation design, plant specifying, site planning and landscape design, and estimating. Screen icons and pulldown menus create a friendly user interface. LandCADD, Inc. Circle 114 on reader service card



Frascio 744b mercury gold door handles are available with a 21/2inch rosette with spring loading. The complete line of Italian

hardware includes traditional, modern, and contemporary designs, some of which may be specified in polished laquered brass. Ital Brass.

Circle 115 on reader service card

RamLock Model ZX-1000 controls entry into parking spaces with the touch of a button. A radio-controlled metal column guards personal spaces and provides security while the vehicle is in place. The device is compatible with current access control equipment. ZaoTech Systems. Circle 116 on reader service card

Flexline Interior Finishes are described in an eight-page folder. In flat or curved vertical surfaces, Flexline offers a range of solid woods, wood veneers, and metallic finishes. Armstrong World Industries.

Circle 202 on reader service card



Custom Accents add the finishing touch to Harris custom solid hardwood planks and parquets. The 5/16-inch-thick borders and corner motifs are available in three distinctive patterns that feature walnut inlaid into red oak, white oak, or ash. Hardwood Division, Tarkett. Circle 117 on reader service card

StressLab® software, an easy-touse finite element modeling and analysis tool for the design engineer, reduces product development costs, and improves quality by predicting how designs will stand up to real-life stress. Computervision. Circle 118 on reader service card

Three new CAD-specific Hyper-Card stacks, Bill of Materials, Door & Window Scheduling, and a CAD Text Processor, are included with the new Version 1.1 release of VersaCAD/Macintosh Edition. VersaCAD Corp. Circle 119 on reader service card

The 1988 National Fire Protection Association Catalog describes fire protection and service products, additional codes and standards literature, and pages on fire safety education. NFPA.

Circle 203 on reader service card (continued on page 124)



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(continued from page 122)



Trianon circular office systems for open plan work environments provide comfort, privacy, flexibility, and space efficiency. Circular and rectangular modules make up the system. Center-Core.

Circle 120 on reader service card

A color catalog details Iperfan crystal clear glass block vertical panel systems. The blocks comply with Standard Building Code, Section 1413. Imported from Italy, a sienna tint and a variety of architectural patterns are offered. New High Glass. Circle 204 on reader service card

Slightly rounded, cushioned edges set Seneca Tiles apart from other mass-produced pavers. A brochure describes how the clay and shale mixture is fired in a downdraft kiln to create eight standard unglazed colors and 16 standard glazed selections. Seneca Tiles, Inc.

Circle 205 on reader service card



Avonite + solid surfacing material for countertops, furniture, wall treatments, and architectural elements is now offered in four new colors. The material meets Class I flame spread codes and cuts like wood for use with a variety of decorative detailing. Avonite.

Circle 121 on reader service card

The Gres Kitchen from Arc Linea includes a comprehensive range of cabinet sizes, heat-resistant terra cotta tiles for countertops, tables, and shelves, and finish options of laminates, ash, Italian walnut, and Italian lacquers. IPI.

Circle 122 on reader service card

Teflon can now be specified for contract upholstery fabrics used in high traffic areas. The waterrepelling treatment increases soil and stain resistance without

affecting flammability (fabrics should be individually tested). A three-part marketing program provides technical facts in addition to cleaning and maintenance support. Du Pont.

Circle 123 on reader service card

Cedit ceramic tiles in modular sizes offer the designer freedom in pattern assemblage, with color coordination between wall and floor tiles in a range of styles and dimensionally textured glazes. Cedit U.S.A.

Circle 124 on reader service card



Custom shoji panels and architectural screens are now available in seven new contemporary colors. Whitewash, Graywash, and white lacquer are a few of the new color choices for the ramin wood partitions, window coverings, and door and light covers. Design Shoji.

Circle 125 on reader service card

A 76-page catalog features many new products in addition to such time-saving tools as planimeters, cutting instruments, drafting machines, design grids, and mailing tubes. A complete selection of plotter points and accessories for a number of CAD and automated plotting systems is also illustrated. Saga.

Circle 206 on reader service card

Oval Light and Sunburst insulated steel entrance doors are introduced in a color brochure along with several other new products. The brochure contains information on the insulation used in each door, the weatherstripping featured on all frame systems, and other components of the entry systems. Benchmark.

Circle 207 on reader service card

Modo tiles, fired from Impruneta clay from Italy's Florentine hills district, are calibrated, beveled, and presplit for stacktype installation. Produced in 12" x 12" sizes, polished or honed finishes may be selected. MFG. Circle 126 on reader service card

Information on Twist-Lock® wiring devices, including a redesigned Insulgrip® 50-ampere plug and connector, is published in a new 14-page color brochure.

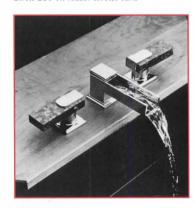
Also detailed is a new face color coding by voltage for the plugs and connectors to facilitate locating and mating similarly rated devices. Hubbell.

Circle 208 on reader service card

Satinglo® glazed ceramic mosaics are illustrated in a twopage color brochure. Also described are Distinctions glazed floor tiles, a semi-matte glaze that has a lightly textured abrasive grain to provide slip resistance. Satinglo® stainproof, scratch-resistant porcelain mosaics are impervious with an absorption of less than 0.5 percent. American Olean Tile. Circle 209 on reader service card

A three ring binder depicts classic and innovative contract furnishings from Italy. Stacking and lounge chairs of beechwood and wicker, a pear wood sofa and club chair constructed in the tradition of Vienna's Art Nouveau, and an ash veneer folding table, which can be used as two individual tables or singly, are all illustrated. Meuble Design International.

Circle 210 on reader service card



The Aqueduct basin spout can be made from customer supplied marble or stone. Five optional metal finishes and five lapidary finishes for handles may be specified. Kallista.

Circle 127 on reader service card

Seton Name Plate Catalog introduces hard-to-find products for public and private companies, institutions, and organizations. The full-line publication covers all facility identification, maintenance, and safety needs and cites regulations and standards that are helpful in specifying signage. Seton Name Plate.

Circle 211 on reader service card

The five colors of the 17" x 17" Rodano Series of ceramic floor tiles can be combined with the smaller stars from the Taco Estrella series. The 45-minute monocottura production process yields a flat "button back" that is easier to install and minimizes breakage from improper installation. Porcelanosa, USA. Circle 128 on reader service card



Gere Kavanaugh designed the Vienna Table for hospitality, corporate, and retail applications. The base consists of a molded urethane and steel pedestal and four tubular steel legs, which can be specified in a range of plated and polyurethane finishes. Images of America.

Circle 129 on reader service card

A full-color catalog describes the design process for various types of prefabricated bridges, including CADD designed structures. Recreational and golf course bridges, vehicular and cross walk spans, bridging support systems, and skywalks are among the products detailed. Continental Bridge.

Circle 212 on reader service card



Zero is a modular Italian display system constructed of epoxy-coated steel. A lattice beam and six-way junction create an infinite variety of structures with the freedom to add panels, shelves, or ceilings. Zero U.S. Corp.

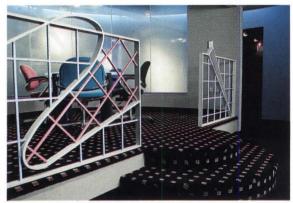
Circle 130 on reader service card

Metallogen HMI 1200 W Par metal halide lamps for stage and studio lighting have a shorter light-arc designed to increase the luminance efficiency. Lighting Services, Inc. Circle 131 on reader service card (continued on page 126)

# **DUPONT SALUTES THE WINNERS OF** THE 1988 ANTRON® DESIGN AWARD COMPETITION



GRAND PRIZE. Design Team: Phyllis Martin-Vegue, Lamberto Moris and Cindy Kupka of Simon Martin-Vegue Winkelstein Moris, San Francisco. Client Site: Packard Foundation. Carpet Mill: Patrick. Styles: Tradition, Heritage. Contract Dealer: Conklin Brothers.



**OUTSTANDING ACHIEVEMENT, PUBLIC SPACES** CATEGORY. Design Team: Jane Garland Lucas, Janice Fanya Lewbin, and Edwin J. Steel of JGL Interiors in association with Stahl Associates, Boston. Client Site: Boyd Corporation's Advantage Showroom. Carpet Mill: Harbinger. Styles: Confetti, Classic Square, Fifth Avenue.



**OUTSTANDING ACHIEVEMENT, HEALTH CARE** CATEGORY. Design Team: Raymond F. Stainback, Jack Plaxco, and Paula Stafford-Cloutier of Thompson, Ventulett, Stainback and Associates, Inc., Atlanta. Client Site: Ronald McDonald House at Emory University. Carpet Mill: Designweave. Style: Marquis. Contract Dealer: Carnes Brothers.

In recognition of their outstanding achievement in interior design utilizing carpet made of Du Pont Antron® nylon, we congratulate this year's talented winners.



(continued from page 124)



Paolo Piva designed the Arcada System. A glass conference table and computer side table complement the briarwood and leather desk. A tip-up container hangs or runs along all-purpose channel rods. B&B Italia.

Circle 132 on reader service card

**The Dust Collector Selection** guide assists in choosing the appropriate dust control equipment for specific markets. The 16-page brochure describes dry mechanical collectors, wet collectors, fabric collectors, and electrostatic precipitators. American Air Filter.

Circle 213 on reader service card

The ImageCourier holds a single 35mm plastic, glass, or paper mounted slide plus the new ImageGuard slide holder. The courier is made from a clear vinvl material and has an adhesive backing for easy attachment to a file, letter, or other paper documents. DRT Corporation.

Circle 133 on reader service card



Quick-Tach® brackets (patent pending) for replacing damaged clay roofing tiles and finishing out new tile roofs are stronger than copper strips or wire attachment systems. The brackets are constructed of 22-gage, rust-resistant metal and are available in five configurations. Ludowici Celadon Co.

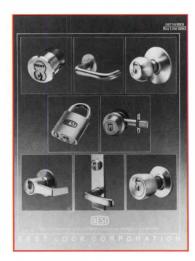
Circle 134 on reader service card

A copier that can produce fullcolor copies as large as 11" x 17" is the subject of a new, 12-page brochure. The Xerox 1005 Color Copier reproduces charts and

graphs, photographs, pages from bound books, and three-dimensional objects in full color. It will also produce color transparencies for overhead projection. In addition, the brochure describes an accessory for making color prints from slides. Xerox. Circle 214 on reader service card

The SARC (Solar Angles and Radiation Calculations) menudriven program provides extensive solar angles and solar intensity data. The output can be used to estimate the relative impact of the sun on building materials, fenestration, and solar collectors. Tait Solar Company.

Circle 135 on reader service card



A revised 20-page brochure illustrates the standard line of locking devices. The literature also features specifications, function charts, trims, and finishes for several different locks. Best Lock Corp.

Circle 215 on reader service card

Designed for commercial/public light or sign application, the vandal-resistant, shallow fluorescent light fixture features a polycarbonate lens and tamperresistant screws. Cracked ice, opal, or K12 lens inserts can be specified; housings are offered in bronze, black, or white. Fail-

Circle 136 on reader service card

DYmeric Plus low modulus, multi-component epoxidized polyurethane sealant tolerates expansion, compression, transverse and longitudinal movement. The high performance compound provides weathertight seal that has a 20+ years life expectancy. Tremco. Circle 137 on reader service card

Keramos ceramic floor tiles for heavy duty applications pass stringent abrasion and color fastness tests, assuring a longer

lifetime in a glossy, spotless condition. Imported from Italy, the collection consists of several neutral and complementary colors. MFG, Inc.

Circle 138 on reader service card



Pucci de Rossi's Tristan and Isolde steel and glass table measures 28 inches in diameter. Several steel finishes may be specified. Karl Mann. Circle 139 on reader service card

The PETAL armchair in genuine leather is welted and designed with a pieced cover effect and a slight fluting in the arm. It measures 28 inches wide, 28 inches deep, and 32 inches high. AGI Industries.

Circle 146 on reader service card



The Neo-Classic collection includes conference and occasional tables, monoforms, and planters that feature a base detail reminiscent of a classic column base. Chrome, brass, black, and red crinkly finishes may be selected for the base. Intrex Furniture. Circle 143 on reader service card

# **Building Materials**

Major materials suppliers for buildings that are featured this month as they were furnished to P/A by the architects.

ABC Phase II, New York (p. 76). Architects: Kohn Pedersen Fox Associates, New York. Brick: Hanley. Curtain walls, Kynar on aluminum stick system: Zimcore of Canada. Insulating glass: PPG. Granite, Milford pink, Castellucci Pink, and Stony Creek:

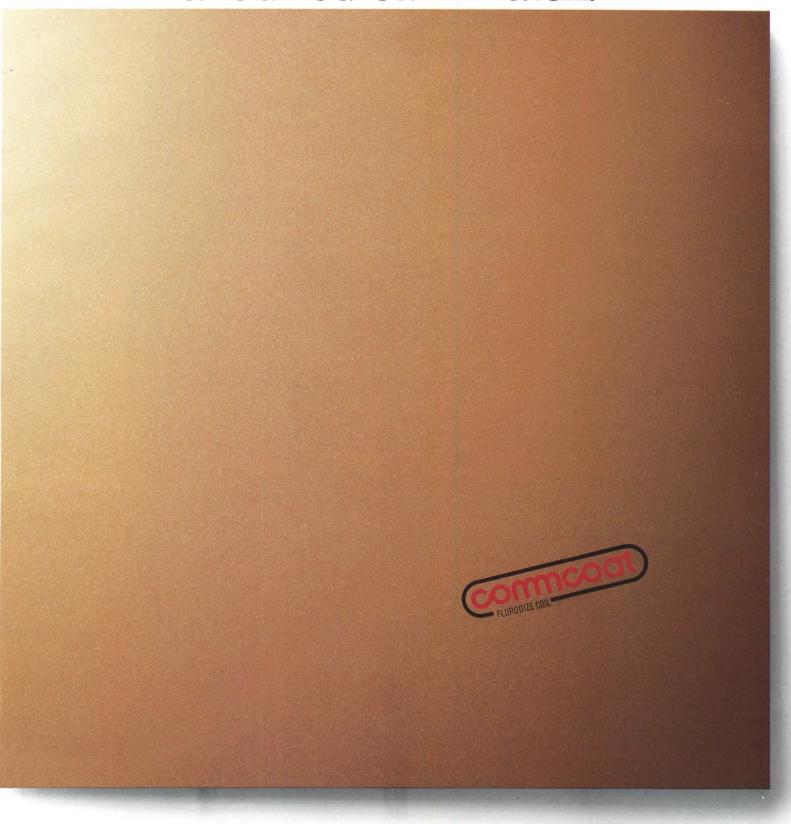
Castellucci. Interior floor marble, Verde Issognia and Alicante red: Moliterno. Terrazzo: Expert Terrazzo. Acoustic tile ceilings: Armstrong. Imperial board (with skim coat plaster): U.S. Gypsum. Aluminum panel lobby wall system: Eastern Architectural Systems. Revolving doors: International. Interior doors: Built-Rite. Roofing, ballasted unadhered membrane: Gates. Waterproofing, silicone: G.E. Sealant. Interior paint, latex: Martin-Senour. Hinges: Stanley. Locksets: Schlage. Door closers: LCN. Panic exit: Von Duprin. Elevators and moving stairs: Schindler Haughton.

188 East 70th Street, New York. Architects: Kohn Pedersen Fox Associates, New York. Brick: Yankee Hill. Limestone: Indiana Limestone. Aluminum windows, custom: Inland Architectural Products. Skylight: Fisher. Entrance doors, bronze: Diamond Architectural. Interior doors, hollow metal: American Steel Products. Overhead grille doors: Atlas Door. Exterior paving: Georgia Granite. Locksets: Schlage. Kitchen cabinets: Poggenpohl. Kitchen appliances: Magic Chef. Bathroom fixtures: American Standard. Elevators: Westinghouse.

Heron Tower, New York. Architects: Kohn Pedersen Fox Associates, New York. Curtain wall: Wausau Metals Corp. Granite, exterior, Cold Spring white: Cold Spring. Brick: Merit Brick. Doors, entrance, overhead, and interior: Metralite Industries. Sidewalk paving: Hastings Paver. Granite lobby floors, Canadian black and Tennessee pink: San Nicola. Elevators: Fujitec (machinery), Parkline (cabs). Custom lighting: Baldinger.

Cedars-Sinai Comprehensive Cancer Center, Los Angeles (p. 67). Architects: Morphosis Architects/Gruen Associates, Los Angeles. Steel coating: Cardinal. Interior paint: Sinclair. Locksets: Schlage. Door closers: LCN. Intercom: Executone. Smoke detectors: Mitone. Security: Instant Replay, Vivitar. Lavatory/ toilet modules: Acorn. Elevators: Otis. Exterior lighting: Kim. Interior lighting: Rambusch, Elliptipar. Light controls: Lutron. Plumbing fittings: Chicago Faucets. Toilet compartments: Fiat. Restroom accessories: Bobrick. Sprinklers: Omega. Carpet: Milliken. Blinds: Levolor. Projection TV: Sony. Floor tile: Fritz Tile. Wall tile: Buchtal. Skylights: Carmel. Roof panels: Kalwall.

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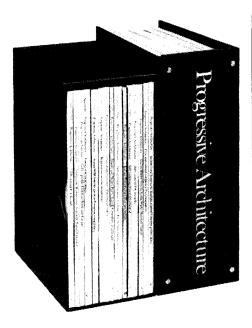
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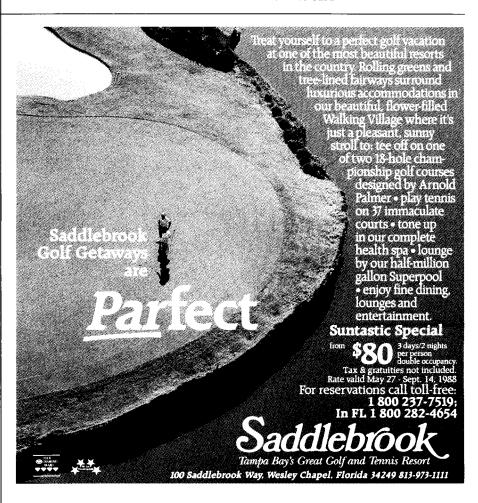
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# P/A in August



View of the Parliament House at night.

# Australian Parliament House, Canberra

The design and technics section in the August issue will be devoted to one of the landmark buildings of this decade: the Australian Parliament House designed by Mitchell/Giurgola & Thorp. There will a discussion of the building's relation to Canberra and its meaning to Australia as part of an in-depth analysis of the building's design and construction, its unique art program, its furnishings—all under the architects' control—and its landscaping.

# Coming in September

The September issue will feature profiles of architects and designers at the leading edge of interior and product design. Among the people profiled will be Shiro Kuramata, Antonio Citterio, and Michael Graves.

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The Cultural Found tions for its multi-project design competition is inviting applicafor ARTS PARK LA. The Arts Park is composed of five facilities on a 26-acre lake in the heart of the San Fernando Valley within a 165-acre mixed use recreation development.  $\square$  The competition will feature concurrent "minicompetitions" for (1) a 2,500 seat theater (2) a 20,000 sq. ft. multi-cultural media/film center for children (3) a 25,000 sq. ft. fine arts gallery and artist workshops (4) a 2,500 seat open air performance glen and (5) a 45,000 sq. ft. natural history museum. Each "mini-competition" will require team collaboration of architects, landscape architects, and artists with a masterplan redefinition phase following. Competing teams for each facility will be selected through submissions of qualifications and demonstrated potential for outstanding collaborative design. Honorariums will be awarded to teams

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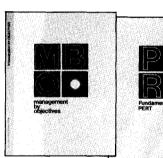
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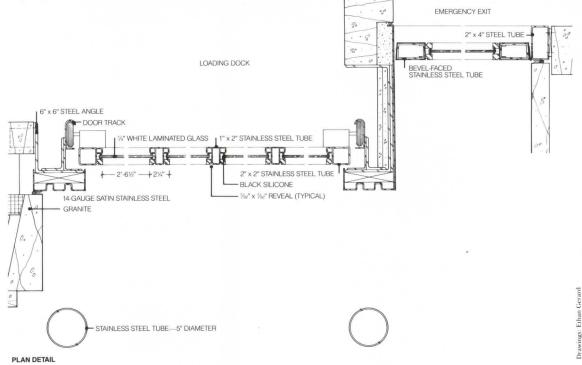


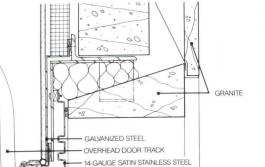
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# Selected Details





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DOOR HEIGHT: 12'-3%"

#### **Loading Dock Door** Heron Tower New York

The loading dock door at Heron Tower (p. 82) designed by Kohn Pedersen Fox Associates illustrates the extent to which architecture can be wrung from utility. Designed to match a storefront on the other side of the building's main entrance (right in bottom photo), this opening accommodates both a freight entrance and an exit from a fire stair. The overhead door has square lights of 1/4-inch laminated opalescent glass set in stainless steel frames, and the stainless steel pass door has a single sheet of the glass with glass transom above. Stainless steel trim pieces cover steel angles that attach the assembly to the building's granite-clad concrete block walls. The bollards consist of concrete-filled steel tubes anchored to steel plates beneath the paving and clad in stainless steel. While such materials and details are hardly typical of loading docks, they represent an appropriate response in a highly visible—and vulnerable—urban location.



Stainless steel, satin finish, US32D. Stainless steel components: Julius Blum. White laminated glass: Falcon Glass. Door track: Overhead Door of Long Island. Entire assembly of doors and frames by Metralite, architectural metal fabricators.



LOADING DOCK AND EXIT DOOR



BUILDING FRONT, LOADING DOCK AT LEFT

SECTION

x 2" STAINLESS STEEL TUBE

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# Who says nothing is made to last these days?

It's not likely we'll see one of our planters wear out. That's because Mother Nature and Sitecraft have been working together for generations to produce planters and other site furnishings that not only last, but look beautiful doing so. One reason Sitecraft site furnishings are so durable is the materials we choose. Clear, all-heart California Redwood, South American Ipe and Purpleheart, Philippine Mahogany, Red Oak and Western Yellow Cedar are among the most durable woods on earth. Another reason is craftsmanship. We've been molding, shaping, finishing and protecting

these woods for professionals like you for a long, long time.

If you've got an upcoming project and you want beauty that lasts, call or write today for a FREE copy of our Sitecraft IDEA BOOK.
With Sitecraft, what you design today, your great, great grand-children may enjoy tomorrow.



40–25 Crescent Street Long Island City, NY 11101 1-800-221-1448 Toll Free (In NYS, 718-729-4900)

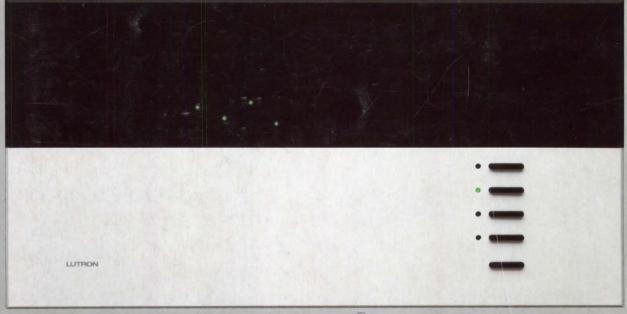
Who says imagination doesn't grow on trees.



#### Introducing

# GRAFIK Eye™

# 4-Scene, 4-Zone Preset Dimming Control



GRAFIK Eye Control—Preset dimming with a sleek, thin profile design



# Create 4 Distinct Lighting Scenes... Recall Each by Touching a Button

The GRAFIK Eye Preset Dimming Control offers:

- coordinated lighting control in one sleek, thin profile unit.
- control of 4 independent lighting zones (circuits) which create 4 distinct lighting scenes.
- the ability to transform the lighting of any space with the simple touch of a button.

## The GRAFIK Eye Control can:

- provide proper lighting levels for multiple functions.
- emphasize unique features that have been designed for the space.
- · create different moods or ambiance.

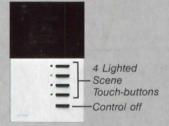
The GRAFIK Eye unit controls up to 2000 watts\* of incandescent, incandescent low voltage, and fluorescent lighting.

This product is covered by one or more of the following U.S. patents: 3,619,716; 3,731,142; 3,735,020; 3,746,923; 3,824,428; 3,919,592; 3,927,345; 4,207,497; 4,207,498; 4,575,660; DES 249,141; DES 253,342; DES 253,532; and corresponding foreign patents. U.S. and foreign patents pending. Lutron is a registered trademark. GRAFIK Eye is a trademark of Lutron Electronics Co., Inc. Copyright ⊚ 1987 Lutron Electronics Co., Inc.



GRAFIK Eye Control with white opaque cover Dimensions: .295" thin x 87/8" x 41/2"

Thin profile



Auxiliary Scene Activator provides remote touch-button control from 1 or 2 additional locations. Dimensions: .295" thin x 23/4" x 41/2"



Wireless Remote Control Accessory for GRAFIK Eye Control. Dimensions: .93" thin x 1.5" x 5.7"

For more information on the GRAFIK Eye Preset Dimming Control, call Lutron's Hotline toll-free:

(800) 523-9466 (U.S.A.) (800) 222-4509 (Pennsylvania)

# LUTRON°

Lutron Electronics Co.,Inc. 205 Suter Road Coopersburg, PA 18036 U.S.A.

Circle No. 348 on Reader Service Card

<sup>\*</sup> For applications requiring more than 2000W/VA total load, consult the Lutron Hotline.