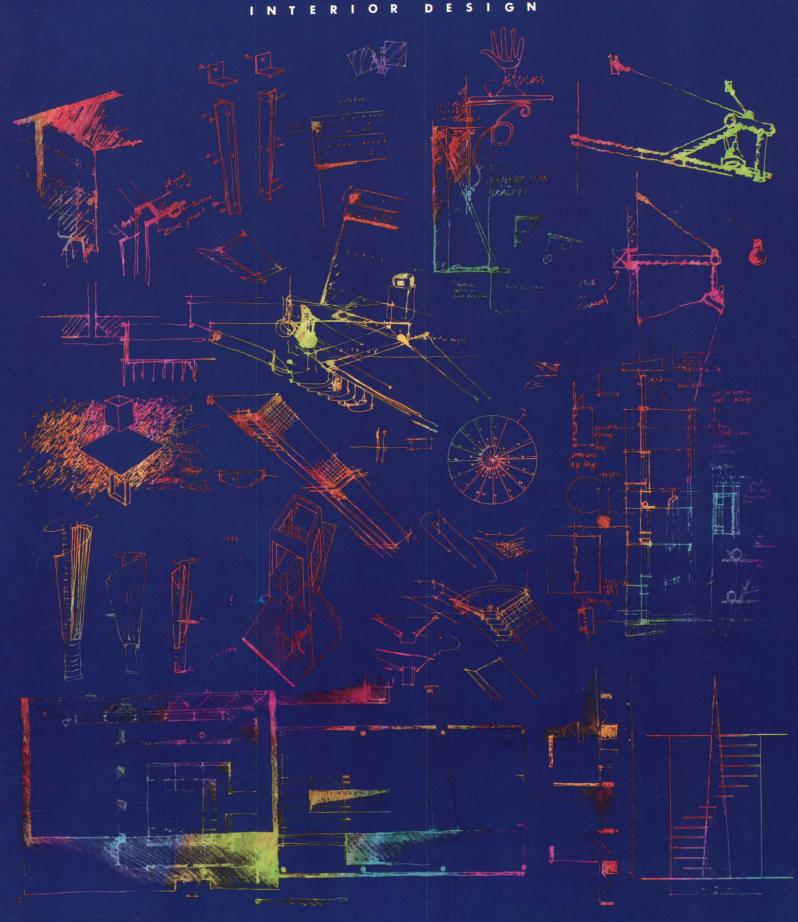
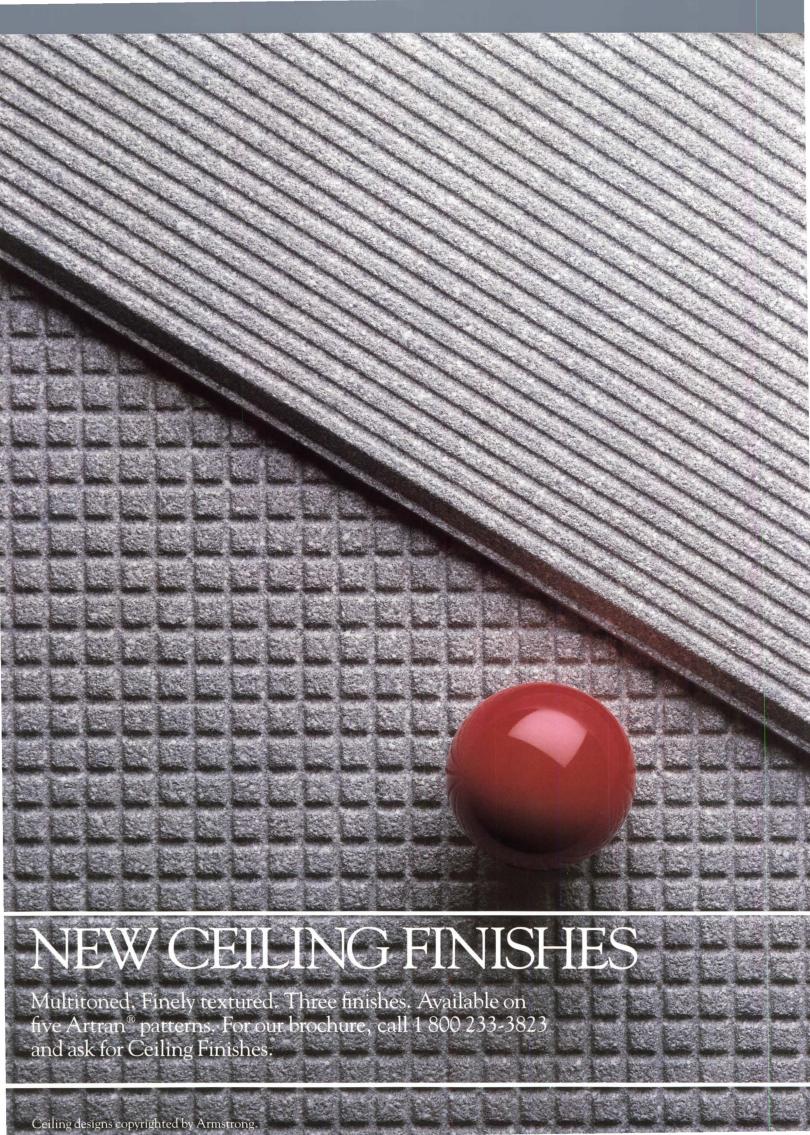
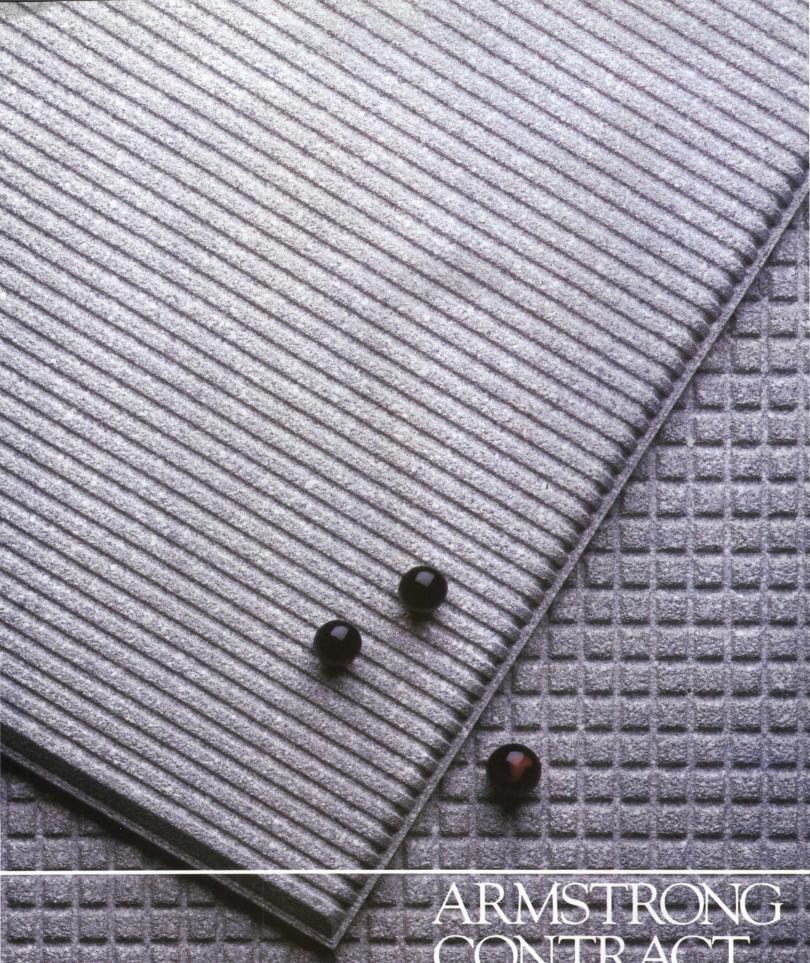
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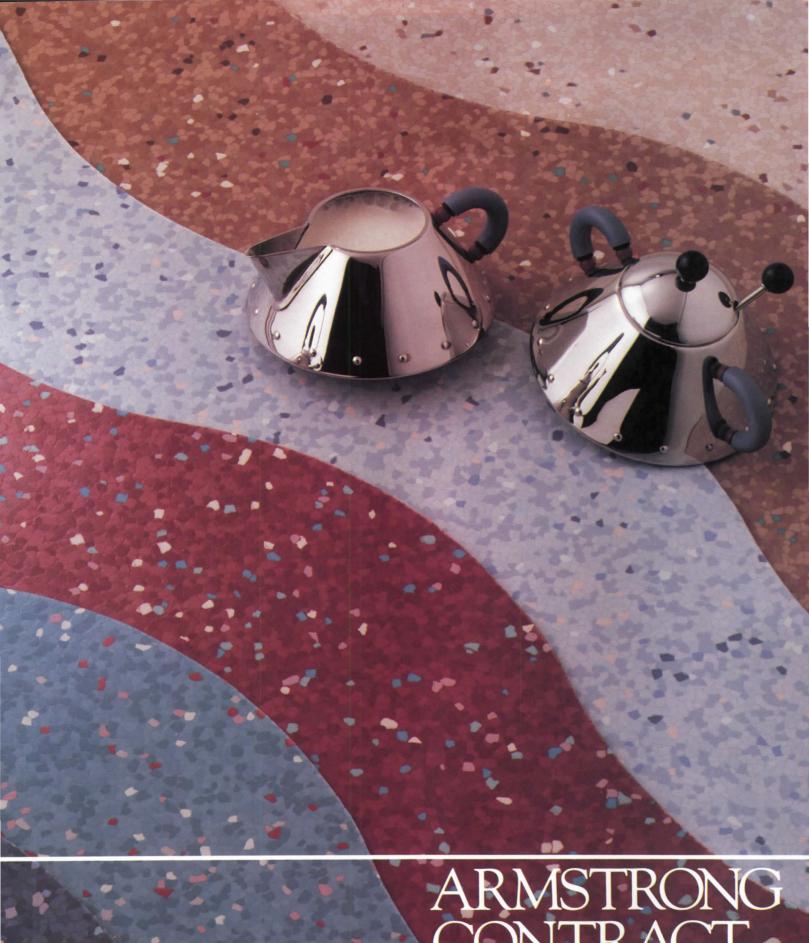


## ARMSTRONG CONTRACT INTERIORS GARPETS FLOORS WALLS

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## ARMSTRONG CONTRACT INTERIORS CARPETS WALLS

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### SEPTEMBER 1989

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Design by Derek Bacchus.

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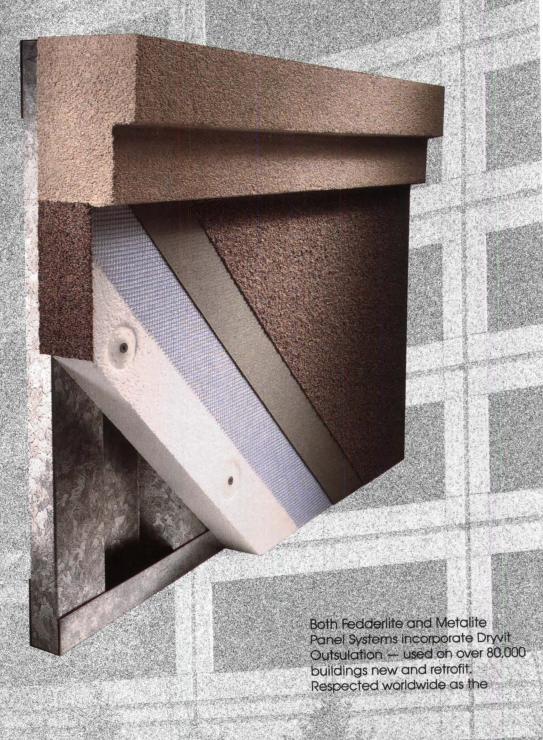
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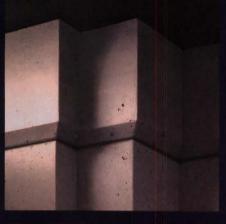
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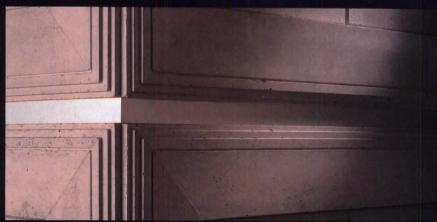
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### Government Issues

Current Federal debates regarding arts, housing, and finance indicate a need for wiser judgment—by architects, among others.

DAY-TO-DAY reports out of Washington this summer portrayed ongoing crises in three areas of concern to architects and designers: housing program abuses, savings and loan failures, and Federal involvement in the arts. In each area, there are questions of architects' involvement, and there are implications for future policy.

Housing scandals. Investigations have been disclosing what can happen to socially well-intentioned programs in the hands of an administration philosophically opposed to them. It appears that HUD, as a step-child department, was left to the care of administrators who had no higher goal than to reward their political allies and line their buddies' pockets. The temptation for abuse stems from the seeming arbitrariness of HUD's decisions on projects to back, aggravated by shrinking funds for the purpose. The result—now coming to light—was that under the last administration "consultants" got quick approvals—and huge fees—by simply telephoning the right people at HUD. Architects for the projects involved must have known about much of this influence-peddling. They probably considered the HUD approval well deserved, and they were hardly motivated to expose practices that are unethical but not necessarily illegal. So they became silent bystanders to sordid deals.

An emerging concern now is what effect these scandals may have on future housing policies. They may further sour an already skeptical public on the possibilities of government housing subsidies, while the shortage of affordable housing grows ever more severe. On the other hand, this low point may force the current administration to give serious attention to the national crisis in housing. There is now a HUD secretary with a will to make constructive changes; if he and the Congress can agree on programs—and ethical procedures—there is some real hope.

Savings and Loan bail-out. Last month President Bush signed into law a bill that will reimburse depositors for more than \$100 billion lost by savings and loan institutions. Released in recent years from their traditional limitation to lending for houses, many of these "thrift institutions" made unwise loans for economically unsound commercial and residential developments. Although architects generally do not take responsibility for the financing and marketability of projects, many must have questioned their clients' economic wisdom—if not their ethics. As in the case of the housing abuses, however, there has been little motivation to blow the whistle. A result of the new law should be to stiffen and standardize regulations on lending, reducing the chances for economically ill-conceived projects.

Federal art controversy. Although it does not involve architecture or design as such, the brouhaha over National Endowment for the Arts funding of potentially offensive exhibitions will seriously affect Federal programs in all of the arts. Since the cancellation of the NEA-supported show of Robert Mapplethorpe photos at Washington's Corcoran Gallery in June, reams of opinion have appeared on government involvement in the arts. Clearly, every effort must be made to keep decision-making on art and design grants (or commissions for art or buildings) in the hands of recognized experts—rather than surrendering it to legislators who know what they don't like. On the other hand, those responsible for bestowing public funds on the arts cannot simply plead ignorance of political responsibilities. While our society does not prevent museums or galleries from exhibiting Mapplethorpe's images of homoerotic or sadomasochistic encounters (or of a crucifix immersed in urine, as in the work of Andres Serrano, in another controversial exhibit), any reasonable person should realize that our government was not committed to footing bills for such events. The fact that certain other countries may provide hands-off arts support does not mean we can have it here. If further Congressional tampering is to be averted, those charged with choosing art must give up their self-righteous defense of everything labeled "art" and face the realities of what the American public is willing to support with its dollars.

John Maris Dife



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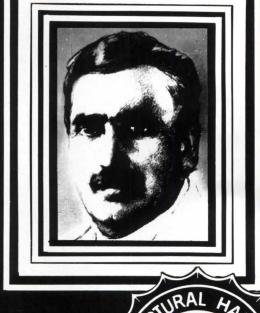
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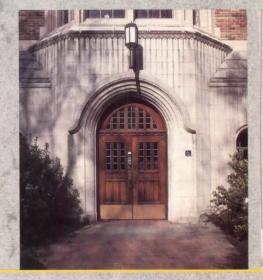
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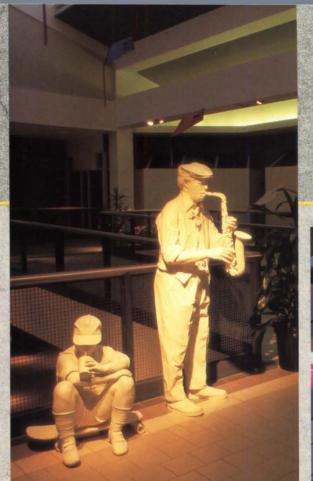
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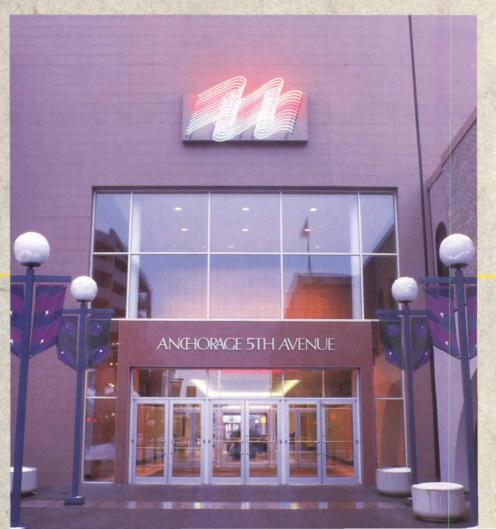


A esthetic integrity in architecture is the result of the manipulation of small things within the discipline of the overall concept.

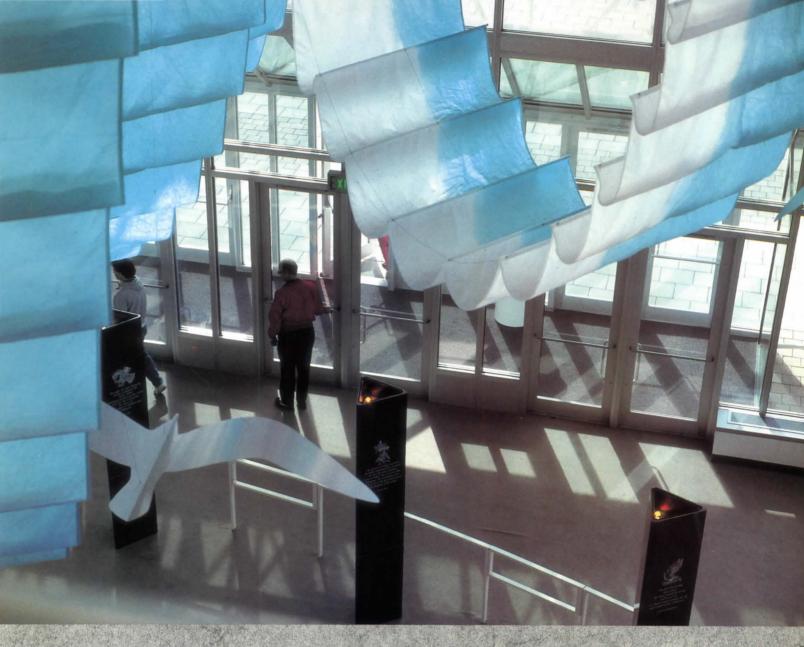
Whether the designer exactly matches or deliberately contrasts the finish of a door and its hardware; subtly blends the quiet bronze of a pivot with the rich warmth of an oak door; conceals the hardware completely; or calls attention to its function, each decision will directly affect the design as a whole.







Anchorage 5th Avenue Mall Anchorage Kober/Sclater Architects Seattle













he opening and closing of a door is so basic a function as to seem simplistic. Nothing could be further from the truth. Precision door control over time requires that the hardware be exactly suited to the specifics of door size, type, weight and use.

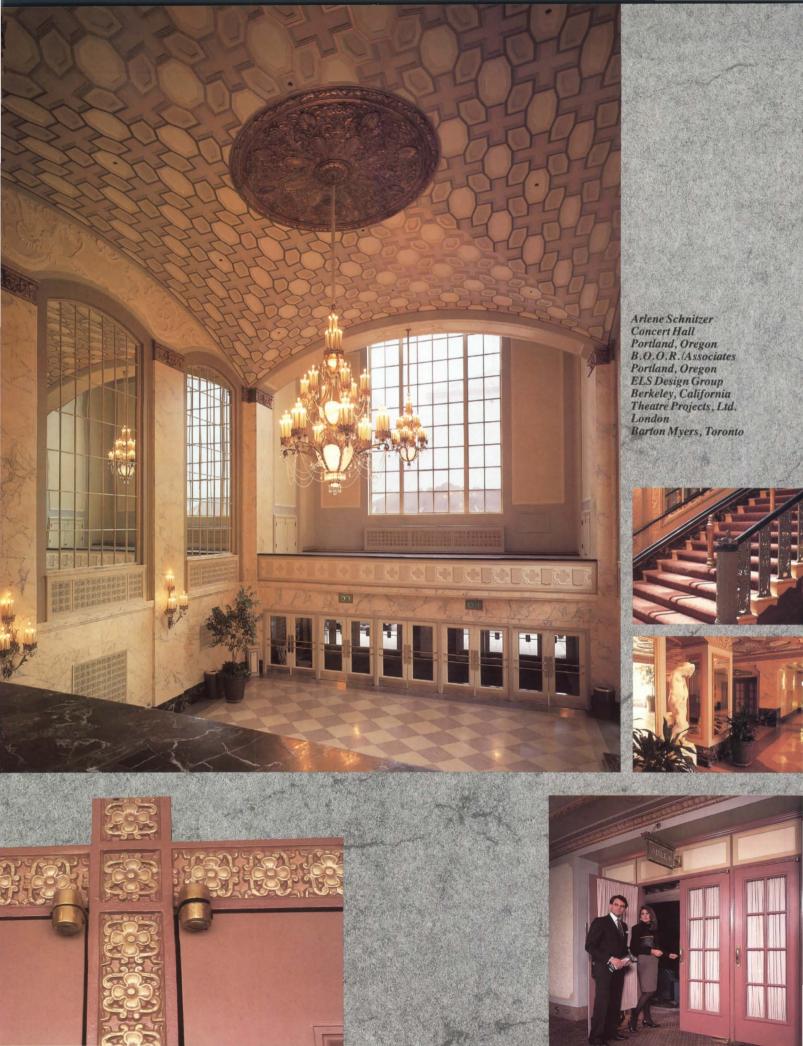
The door must continue to perform reliably in punishing environments over a million cycles and more. The process is governed by often complex mechanisms whose strength and durability cannot be taken for granted.







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MCI Plaza Englewood, Colorado Kirkham Michael & Associates Englewood, Colorado

he conflict is central. Architectural integrity requires attention to detail. But the sheer multitude of elements over which control must be exercised demands a depth of knowledge requiring more time than most architects can justify.

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A building is more than the sum of its parts. It is the physical realization of an architect's vision. The care and sensitivity with which the designer selects each discrete element, then integrates it into the whole, determines whether the concept is realized or lost.

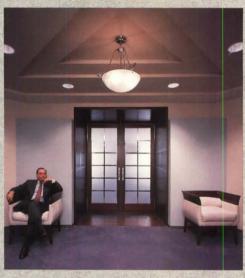
Attention to detail is critical. It is the difference between a building that is merely serviceable and one that adds richness and texture to the human experience.

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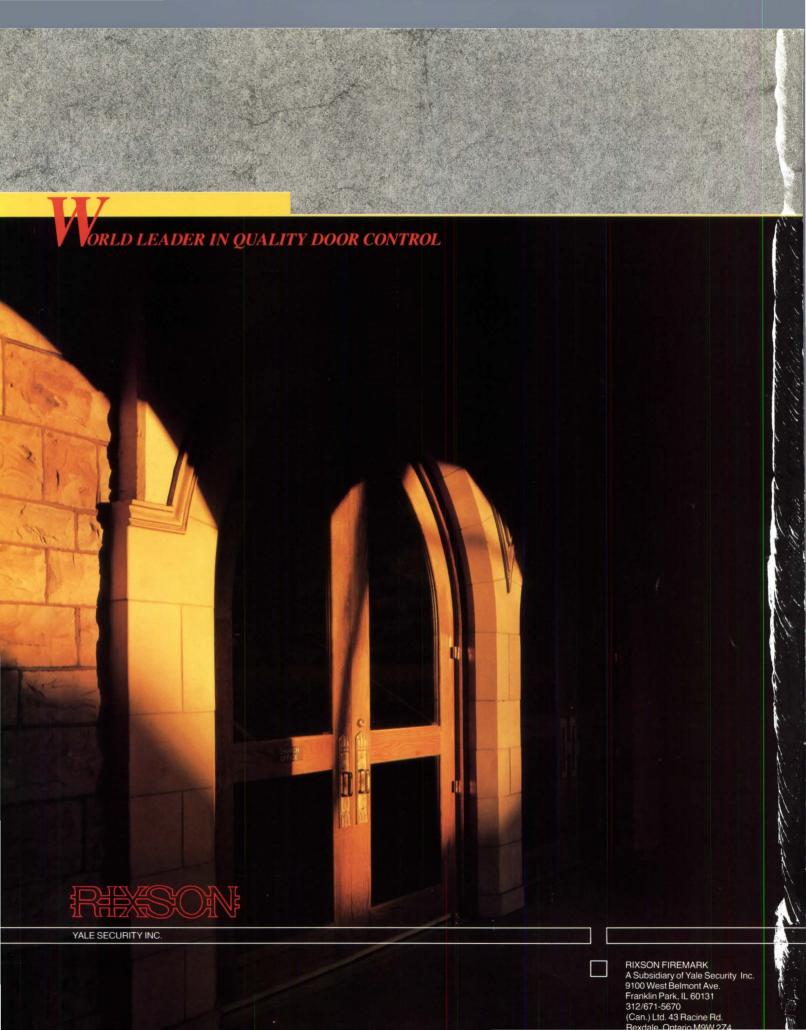












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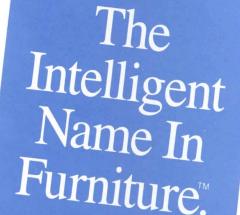
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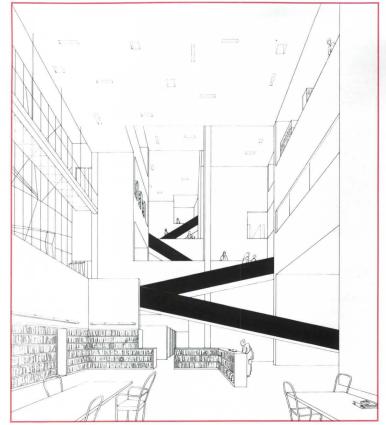


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### P/A News Report

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Steven Holl's **American Memorial** Library in Berlin (above) is among six projects shown In Progress (p. 35).



Interior of Paris' Panthéon, focus of attention during the Bicentennial.

### Batman: Design for the Bad Guys

In Warner Bros.' hit movie Batman, directed by Tim Burton, the architecture of Gotham City is almost as heroic as the Caped Crusader himself. Production designer Anton Furst created a collage of historical and contemporary styles that manages to evoke both a timeless feeling of urban grandeur and a frightening vision of a New York overrun by unchecked development, greed, and crime.

Bob Kane, the originator of the Batman comics, never really fleshed out a detailed description of Gotham City's architecture, (continued on page 22)



Cardinal's National Museum of Civilization on the Ottawa River

### A Bicentennial Sans Architecture

For both political and ideological reasons, the Bicentennial of the French Revolution was conceived as a vast, multi-faceted, and somewhat Rube Goldbergian machine, composed of events from street festivals in small villages to the 6000-person spectacle-parade on the Champs-Elysees on July 14.

Architecture might be expected to play a hefty role in the celebrations, given the Revolution's own penchant for architectural decor, the precedent estab-(continued on page 26)

### "Right-sided" Museum for Ottawa

The National Museum of Civilization (NMC) is one of two Canadian cultural monuments commissioned in the 1980s, during the Trudeau era, the other being the National Gallery designed by Moshe Safdie. The gallery opened a year ago (P/A, July 1988, p. 23); the NMC, still incomplete, welcomed the public this June. Facing one another across the Ottawa River, the buildings have nothing in common but the view. Safdie's decorated box, its vestigial historical (continued on page 24)



Batman's Fluegelheim Museum, one of Anton Furst's elaborate sets.

### **Pencil Points**

The Pennsylvania Avenue Development Corporation is currently evaluating seven development proposals to complete Washington, D.C.'s Federal Triangle. Design architects for the teams are: Kohn Pedersen Fox; I.M. Pei & Partners; Hardy Holzman Pfieffer; Hellmuth, Obata & Kassabaum; Michael Graves; Harry Weese & Associates; and a nine-firm team headed by Skidmore, Owings & Merrill, New York. The PADC plans to announce a winner in the fall.

Beverly Russell, editor of Interiors, has been named editorial director of that magazine and of Architecture—a recent acquisition of BPI Publications, which also owns Interiors. Donald Canty, Architecture's editor for the past 15 years, has resigned, citing what he felt would be an "unabashedly marketplace-oriented" future for the magazine.

New York City zoning laws are currently being contested underground and underwater. Developers of a proposed 72-story Kohn Pedersen Fox office tower seek to transfer Grand Central Terminal's air rights to a Madison Avenue site several blocks north based on a series of connected underground lots between the terminal and the site. Donald Trump is looking to transfer development rights from underwater land he owns along Manhattan's Upper West Side to increase the size of his proposed Cooper Robertson & **Partners-designed Trump City** development just east of it.

The 1989 ID Annual Design Review honored architects Emilio Ambasz and Michael Graves—Ambasz for the design of his Herlitz Aqua Box, a three-tiered paint box, and Graves for a pepper mill he designed for Alessi.

The National Center for the Study of Frank Lloyd Wright has been renamed The Domino's Pizza Center for Architecture and Design. Also the 1989 Domino's Pizza preservation grant was awarded to the Wright-designed Darwin D. Martin Residence, Buffalo, New York. Both announcements were made at the annual Domino's Pizza Frank Lloyd Wright symposium held in July.

A documentary on last year's fivefirm competition to design the Harold Washington Library Center in Chicago (P/A, July 1988, p. 25) titled "Design Wars!" is to be broadcast on the PBS series NOVA. The show will air on October 17; check local listings.



From Batman: Art Deco office for a crime boss.

Batman (continued from page 21) although his drawings of a distant skyline with a Mont-St.-Michel-like massing appear to have inspired a similar image in the movie. But Furst's Gotham is a sad and sinister place, its streets rendered dark and dismal by the canyons of skyscrapers that seem to cantilever out over them, as if New York's setback laws had been literally reversed. The buildings look old and dingy outside, despite their sophisticated interiors, such as the Art Deco extravaganza that is crime boss Carl Grissom's office, or the stylish Moderne penthouse (with what looks to be lacquered flakeboard wall panels) occupied by hoodlum Jack Napier before his transformation into the villainous Joker.

Furst has cited architectural references ranging from Otto Wagner and Louis Sullivan to the contemporary Japanese architect Shin Takamatsu (P/A, Oct. 1987, p. 95). Indeed, Furst's renderings of the Flugelheim Museum reflect Wagner's influence, while the Axis Chemical factory, the site of the Joker's macabre "birth," is clearly indebted to Takamatsu's machinelike forms. The abandoned Gotham City Cathedral, intended to symbolize the town's godlessness, reflects Furst's admiration for Antonio Gaudi's Sagrada Familia.

Interestingly enough, the film's fantastic architecture, which was created entirely out of sets at Pinewood Studios in England, seems to be reserved for the story's bad guys. Batman's alter ego, millionaire Bruce Wayne, lives in a standard-issue Gothic mansion, minus the flights of design fancy, save for one: it boasts the world's most fantastic cellar, the Batcave, from which Wayne/Batman can keep his eye on evildoers at a

bank of sophisticated electronic equipment. If there's a message implicit in this, it may be that, once again, as in movies ranging from Brazil to Baby Boom, that contemporary Design with a capital "D," no matter how eclectic, isn't quite suitable for nice, normal folk. In another of Warner's summer blockbusters, Lethal Weapon 2, good guys Mel Gibson and Danny Glover live in a trailer and a suburban tract home, respectively, while the South African bad guys hole up in a house designed by California Modernist John Lautner—a replica of which gets pulled down the side of a hill. Architects, beware. Pilar Viladas

The author, a former P/A senior editor, is Los Angeles editor of HG.

### Art Institute on French Avant-Garde

"French Avant-Garde Architecture," on display at the Art Institute of Chicago through September 17, is an exhibit more intellectually sound than visually compelling. It contains the work of 12 contemporary French architects, about a third of whom



Lyons School of Architecture from Avant-Garde show

were involved in the famous grands projets commissioned for Paris by presidents Mitterrand and Giscard d'Estaing. But the bulk of the work will be less familiar to most viewers.

Still, the influence of the grands projets is clear. Like most of the presidential projects, the work on exhibit at the Art Institute is unretiring, aggressively Modern and enamored of technology. There are designs for entire technical school campuses, for a town hall addition, for a new waterworks, and a day care center, all commissioned by elected officials—many outside Paris—who are eager to emulate the monument-making leadership of Mitterrand and Giscard d'Estaing. The Art Institute exhibit suggests that the revolution begun by the projets is still underway and is marching to the countryside. These architects' energetic embrace of the future and the radical look of their work stands in strong contrast to the historicist architecture so much in vogue in the United States.

Included, for example, is the Advanced School for Electronic and Electrical Engineering in Marne-la-Vallée, designed by Dominique Perrault. With its steeply angled, metal-covered façade, it resembles the wing of an airplane. Claude Vasconi has used the same High-Tech materials to design a ski resort.

But, for all the hard and gleaming surfaces, a certain romanticism links the works. "The architects were able to use technology in a personal, poetic way," says Lesnikowski. Vasconi's resort, for example, adopts the form of a medieval village with a fortress-like encircling wall. Françoise Jourda and Gilles Perraudin's school of architecture in Lyon exhibits a Modernist discipline through its first two stories, only to be carried away at the top by a sail and cable roof.

Despite its good ideas and interesting work, the show-unfortunately—does not come across very well. Perrault's stunning and original school, which has been gorgeously reproduced in several magazines, is represented by photocopies of photographs. Jean Nouvel's Institut du Monde Arabe (P/A, July 1987, p. 72; May 1988, p. 94) has also looked better. In addition, the show is poorly explained: Labels give only the architects' names, not the projects' titles, and do not indicate whether the drawings represented buildings that will actually be erected.

Cheryl Kent

### Brick Awards to Nine Firms

The Brick Institute of America has awarded its first Brick in Architecture Awards to nine architectural firms for projects that "demonstrate successful and innovative brick use." The awards are to be given biennially.

Winners were: Centerbrook Architects, Essex, Connecticut, for the Hood Museum of Art at Dartmouth College, Hanover, New Hampshire; Cesar Pelli & Associates, New Haven, Connecticut, for Herring Hall at Rice University, Houston, Texas; College Planning Associates, Denver, for Western Wyoming Community College, Rock Springs, Wyoming; Davis, Brody & Associates, New York, for the Mount Sinai-Resident Facility, New York; Hagman Yaw Architects, Aspen, Colorado, for the Hotel Jerome Addition, Aspen, Colorado: Kohn Pedersen Fox & Associates, New York, for ABC Studios; Sasaki Associates, Watertown, Massachusetts, for Edith Stein Hall at Holy Cross College, Worcester, Massachusetts; and Short & Ford Architects, Princeton, New Jersey, for Student Houses at The Lawrenceville School, Lawrenceville, New Iersey.

Jurors for the awards program were architects Harrison Fraker, Minneapolis, Arthur Cotton Moore, Washington, D.C., Frank Welch, Dallas, and Barton Phelps, Los Angeles.



Brick award winners: Hood Museum . . .



and Lawrenceville Student Houses.



"Large Torso: Arch" by Henry Moore on Kansas City's 'nature trail."

### A Dozen Moores In Kansas City

On a grassy slope, children squeal with delight at the echoing sounds which they can make by beating on the side of Henry Moore's "Sheep Piece." Not too far away, in a clearing of trees, a father tries to coax his two small children into the twin concave forms of Moore's "Large Totem Head" for a photo. Farther away, on an empty, sun-baked plaza, two smaller Moore pieces, "Three Part Object" and "Torso," cower next to the looming backdrop formed by the walls of the Nelson-Atkins Museum of Art.

A marked distinction between parklike settings for many sculptures and the imposed order of a traditional "sculpture garden" setting for others is only one of the many sharp contrasts that characterize Kansas City's new Henry Moore Sculpture Garden. Designed by landscape architect Dan Kiley and architect Jaquelin Robertson, the garden spreads 12 of Moore's pieces over almost half of the 40 acres of museum grounds.

The new garden utilizes the existing wooded areas on either side of the lawn leading up to the museum and creates a new, formal landscaped area across the lawn directly below the museum's south façade. This area consists of rows of ginkgo trees flanking the museum's portico, traversed by a series of footpaths of Arkansas limestone, a material oddly reminiscent of woodgrained quarry tile. The garden's only architectural elements, a pair of greenish-black tubular metal aediculae, demark the outer corners of the area.

In many ways, the garden complements the accessibility of

Moore's work. One is often invited, indeed expected, to leave the footpath and approach the sculptures. Many are mounted on low pedestals or simple slabs which encourage visitors to touch them, or to walk or crawl through them. In addition, the new garden area helps soften the imposing formality of the museum itself. As the trees mature, the effect should be similar to the gardens at Versailles, but in reverse: One finds the big building at the end of the diminishing perspective, rather than at the beginning.

The museum acquired the collection, which includes more than 60 Moore pieces, through a long-term loan arrangement with Kansas City's Hall Family Foundation. The Hall Family, creators of Hallmark cards, purchased the collection in 1986 from Wichita businessman George Ablah. Ablah had previously lent several pieces from his collection to the city of New York in 1984, where they were displayed throughout the city.

Those who saw the Moore pieces on display in Central Park may be especially appreciative of the Great Lawn-type setting of Moore's "Sheep Piece." They may also wonder at the omission of any water, as may many Kansas Citians, since the city boasts of its wealth of fountains. Curiously, museum literature features a photograph of Moore's "Reclining Figure: Hand" in its old home in a pond in Kansas City's Loose Park, rather than in its new location among the ginkgo trees.

It remains to be seen how the garden's plant materials will survive the harsh extremes of Kansas City's climate. Less than two months after its opening, many of the formal beds are displaying

a variety of dead and dying low plants, and the "pools" of ground cover which surround some of the sculptures look pitifully thin. Since the garden succeeds for the most part in giving Moore's works the natural setting which most befit them, perhaps one can only regret that it is called the "Henry Moore Sculpture Garden," when the "Henry Moore Nature Trail" would be more appropriate.

Helen Maib

The author is an architect in Kansas City and a freelance architectural writer.

### **Memphis Tries Pyramid Power**

"The antithesis of form following function" is how Ron Mitchell of Rosser/FABRAP describes the Atlanta firm's commission to design a 321-foot stainless steel pyramid for the city of Memphis, Tennessee. For years, the city has discussed building a pyramid—to help establish a civic identity and as a tribute to its ancient Egyptian namesake—but, according to Mitchell, "never found a function big enough to make it worthwhile."



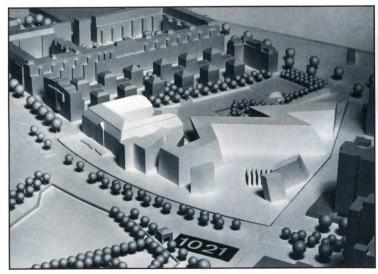
Model of proposed Memphis pyramid.

Now it has. Local sports mogul Sidney Shlenker has won the right to run the pyramid as a 20,000-seat sports and concert arena, with other attractions such as a museum of American music in the glass-enclosed tip bringing in additional tourists. Shlenker plans to reimburse the city for the \$55 million in costs over 25 years. Construction is expected to begin this month; completion should come in 1991.

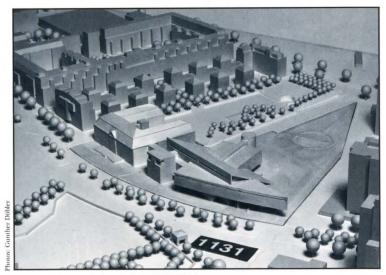
### Libeskind Wins Berlin Museum

Daniel Libeskind has won the competition to design the Berlin Museum Addition/Jewish Museum in West Berlin. The project will be located next to the existing Baroque Berlin Museum and will house artifacts describing Jewish history and Berlin history since 1870.

The addition is one of a number of new projects in both (continued on page 24)



Daniel Libeskind's winning Berlin Museum design . . .



and second place design by Raimund Abraham.

Berlin (continued from page 23) East and West Berlin in which architects are being given the opportunity to address what psychologists have said is the greatest problem confronting German society today: Coming to terms with the guilt of the Holocaust. In East Berlin, for example, authorities have announced plans to restore the Oranienburger Strasse Synagogue, prewar Berlin's main synagogue, which has stood in ruins since 1938, when it was ransacked by the Nazis.

Libeskind's museum proposal attempts "to make visible the invisible" by designing a metaphor for Berlin's intertwined German and Jewish history. The main part of his building, a giant "zig-zag" form, lies irregularly on its site and is intended to symbolize Berlin's varied but continuing history. In contrast, the spaces of the Jewish Museum form a broken line that cuts internally through the interior of the Berlin Museum.

Raimund Abraham's second prize proposal consisted of three boldly collaged forms to be constructed of brick, concrete, and Cor-ten steel. His Jewish Museum was located in one acutely angled, elevated form symbolizing "the end and a new beginning of Jewish history in Berlin."

Among the 165 entries, one "pop" project by West Berlin architects Wolfgang Goschel and Joachim von Rosenberg attempted to reveal the dark forces still lurking in German society. Their model displayed a collection of elements from Berlin's history (the Wall, a rebuilt synagogue, a plane from the 1948 airlift, etc.). Projecting out from the model's base was a drawer full of "hidden" contents, such as literature from the Republikaner party, a Neo-Nazi organization that has captured a large minority vote in recent elections.

For the thousands of Berliners who visited this competition exhibition this summer, one message was clear: Germany is still being affected by forces from the past. *Mary Pepchinski* 

The author, an architect working in West Germany, writes frequently for P/A.

Ottawa (continued from page 21)

references playing to the Ottawa skyline, belongs in the tradition of Eurograndeur. The NMC (actually in the city of Hull) relates only to the imagination of architect Douglas Cardinal, of partly Native American ancestry, who says: "I think in curvilinear forms. I will design intuitively, solve a function intuitively. Then I analyze it and figure out how I can build it. I'm very right-sided. It's part of my native background. It's almost that analysis doesn't mean anything."

The NMC has a permanent collection of 3.5 million ethnographic and historical artifacts, but no intention of displaying them in cases. The idea is "to set a new standard in museum entertainment." That telling phrase, which speaks of the evolution of shopping mall, theme park, and art gallery into a single architectural type, was translated into a program that included outdoor theaters "for land and river pageants," an Imax/Omnimax theater, a 500seat performance theater, and a floor of replica buildings and "settings" standing in for a thousand years of Canadian history. Already dubbed Epcot North, the NMC is wired with hundreds of miles of cable in support of 25 communications systems.

The NMC may well be the most intelligent building in the world. It is certainly among the weirdest. Cardinal designed it as two main blocks, each low and sinuous, one dedicated to performance and exhibitions, the other to curatorial, storage, and conservation functions. Cardinal proposes that architecture first happened when wave beat upon rock and glaciers scraped land masses; primitive huts were an afterthought. The NMC is less a

building than an idealized landscape, all curves, swirls, and topographical surfaces—a story written in copper and fossil-embedded limestone with the assistance of computer technology.

The architecture is altogether more emotional, narrative, and naturalistic than some people would feel comfortable with. The Great Hall, for instance, its shape made by two arcs, suggests a canoe of spectacular proportions; its detailing alludes to oars, shoreline, and Indian village. One of the most successful aspects of the museum is the way it frames, ennobles, and defers to the monumental feature of the surrounding landscape, the Ottawa River. There are shortcomings: The curatorial block looks too much like a parking garage, while the profusion of carved plaster ceilings is suggestive of a heavy finger on a can of Reddi-Whip. But Cardinal's vision, genuine and compelling, rises above circumstance.

Adele Freedman

The author, a frequent contributor to P/A, is design critic for The Globe and Mail of Toronto.

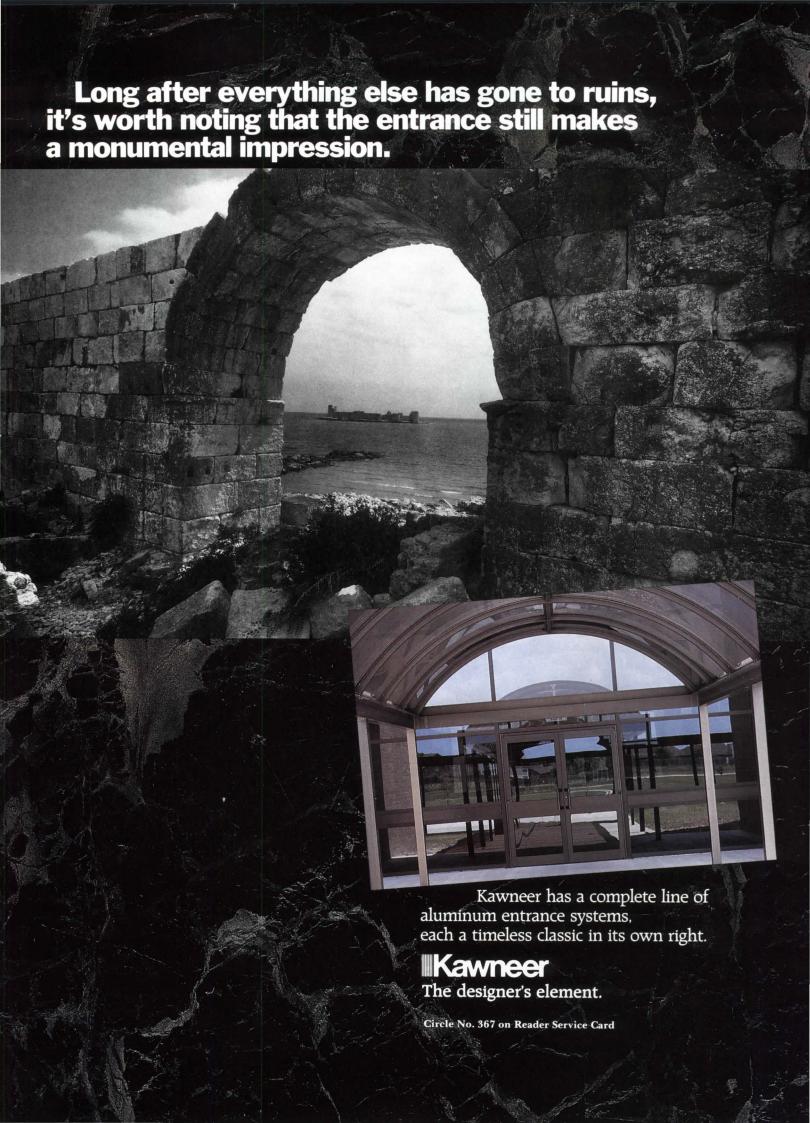
### Philip Arcidi Joins P/A Staff

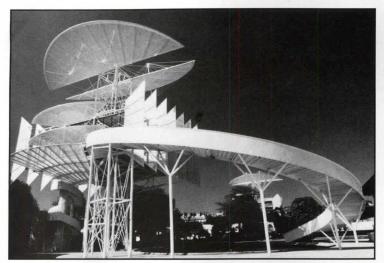
Philip Arcidi has been named an Associate Editor of P/A, with responsibility for design features. Arcidi served for two years as the editor of *Crit*, the magazine of the American Institute of Architecture Students. He has worked for architectural firms in Texas and Virginia, and holds an M.Arch degree from Rice University and an M.F.A. with an emphasis on architectural history from Tufts University.

(News Report continued on page 26)



Curatorial block of Cardinal's museum, with Ottawa skyline at rear.





"Towers of Liberty," the Bicentennial's architectural contribution to Paris.

Bicentennial (continued from page 21) lished by the Centennial—which left Paris the Eiffel Tower—and, of course, President Mitterrand's well-established program of grands projets. Astonishingly, the Bicentennial has in fact produced little architectural creation, either ephemeral or concrete, and while there were many events devoted to architecture scattered throughout the 300page list of performance art, exhibitions, and historic restorations, there was no architecture of the Bicentennial.

The major architectural commission by the Mission for Paris was for the two Towers of Liberty, erected by Jean-Marie Hen-

nin and Nicholas Normier, with technical support from the creative engineering of Bernard Viry and Peter Rice. The product of an open competition that had attracted few entries, these towers of vertical polyester sails and helicyclical ramps placed in the Tuileries Gardens on each side of the Louvre-Concorde axis have been little noticed by the general public and in architectural circles. French architects, explained Bicentennial coordinator Eli Shulman, suffered a "psychological shock" when the World's Fair of 1989 was cancelled and have remained uninterested in the Bicentennial. Indeed, the most important piece of architectural art developed for Paris, the 26tower brick Bastille at La Villette, was designed by an American, competition winner Harris Dimitropoulos.

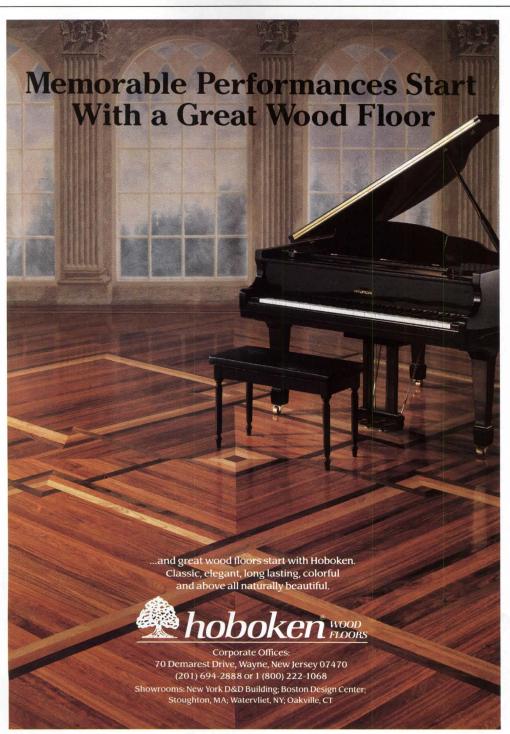
The major architectural exhibition of the summer was the show devoted to the Pantheon, a Franco-Canadian coproduction, with American Barry Bergdoll as curator and representative of the Canadian Centre for Architecture in Montreal (where the show can be seen this fall). It is important both as a radical reinterpretation of the familiar building and as an opportunity to see some of the recently discovered drawings and sculptural fragments of the vast edifice.

While the government did ally the opening of the Bastille Opera and the Tête Défense with the Bicentennial, apparently, it was believed that architecture today cannot rival the television broadcast, and that monumentalizing the Bicentennial could best be achieved by the parade, an unprecedented media event. Television, though, has not yet done for the Bicentennial what architecture had done for the Centennial in giving Paris the Eiffel Tower. Helénè Lipstadt

# **Board Overrules Competition Results**

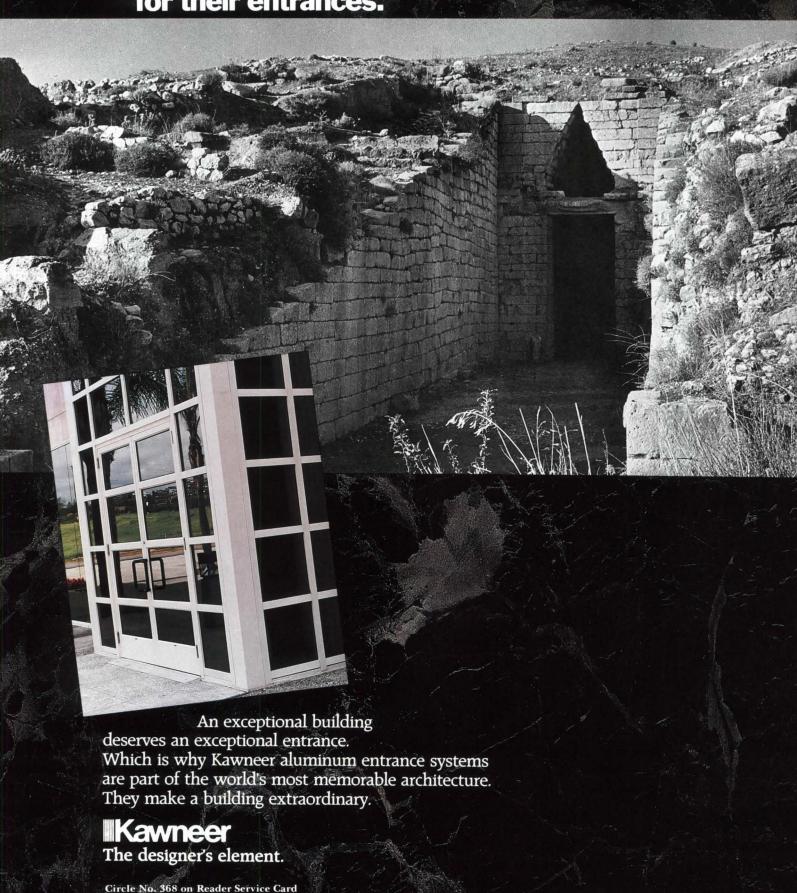
For all that is wrong with architectural competitions, there has always been, in America at least, a certain sanctity afforded a jury's decision (unlike Europe, where clients often throw out competition results). The result of a recent invited competition sponsored by the Cleveland Public Library, though, has angered participants and brought issues of competition ethics to the fore.

In a competition to add to the library's Beaux-Arts building, a 16-member advisory panel had (continued on page 28)



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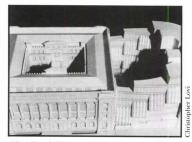
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Competition (continued from page 26) recommended a design by Hammond Beeby Babka and van Dijk, Johnson & Partners to the board, which chose instead a scheme by Hardy Holzman Pfeiffer Associates and URS Consultants.

In a letter to the board, architects Bernard Babka and Peter van Dijk said they were "bewildered" by the decision. Members of the advisory board also complained that ignoring their decision was "shabby treatment."

The invited competition called for the architects to add 50,000 square feet to the library, which is housed in a turn-of-the-century Beaux-Arts block and an adjacent annex. Hammond Beeby Babka and van Dijk Johnson proposed to preserve the façades of both buildings and the garden between them. The additional space would come from filling in the light court of the main building and



Cleveland library schemes: HHPA.

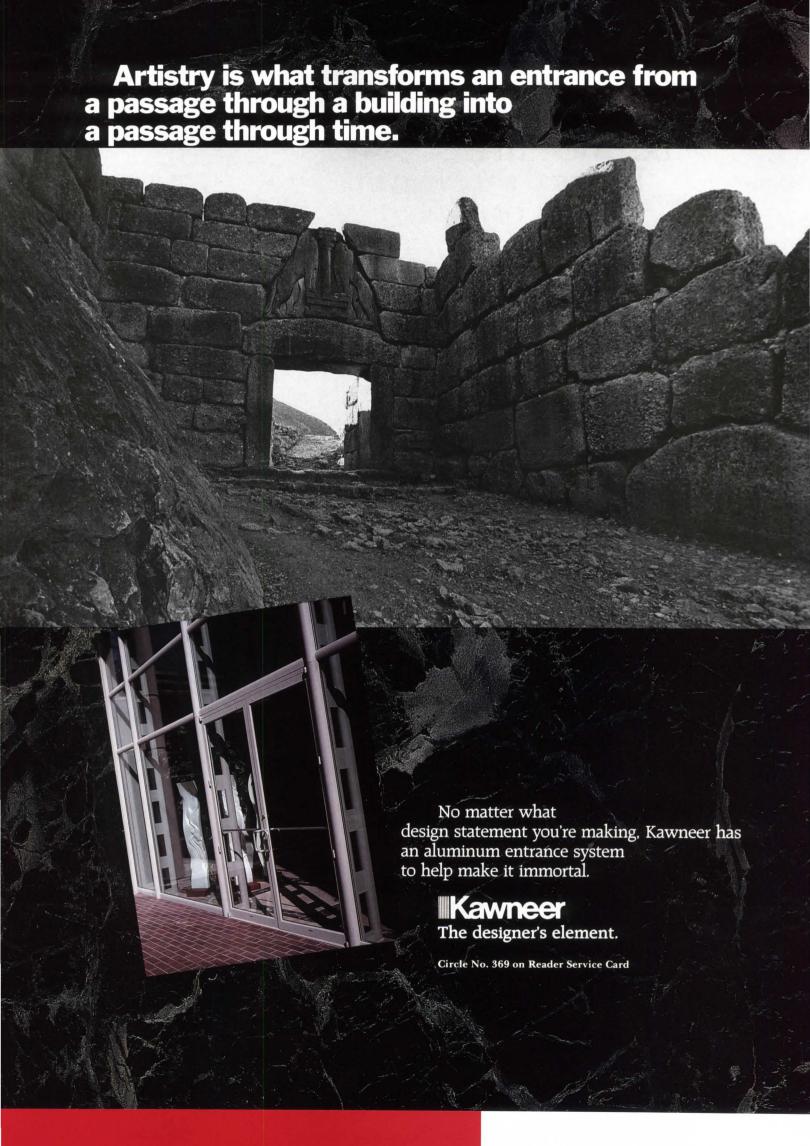


Hammond Beeby Babka . .



and Davis Brody.

rebuilding the annex's interior with shorter floor-to-floor heights. Davis, Brody & Associates and Richard Fleischman Architects designed a new building to replace the annex and connected the two buildings underground. Only HHPA and URS proposed a major change to the site, adding a Modern glass-and-steel structure that will enclose the garden—this was forbidden by the competition (continued on page 30)





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## In Progress

Public and campus projects by Holl; Mack; Venturi, Rauch & Scott Brown; Gwathmey Siegel; and Viñoly are featured this month.

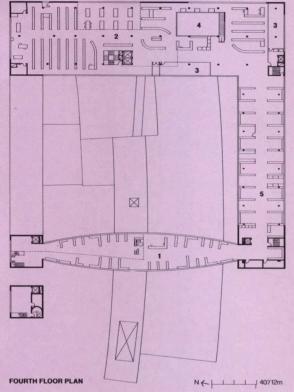


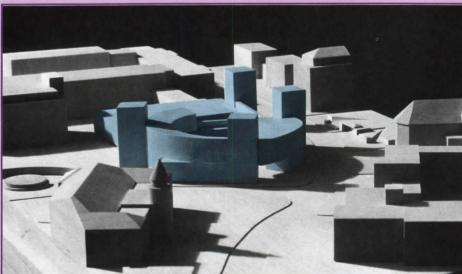
1 Addition, American Memorial Library, Berlin, West Germany. Architect: Steven Holl Architect, New York. Holl's competitionwinning design for an addition to a 1954 library by Fritz Bornemann expands on the original library's then-innovative open stacks. The circulation pattern of the addition was developed less to facilitate easy access than

to encourage "browsing." The irregular mullion pattern on the curtain walls of the main portion (top in plan) are, Holl says, "analogous to the act of browsing." The museum's children's library is elevated to heroic status by its placement in the glass-enclosed bridge spanning the original building; children are thus made "guardians of the city."

- CHILDREN'S LIBRARY ART LIBRARY OFFICES OPEN TO BELOW

- MUSIC LIBRARY

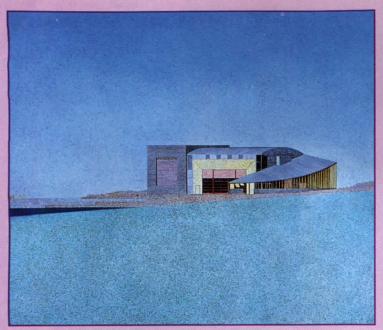




2 Addition, School of Architecture and Landscape Architecture, University of Minnesota, Minneapolis. Architects: Steven Holl Architect and Ellerbe Becket. In another addition to a 1950s building, Holl again plays on the theme of circular procession, this time creating a circular counterpoint to the square plan of the original building (by Thorshov & Cerny, 1958). Likewise, the exterior garden in

the center of the addition mirrors the enclosed atrium of the original. An entrance ramp that rises from the north tower begins a "figure-8" circulation sequence through the old and new portions. The four towers are topped with studios that become "campus beacons" while in use late at night. The new building contains faculty offices, an auditorium, a library, and studios. (In Progress continued on page 36)

JURY ROOM FACULTY OFFICES GARDEN COURTYARD RAMP FROM NORTH ENTRY LIGHT TOWERS ADMINISTRATION STUDIOS INTERIOR COURTYARD



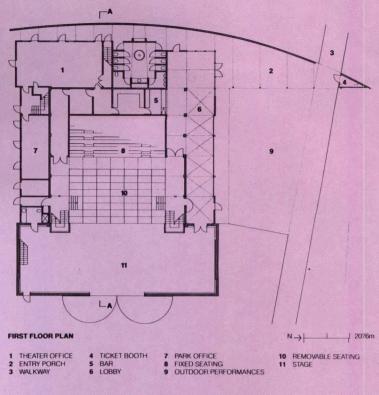
In Progress (continued from page 35) **3 Candlestick Point Cultural** Center, San Francisco, California. Architects: MACK Architects, San Francisco. Mark Mack's work has steadily moved away from the primitivist Classicism of his partnership with Andrew Batey. A freer compositional sensibility, albeit with the same interest in simple materials, is evident in this theater, part of a collaborative park design with artist Douglas Hollis and landscape architect George Hargreaves (P/A, July 1989, p. 66). The 400-seat,

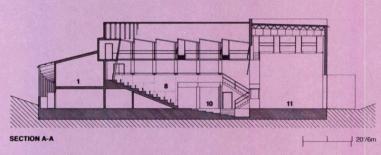
15,000-square-foot theater consists of three parts: a concrete masonry stage block, a barrelvaulted metal-and-wood audience chamber, and a wood-trellised office and entry wing. The main stage area features collapsible seating and oversized doors that provide a natural backdrop when desired. A festival lawn outside the building lobby can also be used for seating-with the glass-doored lobby as a stage. Groundbreaking is scheduled this fall; completion should come in January 1991.

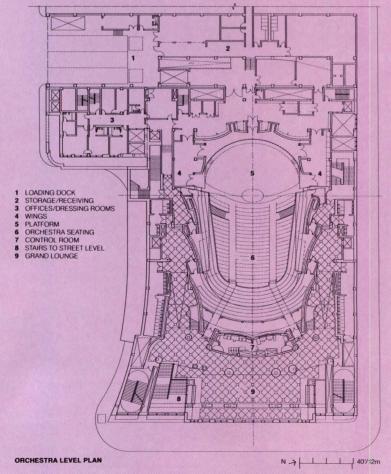


4 Philadelphia Orchestra Hall, Philadelphia. Architects: Venturi, Rauch & Scott Brown, Philadelphia. Venturi's latest "decorated shed" is uncharacteristically lacking in decoration save for the supergraphic sign and the alternating bands of buff brick and Kasota Stone. The firm's explanation is that, as an urban building on Philadelphia's nonhierarchical grid, the Orchestra Hall should not be too assertive; still, it's curious that one of Philadelphia's most prominent institutions would agree to put up a \$95-million background building. The building's flourishes and ornament are saved for the interior, where a 14-foot-wide staircase leads to a second-floor grand lounge overlooking Broad Street; the lounge in turn leads to the 2800-seat horseshoeshaped concert hall. The hall, whose shape was largely determined by acoustical consultants Artec, Inc., employs a simple platform for performers instead of a full proscenium-arched stage, since the building is designed solely for music. The project is in schematic design and should be complete in 1993.

(In Progress continued on page 38)









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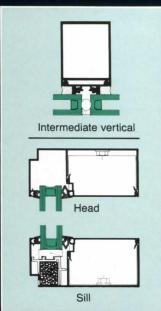
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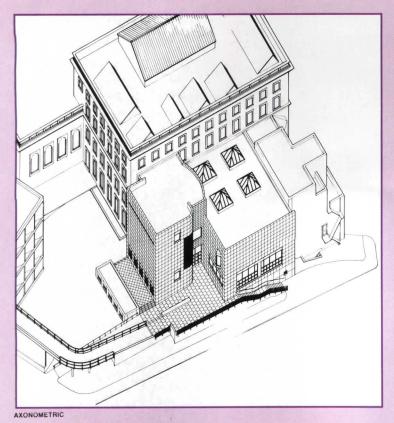


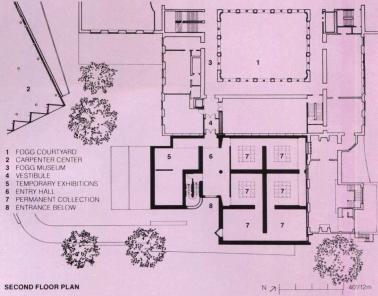
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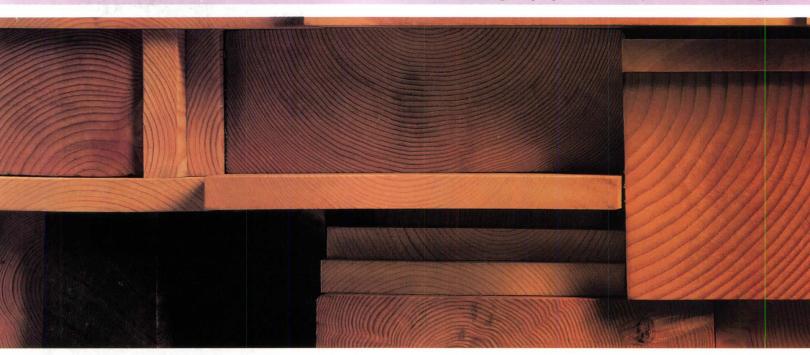
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In Progress (continued from page 36) 5 Busch-Reisinger Museum, Harvard University, Cambridge, Massachusetts. Architects: Gwathmey Siegel & Associates, New York. Next door to Le Corbusier's Carpenter Center and behind the Georgian Fogg Museum, Gwathmey Siegel has produced an early Corbusian container for the Busch-Reisinger Museum, Harvard's collection of Germanic art. While the architects take pains to resolve the Carpenter's ramp with its site, the new building's major public

entrance is off the Fogg's courtyard. The simple duality of the plan is expressed in the exterior massing; large and important spaces like the Fine Arts Library and the permanent collection are in the two-story wing, service spaces in the towerlike threestory wing. Because the new building sits atop an underground library, a lightweight cladding of gray porcelain metal panels was chosen. The building's Cubist character fulfills the charge to give the building an identity distinct from the Fogg.



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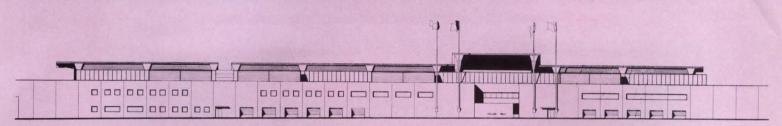
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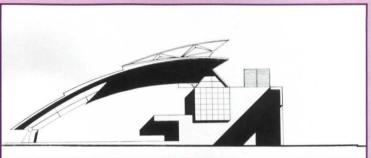
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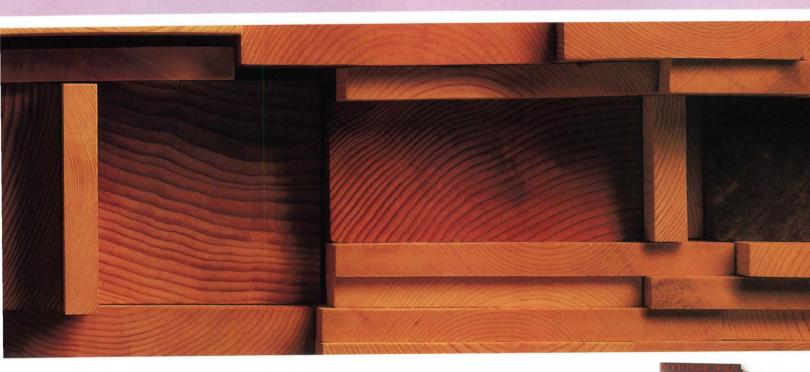




EAST ELEVATION

6 Lehman College Physical Education Facility, Bronx, New York. Architects: Rafael Viñoly Architects. A steel truss system supports the elegant curved planes of this building's metal roof. The raised portion of the roof marks where the "campus walk" passes through the build-

ing, forming a gateway to the campus (flanked by flagpoles visible in elevation, top). The major spaces include a large gymnasium (left in photo), a pool (to the right of the "campus walk"), and an auxiliary gymnasium (far right).



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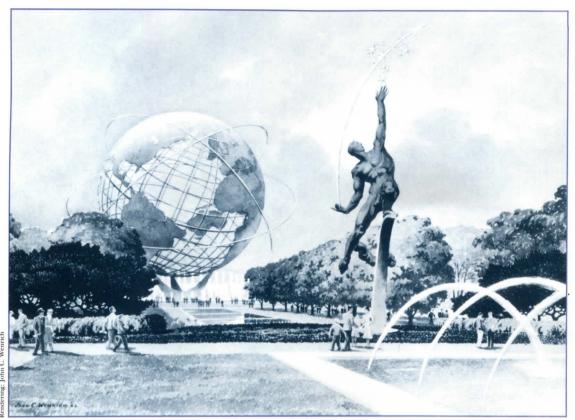
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### P/A Calendar



Rendering of 1964 New York World's Fair, from "Remembering the Future" at the Queens Museum through December 31.

#### EXHIBITIONS

#### Berlin Modern Architecture

Housing, streets, squares, parks, and gardens recently completed, under construction, or planned in Berlin are among the works included in this exhibition of IBA projects by Gae Aulenti, Kisho Kurakawa, Peter Eisenman, Arata Isozaki and others. Pacific Design Center, Los Angeles.

Through September 23.

**Building the Octagon** 

Built in 1801 for Colonel John Tayloe, the Octagon, now the AIA's museum, is itself on exhibition as a period example of a Washington, D.C., townhouse. Exhibits include original construction records, floor and site plans, and other objects involved in the building process. The Octagon, Washington, D.C. Through September 30.

#### **Processes as Interpretation**

In celebration of the sesquicentennial of photography, this exhibition explores the history of architectural photography and documents the work of several architectural photographers. Canadian Centre for Architecture, Montreal. Through October 8.

#### Views of Rome

With the subtitle "Drawings and Watercolors from the Vatican Library," this collection of 85 works, dating from the early 1500s to the early 1800s, documents "a city that no longer exists." Cooper-Hewitt Museum, New York. Through October 29.

Remembering the Future

Subtitled "The New York World's Fair from 1939 to 1964," the show documents the ideas and innovations presented at the Fairs. Look for blueprints, models, and drawings of pavilions and other structures by Eero Saarinen, Skidmore, Owings & Merrill, Philip Johnson, and others. Oueens Museum, N.Y. Through December 31.

#### I.M. Pei & Partners

This is an exhibition of original materials—models and plansof Pei's Meyerson Symphony Center and of Henry Cobb's Fountain Place. Dallas Museum of Art.

September 8-October 22.

#### Aldo Rossi USA

Drawings, sketches, and paintings of recent projects-including the University of Miami School of Architecture (P/A, May 1988, p. 33), Monumental

Arch in Galveston, Texas, and a Toronto amphitheater (P/A, November 1988, p. 23)—developed in the architect's American office will be on exhibit. Max Protetch Gallery, New York. September 9-October 21.

#### Le Panthéon

Focusing on the transformation of Jacques-Germain Soufflot's Saint Geneviève church into the "secular Pantheon of French national heroes," this exhibition situates the building within the country's sociopolitical environment from 1774 to the present. Canadian Centre for Architecture, Montreal. September 20-November 19.

#### COMPETITIONS

#### **AIA Honor Awards**

Entries for the 1990 awards program may be any work of architecture completed since January 1, 1983, by an architect registered in the United States or one of its territories at the time of the project's completion. Contact AIA Honor Awards Program, 1735 New York Ave., Washington, D.C. 20006 (202) 626-7300. Entry deadline September 25, submissions due October 23.

#### **Wood Council Awards**

The 1989 Wood Design Awards Program, sponsored by the American Wood Council, is a call for new and remodeled residential and nonresidential projects completed since January 1986. Buildings must have a "dominant wood character." Contact American Wood Council, 1250 Connecticut Ave., Washington, D.C. 20036. Submission deadline October 6.

#### CONFERENCES

#### **Biennial of Architecture**

An impressive international mix of architects and designers-including Cesar Pelli, Richard Rogers, Josef Kleihues-will gather in Buenos Aires for a series of lectures, round tables, exhibitions, and competitions. Contact Center of Art and Communication (CAYC), Viamonte 452, 1053 Buenos Aires, Argentina. Tel. 311-3156. September 18-23.

#### **Urban Waterfronts '89**

"Keeping Waterfronts Distinctive—Choosing the Right Mix" is the theme for this year's conference in Washington, D.C. Panel sessions, plenary presentations, and workshops will be held; New Orleans will be the featured waterfront city. Contact The Waterfront Center, Susan Kirk, 1536 44th Street, N.W., Washington, D.C. 20036. September 21-23.

Designer's Saturday

Amidst the showroom introductions, Facilities Management Day, and related festivities, watch for a panel discussion on "Affordable Housing: The Big Picture" and the exhibition "30 Under 30" at this year's contract furniture conference (see p. 143). Contact Linda Foa, 150 East 58th Street, New York 10155. October 12-14.

#### **Concrete Institute**

"Marketing Strategies for the '90s" is the theme for this year's Precast/Prestressed Concrete Institute conference. Seminars and sessions on topics from parking structures to justice facilities and seismic concerns, and a show of industry-related products and materials will be offered. Contact Sheryl Blecha, Precast/ Prestressed Concrete Institute, 175 W. Jackson Blvd., Chicago 60604 (312) 786-0300. October 22-25.





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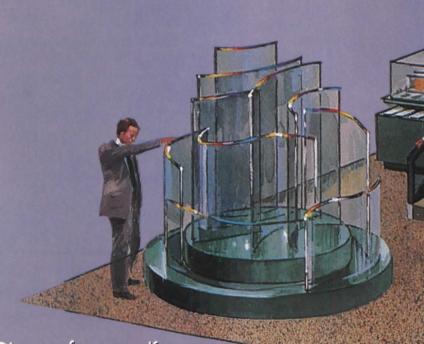
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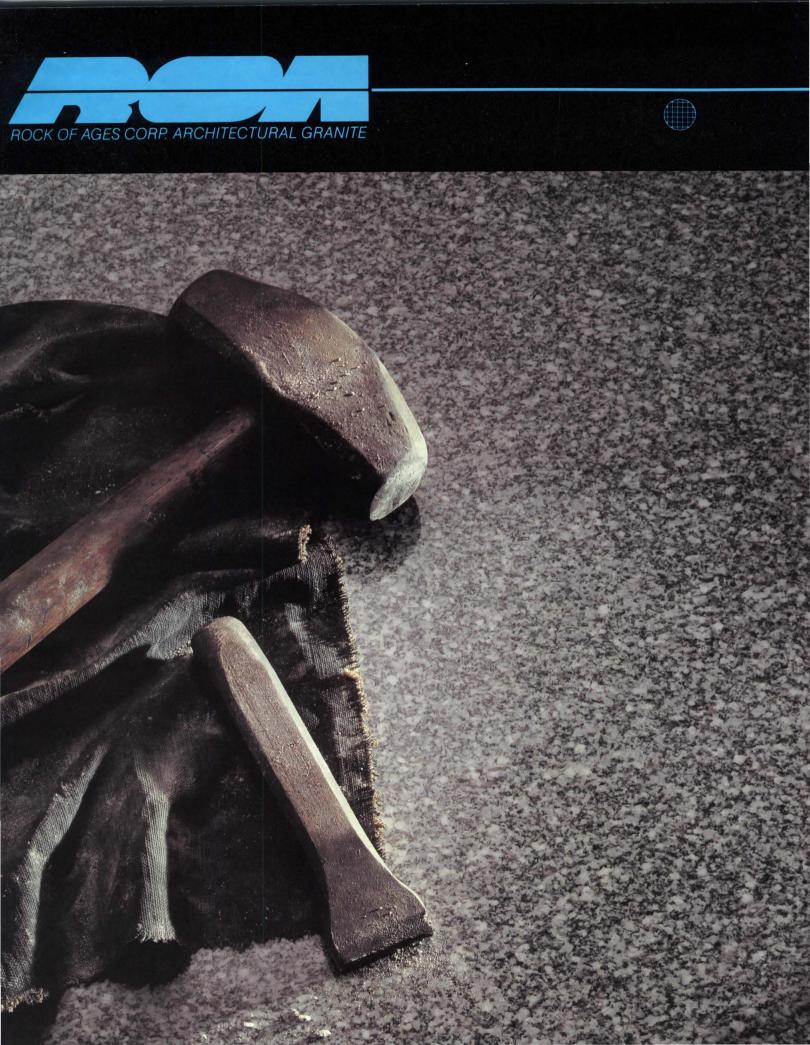


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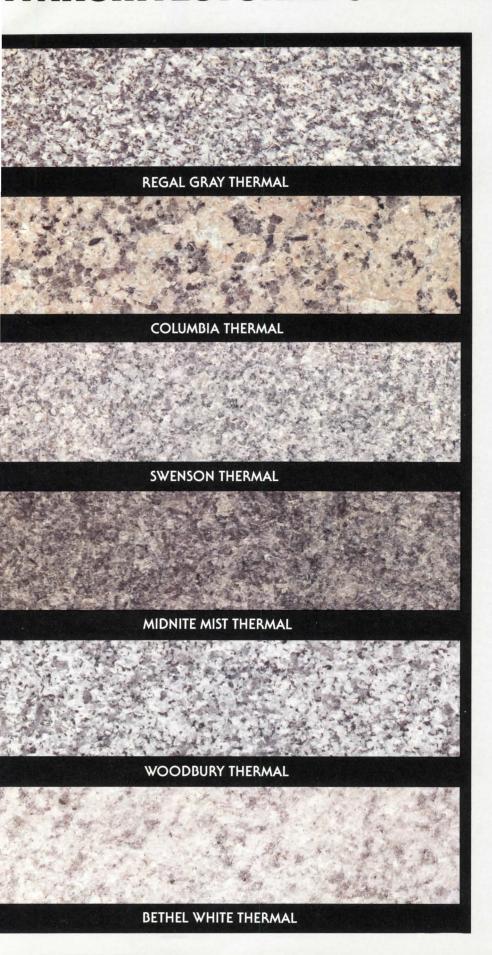
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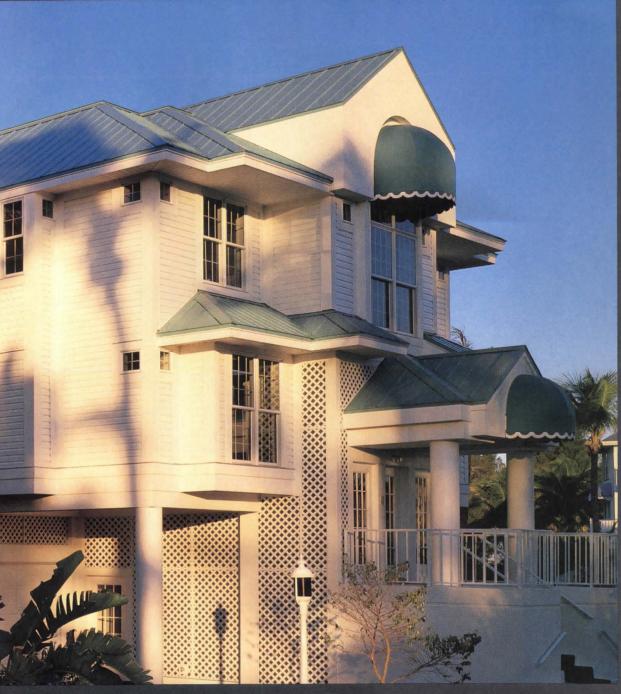


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PA Practice

Diagnostics: Raymond
DiPasquale discusses water entrapment in buildings.
Law: Norman Coplan documents the further erosion of the privity principle.

Specifications: William Lohmann explores the use of performance specifications.

# Diagnostics: Water in Buildings

In almost every major study of problems and defects in buildings, over 50 percent of them can be directly attributed to water or moisture in one form or another: rain penetration (25 percent), condensation (16 percent), and entrapped moisture (10 percent). The last—water entrapped during construction—is often overlooked by the design professional, as well as the contractor as a potential source of serious problems during the early life of a building.

Entrapped moisture can get locked up in a building after the envelope is completed and take years to dry out. Major sources of that moisture are building materials that absorb moisture (there are very few that can't), which are left unprotected on the building site (either while stored or in-place), and exposed to rain, snow, or high humidity. There also are many materials in which moisture is the consequence of their manufacture or an intrinsic part of their nature: materials such as wood, concrete, concrete masonry.

Wood, for example, has an equilibrium moisture content in service of approximately 15 percent, which varies with species, season, and exposure. In the northern part of the United States during the heating season, the moisture content of wood in an enclosed building can be as low as 5 percent, undergoing slight changes all the time.

Other sources of moisture include any material that requires water for mixing or installation: concrete, plaster, floor leveling materials, stucco. Water used for clean-up operations also can penetrate cavities or be absorbed by some materials and remain in the structure and its systems for long periods. And water trapped between roofing felts or under roof membranes is another fairly common occurrence, leading to roof blisters and eventual roofing failure.

In a typical 2400-square-foot (continued on page 60)

# Law: Third-Party Suits

When is a design professional liable for loss sustained by a third party with whom he has no contract? The answer to this question varies depending upon the jurisdiction in which it is raised. Even in jurisdictions that limit an architect's liability, however, the courts are finding exceptions to such limitations.

New York is one jurisdiction that has followed the rule of privity, where a direct claim cannot be asserted against a professional by a third person because there is no contractual relationship between them. The only exception to this rule was for accountants who, under certain narrowly defined circumstances, could be held liable to parties with whom they had no contract and who relied on negligently(continued on page 60)

# **Specifications: Performance Specs**

Perhaps you haven't noticed. Performance specifications for buildings, which seemed threatening to the design community in the 1960s, are still with us. Although seldom used now for the large-scale, preassembled, self-contained parts of buildings for which they were touted at the time, the performance concept has spread to curtain wall design, elevator operation, mechanical/electrical systems, sealants, coatings, and many other components of buildings.

A number of factors have contributed to the growing use of performance specifications. Given the option of selecting products from a manufacturer's often-outdated catalog, architects have found that performance specs offer a way of keeping up with changing technology. The rapid rate of development in certain fields, such as curtain wall systems, roofing, and coatings, makes this approach especially appropriate. Since performance requirements are also (continued on page 62)

# **Practice Points**

Dow Chemical convinced a federal district court jury that its controversial mortar additive Sarabond is safe, reports ENR. The jury decided from a Denver court room that the additive does make mortar more corrosive but at too slow a rate to do significant damage. Heretofore, similiar verdicts had ruled against the chemical manufacturer, who has also settled dozens of suits out of court.

Modernization is enjoying steady growth. Of the owners, developers, and corporate facility managers polled in Buildings' 1989 Modernization Survey 93 percent said they or their firms are currently involved in or planning modernization. Almost 50 percent of the buildings undergoing modernization/remodeling are between 10 and 20 years old. Carpets, indoor lighting fixtures, coating materials, and HVAC systems are the most frequently updated.

While modernization is on the rise, rehabilitation of historic buildings fell 43 percent in 1988 from the previous year's total, states A/E Marketing Journal. But help is on the way. Preservation News reports that the House Ways and **Means Committee's Subcommittee** on Select Revenue Measures voted to counter the restrictions of the 1986 Tax Reform Act, which severely tightened tax credits for historic rehab. Their proposal would allow investors in "low income housing and historic rehab projects to use at least \$7000 of tax credit each year, without regard to overall income."

Perestoika Joint Venture, a U.S.-Soviet alliance anchored by a privately held Atlanta real estate development group, hopes to build more than \$1 billion worth of Western-style hotels and office space in Moscow. Profits from the project, which is to extend over the next five years, will be split between American dollars and Soviet rubles, states ENR. The renovation of historic buildings in central Moscow into office space will kick off the venture.

Diagnostics (continued from page 59) single-story wood-framed house, with a basement of concrete-masonry walls and a concrete floor slab, the approximate amount of water entrapped during the construction approaches 50,000 pounds or 25 tons! And that is in a small structure. Imagine the tremendous amount of moisture that is locked in a building of any size.

What happens to this moisture and where does it go? The moisture attempts to reach equilibrium with the surrounding environment. This moisture migration and corresponding transfer of energy is what can account for many later problems. Water occupies space, so when it leaves, there are usually dimensional changes such as shrinkage. Cracks and deformations also can occur because materials that require water in their manufac-

ture are generally weak in tension. Although such distress seldom has structural significance, owners are nevertheless disturbed and may blame or even sue everyone involved in the construction. Time is wasted defending allegations, and reputations sometimes suffer.

A couple of specific cases will illustrate the point. The first one involves tongue-and-groove wood flooring laid directly on a plywood substrate which was itself mechanically fastened directly to a concrete floor slab within three months after the slab had been placed. In a very short period after installation, the flooring started to heave and buckle. Moisture from the green concrete had saturated the plywood substrate which in turn increased the moisture content of the flooring, causing it to expand and buckle at the joints.

The plywood substrate should have been installed on sleepers which would have provided an air space or channel for vapor pressure to be relieved and moisture to escape. At the perimeter of the floor area, there also should have been relief outlets.

The second case is similar but more interesting. Vinyl tile was adhered to a new concrete slab on grade. Soon after installation, the tile was heavily waxed. Within a short period, the edges of all the tile started to lift up although, because the centers of the tile were perfectly attached, there was no delamination.

At first, a compatability problem between adhesive and a concrete curing compound was suspected. But the problem was pinpointed to vapor pressure from the prematurely sealed concrete slab escaping through the joints of the tile. The heavy wax coating acted as a thin membrane which lifted the edges of the tile as the vapor attempted to escape from the slab.

Solving the problem involved stripping the wax from the floor, rolling it with a heavy roller to reseal the edges, and allowing the slab to lose its moisture (which should take at least a year). Heavy wax coatings were not reapplied until the substrate was dry.

To avoid some of the problems associated with the entrapped water, here are a few rules to keep in mind:

1. Cover all porous construction materials during site storage, including all masonry and concrete products.

2. Protect all moisture-sensitive materials already in place with moisture-resistant wraps.

3. Anticipate the post-construction drying-out period by providing adequate on-going ventilation and possibly a forced drying system for all interiors.
4. Don't cover moisture-laden substrates with impervious materials or finishes, or with absorptive materials, unless there is a path for moisture migration and vapor-pressure relief. Ventilation is the key.

5. Try to avoid excessive water intrusion during clean-up or maintenance operations.

6. Alert the owner to possible signs of distress associated with construction-moisture loss. Signs might not show up for years.

Raymond A. DiPasquale

The author is a Professor of Architecture at Syracuse University and a practicing architect and structural consultant specializing in building failures.

Law (continued from page 59) prepared financial reports. In a recent decision, however, the highest court of New York upheld the viability of a claim asserted by a school district directly against an engineer with whom it had no contract (Ossining Union Free School v. Anderson LaRocca Anderson et al).

The facts of this case involved the retention by the school district of an architectural firm to make a general study and structural evaluation of its buildings. The architectural firm, in turn, retained consulting engineers to assist in various aspects of the work; the engineers had no contract with the school district. They tested the concrete throughout a particular building and reported serious weaknesses, especially in the structural slabs. Relying upon the report, the school district, at considerable expense, closed the (continued on page 62)



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See Our Sweets Catalog 09650/FOM BuyLine 7258 Law (continued from page 60) facility and moved its activities elsewhere.

The school district then retained another expert to verify the results and was advised that the building had been constructed with a lightweight concrete known as "gritcrete" rather than 2500-pound cement which, it was alleged, the first engineers had assumed and upon which they had based their report. It was further alleged that this information was available to them in the original drawings and specifications, which had been furnished to them. Had they read these materials, rather than acting on a mistaken assumption, they would not have rendered the report upon which the school district relied.

The school district instituted a legal action for damages against the consulting engineers, claiming negligence and malpractice. The defendants then moved for a dismissal, asserting that, in the absence of a contractual relationship between them and the school district, neither the negligence nor the malpractice claim could be sustained. The Trial Court dismissed the complaint, and this decision was affirmed on appeal. The Court of Appeals, however, reversed the decision in an opinion that has significant implications for the

design professions.

The Court concluded that recovery may be had where the relationship between parties is so close as to approach that of privity. Although the rule of privity had been relaxed in cases involving accountants, the Court saw no reason for treating other professionals differently if reliance upon their services by a third party is the end and aim of the transaction. The third party then should be in a position to recover pecuniary damages arising from negligent performance.

The Court pointed out that the consulting engineers, because of the nature of the work and of their direct contact with

the plaintiff, had to be aware that the substance of the reports they furnished would be transmitted to and relied upon by the school district. The defendants rendered their reports for the presumed objective of shaping the plaintiffs' conduct. Thus, stated the Court, "they owed a duty of diligence to the School District in performing services.'

Does this decision open the door to suits by contractors against architects for economic loss allegedly sustained because of some failure in the architect's performance? If reliance by the contractor upon the plans and specifications of the architect can be construed as the "aim and end" of the transaction between owner and architect, the answer would appear to be yes. If this decision is extended, the increase in the design professionals' potential liability will be great indeed. Norman Coplan

The author is a partner in the New York law firm of Bernstein, Weiss, Coplan, Weinstein & Lake.

**Specifications** (continued from page 59) a method of shifting some design liability to the contractor, they are attractive from that standpoint as well.

Before using performance specifications, it is important to understand their role in the construction process and their potential limitations and benefits. Because final detailing, engineering design, and product selection are usually performed by a contractor after contract award, specification control is critical. Most performance specs are based on widely-accepted reference standards, such as those of ASTM and ANSI. Others reflect recognized trade practices and compliance with code requirements. Therefore, a specification must be studied carefully, in sufficient detail, to ensure that a contractor will be able to meet the requirements. Review by qualified consultants is crucial to this process. After the work is under contract, the specifications also must be strictly enforced. Economics will always tempt the contractor to cut corners, so detailed checking of shop drawings, test data, and design calculations is essential.

Performance specifications depend upon three pieces of information: a clear scope of included (and excluded) work, a precise statement of performance criteria, and a complete description of appropriate test methods for determining compliance with those criteria.

(continued on page 64)

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Specifications (continued from page 62)

Curtain wall design probably represents the most widespread application of performance specifications. It has become the accepted norm for large curtain wall applications and has expanded into related specifications for stone, sealants, and glazing.

In reality, most specifications for curtain wall systems are only partly based on performance criteria and testing requirements. The architect usually reserves judgment in aesthetic areas and imposes certain limitations on the contractor's design, such as precise component profiles, modular dimensions, concealed fasteners, concealed sealants and gaskets, and location of joints. Glass materials and finishes are often specified as proprietary products.

The major part of a curtain wall specification, however, is based upon performance design. It stipulates design conditions in terms of wind load (from building code requirements or wind tunnel testing), maintenance equipment loads, anticipated structural deflections and movement, and climatological data. Performance criteria are established for air and water penetration, condensation, controlled drainage, deflection limitations, thermal resistance and move-

ment, performance of anchors and fasteners, and seismic resistance. Test methods, such as AAMA 501 "Methods of Test for Metal Curtain Walls" and ASTM E 330, E 331, and E 332, are specified. A test sequence is defined, and tests are usually performed on a laboratory mock-up prior to the full production of curtain wall components. After installation, follow-up testing is specified to uncover defects in workmanship and field installation.

Stone-support systems are sometimes specified as integral components of a curtain wall system and are subject to the same performance require-

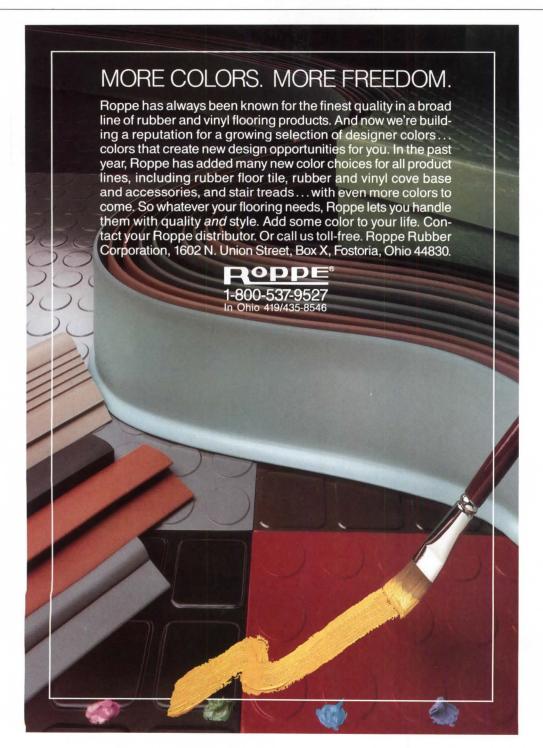
ments. Initial testing of stone samples is required in accordance with ASTM C 880 so that the fabricator can determine the necessary panel thickness based on size and loading. Stone panels are also tested as part of the curtain wall mock-up. If stone is to be supported on an independent strong-back system or concrete unit masonry backing, the design conditions and testing requirements for panels and anchors are specified separately. But, either way, the contractor is basically responsible for final performance of the assembly.

Glazing, sealant, and coating systems are also specified as components of a curtain wall design. But more and more frequently, independent applications appear in a performance format. Design loads and a temperature range are specified for exterior glass and the glazier must determine glass thickness and minimum bite of the frame. Test data on the strength and adhesion, in accordance with ASTM C 920, and weathering compatibility of sealants are submitted by a sealant contractor to justify the contractor's selection of certain sealant products. Sealants are sometimes limited to a certain type of material but without actually naming products, leaving their selection to the contractor. Exposure conditions for special coatings, such as chemical resistance, ultraviolet radiation, and physical abrasion, are often specified, and the products are then proposed by the contractor to meet the conditions. The architect picks only the color.

For many architects, performance specifications still imply verbose documents with elaborate design criteria and testing procedures. But the preceding examples indicate that performance requirements are woven into our typical specifications in many ways—through stipulated requirements, code compliance, and reference standards. However much their scope, criteria, and tests may vary, performance specs are here to stay.

William T. Lohmann

The author is Vice President, Specifications at Murphy/Jahn in Chicago.



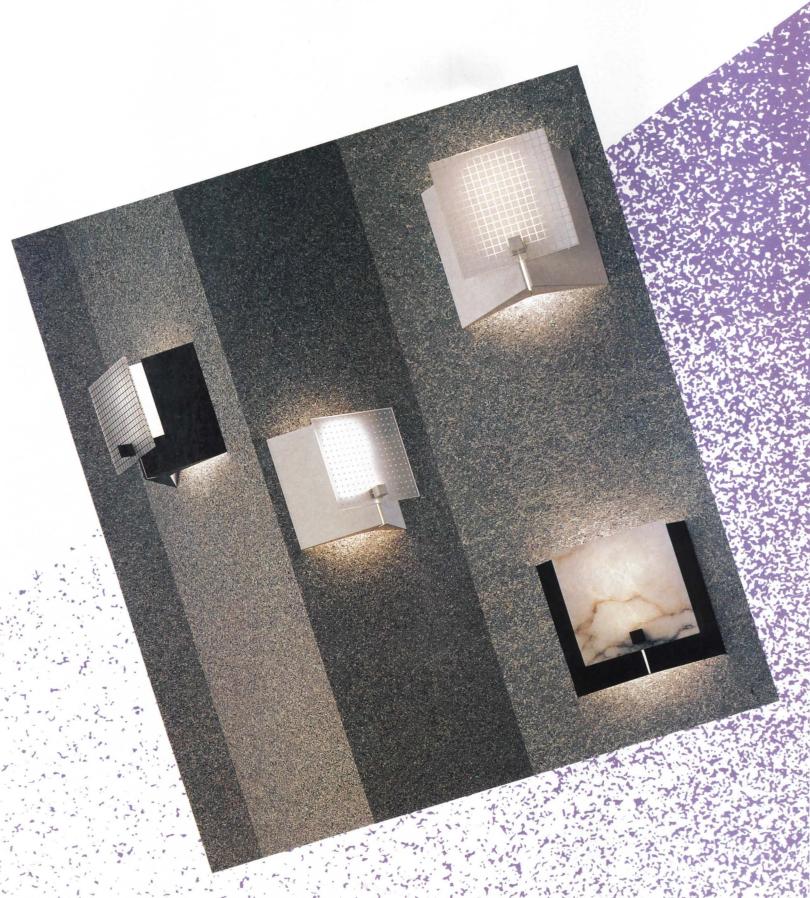
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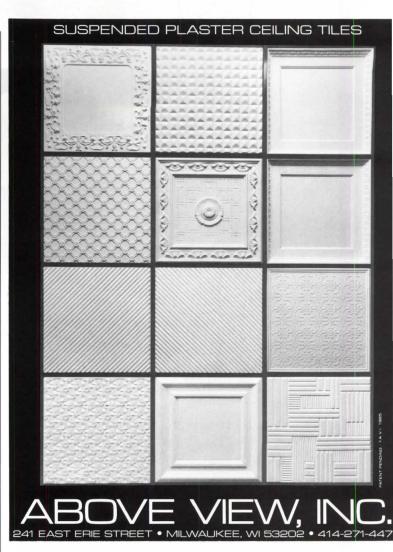


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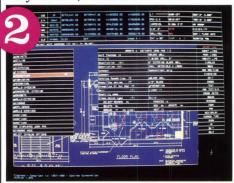
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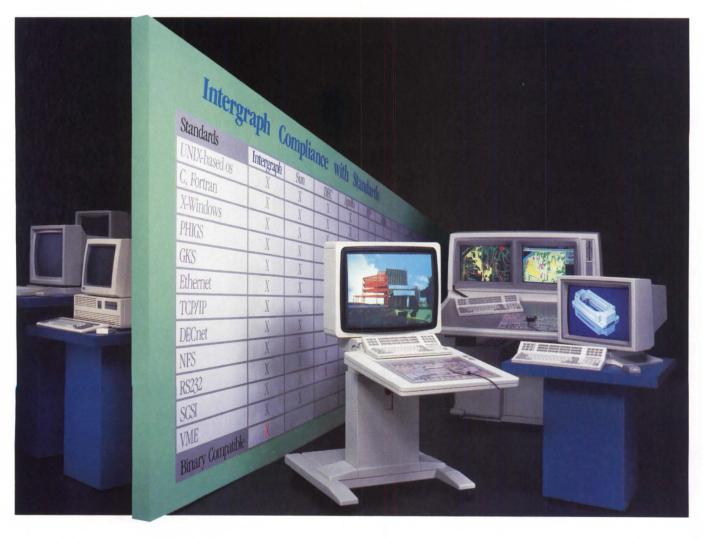
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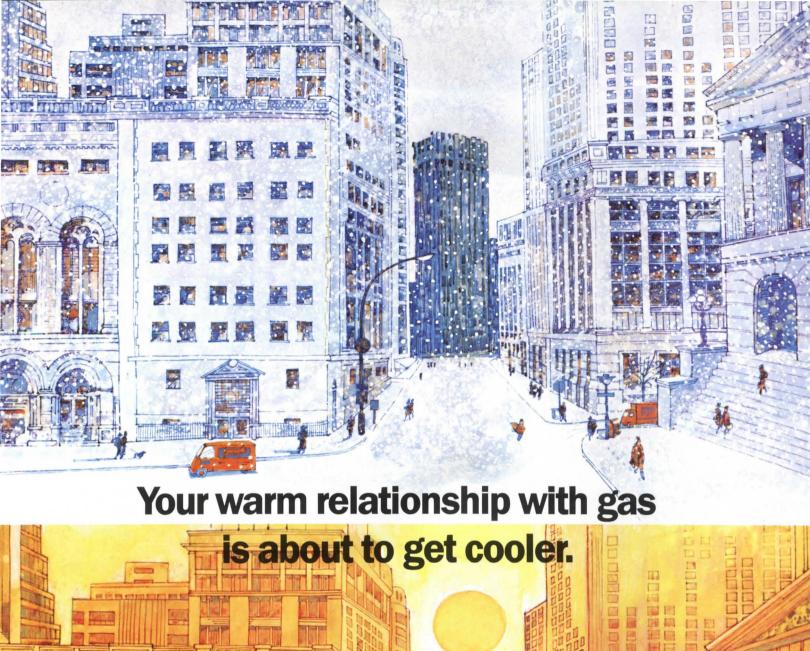
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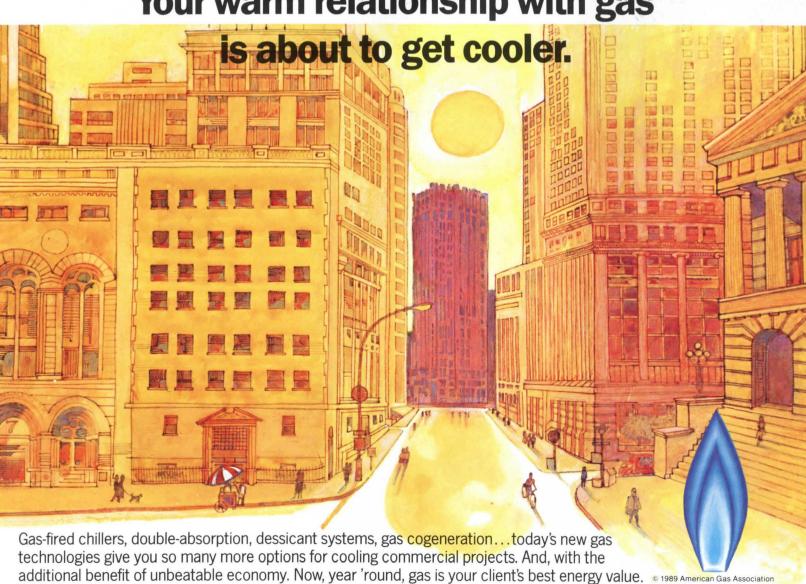
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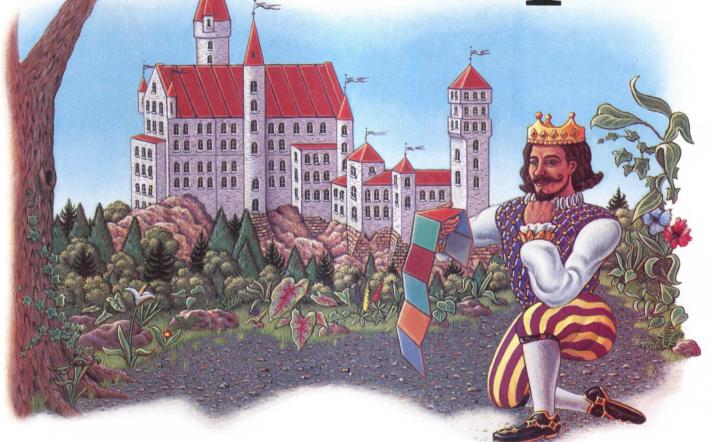






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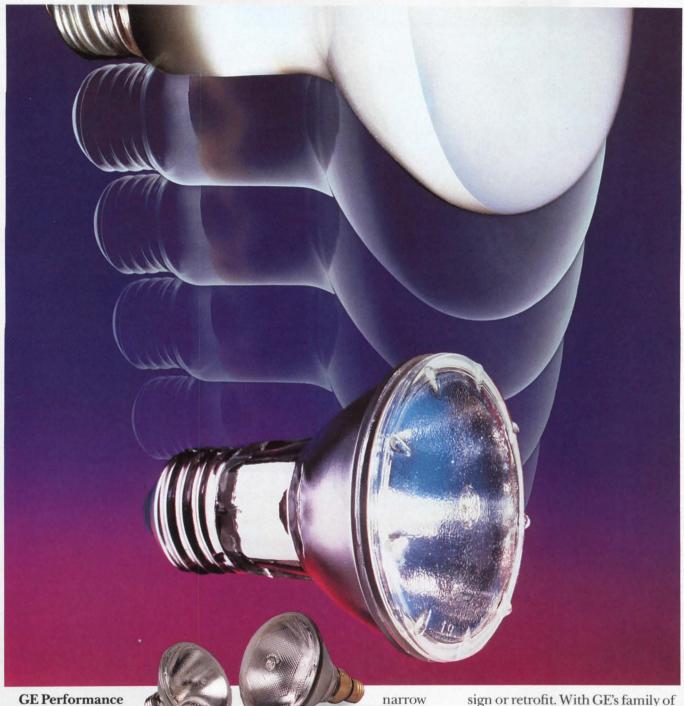
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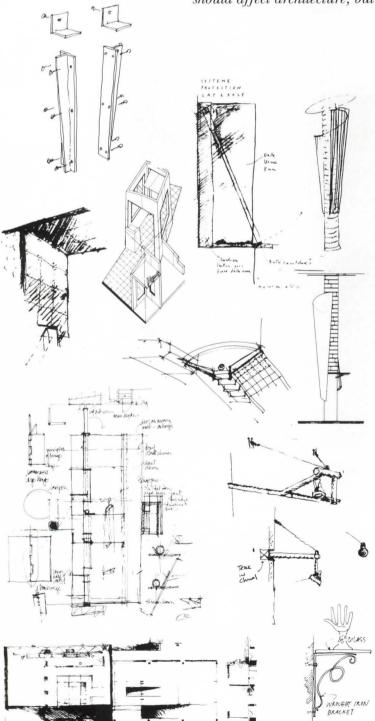
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# **The Art Connection**

Art is the "new aristocracy," and in the free air of its undoubting public acceptance, many architects no longer question whether art should affect architecture, but rather how much.



INTERIORS provide a reading on the doings in diverse areas of design and on the currents buffeting architecture in particular. That is because interiors are usually quicker and easier to implement than full-fledged buildings, their budgets lower. The sense that the stakes aren't as high, combined with the temporary nature of many interior design projects, encourages architects to experiment, take risks. Look at interiors, and you are reading the times.

In interiors, as elsewhere, art figures large in the headlines. Indeed, it is old news by now that art has infiltrated architecture and design. We see it everywhere: in the booming art furniture market and resurgent artisan movement, in museum shows of architects' drawings and installations, and in the civic sanction and proliferation of artist and architect collaborations. Deconstructivism (and its death by hype) can be better understood in this context. But most cogently, we see the ascendance of art in the rise and enduring appeal of Frank Gehry.

Certainly, these are part of a broader phenomenon. As Tom Wolfe succinctly voiced it on primetime TV, "Art is the new aristocracy," the vehicle of the age to legitimize new money, attain social standing, portray power.

While there have been efforts to tie current designs to certain artistic schools—Constructivism, Expressionism, or Primitivism—style is not the issue. More than any specific inspiration, the abiding significance of the art and architecture connection lies in an attitudinal shift it has caused among architects. Its hallmarks: a fascination with form-making and new media, a search for emotional underpinning and impact, and the license to use imagery that is ambiguous—liberated from the Modern imposition of a univocal language. Cases in point: At a panel on "The New Pluralism" held recently in Chicago, Peter Eisenman discussed "the necessity of arbitrariness"; Wolf Prix of Coop Himmelblau spoke of "psychic plans" that he and partner Helmut Swiczinsky arrive at by drawing with their eyes closed.

And so, beyond the favorable climate provided by an almost "kneejerk" public acceptance of art, the affinity to it in today's design can be construed as part of an architectural continuum—a mature rebellion against Modernism, for which the decorative and metaphorical aspects of Post-Modernism paved the way.

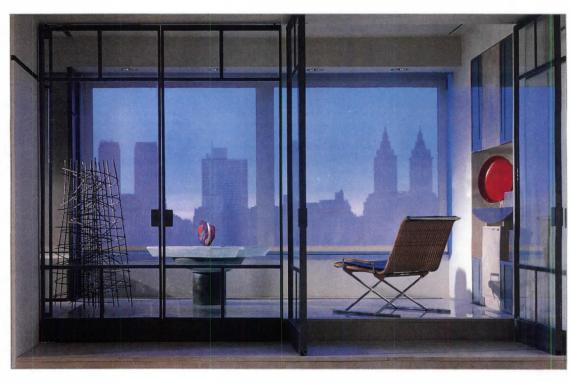
Does this attitudinal shift give rise to good architecture? The answer, we suspect, has to do with whether the artistic impulse is tempered with architectural rigor: a consideration for inhabitants' needs, and a deep understanding of the properties of materials and the fundamentals of construction, as manifested in crafted details.

To illustrate, we have assembled in this issue a broad spectrum of work, diverse in style, function and location. Besides conventional documentation of each project, we focused also on selected details. As the various building types demonstrate, good design these days may be unconfined formally, but it is ever alert to its appropriateness. And good architects need no longer agonize whether art should affect architecture, but rather how much. *Ziva Freiman* 



# **Process of Elimination**

An unrestrained design method led to elegant Minimalism in this New York apartment by Pasanella + Klein.



The apartment's enclosed terrace (this page), which overlooks Central Park, was raised to lower the sill height and help define the area as a discrete "room." Room-making was also the idea behind the dense zinc-lined portals of the foyer (facing page, top). Heavy frosted glass pocket doors close off a bedroom (left in photo) and the dining room (right). The portals, such as the one that leads into the living room (facing page, bottom) give a sense of passage while retaining an open plan. An asymmetrical "God's eye" pattern appears in the foyer floor.

THE DESIGN team from Pasanella + Klein was trying to decide how to finish the zinc cladding of the foyer passageways in their latest project, a Fifth Avenue apartment. Options were put forth over a conference table, then someone picked up a draftsman's metal triangle. "We said, 'Yeah, this is what we want,' " says design partner Wayne Berg; workmen were instructed to match the patina of the triangle when treating the zinc.

So went the design of this pied-à-terre for a crafts collector, a collaboration between Pasanella + Klein and Berg (who has since joined the firm). "We don't come into a project with any *a priori* ideas," says Berg. Indeed, although this apartment may suggest Minimalist restraint, the only doctrine Berg seems to hold dear is that of process: A project's guiding principles take shape through trial and error, accidents, and through little inspirations like that of the draftsman's triangle. In this apartment, the process was one of simplifying and removing superfluous elements. Reductivism became

the strategy for this apartment largely because it functions as a showcase for the owner's collection of crafts, which dominates the space. The client came to Pasanella + Klein after seeing another Fifth Avenue flat by Henry Stolzman (partner-incharge on this project). She explained that she didn't want her apartment to *look* like the one she'd seen, but that she respected its "intelligence."

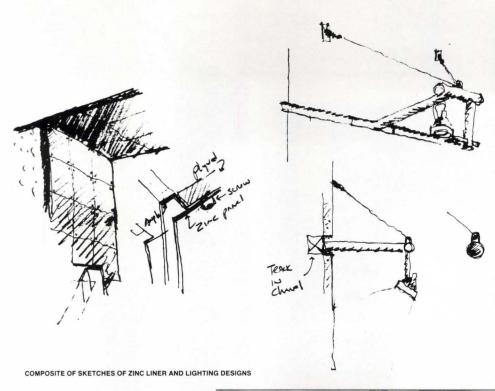
While much of the apartment's physical and intellectual content developed through a collaborative process, the team established a few givens from the start. A traditional sense of separate rooms was desirable, for instance, but this had to be accomplished without making the precious Fifth Avenue spaces feel boxed in. Also, the view of Central Park across the street was of paramount importance. The decision was made early on to raise the floor of the main bedroom and the enclosed terrace, to define them as discrete spaces and to enhance the view from their windows.

(continued on page 86)





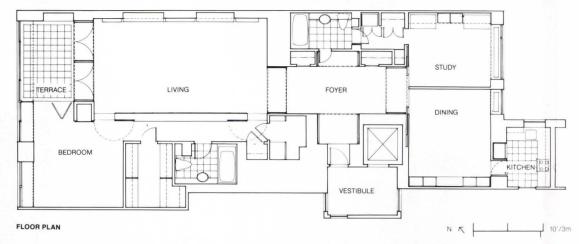
### **Collector's Apartment**



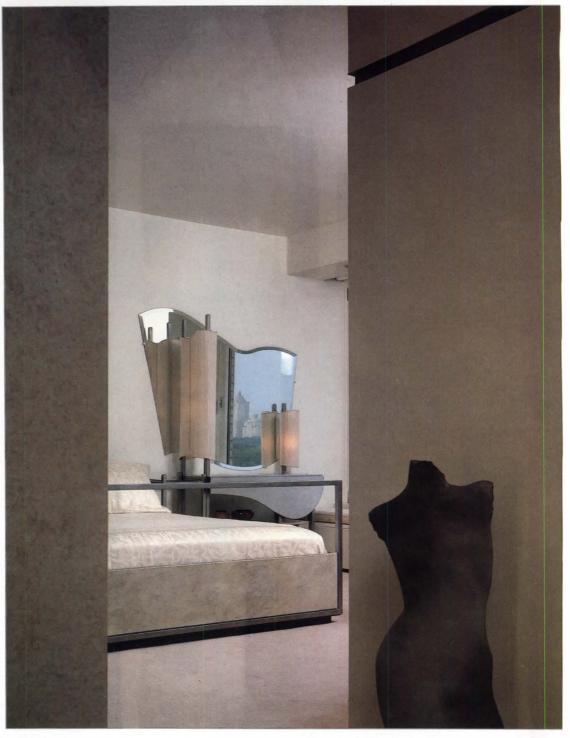




Since the apartment also functions as a showcase for art, lighting was of great importance. With lighting designer Jerry Kugler, the architects created fixtures (sketch and photo, upper right) in the language of the apartment's details. That vocabulary developed through the design of the reveal where the zinc "liners" meet the walls (sketch, upper left). The reveal was used in the datum line seen throughout the apartment. The zinc-covered cantilevered display shelves on the living room wall (center) appear more substantial than they are; L-shaped profiles increase the apparent bulk. The steel frames of the custom-made terrace doors (facing page) were sandblasted to hide imperfections; they will rust over time.







The main bedroom (right and facing page) is also raised to take advantage of the view. While the doorway from the living room appears open, a door from the adjacent built-in cabinets can swing 180 degrees to close off the space. An appropriately minimal aluminum-frame bed and a fanciful dresser were designed for the room by project architect Lea H. Cloud.

(continued from page 82)

The next move was the creation of a well-defined foyer to serve as the heart of the apartment. A set of portals on each side of the foyer developed as another way to define separate rooms—by suggesting passage from one to another—while avoiding complete enclosure.

The process of detailing the inside of these passageways (Berg calls them "liners") was the genesis of much of the apartment's vocabulary. Where the zinc cladding meets the corner (see detail, p. 84), Berg created a one-inch reveal that was subsequently repeated at the 6'8" datum line throughout the living room. (The line appears virtually everywhere in the apartment, albeit in different forms: as the top of the kitchen cabinets, as a window mullion, as the top line of the tile surface in the bathrooms.)

From there, the design of the apartment became one of details and of carefully examined and manipulated materials. The effort to reduce the apart-

ment to a series of consistent, readable details is manifested in the south wall of the living room, which was originally conceived as a wall of sculptural limestone niches. Instead, the team decided to go with limestone slabs held in place with metal clips and supported on lead-plug "feet." Further examples include the custom lighting fixtures designed to illuminate the art and animate the space (see detail, p. 84) and the custom thin-profile steel doors to the terrace.

The range of materials employed in the apartment doesn't end with the metal details, however. Interiors consultant Tse-Yuen Chu introduced distressed glass, oak flooring with ebony borders, green marble flooring (on the terrace), and faux-painted cabinetry into various parts of the apartment. Characteristically, though, this fascination with materials rarely leads to sensory overload; the sometimes bizarre artifacts in the crafts collection remain at center stage.

However, there are exceptions to the formally



subdued design. In the bedroom, a vanity designed by project architect Lea Cloud responds directly to curvaceous pieces in the owner's collection. On another level, the steel frames of the terrace doors create abstract compositions of their own—which vary according to the viewer's vantage point.

An apartment of this modest size and considerable budget is not, of course, the norm for most architects, and it is valid to wonder whether Pasanella + Klein's evolutionary design method is a luxury that is unworkable for larger projects. Berg thinks not, and suggests that architects of his generation (he cites Morphosis and Steven Holl—both of whom seem to share his interest in details) have been successful in implementing lessons learned from small projects in larger ones. Berg's current work with the firm includes some large-scale institutional buildings that just might prove his point. *Mark Alden Branch* 

**Project:** Art collector's apartment, New York.

Architect: Pasanella + Klein, New York (Wayne Berg, design partner; Henry Stolzman, partner-in-charge; Lea H. Cloud, project architect; Nancy Cooper, Harley Swedler, project team).

**Program:** Remodeling of a gutted 1800 sq ft apartment to serve as a pied-à-terre and house the owner's crafts collection.

Major materials: oak, zinc, limestone, marble, steel (see Building Materials, p. 196).

**Mechanical systems:** split A/C system, hot water heat.

**Consultants:** Tse-Yun Chu, New York, interiors; Jerry Kugler Associates, lighting.

Contractor: Embassy Construction. Costs: \$340,000.

Photos: Paul Warchol.



FAMA RESTAURANT · SANTA MONICA

# Form, Economy, Delight

Operating on a shoestring, architect David Kellen brings visual and emotional richness to a restaurant interior with craggy plywood forms that display increasing sophistication in the use of the material.

LOW-BUDGET design is becoming more prevalent in retail and restaurant interiors, as many owners are reluctant to spend big bucks on enterprises that may not survive the year. At the same time, savvy entrepreneurs demand from designers a distinctive image, knowing well how a trendsetting look can boost their bottom line. Unfortunately, too often such a strategy results in schlock.

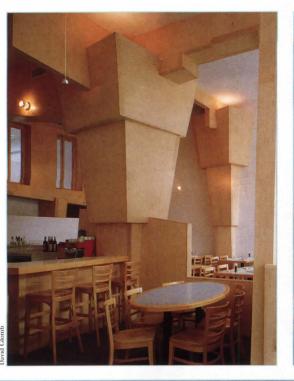
All the more encouraging, then, to find lowbudget restaurant design such as Fama's, whose artistic conception and pragmatic execution successfully meet not only commercial imperatives, but enduring architectural standards as well.

Designed by architect David Kellen, and built for a respectable \$50 per square foot, Fama occupies a one-time bakery in Santa Monica. Its existing kitchen needed little modifying, allowing Kellen to concentrate chiefly on the dining room and bar. Here the architect used maple-veneer plywood to create a sculptural framework, anchored to existing columns and beams, that divides the space into uneven quadrants. At the entrance, he installed a shed-like host station and at the rear, on either side of the kitchen, he tucked the restaurant office and a small, raised dining gallery, which looks over the main room and out the glass front to the street. Enhanced by concealed lighting, and displaying increased sophistication in the use of the material, Kellen's chunky plywood constructions provide all the ornament and interest the restaurant needs.

"I've found that spaces seem engaging when something in them is switching on the user's emotions or reasoning powers," Kellen explains. "I wanted people in the restaurant to be more than mindlessly comfortable and to notice the surroundings, the food, their own conversations." Such awareness is heightened by sculptural forms that, lacking recognizable scale or rhythm, absorb the viewer's perceptions. Or, as Kellen puts it, "It's the unconscious talking to the unconscious." He arrived at Fama's evocative plywood forms through design models that examined the shapes' presence and emotional impact. "If they worked for me, then they were working," he says.

The architect draws inspiration from the "emotional impulse" he finds in the painting and sculpture of artists exploring similar ideas, from Expressionist Edvard Munch to Dadaist Kurt Schwitters,











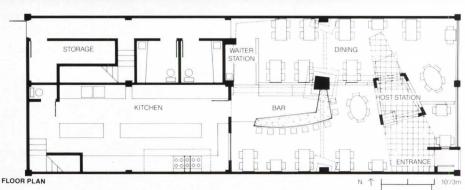
and "mystical painters" Kandinsky and Klee. "A time and a place close to me is Barcelona," Kellen adds. "Gaudi, Picasso had their own style which was dreamlike, subconscious."

Yet, however far he reaches for inspiration, Kellen takes pains to give his design a solid functional foundation. And while each project illustrates an evolution of ideas about form, its resolution is equally governed by specific site and program requirements. "Some architects find constraints to be a nuisance," he says. "I look at them as something to pursue, to emphasize. Then they become possibilities." For example, a slight change in level required the architect to provide access for the disabled. Rather than a perfunctory ramp-and-rail solution, Kellen used the host station to incorporate a subtle linoleum-covered incline.

The site's broader context provided its own cues: Fama is located in one of Los Angeles's most "urban" areas, in the sense that its neighborhood has lively pedestrian traffic. In response, the architect contrived to give the dining space the sense of a courtyard situated off a main walking path. Thus, the rear wall of the restaurant is treated like an exterior wall, with punched windows for the office and kitchen pass-through, and plywood cutouts to frame the gallery fenestration; a glazed façade makes the front wall all but "disappear."

Kellen, 36, earned his first degree in mathematics, then spent a number of years "floating around," doing everything from sound engineering in recording studios to building surfboards and sculpting in ceramics. He returned to Berkeley for a master's in architecture, followed by stints in the offices of Frank Israel, Charles Moore, and Fred Fisher. The most lasting influence on his design came from three and a half years with Frank Gehry. "Frank is also a very intuitive, personal designer, and his work gave me the strength to do this," Kellen says. Before founding his independent practice 18 months ago, Kellen and fellow Gehry alumnus Josh Schweitzer worked in partnership for over three years. (Their restaurant, City, was featured in P/A Sept. 1986.)

Leery of being taken for licentious, Kellen is adamant about rigor. "It has to do with hard work on many levels, like a musician practicing scales. It's years of discipline that allow for what looks like complete freedom." Ziva Freiman



**Project:** Fama restaurant, Santa Monica, California.

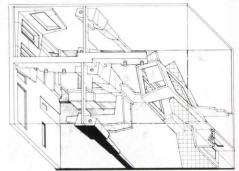
Architect: David Kellen, Los Angeles (David Kellen, principal; Taxiarchis Madouras, Richard Song, design team).

Client: Hans Röckenwagner and Mary Fama-Röckenwagner. Program: Conversion of a bakery into a 1900-sq-ft restaurant. Major material: <sup>3</sup>/<sub>4</sub>" maple-veneer plywood (see Building Materials, p.

Consultants: Davis-Fejes, structural; Comeau Engineers, mechanical.

Contractors: Asterisk Construction. Costs: \$95,000.

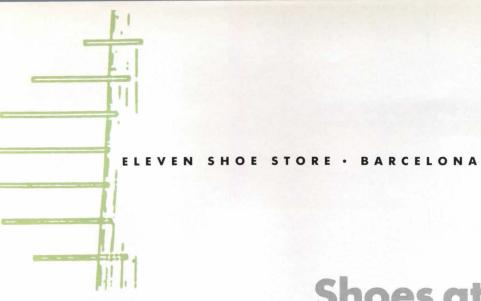
**Photos:** Tim Street-Porter, except as noted.



AXONOMETRIC OF MAIN DINING SPACE

Plywood cutouts wrap around the corner to "fenestrate" the wall facing the bar (above right). Kellen capitalized on the grain of the plywood's maple veneer (facing page), fitting the sheets so their texture would contrast, and augmented the effect with clear varnish.





# **Shoes at Eleven**

'YN's interior design partners defy pedestrian retail conventions in a mixed-media footwear store in Barcelona where titillating architecture is the art sell.

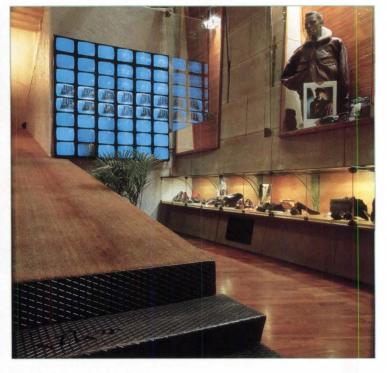


ARCHITECTURE sells shoes at Eleven. The need to provide clear access from street level to the first floor of an old dress shop in downtown Barcelona set the design theme of the store and inspired its name. The word "Eleven" has dual connotations here: In Spanish, it means to bring something up, to raise or elevate it, while the English word has a catchy, commercial sound.

Designed by local "interioristas" Manuel Ybarguengoitia and Maria Del Mar Nogues, the shop signals to passersby on Diagonal Avenue that something special is afoot: Its two-story storefront contrasts with neighboring shops housed on the ground floors of turn-of-the-century buildings, with a giddy entrance hall that looks more like the foyer of an avant-garde art gallery than the lobby of a commercial space. And the art of architecture is definitely on show.

The entry space has a glass hydraulic elevator leading to a glass-floored bridge that runs across the façade, complete with a Gaudi-inspired wrought metal railing based on the store logo's cartoon. Beyond allowing access for the disabled, the elevator provides glimpses of Barcelona's most bustling boulevard, the Rambla Catalunya.

For the able and adventurous, there's a relatively steep, steel-

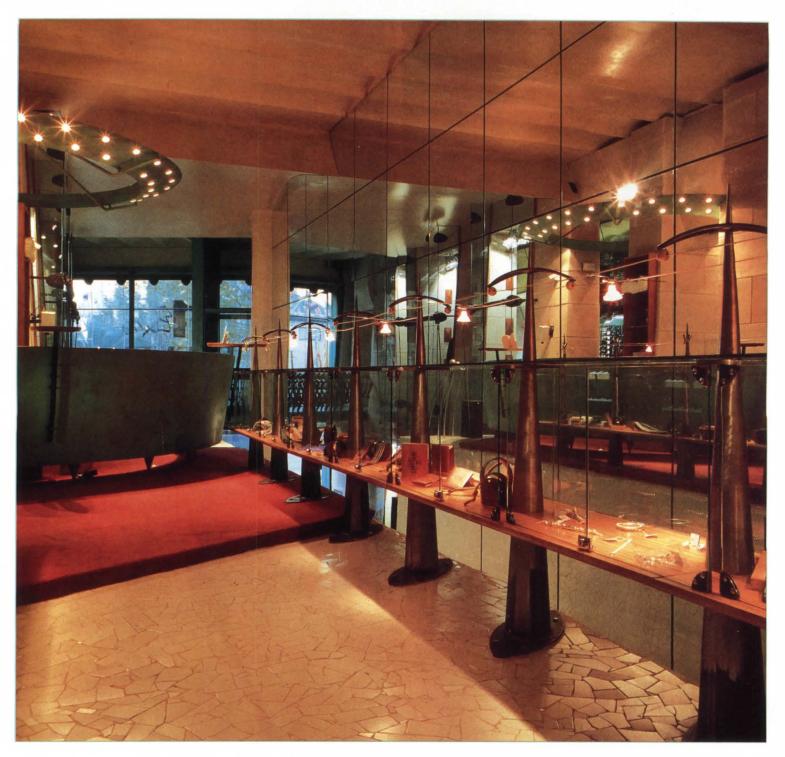


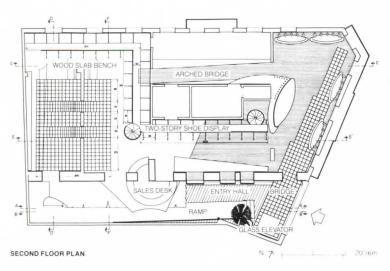
framed ramp, "launched" by steel-plate steps, that delivers shoppers to the second level, past a circular reception desk poised at the "precipice" overlooking the entrance. A trio of tall glass and steel display windows occupies one wall of the double-height foyer; mirror panels clad the other, adding illusory breadth to the ramp.

Indeed, most of the idioms and materials used throughout the shop are announced in the entry space. High-tech materials, such as stainless steel and satin-finished metals, are placed next to the textured surfaces of coconut matting, embossed steel plate, and fragmented white tile reminiscent of Gaudi's masonry at Güell Park. But the dominant element in the entry, setting the theme for the shop above, is an electronic billboard composed of 48 TV sets.

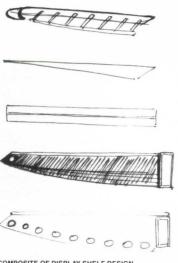
On the second level, the incongruous juxtapositions of forms and materials continue. The round sales counter, with an oxidized-bronze finish and small conical feet, appears to float through the thick, load-bearing walls of the building. Upright metallic needles impale delicate glass display cases. Thick slabs of wood, screwed together to form benches, face thin sheets of metal supporting shoes.

Eleven is a self-service shoe store. In keeping with that unconven-





Eleven's entry (facing page, left) is framed by a glass elevator and glass bridge, which lead to the secondfloor shoe store. The entry space (facing page, right) contains glass display cases and a billboard of 48 television screens, which prepare customers for the video technology used upstairs when they try on shoes. A ramp, with three embossed-steel steps at its bottom, rises along a mirrored wall to the second-floor sales space (above) with its circular metal sales counter and glass cases at once pierced and supported by metal spikes. The second-floor plan (left) shows the shop's organization into a front and back display area connected by two passages.

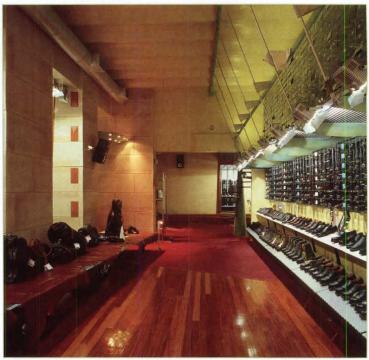


### **Eleven Shoe Store**









tional premise, and denying the custom of keeping stock out of sight, the designers turned a two-tier "storeroom" of steel-racked shoeboxes into a major design element: A towering wall of shoes, accessible via a cable-supported steel-grate catwalk anchored by two strategically placed spiral stairs mounted on oxidized metal cones.

But it is the TV sets, located at various points in the shop, that play the most important part. TV cameras and monitors throughout the store replace the old fashioned mirror; through video, clients can see how new shoes suit—from every imaginable angle.

The idea of bringing TVs out from their conventional domestic settings into public and urban contexts is an old one; Dali set a whole bunch of them one above the other, in an obelisk in a public square in Figueres. Their use here, however, aims at high-tech appeal. If anything, the problem at Eleven is that its designers never go far enough to make a comment about television, or even to exploit its narrative powers. (For example, elsewhere in Barcelona, Architect Alfredo Arribas brought TV monitors right to the dining tables in his restaurant "Network," a purposely intrusive move fraught with cultural commentary.) Lacking that larger meaning, the use of video

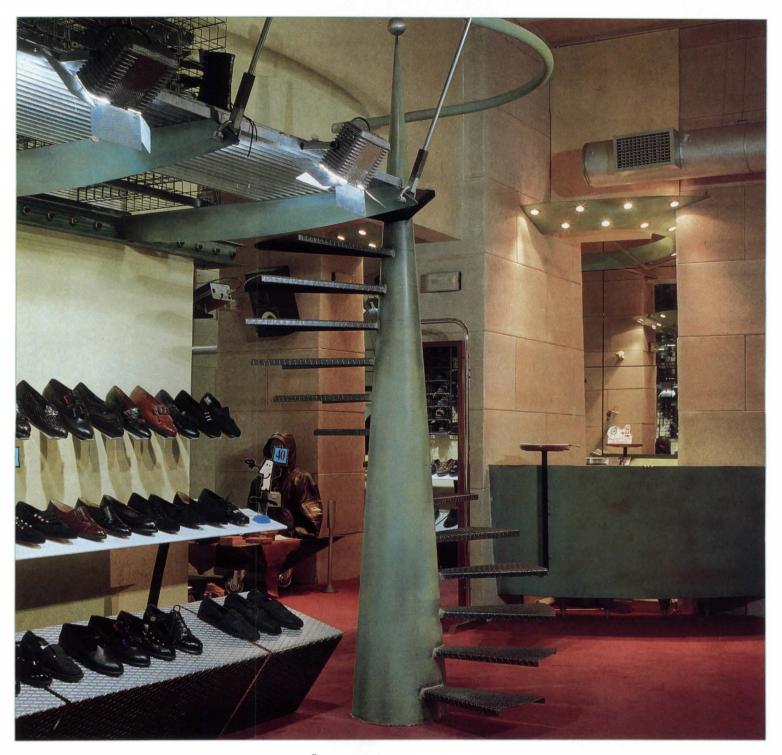
at Eleven is often simply confusing. Salesmen report that customers, intimidated by the sets, end up asking for the mirror.

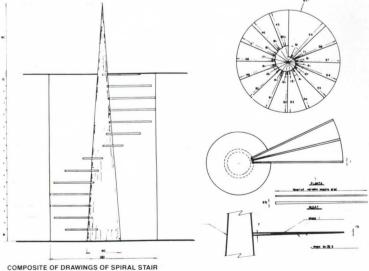
Electronic gimmickry aside, Eleven defies architectural conventions effectively, albeit without the social agenda of such artistic movements as Dadaism and Surrealism, which contested *petit bourgeois* values. Even the entry ramp doesn't work as ramps usually do: The steps at the bottom of it make it definitively "non-accessible."

What is most interesting about *Eleven* is what it represents. First, it signifies a belief that, as the store's product manager says, "good design can sell anything." Second, it represents what some have called a "new realism" in architecture, a willy-nilly Modernism that is almost perverse in its defiance of convention.

In short, Eleven sells design as if it were simply more consumer goods. Yet it counters the expectations of comfort upon which consumerism stands. The point of it may be to sell shoes, but the result is revealing in many other ways. *Magda Saura* 

The author holds a PhD in Architecture from the University of California, Berkeley, and is now teaching at the architecture school in Barcelona.





Eleven is full of contrasts between images of high technology and a kind of neo-primitivism. Seemingly weightless lighting fixtures project from apparently heavy, patinaed posts (facing page, top left) while thin display shelving is juxtaposed with thick, wood-slab benches (facing page, top right). The shop also contrasts various design cultures, such as the arched "Japanese" bridge and display case (facing page, bottom left) and the "high tech" cable structure supporting the upper level walkway (facing page, bottom right). Epitomizing such juxtapositions are the corner spiral stairs (above), whose menacing support spike and daring cantilevered treads lead to an ultra-refined, high-tech catwalk.

Project: Eleven shoestore, Barcelona.

Interior designer: 'YN, Disseny d'Interiors, Barcelona (Manuel Ybarguengoita, Maria del Mar Nogues).

Client: Lamolla.

Program: Design of a 3832-sq-ft self-service shoestore.

Major materials: Bolondo wood, iron with oxidized bronze finish, wool carpets, bleached white ceramic tile, crystal.

Contractors: J.R. Almirall, Bonambient, Volutra, Cristalerias Terrassa, Park Mobel, Talleres Gial, Decarprat, Inteco Sistems, Ascensores

Photos: Javier Carles Matheu.



OFFICE OF MARGARET HELFAND ARCHITECTS · NEW YORK

# Method to the Madness

A rigorous process reinforces the unpredictable forms, iconoclastic choice of materials, and innovative structure evident in architect Margaret Helfand's design of her own New York office.

"IN YOUR work the building is just a scaffolding for the glorious display of magnificent details . . . Yours was a language where neither the text nor the final message mattered as much as the single, resonant word," wrote Emilio Ambasz in a rousing homage to Carlo Scarpa published in these pages in May 1981. "In your architecture, the parts *are* the whole."

Scarpa came insistently to mind when evaluating the office designed by architect Margaret Helfand—even though Helfand never mentioned his name, and in form her architecture has little in common with Scarpa's Wrightian vocabulary. Nevertheless, in its passion to unmask the essential properties of materials, yet cloak in mystery the details of their construction, Helfand's work—and her architectural mindset—invoke Scarpa in force.

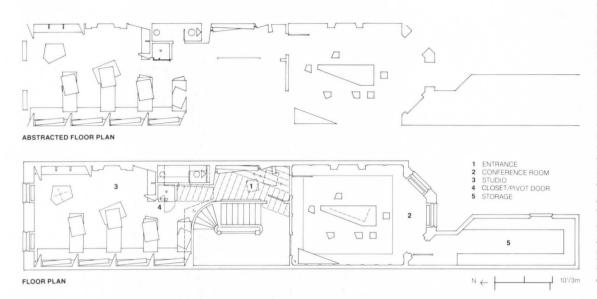
Working in close collaboration with her associate, Marti Cowan, Helfand rehabilitated the best features of one floor of an 1880s Manhattan townhouse—its wainscoted walls, plaster dentil cornices, and marble fireplace. Within the refurbished shell, she designed and installed the striking furnishings of her office. The back parlor became the conference room. In the front, the architects removed all'intermediate partitions to create the studio (a move that entailed restoring missing segments of the plaster cornice by hand). The entrance foyer, much narrower in girth, and located just off the townhouse's winding central stair, forms the link between front and back spaces.

At first glance, Helfand's acute-angled furnishings look like rarified ideas made concrete—almost too abstract to inhabit, more artistic than functional. But that impression is deceiving, Helfand asserts, for there's a distinctly architectural "rigor and logical structure underlying what at first appears random and arbitrary."

To attain that framework, Helfand and Cowan begin their design process with an analysis of activities and the circulation patterns those generate, with the aim of distilling them to the point where they can be illustrated with a simple geometry. "That gives you an infrastructure," Helfand explains, which in turn informs all other design elements. The movement pattern in the office, for example, was contingent on getting around the obstacle of the stair and through the "bottleneck" foyer, and so emerged as a geometry of diagonals that is repeated in the skewed cutting surfaces of the studio desks, in the pattern of the foyer's rubber carpet tile, and in the angles of the conference table and console.

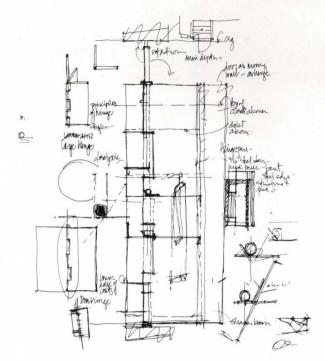
Those diagonal lines appear also on the conference room door, in what at first seems like a wholly ornamental pattern, created by metal-dust silhouettes sandwiched between plates of glass. In fact, the decorative motifs are abstracted from the office floor plan, and the slanting incisions reflect the circulation's geometric theme.





Within the restored shell of the back parlor (below), Helfand installed a conference table with a bent-steel plate base (plus a mated console that was "sheared" off the main table) and steel chairs which she designed. Strong as it is, the cut steel plate that forms each seat and back could be thin; the material's elasticity allowed for the fold. The underside surfaces of the chairs were shotblasted for their coarse texture. The inner sides received a more "precious" treatment, a satiny, luminous finish acquired through disk-grinding by hand. The steel was cut on the bias, resulting in the chairs' slanted top rails. The pattern on the glazed conference room door (facing page and below) was derived from an abstraction of the floor plan (right above and below), and executed with copper, aluminum, and brass dusts, sandwiched between incised plates of glass.





COMPOSITE SKETCH OF PIVOT DOOR DESIGN

Concurrent with analyzing the movement in the space, Helfand and Cowan carefully study the required functions. In this case, being her own client, Helfand knew "intimately" what she needed. And, characteristically, she had no idea what it would look like. Their design process, she says, resists preconceived formal stereotypes that tend to "subsume everything else." Instead, the architects strive to translate their needs into a set of physical parameters—a hard surface to work on, for instance, or a horizontal plane to support books. "You struggle to clean your head completely," Helfand says. "It's like reinventing the wheel." Simultaneously, she and Cowan seek the materials and method of construction that can best deliver the function. "We ask, 'What can it be made of? What does it have to do?'"

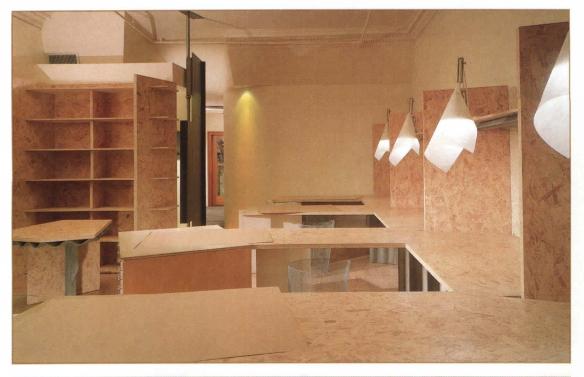
Thus, the long span, unobtrusive base, and light weight that were required of the conference table are amply afforded by a sheet of corrugated roofing, beneath a stained oriented strand board surface. Both lend themselves well to various geometric configurations. Unstained OSB is a chief building material in the studio, too, where it combines with acoustic paneling to provide durable work and tack surfaces; cutting boards are made of inlaid (and easily replaceable) cardboard panels. "We feel free to use materials that are loaded images for some people," Helfand says. "But we use them according to their properties."

Method of construction has as much to do with the final form. The steel pivoting door to the coat closet illustrates the architects' total approach quite clearly: Constructed as an oversize hinge, discreetly mounted on a post, it performs a mundane function with great elegance and simplicity. At the same time, it is mysterious, its inner workings shielded from view. "One of the things that helps simplify the construction is not showing the connections," Cowan explains. "It's not a tectonic approach. We kind of enjoy having things perched precariously, not fastened if they don't have to be." Shelves, for instance, are slotted into appropriately thickened vertical supports, rather than cleated; desks are "fastened by gravity."

Helfand's five-year sojourn in Marcel Breuer's office (prior to opening her own practice eight years ago) goes some way toward illuminating her Modern iconoclasm. The rest wells from personal interpretations and affinities that don't need to be explained. As long as there is a logical underlying order, to this architect it is viable architecture. "Whether this order is legible to other people, and whether everyone has to understand it in the same way are other questions," she says. As with Scarpa, not the text but the "word" is resonant, the parts prevail. Ziva Freiman









A shower was converted to a coat closet at the entrance to the studio (left). Helfand and Cowan arrived at the design for its pivoting door (facing page, top and bottom) largely by working with models. (A process which Cowan partially reconstructed in the sketch at far left.) Conceived as a huge hinge, the steel plate wing swivels on a post. On the door's exterior, only discreet bronze bands show where the bolts have been driven. Rectangular cutouts (facing page, below) mimic the toothy edge of a conventional hinge and offer a tantalizing glimpse of the door's construction. The materials in the studio are similar to those used in the conference room-oriented strand board, wood and steel-except that here the surfaces were left unstained. The intention was to create a white room, an extroverted, light-washed space which would be the arena for "activity and debate." Work bays are defined by an OSB framework (left). Its triangular columns support beam-like wood and steel shelves (below), which were tweaked away from the wall. The tack surface is made of Tectum. The shades on the task lamps at left are of paper and are removable. Even the waste baskets weren't overlooked. The simple cylinders of coarse mesh were designed "to hold hefties in space."

Project: Architects' office, New York. Architect: Margaret Helfand Architects, New York (Margaret Helfand, principal; Marti Cowan, project architect).

Client: Margaret Helfand Architects.

**Program:** Conversion of the parlor floor of a late 19th-Century townhouse into a 1500-sq-ft office, including reception, conference, studio, and office space.

Major materials: steel, oriented strand board, calcium silicate panels, tropical hardwoods (see Building Materials, p. 196).

Contractors: Troy Construction, general construction; Londa Weisman, Mechanic Street Pottery & Iron Works, steelwork; Ian Prior, woodwork.

Costs: not available. Photos: Paul Warchol. NAÏLA DE MONBRISON · PARIS

## **Modern Theater**

The jewelry is the star in this Paris shop by architects Patrick Naggar and Dominique Lachevsky, but elegant architectural display strategies and exquisite detailing play a vital role.



WHILE most of the architectural attention in Paris these days is focused on the *grands projets*—large, impressive buildings that become landmarks before they are complete—one finds on a quiet left bank street Naïla de Monbrison, a small store by Patrick Naggar and Dominique Lachevsky that represents a very different but equally strong design current. The focus here is on the subtleties of building craft and the use of a Modern vocabulary to create a dramatic "stage set" for art—in this case jewelry.

The small, narrow shop, just 550 square feet, employs a minimalism of line and a spatial clarity that the designers describe as an attempt to "remain classic within Modernism." The architecture contains, displays, and protects the shop's wares while upholding its own importance through resourceful use of materials and exquisite detailing equal to that of the jewelry. Unassuming materials—glass, particle board, oxidized bronze, and lead—are made more engaging by the attention paid to their construction. Through the juxtaposition of building materials and precious materials—in particular the opposition of lead and gold—the architecture asserts itself.

The shop's most prominent features are, appropriately, the display

cases, some wall-mounted, some recessed boxes, on the left-hand side. In rethinking what a display case could be and seeing the chance to create a more symbolic object, the designers drew on the image of the theater. Each display case becomes a "stage" enclosed by slanted or vertical pieces of glass.

On the right-hand side of the shop two pieces of particle board furniture connected to lead-coated wooden partitions divide the space into zones of activity. On each side of the adjacent staircase, the wood cases are connected to half walls that have been covered by sheets of lead and banded in brass. The lead, which also bands the floor and covers the wall below the glass cases on the left-hand side of the shop, was used to suggest a "look but don't touch" warning.

Theatricality in architecture is nothing new in Paris; the stairs of the Paris Opera and Pei's Louvre pyramid are among the city's many spaces designed as a stage for real-life drama. Naggar and Lachevsky, in creating their *petit projet*, have shown that the idea also has great possibilities in miniature. *Claire Downey* 

The author is a freelance writer based in Atlanta.



#### Naïla de Monbrison





The shop's elevations (right) suggest the sensibility of an urban streetscape. As the budget did not permit separate doors for each of the recessed display boxes, the architects designed a system of sliding glass doors within thin brass tracks (above). Additional display cases (facing page, top) employ angled metal shelves and unframed glass doors. Metal rods hold the door open for changing the display. Despite their vulnerable appearance, all the display cases are secure containers with minute cylindrical locks. The lead-clad partition (facing page, bottom right) is pierced to function as a "pegboard" for display. A single existing column became the post for a pivoting mirror (facing page, bottom left).

Project: Jewelry store, Paris. Architects: Dominique Lachevsky, Paris; Patrick Naggar, New York, Paris; Jean-Philippe Passot, project

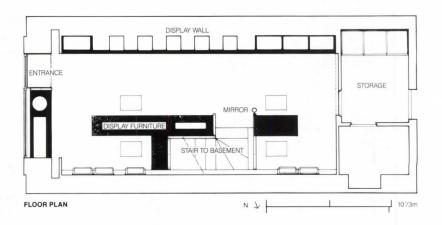
Client: Naïla de Monbrison. Program: 550-sq-ft gallery space for jewelry, plus basement-level office and storage space.

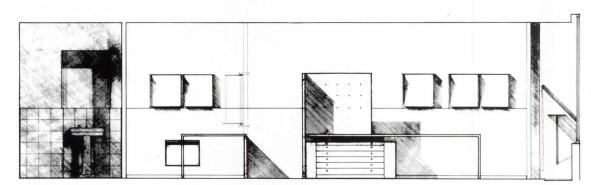
Major materials: plaster walls, lead cladding, bronze, glass, lacquered high-density particle board (see Building Materials, p. 196). Contractors: Chaudesaigues, metalwork.

Costs: not available.

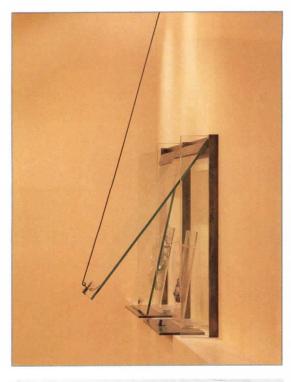
Photography: S. Couturier/Archi-

LEFT WALL ELEVATION

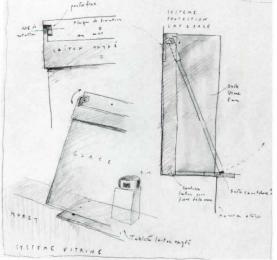




RIGHT WALL ELEVATION

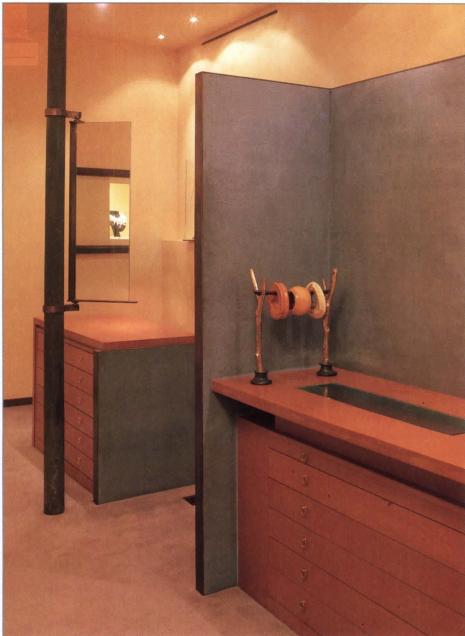


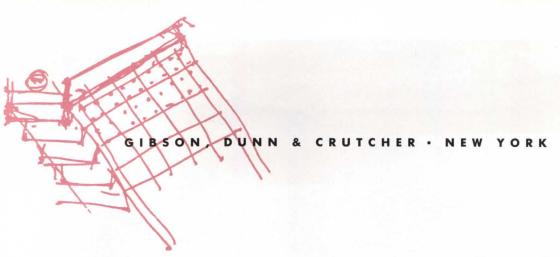




COMPOSITE SKETCH OF VITRINE DESIGN DETAILS







# **An Aesthetic Easement**

Using a rich mix of materials, architect George Schieferdecker and interior designer Shannon McCarroll have designed a law office of distinction without pretension.

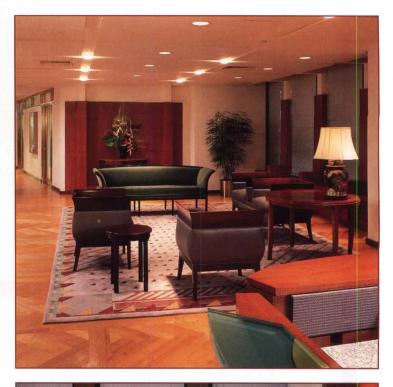
WHILE New York's Pan Am Building is hardly the hands-down favorite of most architects, one result of its visual obstruction of Park Avenue is an undeniable quality: the axial views up and down Park are spectacular from the higher floors. When the West Coast real estate law firm of Gibson, Dunn & Crutcher moved its New York base into the building, its pattern of rapid and steady growth was a relative certainty, so a large amount of floor space was essential. And most lawyers do not have the same architectural prejudices about the Pan Am.

Architects Byrns, Kendall & Schieferdecker were selected to prepare appropriately refined, but still contemporary quarters, the spirit of which the firm would adopt as its New York image. As "newcomers" to New York, they felt that the traditional law firm approach was neither accurate nor appropriate. They had also chosen high floors, the 47th and half of the 48th, in which the firm should be presented with elegance, but not ostentation. George Schieferdecker and interior designer Shannon McCarroll, who had previous experience working with Gibson, Dunn & Crutcher, borrowed formal themes from the elongated octagonal shape of the Pan Am Building to run, sometimes surreptitiously, throughout the offices.

Beginning with the elevator lobby on the 47th floor, the reference begins to make its appearance in the forming of the space itself, in the ceiling treatment, and in the custom lighting fixtures. Although not overbearing or even obvious without explanation, it is clear once the parti is known to the visitor. In the overall design for the offices, the octagon is repeated or abstracted, but even when the entire shape isn't used, the familiar oblique angles are picked up in diverse ways, some overt, some subtle.

Joining the two floors, the grand stair is a major feature, surrounding a free-standing gray cement plaster sculptural element; the stair is wood and granite, and repeats the half octagon shape, as does the centerpiece. Beyond the stair on the 47th floor is the impressive internal suite of conference rooms of varying sizes and shapes. In each, a recollection of the theme is present, although none of them is actually an octagon. As mentioned, the main conference room picks up cues in oblique angles, as do the two roughly hexagonal facilities flanking it. Still another is oval, one circular, and a sixth rectangular.

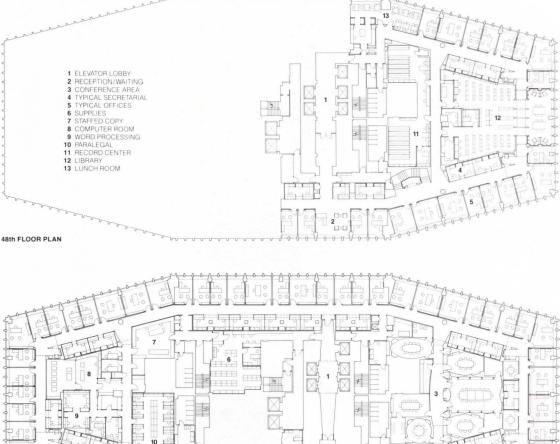
Elegant materials have been used, most lavishly in the elevator lobby, with its travertine, granite, and fabric-wrapped and African Anigré wood panels; various combinations of these opulent elements continue through the rest of the spaces. Rift-cut and quarter-sawn oak, granite, and an area rug of a Wright-inspired design comprise the floor materials in the reception area. The wood reappears with











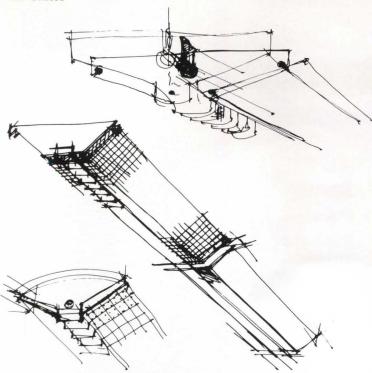
When circulation routes (top) parallel the perimeter of the Pan Am building, potentially over-long corridors are broken into more humane segments; secretarial areas encircle the core (left in photo), and typical offices form the outer perimeter. Custom carpet, lighting, and table in the large conference room (facing page, top) are augmented by the impeccable brass and wood detailing between the horizontal marble ledges along the sides (facing page, bottom).

47th FLOOR PLAN





#### **Law Offices**



COMPOSITE OF SKETCHES OF LIGHTING DESIGN

(continued from page 104)

granite in other circulation areas, and with custom carpet and green Italian marble ledges in conference spaces.

Another recurring element, in various forms, is the wood-clad pilaster. In the reception area it appears as a reflection of the piers between windows outside the building, but also as a slice of the building shape itself. In this location the piers step back twice just above the sill line of the window, to recall the stepped tops of some of the surrounding buildings, visible in the background. A simpler rendition punctuates lightly-angled walls in the large conference room. Surrounds for office doors are completely orthogonal versions; in every instance, the wood is used as a material that may be cut back to reveal the wall behind. This means of expression allows for the variation on the theme in different parts of the office, as the designers sought.

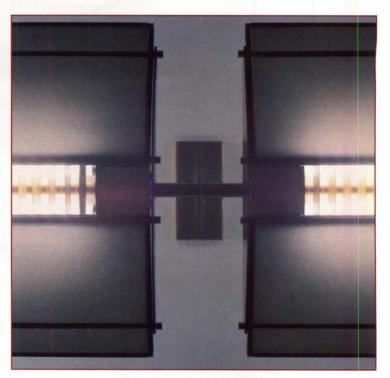
In general, the plan places the offices on the perimeter across from secretarial areas, with all other work and support spaces inboard. The 48th-floor library and lunchroom and one 47th-floor meeting room also share the perimeter exposure. In this way, facilities like the library avoid being dark and cloistered.

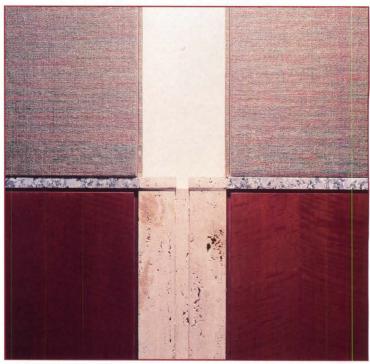
Based on Herman Miller components, the secretarial work stations present wood surfaces to the circulation corridor. While the wood on these elements is different from the wood trim and doors of the offices, its color and detailing are complementary to the butterflymatched Anigré. The palette is further enriched by clear and sandblasted glass and by brass on the reception desk, light fixtures, doors, art hanging rails, accessories, and handrails.

At the narrow ends of the building, the secretarial row ends in a small sitting area with a chair, lamp, and shelves for periodicals. These compact spaces inventively harness the bit of leftover space at these corners, turning it to a useful purpose and providing orientation landmarks. Within the very efficient core layout, they provide a surprising "bonus."

Considering what was requested of the designers, the spaces seem to achieve precisely what the client asked for—unpretentious but elegant appropriateness. The materials and the craft involved in their installation are impeccable, and the overall image has a timelessness that should wear well. The design language used to realize these offices is an eloquent one. *Jim Murphy* 

Materials like the granite floor and touches of travertine in the elevator lobby (facing page) recall the palette of the building's main lobby. The travertine is combined with wood and fabric-wrapped panels (above, lower photo) that recur throughout the offices. Custom light fixtures (top photo and sketch, above) pick up the theme of oblique angles borrowed from the shape of the building.





**Project:** Gibson, Dunn & Crutcher law offices, New York.

Architect: Byrns, Kendall & Schieferdecker, New York (George Schieferdecker, partner in charge; Diane Alexander, Ambrose Kelly, and Larry Wente, project designers; Arthur Blee, Duncan Brown, Judy O'Buck Gordon, and Andreas Hausler, project team; Dan Frisch, presentation drawings).

Interior designer: Shannon McCarroll, New York.

**Program:** 45,000-sq-ft offices on two internally-connected floors to include one large and several smaller conference rooms, library, paralegal space, computer room and word processing area, lunch room, kitchenettes, and normal office and support spaces.

Major materials: granite, marble, brass, glass, wood paneling, gypsum board walls, cement plaster, paint, fabric-wrapped panels, carpet, wood floors (see Building Materials, p. 196)

Consultants: Ambrosino, dePinto & Schmieder, mechanical, electrical, plumbing, and fire prevention; The Office of James Ruderman, structural; Jerry Kugler Associates, lighting; Shen Milsom & Associates, acoustics; Robert Schwartz & Associates, specifications.

General contractor: James G. Kennedy  $\mathcal{C}$  Company.

Cost: not available.

Photos: Elliott Kaufman.





## Close to the Skin

Mind over merchandise: Architect Christopher Bene evokes the moody glamour of film noir in his voluptuous treatment of a luxe Chicago boutique.

MAXIMA sells the kind of creamy, expensive, women's leather clothing that butters the fingertips and emanates musk, money, and sex. "These are not necessities," explains New York architect B. Christopher Bene. "You're satisfying your sensual desires, not buying them because it's cold out." But he had to coax this elegant Chicago shop out of an uninspiring shoebox, a space that seems to house every store in every mall.

Bene thought of old movies—"The Maltese Falcon, film noir, with deep shadows and beautiful black-and-white photography"—and of women's salons from the 1940s and 1950s, where ladies sat in leopard-spotted chairs to select furs and shoes.

He recalled an interior he particularly loved: Chicago architect Abel Faidy's 1936 studio design for the Chicago photography firm Hedrich-Blessing. "Faidy used glass, mirror, a lot of grays and shiny blacks and chrome," Bene says. "He modulated the light and shadow. He brought glass to a corner with mirror; it was very thin and planar."

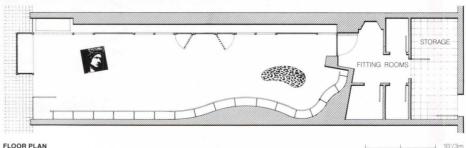
And he thought of the surrealistic interiors by Carlo Mollino, where the walls were mirrored, quilted, tiled or curved, and strange props (anatomical plaster casts, for example) seemed to hover off the ground.

Bene let the images steep, then attacked the shoebox, a 17' x 45' space in the glittering mall designed by Kohn Pedersen Fox, anchored by Bloomingdales, at 900 North Michigan Avenue.

Over the left wall, he erected a black lattice, a wooden grid that runs four squares high to the 12-foot ceiling. In the center of the lattice stands a 9-foot-tall, three-way mirror whose curvaceous panels swing out on little black wheels. Clothes hang in a couple of spots—a concession to the client, Bene says—and the rest of the lattice squares frame mirrors or empty space. Despite the store's skinniness, the architect pulled the grid about 12 inches away from the wall, an arrangement that hides fluorescent tubes, casts shadows, and gives the illusion of more space than it stole.

That is the "determinate," rational wall. The right wall, on the other hand, curves, like the swell of a large and languid wave. Clothes hang from a steel rod that hugs the wave, and a meandering row of downlights, planted in the ceiling, echoes the curve again. This is the "indeterminate" wall, the store's irrational and sensual side, suggestive



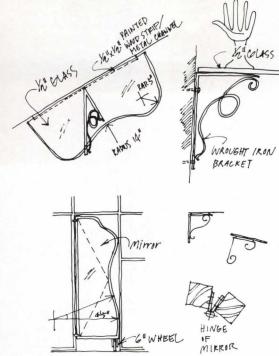


The freestanding painted wooden grid that runs along one interior wall (above, and facing page), creates an illusion of depth in the narrow space, and holds a curvilinear three-way mirror and glass display shelves. The chairs (facing page) are relics from old depart-

ment stores that Bene painted gold and upholstered in black and white stripes. The store desk features an enlarged black- and-white photograph beneath a glass top—Bene's direct allusion to Carlo Mollino, who used a similar device in his 1938 Miller House, in Turin, Italy.







COMPOSITE SKETCH OF MIRROR AND SHELF DETAILS

The bean-shaped upholstered bench in the middle of the boutique (below, left) was designed by Bene and covered in leopard-print fabric. In ladies' salons, he says, "That's where the husbands would sit while waiting for their wives or girlfriends to shop ... and it echoes the curve of the wall." A small, amoeba-shaped glass shelf (top, left) appears to float over the cash register, balanced on a sinuous wrought-metal bracket, as if upon a stem. That bit of inspiration, too, comes from Carlo Mollino, who planted a similar shelf in his 1939 Devalle house in Turin. The webbed wires (below left) only appear to support the clothing rack. Actually, the architect explains, the rack is secured to the wall, but the tielines provide visual credibility.





of a rather voluptuous human form.

All of the forms here are functional—the grid holds mirrors, the curve carries the clothes—but often it looks as though the forms came first. That curved rod, for example, appears to hang from a tense web of nautical wire cables; in fact, those cables hold nothing but the eye. "We started with just the bar on a curved wall," the architect says. "In the drawings, it looked bare. It didn't express the weight of the clothing coming down."

Maxima is almost easy to miss in this gleaming building, where dozens of expensive shops compete for attention. Instead of a sign, the name is painted in gold, like a signature, on the storefront window. But this window doesn't just stand there. It slants outward and tilts to one side, lopping a triangular sliver from the 12-foot-tall black wood door. "The tilted plate glass expressed the pressure of the grid pushing out," Bene says, "threatening to knock the window over."

The 39-year-old architect handled the Chicago

project from his New York office, a sunny, skylighted loft just off lower Fifth Avenue, an area glutted with the studios of architects, photographers, and designers. An alumnus of the offices of Michael Graves, Richard Meier, and SOM, Bene has run his own firm for eight years now, specializing in retail and office design.

Because everything is custom-built, Maxima looks as if it's here to stay. "What I don't like in most mall stores is that designers deal with them as boxes, bringing in loose fixtures and cabinets and just plunking them down," Bene says. "If the store closes, it's a cheaper solution.

"I'm looking for architectural solutions, not store-planning solutions. For something that's permanent. For something that will address people's desires in shopping, their sensual desires, rather than just displaying the merchandise."

Dylan Landis

The author writes about design for the Chicago Tribune.

Project: Maxima shop, Chicago. Architect: B. Christopher Bene Architect, New York (B. Christopher Bene, principal; Alan G. Neumann, project assistant).

Client: Maxima.

Program: prototype for women's leather garment shop, 1100 sq ft on fourth level of six-story retail mall. Major materials: gypsum board, custom wood wall grid, aluminum storefront, carpeting (see Building Materials, p. 196).

Mechanical system: new variable air volume system.

Consultants: Environmental Systems Design, mechanical/electrical.
Contractor: State Construction.
Costs: Not available.

**Photography:** Marco Lorenzetti, Hedrich-Blessing except as noted.



# Hands-On Hangout

In implementing his soup-to-nuts structure-to-furniture design for a South of Market café, designer Robert Bernardin reveals a builder's ingenuity in wood and steel.

LODGED in the heart of San Francisco's trendy down-at-the-heels district south of Market, the Ace Cafe is a biker's bar, named after a notorious London café of the 1950s and 1960s, where the Rockers motorcycle gang used to park. Within the scorched concrete shell of an old ironworker's shop, the Ace was designed and built by Robert Bernardin, himself a shipfitter turned architect.

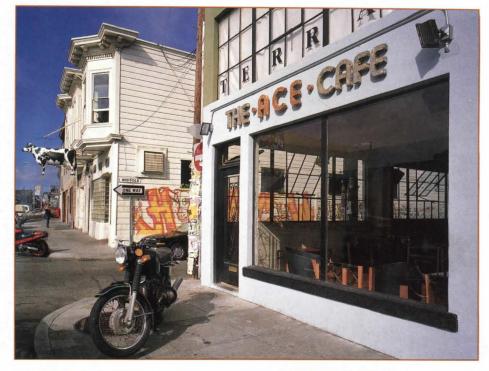
The commission came to Bernardin as first independent commissions often do-a low budget job from a school friend, one of the café owners. "The Ace boys," he says, are English biking enthusiasts who wanted a stamping ground for their generally mobile set, even though there are half a dozen clubs (among them DNA and the Paradise Lounge) scattered within 150 yards.

The location was "brilliant," but the 60-year-old building needed reinforcement. Bernardin inserted two new rows of columns and a system of beams. Given his limited budget, the design of the structure became central. "A nice detail of the post and beam could become the architecture in itself."

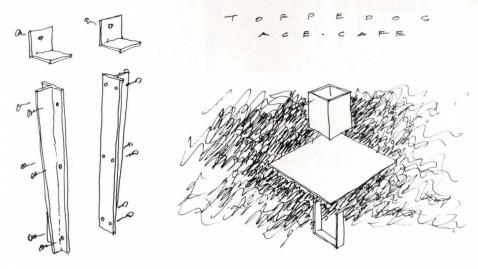
Keen to establish a clear hierarchy in the space, the designer took his cue from its elongated proportions and approached the project as a study of elements, designed in elevation and keyed to the off-center colonnade that runs the length of the café. "To me it was like a street," he says. "I separated each function and made it a building.

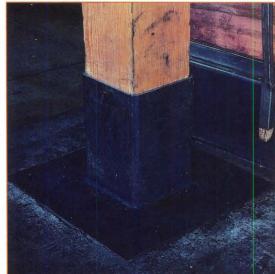
The café was built by a team of 12, including a welder. Bernardin acted as contractor and steel worker. "I did all the working drawings, but nobody knew how to read them," he recalls, "so I had to find nicknames for things." The walled-in bathrooms at the deep end of the "street" became the "tomb." Across from it, the owner's steel-door office was the "vault." The café's storage, dishwashing, and food preparation areas are enclosed in the "hut," which is clad with 1" x 4" fir siding. Actual cooking takes place in the "forge," an open steel framework, all of it on electric appliances—a concession to code, since there was no ventilation hood

Owned by "South of Market bike people," the Ace Cafe (top) was conceived as a trendy hangout for like-minded enthusiasts. The stylish sitting area at the entrance (bottom), a replica of Bernardin's own living room, was created because "these guys have to be five steps ahead of the crowd."









COMPOSITE OF SKETCHES OF COLUMN BASE AND CAPITAL

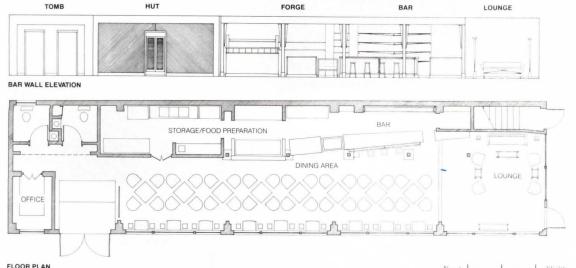
and no money to install one. Upfront, closer to the junction of café and sidewalk, Bernardin built a steel-framed wooden bar. An overflow space at the entrance he turned into a sitting area, defined by a hardwood floor and furnished with maple, glass, and steel pieces of his design.

Bernardin, 32, graduated from Berkeley four years ago, with an AB degree in architecture. He'd left home in upstate New York at 16, to apprentice as an assembler at Newport News, Virginia, "the world's largest shipyard," and later worked at a smaller Cape Hatteras dockyard. In 1979, he moved to California.

"I think it's safe to say I'm a classicist, Classicism tells you how to create an order," he says. "The vocabulary isn't as relevant as the grammar." Andrew Batey is his mentor; other influences include "a lot of dead Frenchmen," like Boullée, Ledoux, and Lequeu. Among the living, Nouvel and Starck.

But even more inspirational than any architect, art provides Bernardin with tangible solutions. "Artists look at things as objects. I look at how artists look at form, line, texture." And like an artist, Bernardin enjoyed the luxury of building his own object—with none of architecture's usual intermediaries to dilute his vision, sure-handed shapes, or feel for materials. Ziva Freiman





**Project:** Ace Cafe, San Francisco. **Designer:** Robert Bernardin, San

Francisco.

Clients: Adam Fisher, William Stone, Courtney Persinger. Program: 1444 sq ft café.

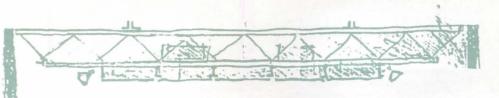
Major materials: steel, sandblasted concrete, plywood (see Building Ma-

terials, p. 196).

Consultants: Universal Light Source, lighting; Structus S.F., structural; Brenda Lom, design. Contractors: Robert Bernardin, general; Khris Penstrom, plumbing; Tim Moran, electrical; Bliss Kole, casework: Reed Jackson, carpentry; Paul d'Orleans, finishes; Craig Feder, Robert Bernardin, metal work; David Holl, upholstery.

Costs: \$80,000.
Photos: Jane Lidz





CHALK + VERMILION GALLERY · NEW YORK

## **Art Within Reason**

To house the hybrid functions of a Soho gallery and publishing house, Smith-Miller + Hawkinson rely on rational analysis as well as intuition to generate complex spaces but simple architecture.



CHARGED with converting the ground floor and basement of a Soho loft building into a gallery and art reproduction publishing house, New York architects Henry Smith-Miller and Laurie Hawkinson took their cues from the existing building and from the district's vernacular materials to create a container that, while true to Soho's industrial character, is eloquently suited to the display of art.

The bilateral symmetry of the original cast-iron structure, with its two party walls and two rows of interior columns, generated a new plan that appears symmetrical, but actually is not. Its central exhibition space is bracketed by balanced but asymmetrical lunchroom and office areas. Beyond the main gallery, close to the building's rear wall, is a smaller, cube-like exhibition space (nicknamed the "ark") which is suspended on beams above the basement. The floor surrounding the ark was cut away to give it the effect of a "levitating" volume, afloat between the offices of the gallery's two owners and accessible by a glass and steel bridge.

The formal strategy throughout the project was to distill the existing structure's fundamental elements—post, beam, and screen and a "basilical" plan—and use those as components of the new design.

Such a systematic, analytical approach reflects Smith-Miller and Hawkinson's preference (and reputation) for rational method. However, they are far from rigid in this; according to Hawkinson, they "enjoy playing real conditions off notions of an ideal order" and view constraints not as hindrances but as touchstones for creativity. Adds Smith-Miller, "Often the anomaly or aberration, discovered during the design process, makes the project."

For example, an existing pilaster on the storefront was "misplaced" and at odds with the second floor fenestration. In response to that original "error," the architects used a secondary proportional system of gridded glass panels on the gallery front to reconcile it to the rest of the building's façade (which is protected by New York's Landmarks Preservation Commission). In the central bay, the geometry and scale of the ark were brought to the fore, represented by a sandblasted glass square.

Elsewhere, intuitive "compositional" moves belie pragmatic logic and give rise to structural innovation: For instance, the basement showroom is reached by an axial stair, built of steel treads and glass risers, that cuts through the center of the main exhibition space.

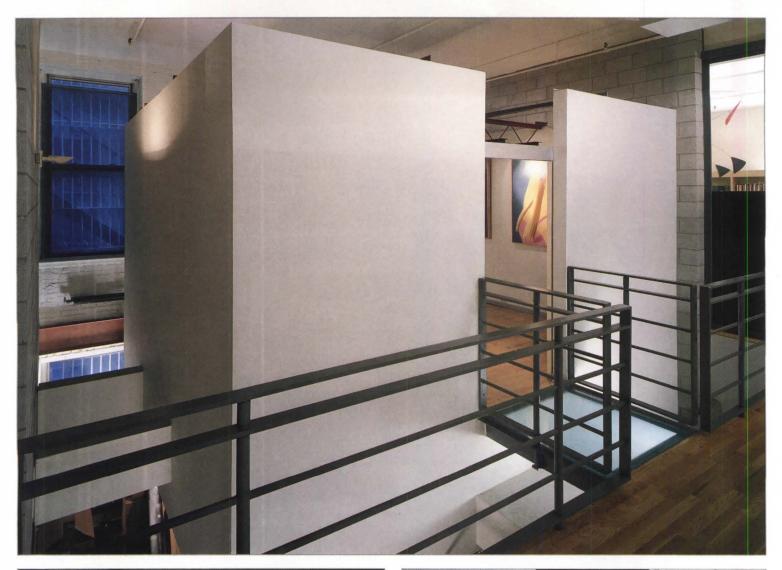






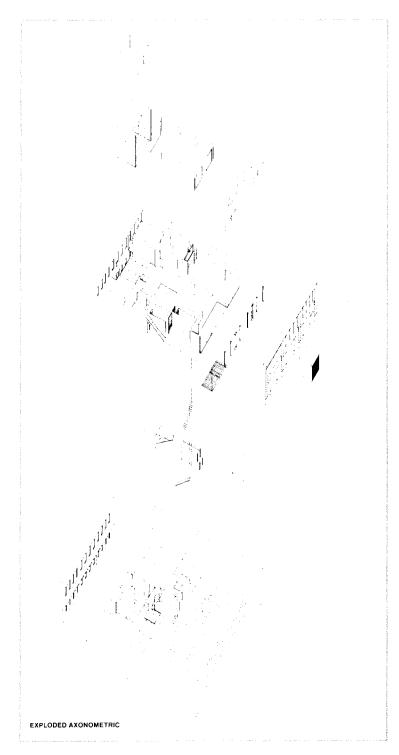
A new rolling fire door in the foyer (above), made of "quilted" galvanized steel and operated by pulley weights, recalls the mechanical ingenuity of Soho's industrial hey-day. Surfaces were treated according to their location and role: Perimeter walls were painted in shades of gray; the concrete block walls of the main exhibition space (left) were "dressed" with plaster on the display side and left exposed on the "backstage" side facing the secretarial area (far left). Folding steel doors on the refurbished ground floor façade (facing page) provide security; translucent glass panels form the façade's inner, more vulnerable skin. Both maintain the spirit and proportions of the landmarked exterior.

Chalk + Vermilion Gallery









OFFICE PRINCERAL STOFFICE TOTAL MORE TOHER GROUND FLOOR PLAN

Interrupting an existing row of cast iron columns, it called for the insertion of twin concrete block walls to disperse the load. The payoff is clear in the processional strength of the stair.

The architects exploit Modernism without adopting its ideological polemics: Chalk + Vermilion, with its low partition-walls and slots providing views on adjacent spaces, is an open plan scheme. The series of glass screens running parallel to the façade derives from notions of transparency and sequence introduced by Le Corbusier and Pierre Chareau.

Disillusioned with Post-Modernism's short-lived stylistic "commodities," the architects shifted their focus to craft and to the actual materials of construction—plaster, concrete, steel, and glass. In terms of function, both feel that the idea of a "total plan, fixed forever" is not realistic. As a link in the urban chain of adaptive reuse, the strength of this project springs from the architects' willingness to respect what already exists and to opt for understatement in the creation of a memorable place. Lois E. Nesbitt

The author is a freelance writer on art, architecture, and literature.

The "ark," a cube-like exhibition space suspended above the basement-level showroom (facing page), presented the architects with the challenge of defining its edges and reduced scale while imparting a sense of transparency. To that end, a lowered ceiling (facing page, bottom right) was built of perforated metal sheets, supported by small steel trusses and I-beams, which also incorporate track lights. The ark's rear wall, viewed from the basement (facing page, bottom left), was glazed, exposing the preexisting rear perimeter wall to view. An exploded axonometric (above left) reveals the "deconstruction" and reconfiguration of the cast-iron building's elements as components of the new design.

DETAIL OF COMPOSITE DRAWING OF "ARK" SECTION AND PLAN

ENTRANCE FOYER SECRETARIA!

> **Project:** Chalk + Vermilion gallery and publishing house, New York. Architect: Smith-Miller + Hawkinson, New York (Henry Smith-Miller, architect; Laurie Hawkinson; Annette Fierro, project manager; Sam Anderson, John Conaty, Urs Egg, Jorge Gomez, Ruri Yampolsky, Knute Hanson, Celia Slott).

Program: 12,000 sq ft rehab. Major materials: See p. 200. Consultants: Cal Sterling, Severud, Szegezdy, structural; Carlo Warzot, HVAC; Andy Szewczuk, plumbing. sanitary; Edgar Cortez, electrical. Contractors: Perna Contracting; Materials Design Workshop, cabinets, furniture.

Photography: Paul Warchol, except as noted.



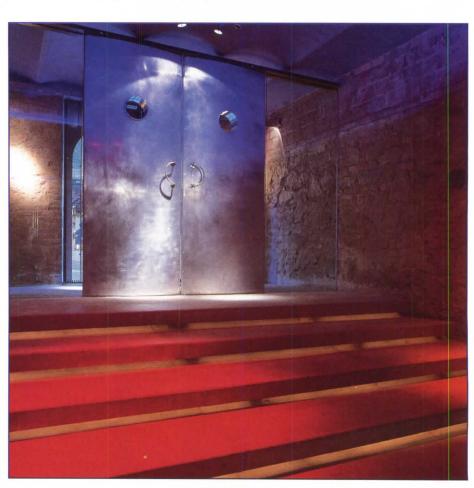
# Red Velvet, Blue Velvet

In tune with the longstanding artistic traditions of his native city, Architect Alfredo Arribas draws from Expressionism and Surrealism for the imagery of a new nightspot in Barcelona.

BARS in Barcelona have a history, as architectural events as well as places for architectural encounters. Josep Lluis Sert used to meet with Catalan Dadaists such as Francis Picabia at Quatre Gats, and in the mid-1960s, Ricardo Bofill and Oscar Tusquets met at Boccaccio's to argue with the older generation of architects about pre-war Purism. Velvet, a new Barcelona bar, is part of that tradition. Its architect, Alfredo Arribas, sought in the design to address diverse users, including architects, and to overcome "dreary utilitarianism" while coming to terms with context and history.

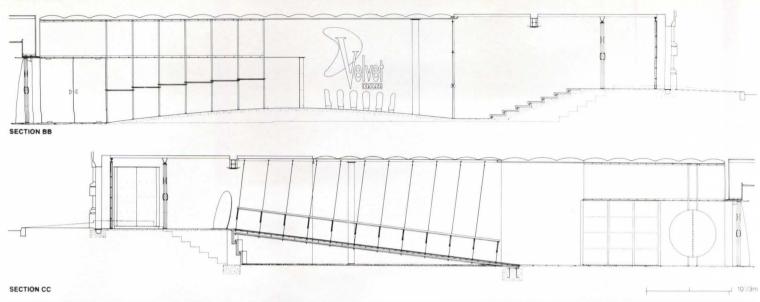
Architectural purists may feel uneasy about Velvet, for its design is intentionally flamboyant and bombastic. Housed in the cellar of an existing 1900s building, and entered through maw-like gates, the bar has two long entrance halls that run almost half the length of the space. Serving as a mystery-making transition from the hectic city outside, these interior alleys retain some urban elements: One contains several palm trees, as if it were actually an alley sidewalk, and the other, a cable-supported glass bridge that ramps down from the street. Like the movie that inspired it, Velvet invites you to suspend your disbelief.

Music and the hint of colored lights lure the reveler past the central toilets (whose free-standing, canted tubular sinks are visible through glass doors) to an intermediate bar area defined by a row of large round columns and a dropped, perforated-metal ceiling. Beyond the massive colonnade, the main space reveals itself: a circular dance floor in the foreground, surrounded by scattered tables and chairs, culminating in a second bar, embraced by a spiraling backdrop reminiscent of Kurt











Schwitters' Expressionist vortex construction.

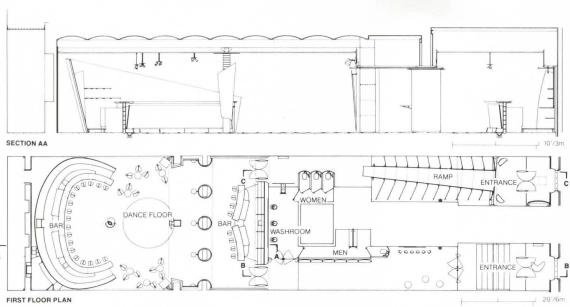
Arribas, born in 1957, belongs to a generation of young architects seeking to reconcile Modernism and Post-Modernism. He will use frankly Modern elements, such as Velvet's bridge-like ramp, yet he will also contradict the Modernist principle of honesty of materials and structure. The bar's rectangular brick piers, for example, have round covers (faced with tiny marble-mosaic tiles mounted onto a paper-mesh backing) that appear to support a very light metalwork lintel hiding the air conditioning ducts, rather than the apartment building above. Elsewhere Arribas contrasts the abstract, reductive forms and cold, hard materials of Modernism with red velvet, a soft traditional fabric. Red velvet draperies cover only part of the raw, exposed brick foundation walls, for instance, and are placed next to sleek, stainless steel finishes.

Historicism, for Arribas, is more than a style and means a revival of both form and function. For Velvet's bar stools, he has replicated Carlo Mollino's Expressionistic chairs, which look like buttocks. And while all artistic production has an expressive aspect, Arribas' use of Mollino's 1940s furniture reveals the influence of the organic and expressionist ideas of that period on his work.

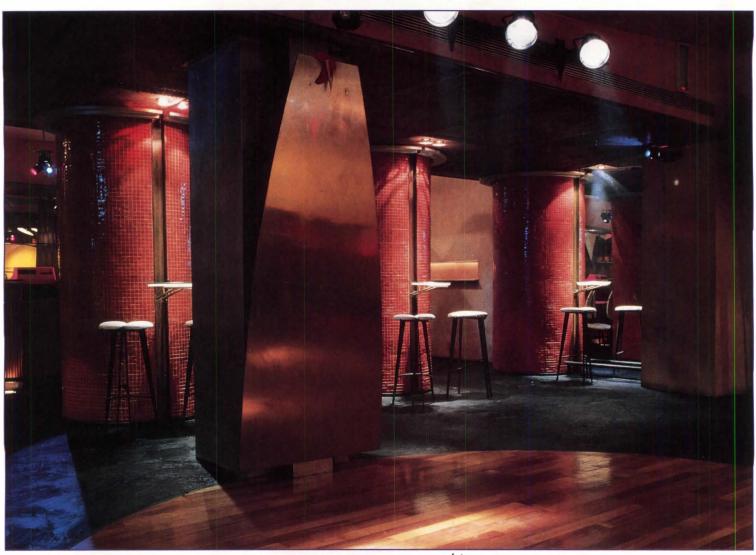
Related to that Expressionism is an interest in spatial movement and dynamic forms. "My work is Baroque," says Arribas. Velvet's interior is just the opposite of a pure, clear space, and perspective views are carefully studied as they were in Baroque work. Arribas' conceptual use of the Baroque is not there because of any stylistic concessions, but because it provides the necessary figurative components to deliver richly associative architecture.







Velvet offers the unexpected at every turn. At one entrance (facing page, far left), the bar's logo, a boomerang-shape with a V in it, is inlaid into the floor. In an entrance corridor (facing page, top section drawing and top middle and right photos), the floor swells upward, the shelves along the metalscreened wall step down, and the metal-clad watercloset enclosure curves outward. Before entering the bar, visitors pass the glasswalled washroom (facing page, bottom) with its mirrored walls and freestanding sinks. There are separate men's and women's waterclosets off of that room. Varied ceiling heights divide the main space into two (section and plan, left). The front area has a split bar with glass shelving behind it, supported by curved metal fins (above). The bar stools are replicas of pieces designed by Carlo Mollino for Lisa and Giò Ponti.



Such ideas led the architect to make analogies to other disciplines outside of architecture.

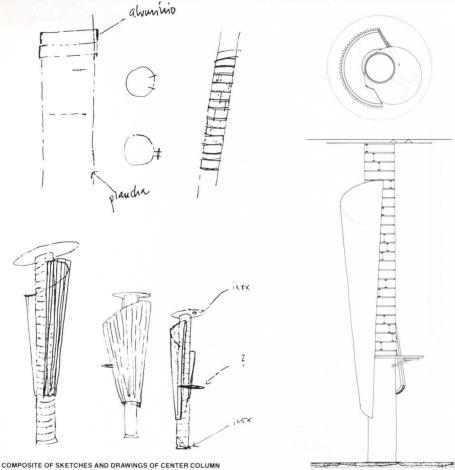
David Lynch's film, *Blue Velvet*, a surrealistic dissection of a small American town, greatly inspired Velvet's design, says Arribas. This is most obvious in the bar's vaguely 1950s atmosphere, its boomerang logo, and the red velvet draperies that are, in themselves, a kind of bourgeois parody—akin to the shocking, sinister/suburban opening sequence of the film.

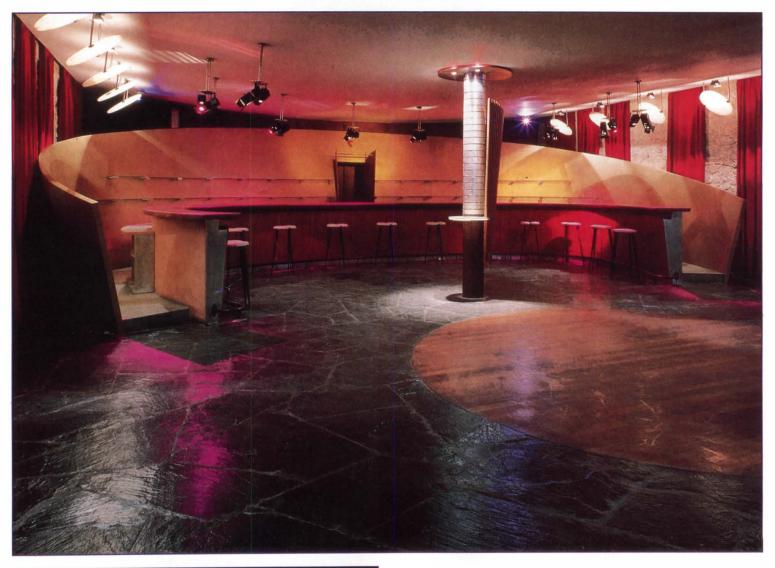
Arribas responds to site constraints with equal versatility. The extravagant imagery and superrich surface effects in his interiors are "a way to correct deficiencies in the original spaces," he says. And he adapts his choice of materials to the existing conditions: The teak wood used in Velvet is a heavy durable timber that will not warp or shrink in the basement's humid atmosphere. Allegorical references to that wet basement are also present in Velvet's structure: The ramped bridge, like the gangplanks used on ships, is suspended on fine tension wires and clips normally used in sailing craft.

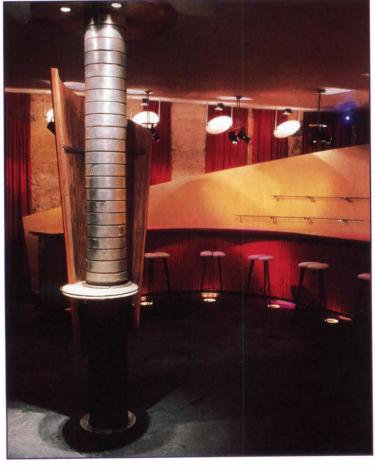
Velvet's interior architecture may be too spicy or too abrasive for the old stomachs who hang around too late at night—the aging corporate architects whose views on contemporary architecture conflict with those of the younger generation responsible for many of Barcelona's new bars. Alfredo Arribas' designs reflect the variety and diversity of visions of that younger generation, for whom memories of Catalonia's iconoclastic artists are still vibrant.

### Magda Saura

The author holds a PhD in Architecture from the University of California, Berkeley, and is now teaching at the architecture school in Barcelona.







The low space between the front and rear bars has round, tile-clad columns, supporting bar-height tables and a dropped ceiling hiding the air conditioning equipment (facing page, top). At the front of the circular dance floor, a curved metal shield hides a structural column. At the center of the rear bar space (above) is a metal-clad column that emerges out of a sheathing of wood slats that appear to be unwrapping (left and sketches, facing page). The light fixtures, with their diskshaped alabaster reflectors, reinforce the circular shapes. Drawing its atmosphere and images from the American movie, Blue Velvet, the nightclub juxtaposes a 1950s ideal of luxury and progress with a 1980s cynicism about its benefit.

Project: Velvet bar, Barcelona. Architect: Alfredo Arribas Arquitectos Asociados, Barcelona (Alfredo Arribas, Miguel Morte, architects). Client: Bumersindo Adán. Program: a nightclub and bar approx. 3200 sq ft. Major materials: paint, gresite, low-voltage lights, alabaster diffusers, custom furniture. Graphics: Juli Capella, Quim

Larrea. Photos: Jordi Sarra. P/A Technics: Computer Hardware

First Mechanical Computer

1834

1850

P/A TECHNICS

1840

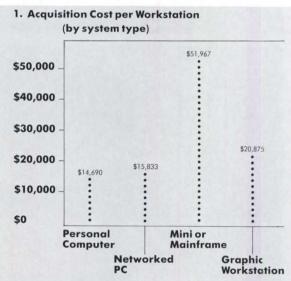
# **Hard Copy on Hardware**

Although computer hardware continues to evolve, the technology has reached a point where some conclusions about its development and future direction can be made.

WHEN we think of the great works of engineering, large structures typically come to mind: bridges, towers, dams, and the like. But the real triumph of engineering in our time is small enough to fit on our laps: the computer. Consider it in relation to what historian David Billington sees as common to all important structures—efficiency, economy, and elegance. The computer, in this decade alone, has undergone major leaps in power and efficiency, precipitous declines in size and cost, and significant improvements in appearance and ease of use.

Billington as much as acknowledges the pre-eminence of the computer. "While automation prospers," he says in his book *The Tower and The Bridge*, "our roads, bridges, and urban civil works rot. Children control computers while adults weave between potholes." Yet our civil works do not rot because of automation; their design and maintenance, in fact, depend upon it. The computer has become a kind of superstructure for what we build—a great work of engineering without which our other great works can no longer occur.

The growing dependence of architects and engineers upon the computer is revealed in recent surveys conducted by Sweets and the magazine *MicroCAD News*. Both sources report that half of all architectural and engineering firms now use computers as a drafting or design tool and that almost all firms plan to be using the machines for such purposes by the early 1990s.



Once a backwater of software development, architecture and civil engineering also have become a focus of applications programming—so much so that, according to George Borkovich and Michael Hough of the A/E/C Systems trade show, "buyers now are selecting hardware first instead of software, confident that appropriate estimating, job-cost control, specifying, CADD and other applications will be available as needed."

Which presents a problem for designers. It is relatively easy to evaluate software according to how well it performs design-related tasks. But what about hardware, with all of the technical jargon and numerical information that surrounds it? Which digitizers, computers, and plotters are best suited to particular needs? And what combination of equipment is right for a given firm? Such questions, even just a few years ago, were difficult to answer. No one type of technology or single group of companies had clearly emerged as industry leaders and worse, none of their equipment was compatible.

The situation has since changed. First, a few major manufacturers of computers and peripheral equipment have become increasingly dominant. You had only to walk around the last A/E/C Systems trade show, where large sections of the floor were occupied by a few hardware producers, to see the change from years past. Second,

The graphs were adopted from those in the PSMJ CADD Application and User Survey. The full survey is available for \$145 plus \$4 shipping and handling from Practice Management Associates, Ltd., Ten Midland Avenue, Newton, Mass. 02158. (617-965-0055).

## HARDWARE GLOSSARY

A S C I I \* A contraction of American Standard Code for Information Interchange, which defines codes for transferring information among equipment made by various manufacturers.

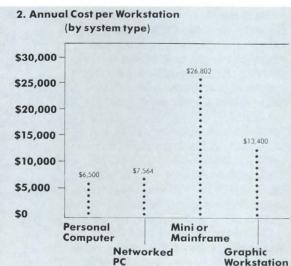
**B A U D** • A measure of signal events per second, used to determine how fast information can be transferred among machines.

**B I T** • A binary digit or single unit of information.

B U F F E R • Device into which information is copied and held for transfer or printing without tying up computer time.

compatibility among products has become more common. The major software packages now run on a variety of operating systems, and computers themselves, through various ASCII translation programs, can now communicate with each other. There are, in short, fewer major companies to choose from and less risk involved with any one choice.

Reducing the risk even further has been the continual decline in hardware prices, to the point where even the most cash-starved firms can justify buying equipment. In many cases, the major expense is no longer the initial cost of a computer, but indirect costs, such as training staff and maintaining the machine. If anything, the decision now facing firms is when to buy rather than if to buy. A recent issue of the *Professional Services Management Journal* reports "a dramatic drop in CADD prices . . . during the past 12 months," and expects "the price (and size) of CADD systems to fall another 10 to 15 percent during the next 6 to 12 months," recommending that firms "wait at least until year end before making any major purchase of CADD equipment." Now is the time, in other words, to step back, examine the options, and be prepared for the next round with the electronics industry, which one observer has called "the most price cutting, device copying, yield busting, market puffing . . . and in some cases money losing business that one can imagine."



#### Input Devices

The mechanisms used to enter graphic information into a computer—digitizers, mice, cursors, styluses, scanners—are not just the eyes of a computer, but its hands. They are the one part of the machine that we regularly touch, so their feel is important. The pen-like stylus, for example, has always been somewhat awkward to use because it had to be held upright. At least one company, however, has now developed a stylus that works at normal writing angles while another has developed a stylus as responsive as any pen, with 128 different levels of sensitivity. Similar improvements have been made to hand-held mice and cursors. Some come leather-wrapped for a softer feel, others have contoured shapes to fit the grasp more easily and wireless controls to eliminate tangle-prone cords.

Speed of operation, too, has become a major consideration in selecting these devices. Some cursors now come with 16-button arrays that, depending upon the software being used, can be programmed to reduce the use of a keyboard. Many other styluses and cursors have improved tracking speeds up to around ten inches per second. And for animating three-dimensional images, a ball-like device is now available that is rotated to control both the speed and direction of movement on the screen.

Progressive Architecture 9:89 127

as proof of the computer's malevolence or foreignness to the design process. But that is an odd indictment, for artists have usually been eager to seize upon new tools for the manipulation of media. What the computer really threatens are established ways of running an architectural or engineering practice. Which cannot be all bad, for, like the electronics industry, it has been, in some cases, the most money-losing business one can imagine. *Thomas Fisher* 

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## Technics-Related Products



A new CAD workstation includes a graphics controller and a high-resolution color monitor and offers several enhancement options. Wyse.

Circle 130 on reader service card

A scanner can accommodate drawings as wide as 40 inches for use with CAD systems or image transmission. Ideal.

Circle 131 on reader service card



A new power component saves data and shuts down the computer in a power interruption. Universal Vectors.

Circle 132 on reader service card



A large-format plotter is compatible with all leading desktop CAD software. Gerard Research. Circle 133 on reader service card

A graphics accelerator aids usual computer functions—text processing—as well as two-dimensional graphics tasks. Sun. Circle 134 on reader service card

A computer system, especially designed for small- and intermediate-sized firms, offers several options for memory expansion, disk storage, and communications lines. IBM.

Circle 208 on reader service card

The Deskpro line offers different configurations of processors, keyboards, and monitors.
Compaq.

Circle 209 on reader service card



A digitizing tablet designed especially for the Macintosh computer comes in various sizes. Options include a stylus or a crosshair. GTCO.

Circle 135 on reader service card

A personal three-dimensional workstation comprises a processor, geometry engines, and a user interface. Silicon Graphics. Circle 136 on reader service card

A monochrome, ink jet plotter prints at 360 dots-per-inch and can also be used as a text printer. Houston Instrument.

Circle 137 on reader service card



An engineering printer can perform at up to 58 prints per minute and also offers finishing capabilities like folding and sorting. Xerox.

Circle 138 on reader service card



A voice command workstation features multi-level work surfaces, custom storage capabilities, and eases operator accessibility. Structural Concepts.

Circle 139 on reader service card

An eight-pen plotter uses different speeds to produce archival quality drawings or fast check plots. Bruning.

Circle 140 on reader service card



An interface kit links video printers and Macintosh computers to produce photographic-quality color prints. Kodak. Circle 141 on reader service card

A series of monochrome electrostatic plotters feature fast speed and high resolution. Hewlett Packard.

Circle 210 on reader service card

An eight-pen plotter can produce drawings on film, paper, or vellum. Encad.

Circle 142 on reader service card

**A high resolution color display** features a 1600 by 1200 line screen. Lundy.

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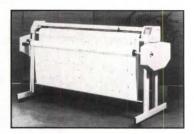
**Color-display adaptors** occupy one slot and give computers high-performance graphics capabilities. Matrox.

Circle 144 on reader service card

A new personal computer includes a 32-bit microprocessor, a floating point coprocessor, and a high-density floppy drive. Apple.

Circle 211 on reader service card

A voice-input system, including software, hardware, a manual, and a menu map, allows handsfree access to over 400 AutoCAD commands. Voice Technologies.



A new pen plotter prints on media up to 72 inches wide. Several plotting options may be chosen with a keypad. Ioline.

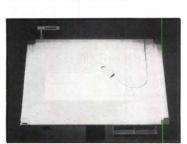
Circle 146 on reader service card

A series of desktop color plotters can work on most plotter media and can support several types of pens and pencils. Graphtec.

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A drawing management system features three scanners to facilitate storing and retrieving documents. DuPont.

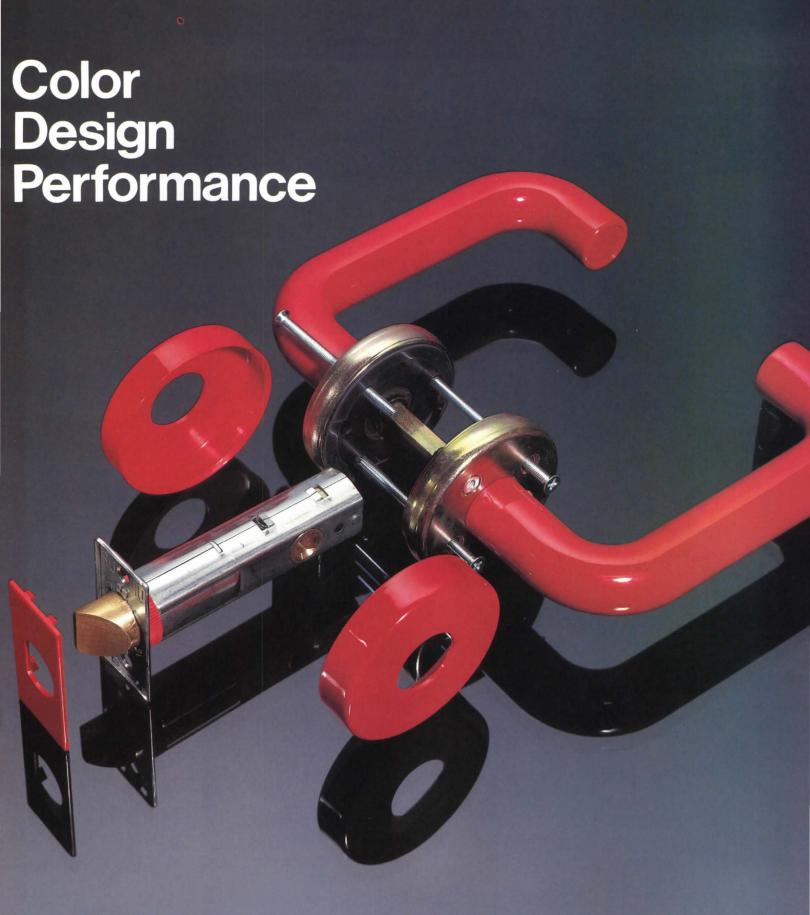
Circle 212 on reader service card



**Large-format digitizers** offer a choice of line-per-inch resolutions. Included are a tablet, a transducer, and an interface. CalComp.

(See Technics, Computer Hardware, p. 126)

Circle 148 on reader service card





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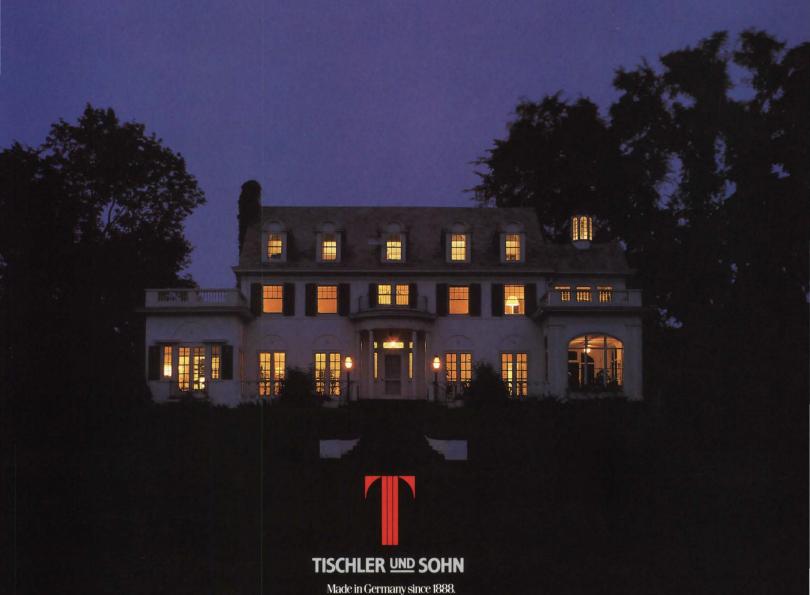


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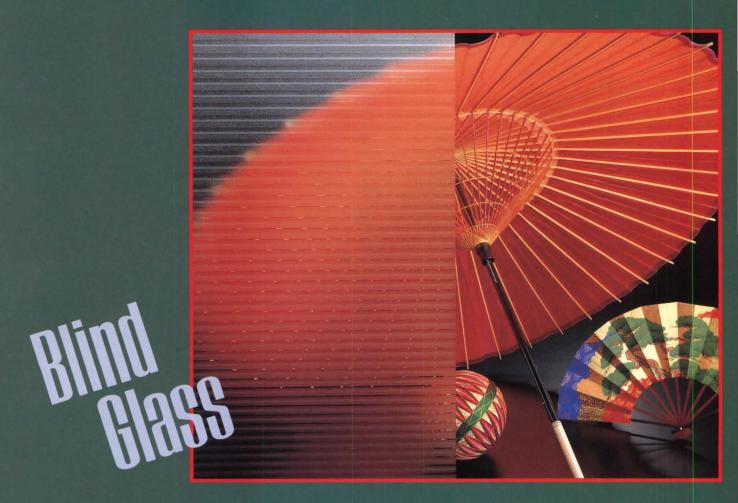
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# **Technics Topics**

- 137 Guastevino tile vaulting is a construction technique that deserves restoration.
- 141 Flat metal roofing has emerged as a viable alternative to conventional methods.



Guastevino tile vaults at the Municipal Building in New York.

# **Guastevino Tile** Construction

Barcelona is well known for its architecture and certainly such masterpieces as designed by Gaudí, which were inspired by early masonry traditions. These Catalan masonry traditions found their way to this country and were applied in some 1500 buildings through the work of the Catalan architect and builder Rafael Guastevino, Sr., and the Guastevino Fireproofing Company which he had founded in 1889. The work of Rafael, Sr., and his son Rafael, Ir., may be lesser known than Gaudi's but they created some of the most monumental spaces in the United States.

Born in 1842 in Valencia, the senior Guastevino studied and subsequently practiced architecture in Barcelona. He built his first house in 1866, and in 1868 a factory for the brothers Battlo, for one of whom Gaudí (in 1904) built a house. During his Barcelona years he became interested in timbrel vaults. This thin masonry vaulting technique, which derives its name from the word timbrel, meaning tam-

bourine, is found in Spain and elsewhere in the Mediterranean. The French refer to this system as voute plate or voute a la Roussillon and the Spanish as bovedas tabicadas. Unlike traditional vaults that derive their strength from the friction between the masonry or tile units and require little or no mortar, the timbrel vault performs more like a concrete shell. This comparison is even more apt when considering that 50 percent or more of the vault consists of mortar, with the tiles functioning as aggregate. Guastevino appreciated the potential of the ancient timbrel vault for a more contemporary architecture and referred to this technique and concrete construction as "cohesive construction," which was also the title of various lectures he gave and of his 1892 book titled Essay on the Theory and History of Cohesive Construction Applied Especially to the Timbrel Vault. This method was contrasted with "mechanical construction," which described the more traditional building

In 1876 he submitted architectural plans to the Centennial Exhibition in Philadelphia,

where his entry was awarded a medal. Buoyed by this success, Rafael Guastevino, Sr., came to the United States in 1881 to start an architectural practice. After only limited success as an architect, he tried his hand at being a developer and builder. It is as an architect/builder providing design-build services that he was most successful. In 1883, he constructed several buildings of fireproof construction using the Catalan timbrel vaulting techniques. In 1885, he obtained the first of some 25 patents dealing with different aspects of fireproof and timbrel vault construction. After several financially unsuccessful ventures, he incorporated in 1889 the Guastevino Fireproof Construction Company, with offices in New York, Boston, and other cities, and later a tile-manufacturing facility in Woburn, Massachusetts. After the death of Rafael, Sr., in 1908, Rafael, Jr., who had been involved in major projects since the 1890s, continued the company and its work. It remained busy till the early 1940s, in spite of the Depression, but never fully recovered after World War II. It was liquidated in 1961.

The Guastevino Technique

In principle, the technique perfected by the Guastevinos was simple. The first course of tile was set in the proper position using a quick-setting mortar. Plaster of Paris, while not very durable, was used for that purpose. Subsequent layers of tiles were placed with breaking joints and regular mortar using Portland, Rosedale, or natural cement, while using the first course of tiles as the formwork. In domes, the tiles were placed in concentric circles. For ribbed vaults built with tiles, the ribs functioned as diaphragm arches and the fields as shells. Stone masonry was often used for the ribs, instead of tile.

The tiles used for structural purposes were hard-burnt, flat clay tiles, typically, 6 by 10 inches or 8 by 12 inches, with an average thickness of 3/4 inch. They were fired in units of six that

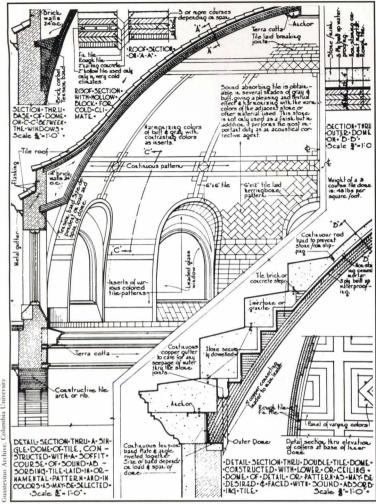
were scored to allow for easy splitting and to give the finished tile a roughened surface for better adhesion in the installation. For the exposed surfaces, a glazed tile with a ribbed or combed finish was usually used.

The number of layers of tiles was limited and generally did not exceed three at the crown and six at the spring of the vault or dome. Some of the detailing evolved over time. Initially only two layers were used at the top, while later the number was increased to three. Reinforcement bars were incorporated in later construction or added to earlier structures to make the shells more rigid. The necessity or effectiveness of these reinforcement bars appears doubtful.

Traditional centering or formwork was not necessary, but templates and other devices were required to achieve the complex curvature so typical for these shells. The temporary dome of St. John the Divine in New York City, constructed in 1908-1909 (and still existing), is a good case in point. Measuring some 132 feet in diameter, this dome was built under the supervision of Rafael, Jr., and was widely published at the time because of the unique construction process. Using templates bolted in place at the base of the dome, the tiles were laid up each day in 18-inchwide concentric circles, and the workmen used the work erected the previous day as scaffolding. This made the installation easy and inexpensive.

Structurally and architecturally, the Guastevinos achieved unique results, which ranged from monumental spaces and complex stairs to utilitarian floor and roof constructions. Because the underside of the structure was left exposed, and textured or ribbed tiles in different colors were used in conjunction with a distinctive raised pointing, dramatic, elegant, and colorful interiors could be achieved.

The Guastevino technique and its architectural applications were used widely across the country between 1880 and 1961 (continued on page 138)



Detail drawings showing how Guastevino tile domes were built.

(continued from page 137) in buildings designed by America's best known architectural firms. Buildings incorporating this particular construction technique include Grand Central Station (with vaulting exposed in the Oyster Bar restaurant), the Cathedral of St. John the Divine, the Municipal Building and its adjacent subway station, the Metropolitan Museum, and the main building on Ellis Island, all in New York City, the Smithsonian Institution's Museum of Natural History and the National War College, in Washington, D.C., the Minnesota State Capitol in St. Paul, and the Boston Public Library.

In 1914 and 1916, the Rumford and Akoustolith tiles were introduced into the system. Both were early acoustical tiles developed in cooperation with the Harvard scientist Wallace C. Sabine, who was one of America's pioneers in acoustics. The method of construction was not altered except for replacing the first layer with sound absorbing tiles. These tiles were used particularly in churches and public spaces and cut down substantially on the reverberation time. The Akoustolith tile was the improvement of the earlier

Rumford tile, which was used in St. Thomas Church in New York City. The Akoustolith tile was utilized extensively in later construction as, for instance, in the nave of St. John the Divine in New York City.

Why the Guastevino system was so popular is easily understood when seen in the context of the time. It provided an inexpensive and architecturally attractive light-weight and fire-proof construction technique. Reinforced concrete could not yet provide a similar fireproof construction and certainly not with the same aesthetics.

# Restoring the Vaults

The restoration of Guastevino vaults and domes frequently baffles architects and engineers because it presents problems that do not follow standard practices. Because the vaults, domes, and stairs perform like shells, they are essentially statically indeterminate. Although the Guastevino book Cohesive Architecture does describe in some detail how these structures were to be calculated, calculations represent the knowledge of structural analysis at the time. They are only gross approximations using graphic methods to

determine the relevant stresses. To provide a technical basis for the calculation and to engender public confidence, various tests on the materials as well as on the structural elements were executed at the time to demonstrate the strength and the reliability of this construction method. The building of Guastevino's vaults was, therefore, based more on tradition than complex structural calculations. One of the most dramatic testimonials to the strength of the vaults was an accident during the construction of the Boston Public Library. A stone block fell from the building and hit a Guastevino vault, causing a hole but not collapse.

The unique structural principles of these vaults were not fully understood until the development of shells later in the 20th Century. Prior to that understanding, Guastevino shells were thought to be too flexible, a conclusion often reached without conducting any detailed structural analysis. These shells, however, can take considerable loads. Structural failures can be caused by only two basic factors: displacements or moisture damage. Where displacement or shifting in the supports or columns has occurred, the vaults or domes will crack, endangering the rigidity of the shell. Careful evaluation of the existing shells and other Guastevino structural members is necessary to determine how structural damage has occurred. If the cracking is stable and movement has stopped, the cracks can be grouted in the traditional manner.

The majority of failures are related to penetration of moisture. White staining at the underside of the vault or missing pointing are the early signs. The white staining is caused by efflorescence, which is the result of the plaster of Paris dissolving and subsequently recrystallizing on the tiles. Where the water penetration is allowed to continue, the water will dissolve all the plaster of Paris and cause tiles to fall. The cohesiveness of the shell will then disintegrate because the tiles that form the underside of the shell are no longer securely attached. The initial danger is falling tiles, so all vaults and structures should be checked for tiles that are no longer properly secured. The loss of tiles, when limited, does not present a serious structural problem, because the nature of the shell structure is such that holes can be made without losing the structural integrity. However, if many tiles are missing or loose, the structural integrity of

the construction should be studied. In the event that serious cracking has occurred, the structural integrity of the vaults should be restored by grouting of the cracks after the initial cause has been eliminated.

After the initial inspection has ascertained that no serious structural problems exist, it is necessary to ensure that no loose tiles are present and that all pointing mortar is secure. The missing tiles or the tiles removed during the inspection can be mortared back into place. Care should be taken that the tiles are well parged and the joints filled. Once the tiles are replaced, the pointing can be restored using a special pointing tool to recreate the unique raised pointing. The tiles to be used for replacement have to visually match the existing tiles as closely as possible. Fortunately, the original tiles had a large variety of color, making the matching easier. Only in the event that acoustical tiles were used and the sound characteristics are to be maintained is the composition of the tiles important. Once the integrity of the tile system has been restored, the tile surfaces may be cleaned. This cleaning requires great care so as not to damage the glazed surfaces or to dissolve the plaster of Paris.

A special problem is presented by the acoustical tile systems. The absorptive qualities of these tiles was so good that spaces seem dead, lacking reverberation. To alter that, the sound absorption of the tiles can be reduced by applying a clear coating, the sole purpose of which is to fill the pores. The selection of the appropriate coating is critical and has to take into account that the coating, once applied, may darken in the long run and may attract dirt. The Duke University Chapel in Durham, North Carolina, and St. Thomas Church in New York, appear to be examples of this treatment.

The Guastevino system represents a unique architectural treatment that has given America some of its most monumental spaces. This is even more remarkable in light of its origin, the complex structural principles, and the limited technology available at the time. It deserves to be preserved and treated with care. *Theodore H.M. Prudon* 

The author is director of restoration with the New York firm of Swanke Hayden Connell Architects and teaches in Columbia University's graduate restoration program.



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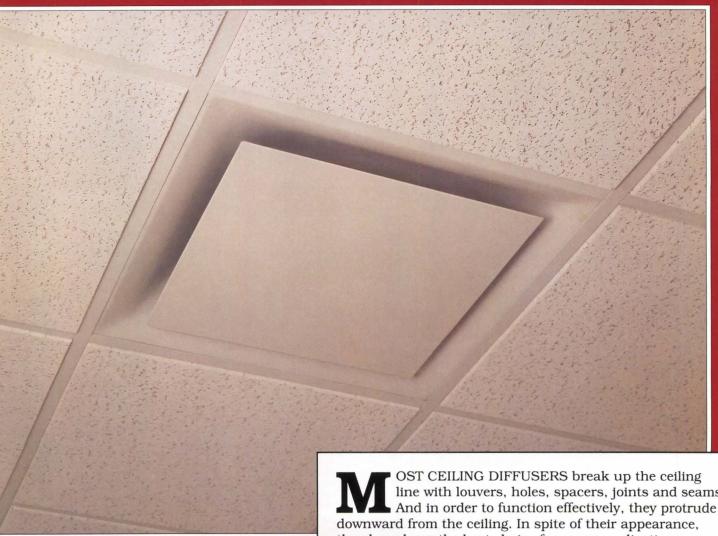
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their supporting purlins. Mova-

ble tabs in the clips create a roof

ports during expansion and con-

severe temperature fluctuations

and prevents cracking and split-

the seams fasten the panels to

that virtually floats on its sup-

traction. This accommodates

ting, a frequent problem as-

sociated with other roofing.

dling flat roofs in buildings-

carbon sheet, typically 0.019
inch to 0.024 inch thick. A hot-
dip metallic coating is then
added to provide the long term
weather protection needed for
atmospheric exposure.

Galvalume sheet steel, for example, which is by far the most common material for low-slope metal roofs, is coated with an alloy of 55 percent aluminum and 45 percent zinc. The zincrich portion of the coating sacrifices itself to protect the steel substrate, while the aluminum part of the coating provides a long-lasting barrier between the atmosphere and base steel.

# Structural Versus Architectural Roofs

Standing seam roofing can be used for both structural and architectural purposes. Structural roofs are regarded as watertight barrier systems for low-slope applications. Architectural standing-seam roofs, with higher pitches, function as water shedding systems.

With slopes as low as 1/4 inch in 12 inches, structural roofs are typically installed on metal buildings and as weatherproof alternatives to flat roofing. To ensure watertight performance, most have a mastic bead within the critical sidelap area. Panels of .024 inch or thicker eliminate the need to back structural systems with load-bearing decks. Further strength is attained with minor rib stiffeners within the panel's pan area. Many of the structural standing-seam roof systems on the market today are designed to pass the UL-90 wind uplift test, and some have passed requirements for hurricanes.

ROOF	IN YEARS	LIFE-CYCLE COST
SSR	20	\$16.41
EPDM-BA	15	\$19.11
EPDM-MA		\$21.22
BUR-CTP	15	\$23 57
BUR-ASP	12	\$23.58
EPDM-AD	15	\$25 37
PVC	8	\$27.72
MOD. BIT.	11	\$28.37

ROOFING LIFE-CYCLE COSTS

Architectural systems, installed on slopes of 3 inches in 12 inches or greater, must be accompanied by a felt underlayment. Since architectural panels are not load-bearing, they also must be installed over a deck. Seam heights are usually less than two inches and are narrower than structural ones. Because of the higher slopes, mastics in seam areas are not needed.

The advantage of using a structural roof in an architectural application is the elimination of felt underlayment and decking. However, many architects select architectural systems to maximize the roof's aesthetics. Architectural panels are commonly painted to provide flexibility, weatherability, color retention, and corrosion resistance.

## **Life-Cycle Costs**

The Roofing Communications Network, in Nashville, Tennessee, conducted a life-cycle comparision of standing-seam, EPDM, built-up, PVC, and modified-bitumen roofs. The researchers used the 48,310square-foot roofs of the Smithsonian Institution as the basis for their computer model. As the chart illustrates (above), the standing-seam roof had the lowest life-cycle costs and the longest life expectancy.

The installation cost of a standing-seam roof depends on the individual project. Costs can range anywhere from \$1.75 to over \$8.00 per square foot. There is, of course, a direct relationship between the complexity of each project and the final cost. Size, insulation requirements, slopes, number of penetrations, type of construction, local labor costs, and site restrictions are just some of the many factors that affect a roof's cost. Roof performance, however, can be expected to remain consistent and long-lasting.

### Manufacturers

Standing-seam roofs are produced by scores of reputable building systems and component manufacturers across the nation. Most manufacturers offer 20year standing-seam roof warranties. For more information, contact:

# **Metal Building Manufacturers** Association

1230 Keith Building Cleveland, Ohio 44115 216-241-7333 (Represents metal building and roof system manufacturers)

**Metal Construction Association** 1133 15th St., N.W., Suite 1000 Washington, D.C. 20005 202-429-9440 (Represents the roofing and metal construction industry)

### Roofing Communications Network

1720 West End Ave., Suite 601 1-800-522-7663 (Offers computerized life-cycle costing and energy analysis)

American Iron & Steel Institute 1133 15th St., N.W. Suite 300 Washington, D.C. 20005-2701 202-452-7188

# Angelo Borzillo

The author is vice president, coated-sheet technology, for BIEC International, Inc., worldwide licensor of Galvalume.

consists of aluminum, copper, zinc, or the more common coated sheet steels. Steel roofing is made from cold-rolled, low-

Metal standing-seam roofing



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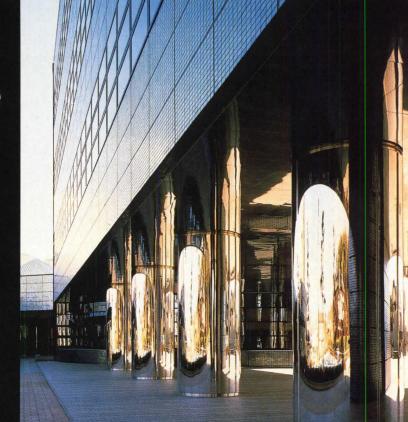
ALPOLIC combines beauty with superior flatness and easy workability. Used for exterior sheathing, display panels, sign boards, and other applications, it resists weather and corrosion. Used for interior applications such as displays, it will enhance the beauty of your designs.

ALPOLIC is available in silver, light bronze, dark bronze, gold and black anodized and painted in a range of colors.

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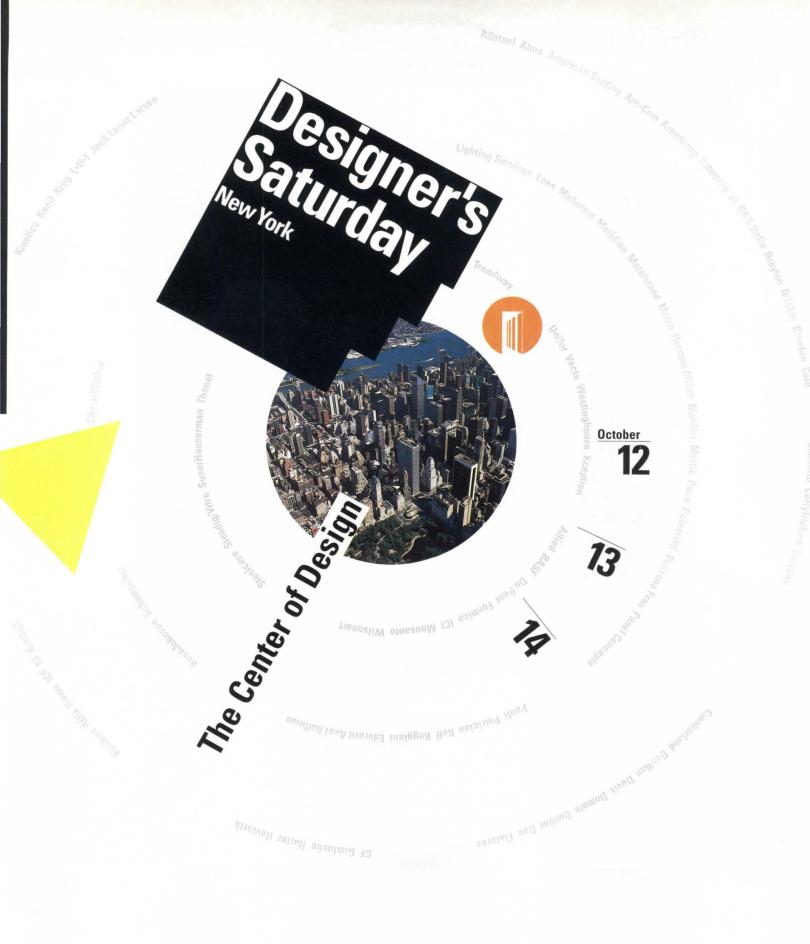
The Lightweight, Flexible, Unbreakable Mirror For Exterior Use And Where Humidity Is High.

Indoors and Outdoors, A-LOOK EX supplies the reflective beauty of a mirror. You can bend it, cut it and hang it. It's ideal for store fronts, eaves, entrance areas and signs as well as for any variety of indoor applications including spas, bathrooms and other areas subject to humidity. The fluoride resin surface of A-LOOK EX provides outstanding weatherability and resistance to humidity.



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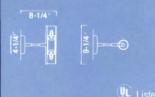
Support Systems for Responsive Working Environments<sup>sм</sup>

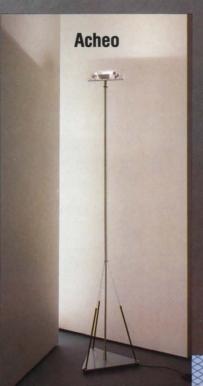
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Halogen wall fixture with diffuser in clear Pyrex glass. Wall bracket in die-cast polished aluminum. Lamping: max. 1 × 300 Watt T3/CL Also available as a floor model.





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Tel: 516/694-9292
Fax: 516/694-9275

# Chicago

Artemide 808 Merchandise Mart Chicago, Illinois 60654 Tel: 312/644-0510

# Los Angeles



# **Designer's Saturday**

Thursday, October 12
Facilities Management Day

October 12, 13, and 14 mark the 22nd annual Designer's Saturday. This year the New York event will showcase products from 87 Designer's Saturday members, including nine new

participants.

Facilities Management Day, October 12, opens with a morning seminar addressing the housing crisis. Architects, developers, corporate executives, and politicians gather to present and discuss a variety of affordable housing projects. Former P/A senior editor and awardwinning journalist Daralice Boles moderates the two-hour event, which is hosted by Formica. (See this page for other member-hosted Facility Management Day events.)

The annual IBD/Contract
Magazine Product Awards will
be presented Friday morning,
October 13, at the Plaza Hotel.
(See facing page for ticket information.) French designer
Philippe Starck and Texan Scott
Strasser will discuss their latest
projects at noon in an event
hosted by the A&D Building. At
2:30 at the IDCNY the Ceramic
Tile Marketing Federation hosts
a seminar on the architectural
and design uses of ceramic tile.

Friday closes with a celebrityattended musical inauguration of the Design in Theater Award. The new honor, which will recognize outstanding solutions to specific theater design programs, is sponsored by the IBD New York chapter and the National Music Theater Network.

This year's closing Gala takes place at the New York Public Library from 6:30 p.m.–10:30 p.m. on Saturday, October 14. Two bands, the Hank Lane Review and Orchestra and the American Grease Band provide the entertainment. See facing page for ticket information and other scheduled events.

8:30 a.m.-10:30 a.m.

Design for Survival: Solving the Housing Crisis. Cinema I, Third Ave. & 60th St. Visual presentation of low-in-

Visual presentation of low-income and affordable housing solutions, moderated by Daralice Boles.

10:00 a.m.

Rockefeller Center in the 21st Century. A panel discussion about the Center's \$260 million enhancement program. A&D Building.

10:00 a.m.

Breakfast at Tiffany: Corporate Style. John Lorring, Tiffany & Co. Jack Lenor Larsen showroom, IDCNY.

10:00 a.m.-11:00 a.m.

Dealing with Asbestos and Other Hazards. A discussion on dangerous substances in the work place, sponsored by IFMA/NY. IDCNY.

10:00 a.m. and 12:00 p.m.

Lease Negotiations: A Facility Manager's Guide to Winning the Space Race. Joseph Horowitz, special projects director, facilities engineering, CBS. SunarHauserman Showroom, IDCNY.

10:00 a.m. and 2:00 p.m.

Furniture Standards in the Work Place. Lucille Daileader, design manager corporate real estate, Continental Insurance. Alma Desk showroom, IDCNY.

11:00 a.m.

Excellence in the Changing Organization. D. Quinn Mills, professor, Harvard University.
Steelcase showroom. IDCNY.

11:00 a.m.-12:00 p.m.

Marketing Design Services. Lester Dundes, publishing director, Interior Design, moderates a panel discussion. IDCNY.

11:00 a.m.-12:15 p.m.

Asbestos: What You Need To Know. C. Jaye Berger, moderator. Panelists include Councilman Sheldon Leffler. IDCNY Conference Center.

11:00 a.m. and 2:00 p.m.

Arts & Antics: An Illustrated Pep Talk on Commercial Custom Design Carpet. Bob Hutchinson, vice president product development, Lees Commercial Carpet; Sondra Rehm, merchandising director, Lees Commercial Carpet. Lees showroom, IDCNY.

12:00 p.m.

Mock-Up Saves Millions. Presentation of Aetna Insurance Company's cost-saving renovation project. A&D Building.

1:00 p.m.

Developing a Criteria for Choosing Office Furniture. Pat Sullivan, accounts director, PHH Environments; Muriel Chess, editor, Professional Office Design. Westinghouse Furniture Systems showroom, IDCNY.

2:00 p.m.

Reconstructivism: Updating Interiors. Ted Brumleve, AIA, senior associate, Brennan Beer Gorman Monk/Interiors.
Brueton showroom, IDCNY.

2:00 p.m.

Survival Course for Facility Managers. Jeffrey Simon, principal, SCR Design Organization. Steelcase showroom. IDCNY.

2:00 p.m.-3:00 p.m.

Clearing the Air: Environmentally Sound Design for the 1990s. How to create toxin-free work-

# Schedule of Events

Friday, October 13

Saturday, October 14

# 2:30 p.m.

Managing Control: Contrary Assumptions. Cornell Facility professor Franklin Becker contrasts European and American facility planners. A&D Building.

Boym's Art Furniture: Relating to Contract Furniture Design. Constantin Boym, designer. Brickel, 515 Madison Ave.

**3:00 p.m.—4:00 p.m.**Marketing: The New Factor in Banking. A moderated panel discussion. Janet Ryan, publisher, Contract, IDCNY, Center One Conference Center.

# 3:00 p.m.-4:30 p.m.

Dessert and hospitality event. Domore showroom, IDCNY.

# 3:30 p.m.

The Chrysler Project. A discussion about the design of the Chrysler Technology Center in suburban Detroit. Anne Fallucchi, editor, Facilities Design and Management, moderates. IDCNY, Center Two Conference Center.

# 4:00 p.m.

Designer Niels Diffrient presents his work. IDCNY.

# 4:00 p.m.

The Relationship Between Furniture and Fashion Design. Developed by fashion coordinator Christian Farrow. Palazzetti showroom, 515 Madison Ave.

# All Day

Technical Innovations in Wall Systems, Eberhard von Huene, developer of the Systems Wall, discusses his product. KI showroom, IDCNY.

## 8:00 a.m.-10:30 a.m.

IBD and Contract Magazine Product Awards Breakfast. Plaza Hotel. Contact IBD at (312) 467-1950.

## 10:00 a.m.-11:00 a.m.

The Good, The Bad, The Ugly: Design in the Eighties. Victoria Geibel, Metropolis, moderates this design critique. A&D Building.

# 10:30 a.m.

Elegant Solutions to Audio/ Video Integration from Bang & Olufsen. Dux Interiors, A&D Building.

# 11:00 a.m.-12:00 p.m.

Beams and Blobs: The Shape of Light for Interior Design Applications. Robert Prouse, partner, Howard Brandston Lighting Design. Sponsored by ai, Artemide, and Lighting Services. IDCNY, Center Two Conference Center.

# 12:00 p.m.-2:00 p.m.

The International Cowboys: Riding into New Design Horizons. Philippe Starck and Scott Strasser present their recent projects. A&D Building.

# 2:00 p.m.

New Design Uses of Ceramic Tile. Paul Sachner, executive editor, Architectural Record. hosts the seminar, which is sponsored by the Ceramic Tile Marketing Federation. IDCNY, Center One, 4th fl. Conference Center.

# 2:30 p.m.-3:30 p.m.

Contract Textiles: New Fibers and Technologies. Members of the Association of Contract Textiles will discuss advances in the field. IDCNY.

## 3:00 p.m.-4:00 p.m.

Licensing: Closer Than You Think, Michael Bouroque, president IBD; Ben Brewer, president AIA; and Charles Gandy, pastpresident, ASID. Len Corlin, co-publisher/editor, Contract, moderates. IDCNY.

# 3:30 p.m.-4:30 p.m.

20 Years of American Design. Beverly Russell, editorial director, Architecture and Interiors, discusses design with Ward Bennett, Patricia Conway, Charles Moore, Robert Stern, and Stanley Tigerman. IDCNY.

# 5:00 p.m.-6:00 p.m.

Stanley Abercrombie, editor Interior Design, moderates as Mario Bellini and Michael Graves each discuss their work. IDCNY.

# 5:00 p.m.-8:00 p.m.

Cocktail parties. All showrooms.

# 8:00 p.m.-9:00 p.m.

Broadway; Yesterday, Today, and Tomorrow. IBD kicks off its new Design in Theater Award with a National Music Theater Network revue hosted by José Ferrer. Sponsored by Allied Fibers. IDCNY, Center Two.

# 9:00 p.m.-11:00 p.m.

Late night dancing. IDCNY, Center Two.

## 10:00 a.m.-2:00 p.m.

30 Under 30, an exhibition showcasing the work of 30 architects 30 years old or less. DAC Building.

## 6:30 p.m.-10:30 p.m.

Gala Affair. New York Public Library. Refreshments and entertainment are included in the \$35 admission fee. Tickets available from Designer's Saturday (212) 249-5237. \$25 tickets for admittance from 8:00-10:30 are available at member showrooms. (See facing page for more information.)

# **Exhibitions**

Style Preview '90. Metropolitan Home predicts what's hot for the coming decade. IDCNY.

Rietveldt's Heirs: Contemporary Dutch Design, an exhibition created by the Netherlands Office of Fine Arts. IDCNY, Center One North Atrium.

Italian Rationalism, A Milan International Furniture Fairsponsored display of Italian furniture designed between 1927 and 1937. IDCNY, Center One, 4th floor.



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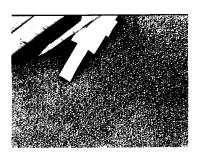


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# **Products**



## **Allied Fibers**

Jupiter II is a textured loop carpet made from Anso IV HP nylon and recommended for heavily trafficked areas. The carpet is available through Lees Commercial Carpet's quick-ship program.

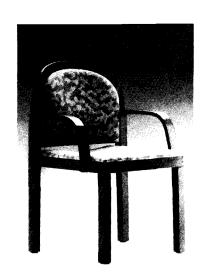
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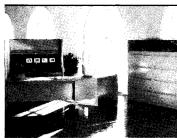


# Artemide Litech

The MIKADO System encloses 12-volt transformers in a pair of aluminum rods that are connected to spotlight projectors. The arrangement of the rods is flexible.

Circle 153 on reader service card





### Allsteel

The 8900 Series, with desk and table assemblies, L-returns, and credenzas, has a new wire-management design that offers a variety of ways to conceal and run cables through a trough beneath the work surface.

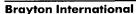
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# **Atelier International Lighting**

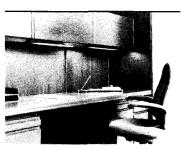
Tango, designed by Stephan Copeland, features a wireway of swagged aluminum tubing, articulated-spring joints and a pivoting lamp head. The fixture can be table, clamp, or panel mounted.

Circle 154 on reader service card



The handcrafted, beechwoodframed ECLIPSE series is available in arm, armless, upholstered, stacking, and ganging chairs.

Circle 156 on reader service card



# **American Seating**

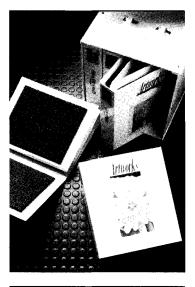
A new task-and-ambient lighting program and a retrofittable power-distribution system have been designed for integration into the System R and Invitational lines.

Circle 151 on reader service card



Four new colors—blue topaz, copper, turquoise, and garnet—have been added to the Suffield line of commercial vinyl flooring

Circle 152 on reader service card



# BASF

The Artworks book collection contains samples of the Zeftron styles and tufting technologies currently available.

Circle 155 on reader service card

# Brickel

The 1940s-styled maple La Brea Pull-Up chair has a wrapped back and contoured arm. The seat is 18 inches high and the arms 25 inches.

Circle 157 on reader service card







# **Brueton Industries**

Inspired by Japanese craftsmanship and design, the MARA Series can be used with one or more pedestals. The steel base can have an acid-washed and/or opaque finish; tops are in glass, marble, stone, or wood. Circle 158 on reader service card



# CorryHiebert

RizziOffice is a new desk system consisting of a steel and wood freestanding desk with credenza, file, and optional overhead storage. Each component has its own wire management system.

Circle 161 on reader service card



# **Domore**

System Seven features a single universal hinge connector, a "Big Top" work surface, and a choice of three-circuit, six-wire, or four-circuit, eight-wire electrical system.

Circle 213 on reader service card



# Cole

Reflex Series seating features an articulated seat, pneumatic height control, upholstered armcap, three-position tilt lock control, and five-prong base with dual wheel casters.

Circle 159 on reader service card



# Comforto

A new wood finish option is now available for the System 28 seating line. A new stacking chair has also been added to the line.

Circle 160 on reader service card



# Croydon

Designed by 20/20 Designers & Consultants, Toronto, Advantage is a fully veneered, selfstanding or panel-integrated system with executive returns, D- and P-shaped work surfaces, and local wire management.

Circle 162 on reader service card



# **Cumberland**

The beechwood ROSA stacking chair, designed by Enzo Berti, can have a black, mahogany, or natural finish and is recommended for office or dining applications.

Circle 163 on reader service card



# **Davis**

Millennium Desk collection casegoods are made of sapele veneers and mahogany solids with a variety of finishes. A series of columns, offered in three sizes, suggest "work-wall" configurations.

Circle 164 on reader service card





# Donghia

The bent metal base, coated with sound-absorbing, antiabrasive finish, and the curved plywood seat of the Academy stacking chair were designed for service industry applications.

Circle 214 on reader service card



# Dunbar

New pieces have been added to the Enloe/Summers Executive Group including the Enloe/Summers Panel Desk that measures 72 inches wide, 33 inches deep, and 29 inches high.

Circle 215 on reader service card

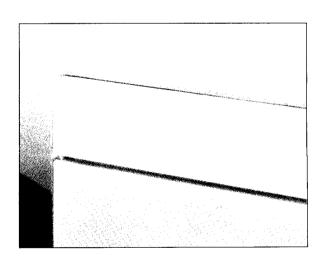


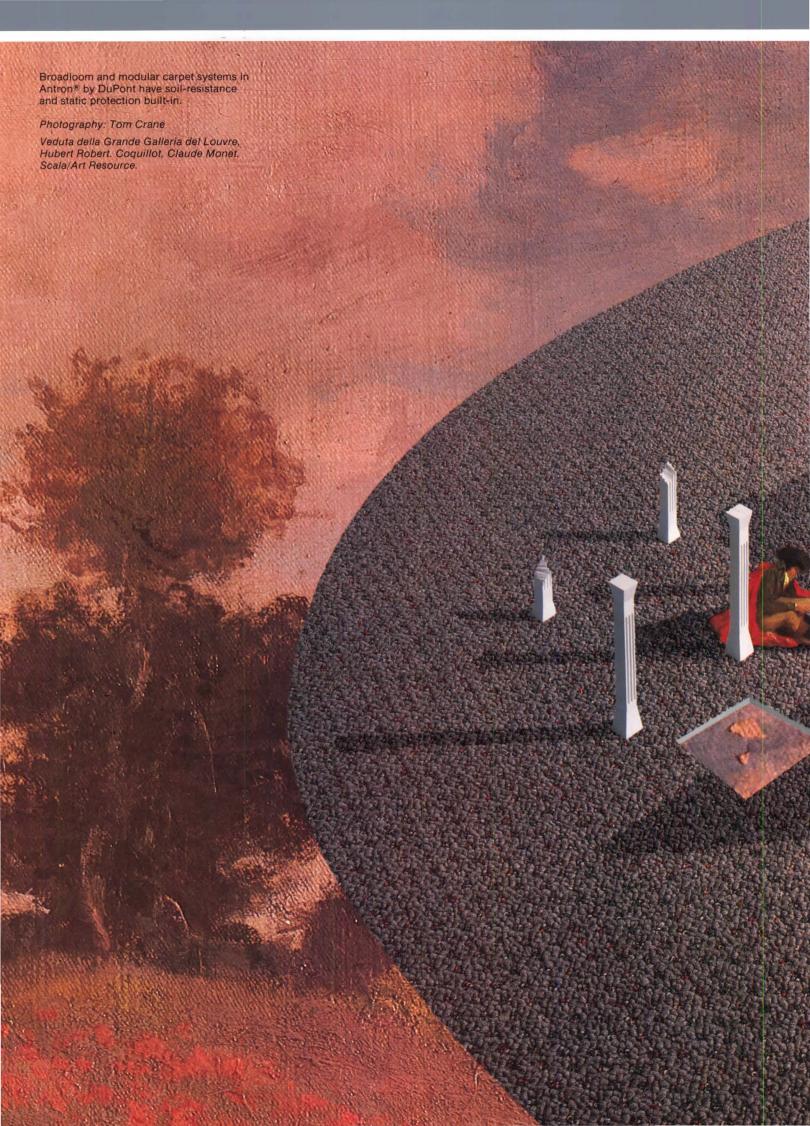
# **Dux Interiors**

Upholstered in Elmo Classic Leather, the Jetson 70 Easy-Chair was designed by Bruno Mathsson.

Circle 216 on reader service card

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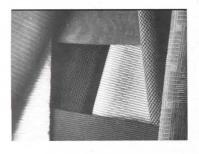




### Intrex

Strathmore casegoods have tops with a pommele sapele veneer and tracks inlaid with satinwood, ebony, and mahogany. They are finished with stain-resistant Satin™ semifill.

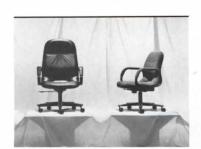
Circle 226 on reader service card



# **KnollTextiles**

Belgian weaver and textile designer Anne Beetz has a new collection of upholstery and wallcovering fabrics featuring cotton, linen, and silk blends in a muted color palette.

Circle 229 on reader service card



# La-Z-Boy

Antero™ Seating can be ordered in executive, managerial, operator, or sled-based side chair versions. Arms and legs can be specified in wood and metal finishes.

Circle 232 on reader service card



# Kimball

Unity, a single casegoods line for both management and staff applications, features anigreveneer finishes to provide grain consistency. Radius, double radius, or bevel edge treatments can be specified.

Circle 227 on reader service card





# Lee Jofa

Falling Leaves, a tone-on-tone wool damask, can be used for both contract and residential applications.

Circle 233 on reader service card



# **Kinetics**

PLUSH is an oversized chair with a wide, self-skinned polyurethane arm rest that can be upholstered to match or contrast with the seat. It is also offered in a sled-based, visitor, or conference model.

Circle 228 on reader service card



# Krueger International

The Stance chair, made of steelreinforced polypropylene, is available in both high-back and mid-back versions and can be stacked or ganged.

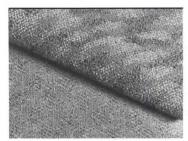
Circle 230 on reader service card



# Jack Lenor Larsen

The St. Moritz Lounge Series designed by Robert and Barbara Tiffany is recommended for both contract and residential applications. The line includes lounge chair, sofa, and settee.

Circle 231 on reader service card



Color Antics (top) and Color Optics are loop pile carpets, the first to incorporate new tufting technology distinguished by precision color placement and controlled textural variations.

Circle 234 on reader service card



# **Lighting Services**

Constructed of extruded aluminum, SB-16 Spacebird is a lighting fixture that is adjustable both horizontally and vertically. It is powered by an integral electronic transformer.

Circle 235 on reader service card



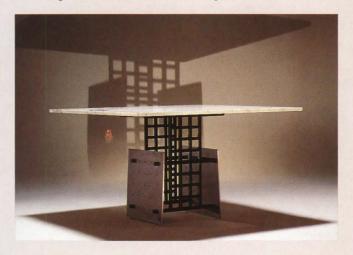
# Mara Series designed by Stanley Jay Friedman

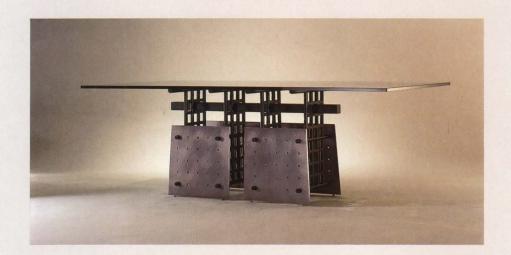
Inspired by Japanese architecture and joinery.

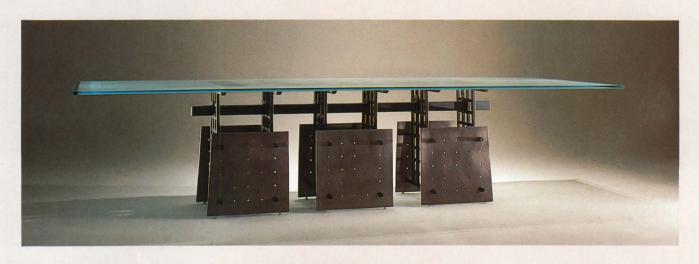
Pedestals and side panels are steel, finished in an acid wash or opaque colors—or a combination of both. Tops in glass, marble, stone or wood. Mara may be used with one, two, or three pedestals or more.

Executive Offices: 145-68 228th Street, Springfield Gardens, NY 11413 Tel. (718) 527-3000 or (1-800) 221-6783

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A striking diagonal upholstery detail is the unifying feature of the collection. Ergonomic design, maximum comfort, and aesthetic appeal are the unique characteristics of this coordinating collection.

Design: Burkhard Vogtherr

brayton international collection

a member of the steelcase design partnership











# Poltrona Frau

Minuetto, designed by architect Gae Aulenti, has a seasoned beechwood frame, steel Greek springs in the seat, and is covered in fine-grain calfskin.

Circle 247 on reader service card



# RoseJohnson

RJPlus is designed to complement the Progressions + office system. It offers new fabric, laminate, and wood finishes and has freestanding or workstation applications.

Circle 251 on reader service card





# **Reff Incorporated**

System Z, with plastic laminate finishes and metal interiors, can be configured as freestanding workstations or combined with panels and panel-hung compo-

Circle 248 on reader service card



# Saladino

The Arch Chair, with a loose, feather-wrapped foam seat cushion, is fully upholstered with baseball stitching detail. It is available with concealed casters or glides.

Circle 252 on reader service card



Orlando Diaz-Azcuy designed Corvo™ to complement the Context™ freestanding furniture system. The upholstered side chairs may be used in a variety of office or restaurant applica-

Circle 255 on reader service card



# Reggiani USA

Constructed of die-cast aluminum, the metal halide Space Lights, designed by Luigi Manzoni, are applicable to all size interiors. Available in black or white, the lamps can be special ordered in brass or chrome.

Circle 249 on reader service card



# F. Schumacher

Woven in America, Rusling, Sedgefield, and Highlands are all 60 percent wool and 40 percent nylon fabrics. They are 54 inches wide and come in a range of colors

Circle 253 on reader service card



Roffman

The Double Pedestal Desk is

one of four in the Quad Desk Collection featuring raceway,

bevel, bullnose, and double

Circle 250 on reader service card

radius tops. Several different

wood finishes can be specified.

**Shaw/Walker** The Paragon™ chair houses its height adjustment control in the left arm and delivers ergonomic benefits through a Rynite™ polymer shell developed with DuPont.

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# **Stendig Textiles**

Among Andrée Putman's new textile collection is Bastille, a reversible fabric of 90 percent wool and 10 percent nylon.

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# Stow & Davis

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### SunarHauserman

The Cameron Workwall is composed of credenza, upper storage, tack board, and light. It is factory-assembled with measurements and options chosen by the specifier.

Circle 258 on reader service card



# Thonet/Madison

The Polar stacking chair is constructed of bentwood arms and legs, molded plywood seat back, and steel wire back support and rear legs.

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# **Trendway**™

Shallow Hanging Pedestal Files have three six-inch-high drawers, while the Freestanding Pedestal Files are offered in a two- or three-drawer unit. Both files are shipped with tops.

Circle 260 on reader service card



# Unifor

Secretaire, designed by Richard Sapper, is an enclosed work area constructed specifically for personal computers. It has a height adjustable work surface.

Circle 261 on reader service card



# Vecta

A welded steel D-section frame supports a seat and back of flexible webbing covered with foam and upholstery in the D/3 guest chair series by Dale Fahnstrom and Michael McCoy.

Circle 262 on reader service card

# **Vitra Seating USA**

Mario Bellini has designed the lmago range of executive chairs. Featuring a synchronous mechanism for free movement, the chair can be ordered with a five-prong base with casters or alides.

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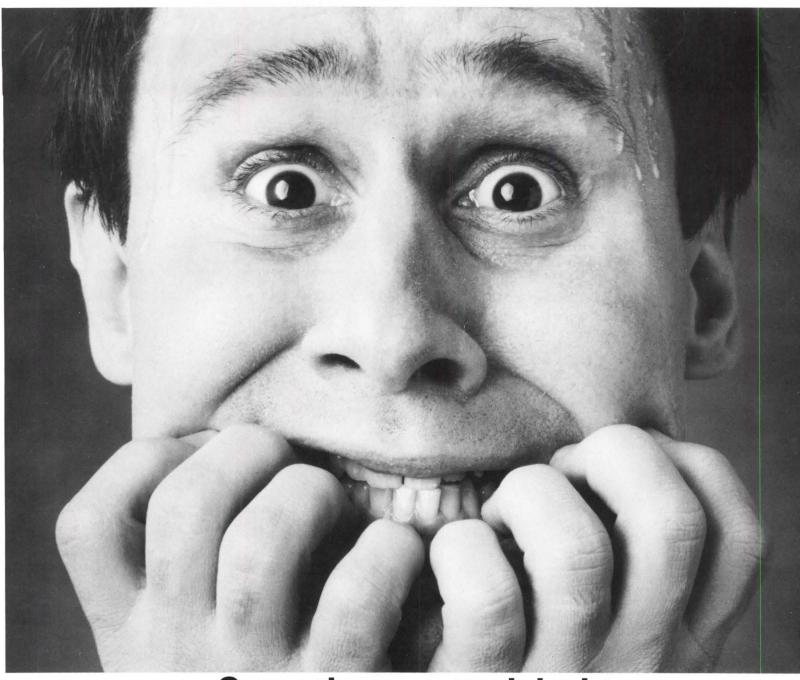
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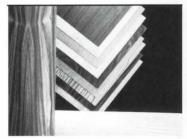




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Equation™ includes cabinet, work surface, and other work-station components. A new selection of laminates, veneers, fabrics, and trim colors are available.

Circle 264 on reader service card



## Wilsonart

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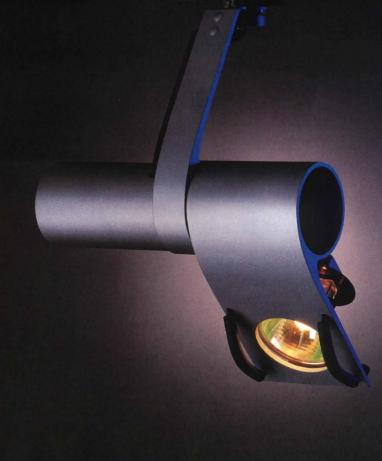
Circle 265 on reader service card



# Zographos

The Cinnamon Desk/Conference Chair with a solid cherry rim can be ordered with a four or five star base in solid stainless steel or solid bronze.

Circle 266 on reader service card



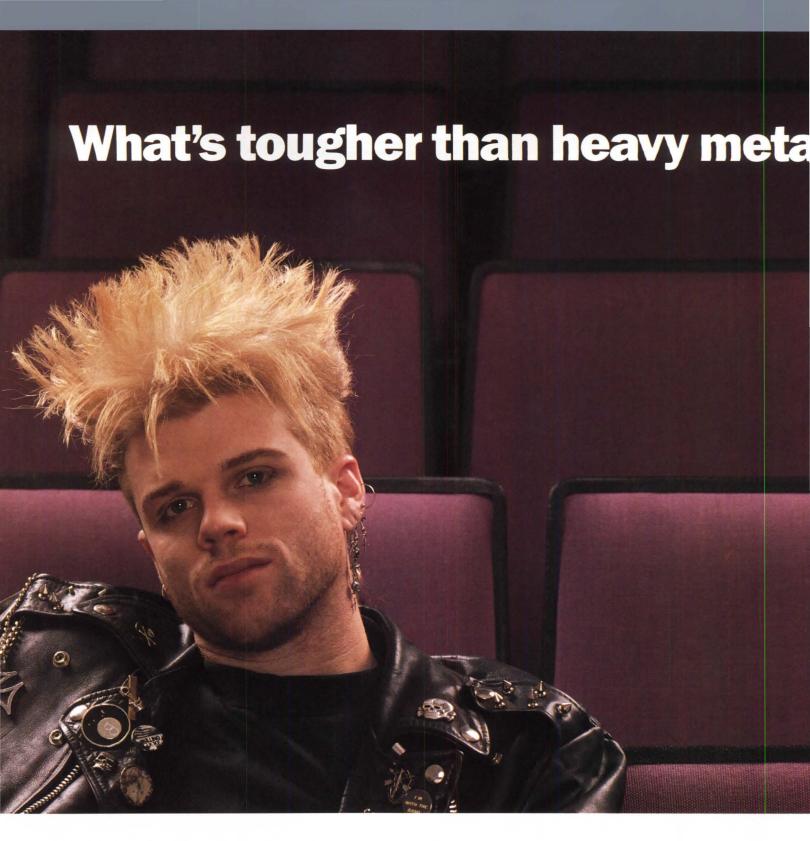
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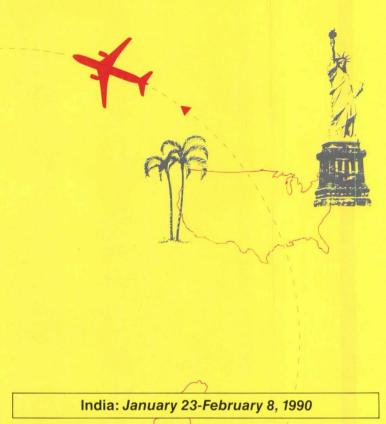
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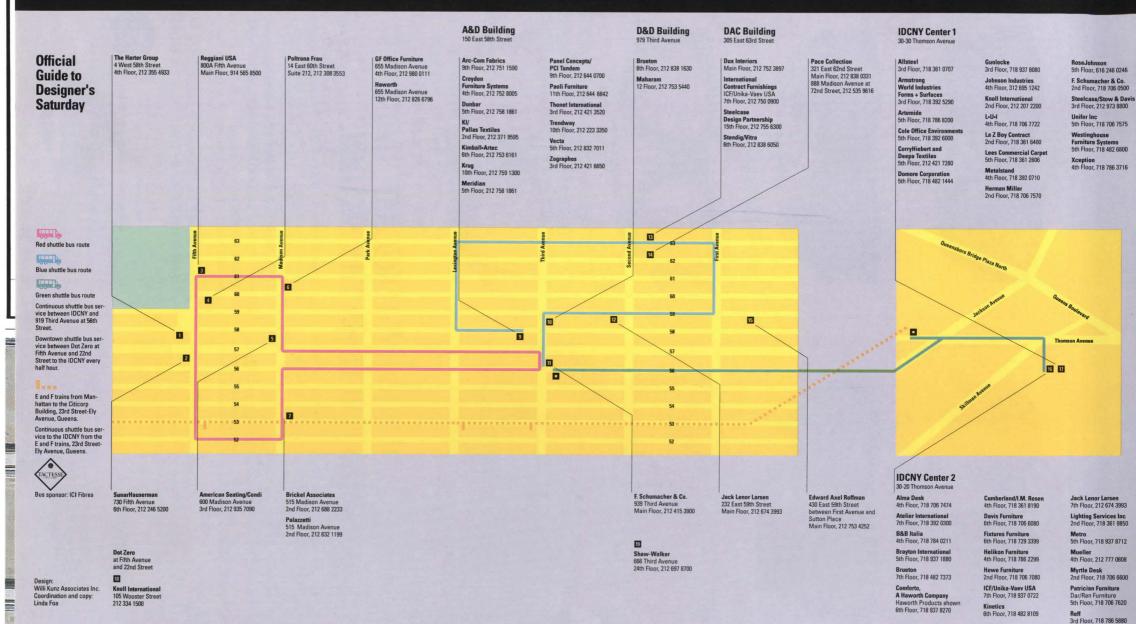
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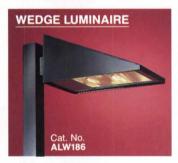












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(continued from page 183)

not merely a manner appropriate to the character or the use of the building, or even the landscape in which it was set, but which referred to a specific time and nation, first emerged on the continent. In 1824, Hans Hubsch published his momentous book In Welchem Style sollen wir Bauen, in which he suggested that a round-arch style (we would call it Neo-Romanesque) could absorb cast-iron construction. His was the first in the century-long effort to find a new style for a new age.

The Romantic triad of Schelling, Fichte, and Herder developed the idea of a unity between political constitution, economic condition, language, and the visual arts, which together constituted a national style. In 1867, John Grace Free-man, an English historian of art, published a list of the 590 "styles," based on Giorgio Vasari's Lives of the Most Famous Architects, Sculptors, and Painters, of 1550; Freeman's list runs alphabetically from "a bold proud animated" through "delicate," "hard and dry," "profound,"
"ridiculous," to "wretched" and "youthful" manners. Freeman's book does not, however, appear in Professor Crook's voluminous bibliography. If it had, Crook might have been more cautious in attributing "Gothic emerging as a stylistic term" to Freeman.

But that, as the poet said, was in another country; Crook claims to tell the story only of English architecture in stylistic key. His very insularity is admirable in some ways, and the enormous learning his book shows depends on real concentration. Yet it accepts not only geographic but also "subject" boundaries all too eagerly—with the result that it does not provide the reader an accurate map to follow.

Let me take an obvious example. Pugin's Medievalism, which colors all subsequent "Gothic' architecture in Britain, is understandable only as part of the post-Napoleonic revolution, which in Britain entailed the rewriting of Whig history by Tory radicals like William Cobbett, Catholic apologists like John Lingard, and Walter Scott. Pugin himself felt closest to Count Montalembert in France and the German painter Cornelius Overbeck (The Great Overbeck, Pugin called him). Of these names, only Montalembert and Scott appear briefly in Crook's text—which leaves Pugin's passion for late 15th-Century English architecture bereft of its context. Consequently, his idea of returning to the style of a new age of faith seems feeble and shallow

In the 19th Century, when both clerics and laymen were prepared to resort to violence about the proper number of candles to appear on an altar or the use of incense, ecclesiology was obsessional in England. Now it elicits no passion, just the same sort of nostalgic dottiness as steam trains. To the men of the last century, it all seemed very different. Architecture was not surface but had a real evocative power. Cardinal Newman was one of the great minds and finest stylists of his time, and therefore aligned with Gothic. Crook mentions him primarily as the builder of the little Gothic church at Littlemore and as Pugin's reluctant admirer; yet on his arrival in Milan in 1846, Newman wrote an English friend about the church of San Fedele, which would certainly be classified as mannerist nowadays: "It is Grecian and Palladian, and I cannot deny that, however my reason may go with Gothic, my heart has ever gone with Grecian. There is in the Italian style such a simplicity, purity, elegance . . . The Gothic style does not seem to me to typify . . . sanctity and innocence ... as the Grecian does .

To this dilemma of Gothic head/Grecian heart Professor Crook provides no guide. His history is rather a prologue to settling the stylistic hash of current architecture. Asks Crook: Is James Stirling a Modernist or a Post-Modernist? On balance, "the Post-Modernists have the better claim." Does that make his buildings better or worse? The

author does not say.

In the 19th Century, styles sometimes posed real choices of head and heart; they tried loyalities. Yet the century-long heroic attempt to invent "the style for the age" failed just as the new age dawned. The attempt to create an architecture of no style at all also turned out to be fraught with difficulties. In our own time, styles have become labels for the way a developer has his high-rise surfaced. The passion's gone and with it, any real interest. Styles, like ecclesiological fashions and disused railway lines, are at best a charming fad; unfortunately, they also provide a distraction from the real horror under the surface. Joseph Rykwert

The author is Paul Philippe Cret Professor of Architecture at the University of Pennsylvania.

Circle No. 327 on Reader Service Card

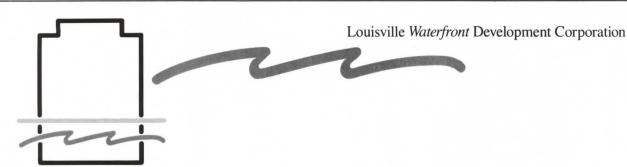


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Request for Qualifications

The Louisville Waterfront Development Corporation will commission design of a Waterfront Master Plan in early 1990. The primary site to be planned is a 108-acre area located on the Ohio River, immediately adjacent to Louisville's Central Business District.

Master plan development will involve a range of disciplines, including urban design, landscape architecture, architecture, engineering, visual arts, tourism, marketing and economic analysis. The Designer Selection Committee will be especially interested in reviewing the qualifications of multi-disciplinary firms or consortiums experienced in waterfront development and integrated multi-use design.

of various candidates.

Please send your prospectus to the attention of David K. Karem, President/Executive Director, Louisville Waterfront Development Corporation, 129 East River Road, Louisville, Kentucky 40202.

Questions and inquiries may be directed to Michael J. Kimmel, Deputy Director, Louisville Waterfront Development Corporation,

at (502) 625-3768.

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Interested consultants meeting the above criteria should submit a

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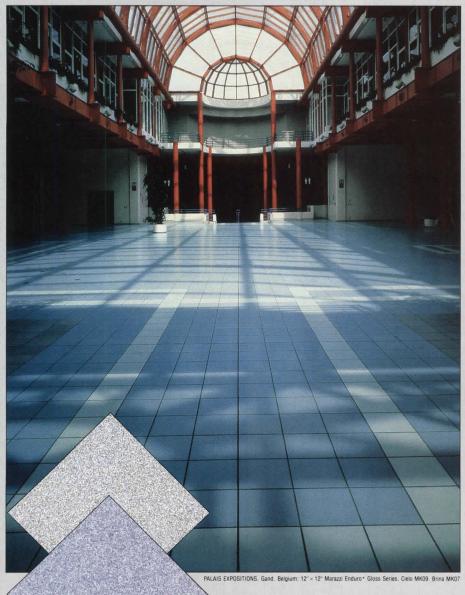
of their firm with particular reference to development of similar plans. Upon review of the submissions, a shortlist will be prepared and the

specified consultants will be forwarded the Program Requirements

Manual and a questionnaire. Site visits may also be scheduled to

acquaint Designer Selection Committee members with the works

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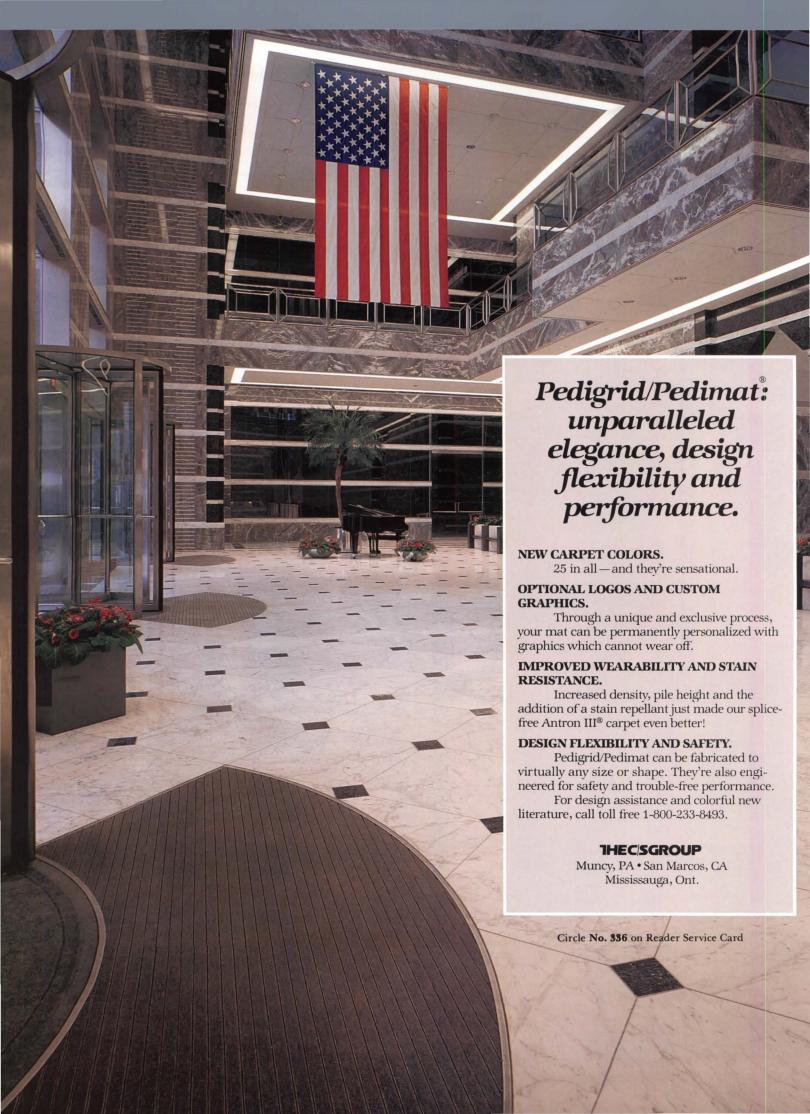
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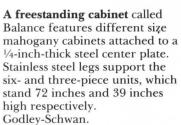
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190 Products and Literature continued



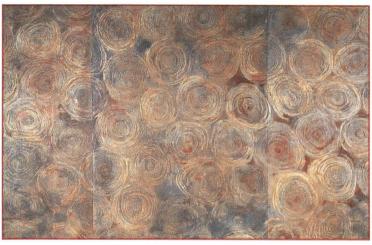


Circle 100 on reader service card



The Nonconformist chair, originally designed by Eileen Gray, is now available. The exact reproduction is made from continuous steel tubing, with a hardwood, foam-covered seat and back; the left arm has been eliminated to provide freer movement. Palazzetti.

Circle 102 on reader service card



#### Flexible metal wallcoverings

have precious metals fused to the wallcovering surface, which is a polymer and paper-based material. The durable, flexible wall treatments are offered in colors ranging from earthen reds and azure blue patinas to bronze and milled steel tones. Numetal.

Circle 101 on reader service card



A new mirror called Lago Dorato features a reflecting glass encircled by gold-leafed wood. The mirror, which is manufactured by Morphos in Italy, measures 110 centimeters or just over 3½ feet in diameter. Atelier. Gircle 103 on reader service card

Wall partitions from the Tall Wall system divide rooms using one-piece, pre-fabricated, three-inch to six-inch steel-faced panels that go up to 40 feet in height. A six-inch panel weighs only 2½ pounds per square inch. National Partitions & Interiors. Circle 104 on reader service card



A new vanity called Alien has a white acrylic basin which is partly encased in a glossy black lacquer countertop. White tubular legs support the top and connect to the arched mirror. The accessory light and towel rack both pivot.

Hastings Tile & Il Bagno. Circle 105 on reader service card



Library furniture designed to accommodate electronic equipment is part of the Diametron collection. An interlocking system of cast corner hubs, steel support rails, and 2½-inch-diameter steel legs provide the framework for the tables. Worden.

Circle 106 on reader service card

Panel sidings and concrete forms are a few products discussed in a new full color brochure. The literature also details a complete line of energyefficient wood windows, which can come aluminum clad. Louisiana-Pacific.

Circle 200 on reader service card



A folding screen called Froh is made from lemon-green onyx with frosted and textured glass, framed in black finished hardwood. Each of the three leaves stands 72 inches tall and measures 29 inches wide. Momarque.

Circle 107 on reader service card



**Tubular deadbolt locksets** which feature a flush-mounted cylinder are now offered with a solid brass trim. Four different finishes are also available. Omnia.

Circle 108 on reader service card

Laminates are now offered in a new wood grain series. Three new lightened-wood laminates include a bleached ash and two shades of oak, one of which is also bleached. Nevamar.

Circle 109 on reader service card

Needlepunched carpet from the new Broadway, Carre, and Polar lines are solution-dyed for color stability. A fourth line, Nova Wave, is a 37-ounce carpet. A brochure describes the designs. V&B Carpet.

Circle 110 on reader service card



A seating collection called the Philadelphian consists of a sofa, love seat, and a chair. Wayne Braun designed the group, which features traditional leg and arm posts and ample proportions. HBF.

Circle 111 on reader service card



Custom millwork for doors and windows is the topic of this new brochure. Doors are assembled with traditional pegged mortise-and-tenon joinery. Windows, too, feature weatherstripping and hardware capable of meeting strict historic restoration requirements. Woodstone.

Circle 112 on reader service card

Parquet flooring is now available in 11 new colors. The urethane-finished hardwood flooring can now be specified in eight wood stains and three white colors and is shown in this new brochure. Hartco.

Circle 201 on reader service card



A new bathroom fixture called Deco joins the Metropolis line of tub, shower, and bidet fixtures, all of which are offered in 14 metal or enamel finishes.

Metropolis.

Circle 113 on reader service card



Dimming controls called Nova T Vareo combine linear slide dimming with electronic touch switching. Vareo controls up to 150W/VA incandescent and magnetic low-voltage lighting, both for single pole and three-way lighting. Lutron.

Circle 114 on reader service card



New ceiling systems that are fabricated from corrosion- and mildew-resistant aluminum or steel panels are available in cell, baffle, linear, tile, and curved panels. Over 75 shades and finishes are offered. Hunter Douglas.

Circle 115 on reader service card

Architectural signage systems are shown in a new color brochure that also discusses interchangeable designs, finish options, installation requirements, and illumination. Charleston.

Circle 202 on reader service card

(continued on page 192)



### Light without glare, continued.

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Look around the picture. Try to find any glare or harsh reflections, on the VDT screen or anywhere else. See how smooth the light is on the walls and ceiling.

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Circle No. 390 on Reader Service Card

(continued from page 190)

A new software program simulates the heating and cooling requirements of buildings, calculates the results of energy-conserving measures, and predicts life-cycle costs. The program, "A Simplified Energy Analysis Method" also reviews code compliance. ACEC Research & Management Foundation.

Circle 116 on reader service card



A new chair called Aura was designed by Gianfranco Poli. Made of beechwood, the chair can be specified with or without arms and is produced in Italy. Interna Designs.

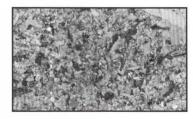
Circle 117 on reader service card



New track lighting fixtures

from the Deco series combine a traditional round back with two 55%-inch lucite rings. The small lampholder measures 41% inches in length and is offered in white, black brass, and black chrome. Halo Lighting.

Circle 118 on reader service card



Composite boards are made with Radixx FR-100, an inorganic non-combustible compound. Waferboard, particle board, and medium-density fiberboard gain fire-retardant protection based on the amount of compound added during production. Radixx/World Ltd. Circle 119 on reader service card

Curved truss components can now be specified in arcs of 30, 45, and 90 degrees. The arched sections are available in two-, four-, eight-, and twelve-foot radii. Interlock.

Circle 120 on reader service card



A new dining table joins the ModuSeat® collection of commercial and institutional seating. The Heavy Duty Dining Table consists of high-pressure plastic laminate tops and a steel substructure. ModuForm.

Circle 121 on reader service card

Aluminum moldings can be installed with a clear anodized or custom painted finish. Drywall moldings provide a ¾-inch matching reveal and a sill on which acoustical tile can rest if necessary. Fry Reglet.

Circle 122 on reader service card

A glass material that is applicable for exterior and interior walls and floors is called Neoparies. The marble-like, weather-resistant material is crystalized glass and can be shaped into columns and curved corners.

Nippon Electric Glass.

Circle 123 on reader service card

Single-piece vanity tops from the CulturTile® collection are the subject of a new illustrated brochure. The ½-inch-thick, cultured-marble tops contain no porous grouting to absorb stains so they are simple to clean and won't discolor. Jensen.

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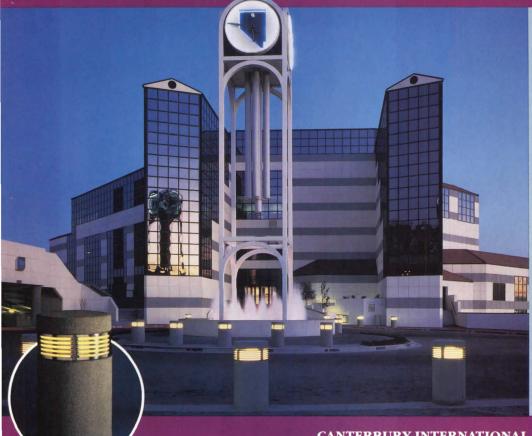


Skylights are the topic of a new color catalog, which discusses glazing and structural options. The catalog also describes the new Danpalon system—a standing-seam, weather-resistant skylight system. Plasteco.

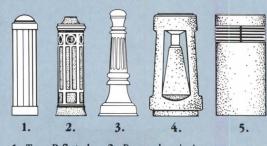
Circle 204 on reader service card

(continued on page 196)

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(continued from page 192)



An enameled cast-iron bath called New Vintage® measures 72" x 42" x 22" and accommodates two bathers. The tub can

stand alone or be installed into a deck. Kohler.

Circle 124 on reader service card

A new computer allows designers to present their ideas to potential clients through the use of a video camera, a color monitor, and CAD. The Preview System is portable and geared toward first-time as well as experienced computer users. Preview Systems. Circle 125 on reader service card

A new coil-coated material called Enduratex® has the look, feel, and versatility of wood. The material, which can be stained or painted, is recommended for use on exterior and interior metal entry doors, garage doors, metal windows, and architectural

trim. Pre-Finish Metals. Circle 126 on reader service card



Handrails from the Interna-Rail systems use anodized tubular-rivet nuts and stainless steel socket-head screws for a secure fit. The pre-fabricated systems, which are the subject of this color brochure, are virtually maintenance free.

Hollaender Manufacturing. Circle 205 on reader service card

Sanitary wall and ceiling products, including new decorative Symmetrix® wall panels, are described and illustrated in a new eight-page brochure. Marlite® and FRP Korelock® panels are also reviewed in the literature. Marlite.

Circle 206 on reader service card



A new ceiling system called Cube Ceiling features a oneinch-deep cube. Crossbeams are inserted at right angles to the suspended hanger sections and factory assembled lay-in cubes are fitted into the resulting grid. An acoustical mineral board lid is an option. CDA.

Circle 127 on reader service card

Lighting dimmers called Brite-Touch® have remote control options. The ivory-and-brass dimmer pad works with a complete control system to remember illumination levels when the system is turned off. Carlon.

Circle 128 on reader service card

Architectural hardware is the subject of a new brochure that outlines materials, finishes, sizes, mounting details, and custom design information. Push plates and kick plates are only two of the many items featured. Rockwood.

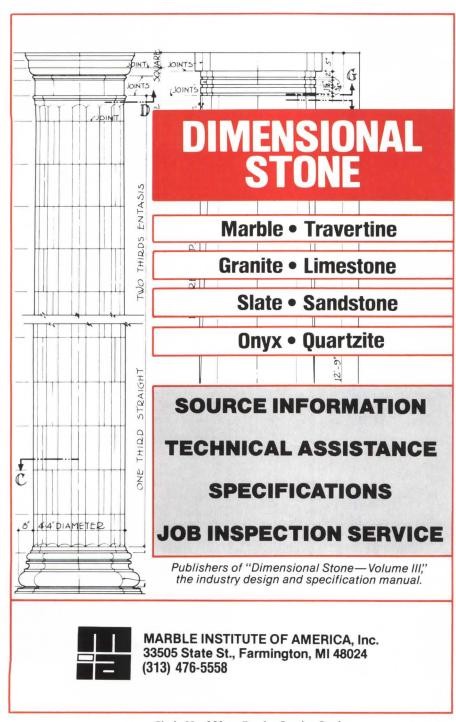
Circle 207 on reader service card

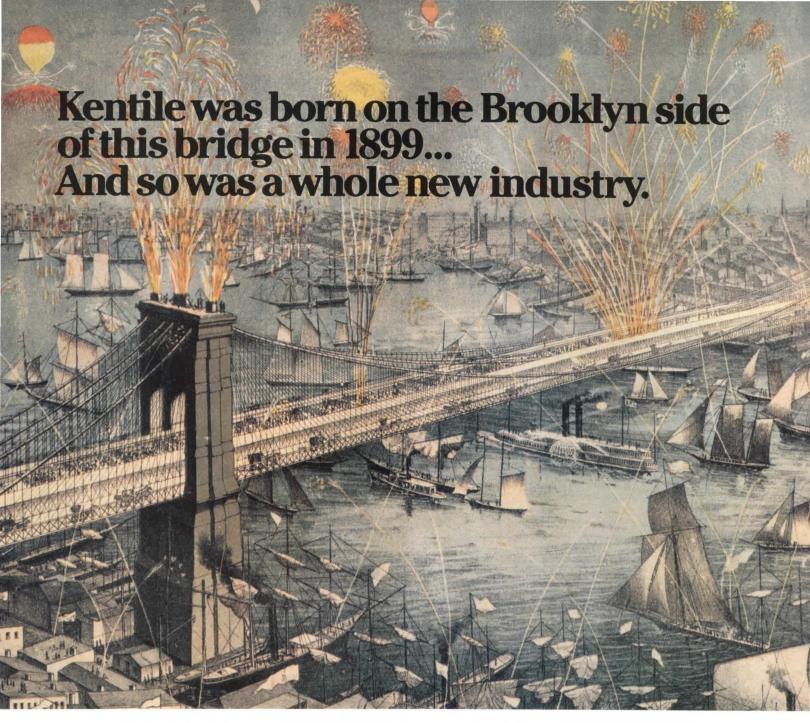
#### **Building Materials**

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

Art collector's apartment, New York (p. 82). Architect: Pasanella + Klein, New York. Paint: Benjamin Moore. Limestone wall paneling, living room. Zinc reveals and liners: Bauerschmidt. Figured glass mirror. Gypsum board partitions. Plaster ceilings. Ebony-bordered, white oak floors. Limestone marble inserts. Carpets: V'Soske. Wall bracket track lighting: Edison Price. Built-in furniture: Lea H. Cloud. Custom desks: Fayston Iron & Steel Works. Bird's eye maple

(continued on page 198)





The event was little noted then.

Jeffries Vs. Fitzsimmons for the Heavyweight Championship was deemed more headline-worthy. So were the new rides at Coney Island's Steeplechase Park. But they faded into history — and even as they did, littlenoted Kentile became an ever greater part of the American scene.

It all began as a concept of Kentile's founder, David E. Kennedy. Cut cork into tiles, he reasoned, and they'd make resilient, easy-to-install flooring material. Hard work and perseverance made the vision come alive. Success brought the inevitable competitors. And a healthy, profitable tile-flooring industry was established.

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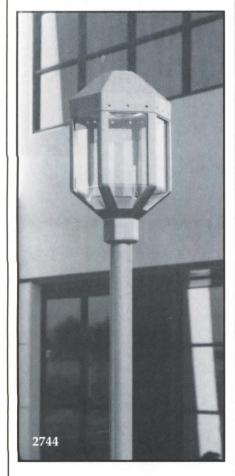
We've raised production capacity and efficiency, with heavy investments in new equipment at all our plant locations. We're creating higher-quality products more cost efficiently than ever, with new R&D techniques and quality-control procedures.

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Circle No. 371 on Reader Service Card

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(continued from page 196)

custom cabinets: Fayston Iron & Steel Works, Bauerschmidt. Sofa: Stendig. Dining chairs: Philippe Starck. Dining table: Knoll. Chaise lounge: ICF. Study chairs: Saporitti. Roller blinds: Mecho Shade. Metal doors: Bauerschmidt.

Fama restaurant, Santa Monica (p. 88). Architect: David Kellen, Los Angeles. Sponge surface paint: Ameritone. Custom maple-veneer plywood. Existing plaster ceilings. VCT resilient floor surfaces: Kentile. Low-voltage area lighting: Ingo Maurer. Custom tables: Hans Röckenwagner. Chairs and barstools: Falcon.

Architects' office, New York (p. 96). Architect: Margaret Helfand Architects, New York. Alkyd paint: Benjamin Moore. Existing mahogany paneling. Gypsum wallboard partitions. Existing plaster ceilings. Existing oak parquet floors. Reinforced rubber floor surfaces: Tirex. Custom work stations, desks, tables, seating. Verosol blinds: Kirsch.

Jewelry store, Paris (p. 100).

Architects: Dominique Lachevsky, Paris; Patrick Naggar, New York, Paris. Glazed, painted plaster walls. Lead-clad wood partitions. Plaster hung ceiling. Carpeted concrete slab floor. Recessed incandescent lighting. Low-voltage lighting: Wendel. Custom high-density particle board desk tops and cabinets. Velvet curtain: Lelievre Velvet.

Gibson, Dunn & Crutcher Law Offices, New York (p. 104). Architects: Byrns, Kendall & Shieferdecker, New York. Interior designer: Shannon McCarroll, New York. Paint: Benjamin Moore. Anigré wood paneling: Eagle Plywood. Acoustic tile ceilings: Armstrong. Fabric on wrapped panels: Schumacher, Carnegie, Wolf Gordon. Area rug: Schumacher. General carpet: Atlas Mills. Custom carpet: Axminster by Navan. Tinted plaster: Art-in-Construction. Brass and glass walls and doors: Dawson Metals. General lighting: Lightolier, Edison Price, C.J. Lighting, Neoray, Alkco, Glashutte Limberg, Raak. Custom lights: Baldinger, Hi-Tech Applications. Table and floor lamps: Two Worlds, Inc., Nessen. Office work stations: Herman Miller Ethospace, Action Office Encore. Desks and cabinets: I.I.L. Files: Meridian. Tables: Hickory Business Furniture, Peterson Design, Area, (continued on page 200)

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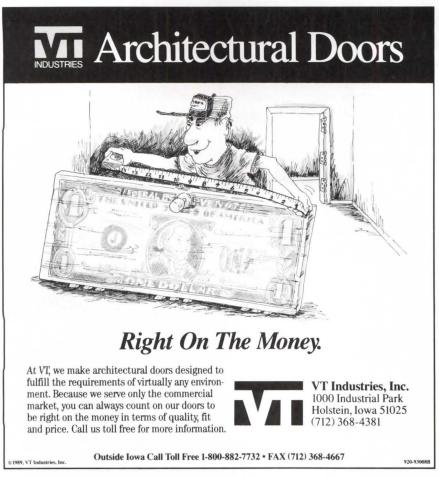
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Circle No. 002 on Reader Service Card

(continued from page 198)

Foro Marble. Seating: Schafer, Herman Miller, Rudd, Hickory Business Furniture, Krueger, Hickory Chair, Nienkamper. Custom conference tables and reception desk: Jean Paul Viollet. Movable shelving: Space Saver. Upholstery fabric: Schumacher, Unika Vaev, Knoll, Herman Miller, Carnegie, Lackawanna Leather, Ben Rose. Blinds: Levolor. Security system: Schlage. Paging: Muzak. Telephone: Rolm. Data equipment: Wang.

Maxima shop, Chicago (p. 110). Architect: B. Christopher Bene Architect, New York. Paint: Benjamin Moore. Gypsum board partitions and ceilings. Acoustical ceiling tile: Armstrong. VCT resilient floor surfaces: Kentile. Carpet: Lees. Downlights, track lighting, fluorescent concealed lighting: Lightolier. Files: Steelcase. Custom table: State Construction. Chairs and custom bench: Paul Fuhrman. Striped canvas upholstery: Schumacher. Panther print upholstery: Boussac. Nautical fittings: Merriman.

Ace Cafe, San Francisco (p. 113). Designer: Robert Bernardin, San Francisco. Thinned enamels for stains, paint, epoxy: Roy Anderson. Office doors: steel, gypsum board. Existing sandblasted ceiling. Exposed ceiling joists. Industrial lighting fixtures: Halophane. Torchères and furniture: Robert Bernardin. Vinyl upholstery: Keystone. Signage: Buddy Rhodes.

Chalk + Vermilion, New York (p. 116). Architect: Smith-Miller + Hawkinson, New York. Paint: Benjamin Moore. White Portland sand plaster: U.S. Gypsum. Ground face concrete block: Plasticrete. Maple floors: Hoboken Floors. Sheet rubber resilient floor surfaces: Roppe Rubber. Custom lighting fixtures: Sterner. Exhibition track lighting: Lightolier. Custom desks, tables, perforated aluminum and steel ceiling system: Henry Smith-Miller and Laurie Hawkinson. Files: Storwall. Seating: Knoll International, Palazzetti, Atelier International. Solar veil: Decor Arts.

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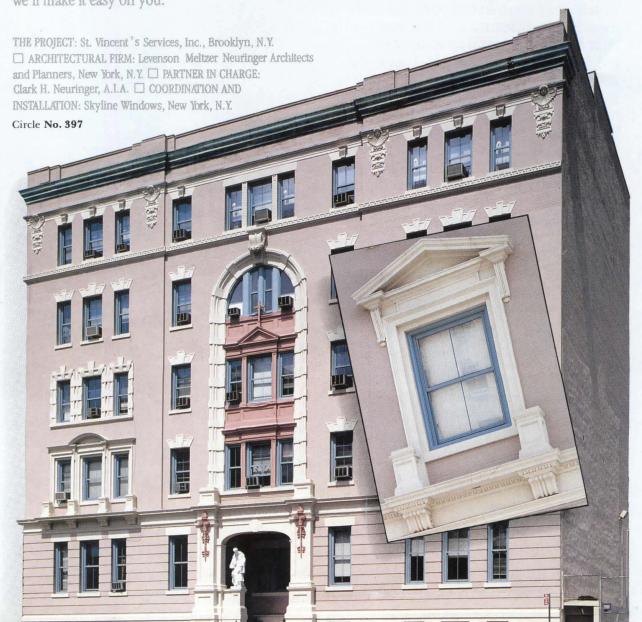
It was no ordinary task. But this was no ordinary building. 

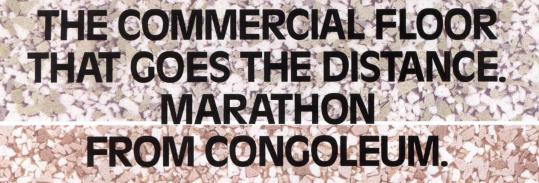
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Rank and salary will be commensurate with experience and qualifications.

Candidates should submit an initial application that consists only of a letter of interest, a curriculum vitae and the names of three references. This initial application should be postmarked no later than November 1, 1989, and should be addressed to:

Professor Derek Bradford Chair, Faculty Search Committee Department of Architecture Rhode Island School of Design Two College Street Providence, RI 02903

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Prof. David Evan Glasser Chair/Search Committee FAMU/USF Cooperative M.Arch Program 10770 N. 46th Street Tampa, FL 33617

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Applications or nominations should be sent to Chair. Search Committee, Dean of Architecture, c/o Ms. Julia M. Jarvis, School of Architecture, University of Maryland, College Park, MD 20742. To be assured of full consideration, applicants should send letter of interest, c.v. and names of three references by Oct. 20. The University of Maryland is an equal opportunity employer. Applications and nominations from female and minority candidates are encouraged.

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- executive leadership, communication skills, vision, and professional integrity;
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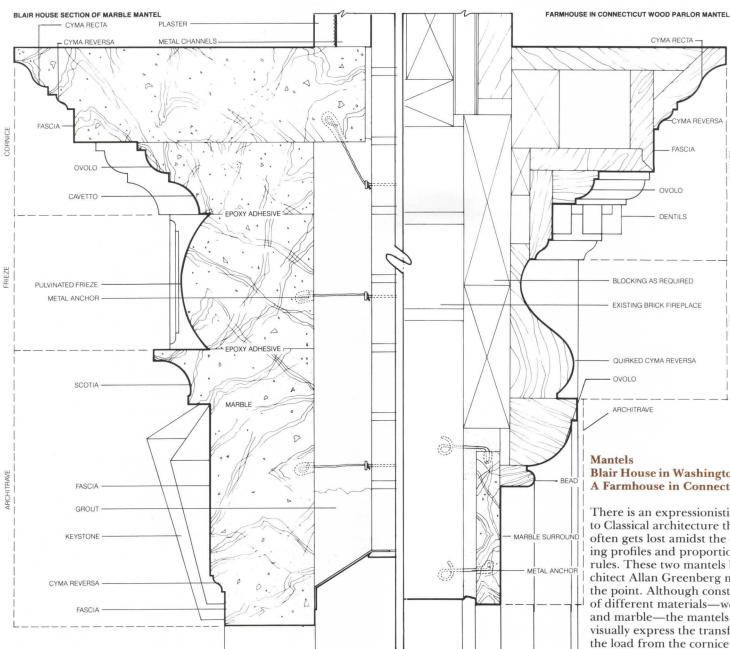
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# Selected Details





MARBLE MANTEL IN THE BLAIR HOUSE.



WOOD PARLOR MANTEL IN THE CONNECTICUT FARMHOUSE.

4"/100mm

#### Blair House in Washington D.C. A Farmhouse in Connecticut

There is an expressionistic side to Classical architecture that often gets lost amidst the exacting profiles and proportional rules. These two mantels by architect Allan Greenberg make the point. Although constructed of different materials-wood and marble—the mantels both visually express the transfer of the load from the cornice to the architrave. The marble piece accomplishes this with a pulvinated frieze, whose bulging sides demonstrate the compressive forces that occur under the concentrated load of the cornice. Lest those crushing forces seem too great, Greenberg visually restrains the frieze with a central panel supported by a double keystone. The wooden mantel plays a slightly different game. Here too, the frieze bulges out under an apparent weight and is again held in by a central panel. But the bulge takes the form of an inverted or quirked cyma curve, recalling similar curves in the cornice above. The frieze strikes a fine balance between supporting its load and oozing out from underneath it. For other Greenberg mantels, see Selected Details, April 1989 P/A. ■

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