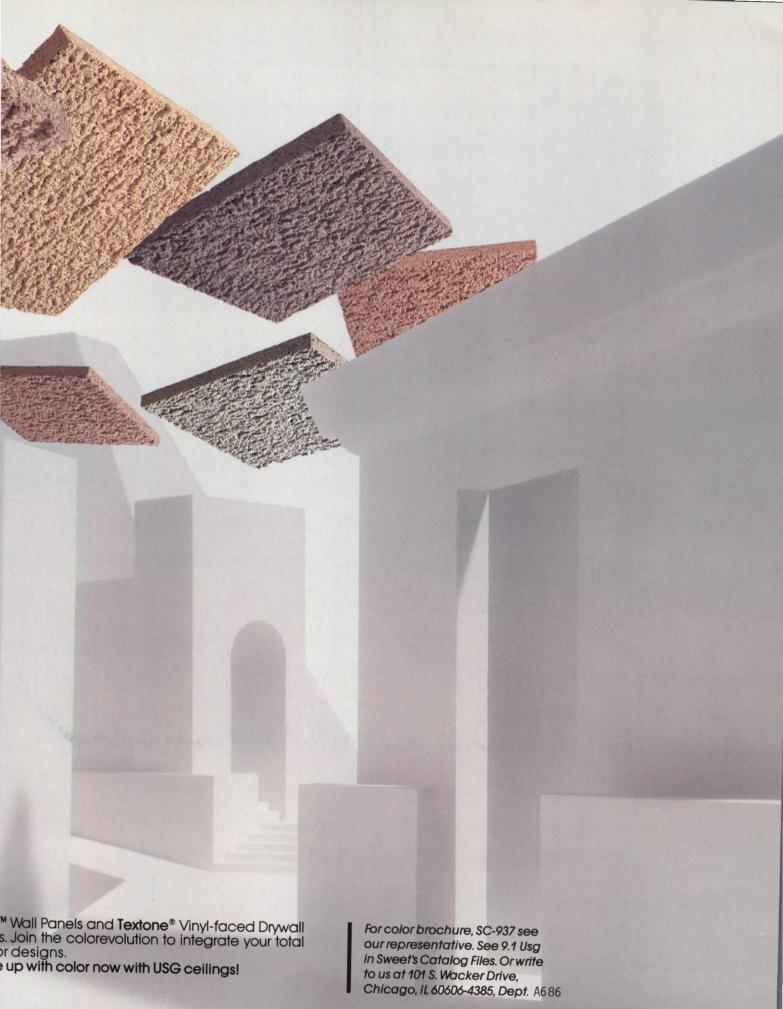


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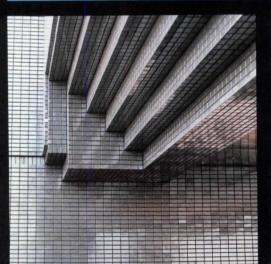
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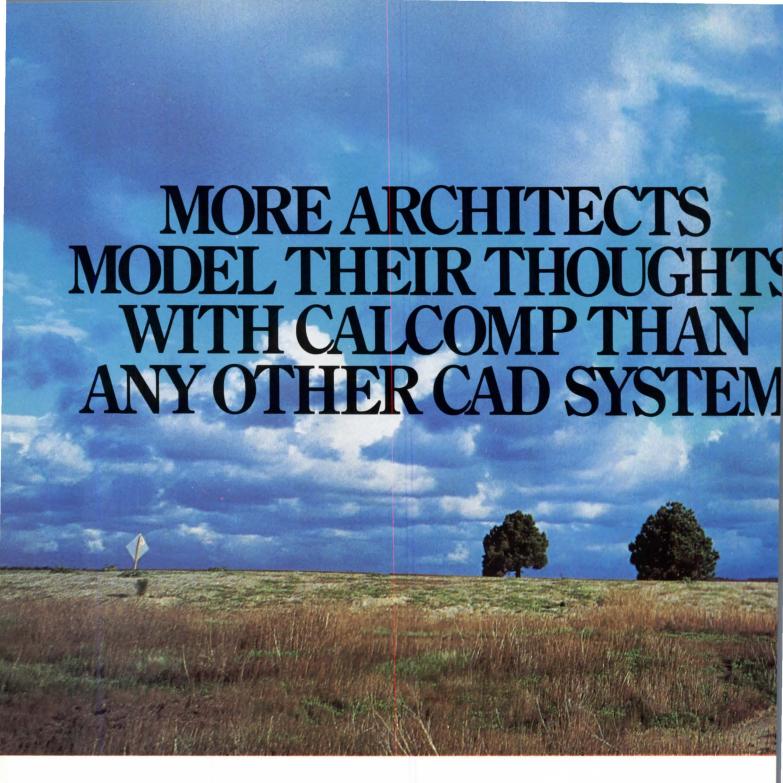
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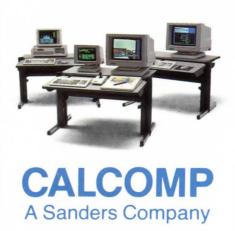
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EVENTS

July 1-3: Conference on International Climatic Architecture Congress, Belgium. Contact: Jean Mewshaw, International Planning Associates, 5010 Sunnyside Ave., Suite 303, Beltsville, Md. 20705.

July 6-11: Seminar on Successful Land Development Practices, Policies and Strategies, London. Contact: The Urban Land Institute, 1090 Vermont Ave. N.W., Washington, D.C. 20005.

July 16-19: Window Fashions Expo '86, Chicago. Contact: Gretchen Artig, National Window Fashions Association, 345 Cedar Building, Suite 450, St. Paul, Minn. 55101.

July 17-19: American Society of Interior Designers National Conference and International Exposition, Los Angeles. Contact: Laurie Hawkins, ASID,1430 Broadway, New York, N.Y. 10018.

July 18: Daylighting Seminar, Catalina Island, Calif. (Repeat seminar: Aug. 8, Laguna Niguel, Calif.) Contact: Gregg D. Ander, Edison Co., 2244 Walnut Grove, Room 931, Rosemead, Calif. 91770.

July 18-20: BeauxArch 86 Architectural Exposition, Bridgehampton, N.Y. Contact: Joan Carlson, The Hampton Day School, Butter Lane, Bridgehampton, N.Y. 11932. July 18-27: 10th International Course on the Conservation of Architectural Heritage and Environment in France, Paris. Contact: Bernadette M. Gradis, 9 rue Franklin-Roosevelt, 75008 Paris, France. July 21-25: Workshop with Christopher Alexander entitled Sketches of a New Architecture, Rhinebeck, N.Y. 12572. Contact: Frank Lee, Lee/Petralito Architects, 717 Light St., Baltimore, Md. 21230. July 24-25: Course on Computer Aided Design and Manufacturing Technology, Chicago. Contact: Gloria Greene, American Society of Mechanical Engineers, 345 E. 47th St., New York, N.Y. 10017.

July 24-26: AIA Interiors Committee Conference on Liability, Washington, D.C. Contact: Ravi Waldon at Institute head-quarters, (202) 626-7429.

July 29-Aug. 1: Annual Conference of the Associated Landscape Contractors of America, Hollywood, Fla. Contact: ALCA, 405 N. Washington St., Suite 104, Falls Church, Va. 22046.

LETTERS

Underground Buildings: Gunnar Birkerts' concern over the difficulty of assessing underground buildings "in terms of architecture" is well justified [see Letters, April, page 8], and his conviction that subterranean accommodation will "not fade out and become part of history" is most welcome. The public and professional acceptance of geospacial concepts is hindered, however, by reference to such exstructions as "underground architecture," a non sequitur with strong political and psychological connotations.

"As recently as three years ago," your

February article points out, "the act of building underground was considered economically sound, morally correct, and patriotic," and so it remains. The history of geotecture is longer than that of architecture, and the extent of geotectural design and geopolitan planning, ancient and modern, is more widespread than generally realized, confirming the values previously stated.

The Environic Foundation International Inc. has taken the initiative in furthering the arts of exstruction in the belief that domestic, recreational, commercial, industrial, and military economy makes such investments inevitable. The foundation is cosponsoring the second international conference (the first having been held in 1983 in Sydney, Australia) on advances in geotectural design, together with the American Underground Space Association and other universities, at the University of Minnesota, June 15-19, in the hope of stimulating an appreciation of those design skills, as demonstrated by such leading geotects as Birkerts, as a distinctive and complementary professional commitment. Patrick Horsbrugh, FAIA

Notre Dame, Ind. Chairman, Environic Foundation International Inc.

Developers and City-Building: Philip Johnson once commented that American cities were better places to live 50 years ago than today. This was his indictment against modern architecture. The theme has been picked up by a number of critics of that movement, particularly those who favor eclectic historicism.

Now, both *Time* and *Newsweek* use the occasion of the Museum of Modern Art's Mies van der Rohe centennial exhibit to restate Johnson's earlier assertion. One publication suggests that "the vital, messy pluralism now prevalent" will do a better job of producing cities than architects of the earlier generation. *Newsweek* is more specific: "Mies ruined our cities with a dogma that is contradicted by many of his designs."

But the reality of the issue is that architects are not producing cities at all. In our culture, that is done by the entrepreneur whose aggressive initiative with a typical concern for the maximization of short-term profit is well known. The real trick is to bring these private goals of the developer into closer harmony with objectives of the community. This can be done by a combination of incentives and prohibitions, all of which seek to achieve the quality environment.

Without some consensus upon such values and priorities, we'll just have to settle for what we get. But we won't be able to point the finger at the architect as we see quality slipping away. After all, attorneys do not produce law abiding citizens nor do physicians create a healthy society. They are only agents in the process which involves us all.

Perhaps, one of our major professional responsibilities is to be an advocate for quality, to create a climate for its appreciation. For the deterioration of our environment can be viewed as a problem of our own making. When we tolerate shoddiness, we promote it. When we fail to see the difference between good and bad, we are not functioning as an informed public upon which so much depends.

This may call for more urban planning, not less. But we may not be able to blame Murray Jones Murray for Sheridan Road, nor Mies for what's happened to Park Avenue.

Robert L. Jones, FAIA

Murray Jones Murray Tulsa, Okla.

Extended Credits: In your November 1985 editorial [page 33] you congratulate yourself for trampling on the practice by other architectural magazines of entering into exclusive publication commitments with architects.

Fair enough, but there is one practice in which other magazines put you to shame: giving credit to other design professionals, or even the general contractor. Your credits list the firms that supply the water fountains and the toilet partitions but only rarely—very rarely—the consulting engineers or the builders. Why ignore their contributions?

My own firm has been fortunate enough to have been a member of the design team on several projects illustrated in your pages, among them the Intelsat headquarters [Nov. '85, page 68]. But we were credited in none of the articles—not even for Stirling's Staatsgalerie [Sept. '85, page 94], for which we designed structure, mechanical and electrical systems, and the lighting—and only mentioned in the text of two, those on the University of Doha [Sept., page 146] and the Hongkong and Shanghai Bank [Sept., page 74].

Is this any way to treat a colleague?

Patrick Morreau

Ove Arup & Partners

London

No.-Ed.

Second Opinions: What a difference between the delightful atmosphere of the Bradford Exchange by Weese, Hickey, Weese [see April, page 62] and what you call "a combination of audacity and skill" [Northpark Mall by RTKL, page 46]. Your "jolly postmodernism" is neither "consistently happy" nor does it display "joy." Instead, these pages degrade creative design into a collection of meaningless "zippy images."

Jan Reiner, Architect St. Petersburg, Fla

Clarification: Credit for the DeWitt Wallace Decorative Arts Gallery in Williamsburg, Va., by Roche Dinkeloo is shared by Roy Eugene Graham, AIA, who was Williamsburg Foundation architect during conception and working drawings phases for the building (see Jan., page 52)



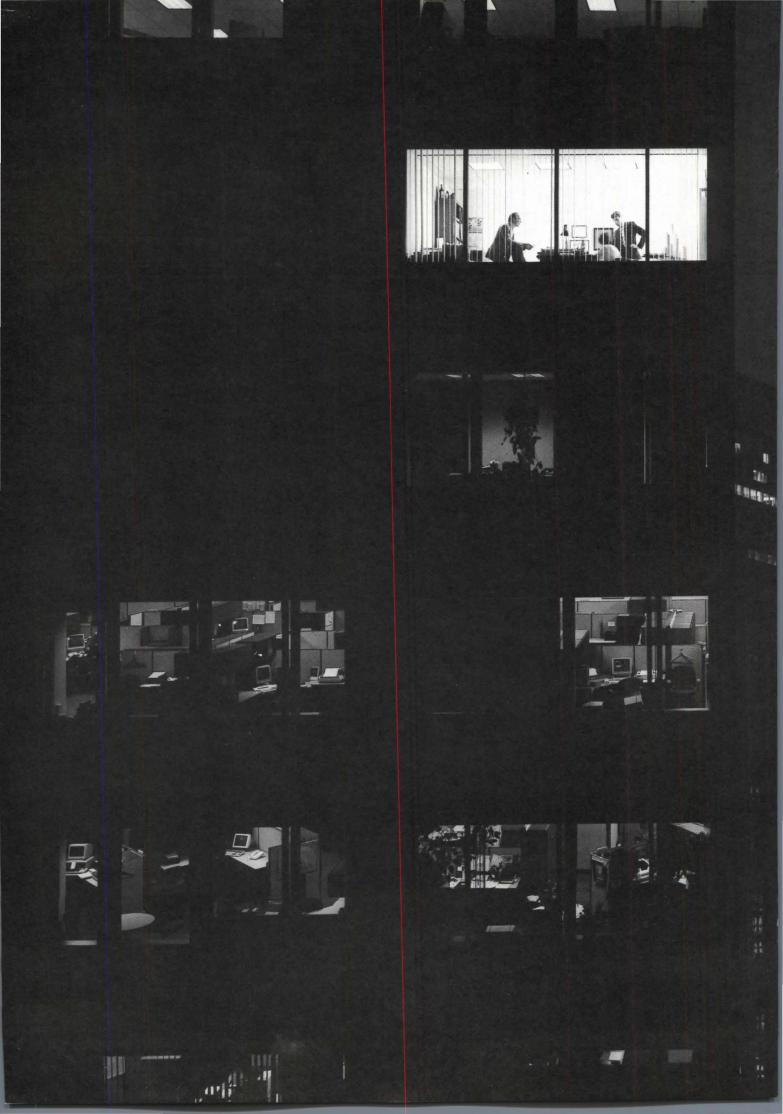
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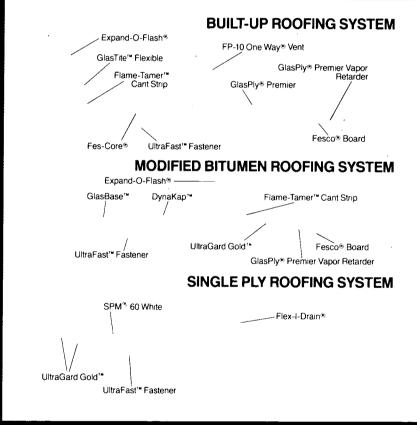
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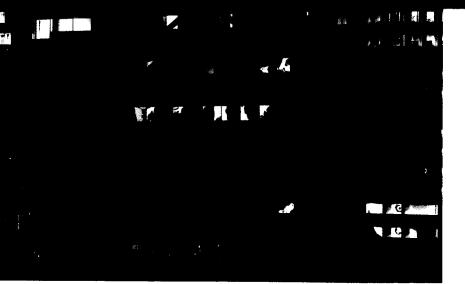
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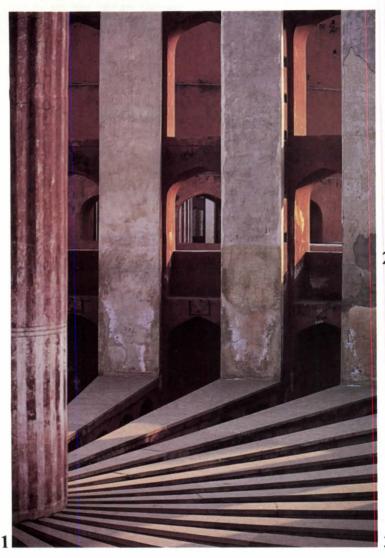
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Awards and Competitions

AIA Photo Contest Winners

These five photographs were selected along with 40 other images to receive top honors in a national AIA photo contest sponsored by the St. Louis Chapter/AIA. The jurors were architectural photographer Jack Hedrich of the firm Hedrich-Blessing, architecture-trained architectural photographer Robert Pettus, and graphic designer Stan Gellman.

Ory Eshel, AIA, of Arlington, Va., captured the \$1,000 first prize with a mysterious image of a solar observatory in New Delhi, India (1). The \$700 second prize went to Terry Peck of San Francisco for his photograph of the West Portal Transit Station (2). An intriguing interplay of diagonals and checkerboard is actually a glimpse of a Boston staircase (3); the photographer of this third prize winner (\$300) was Steve Shelter, Boston.

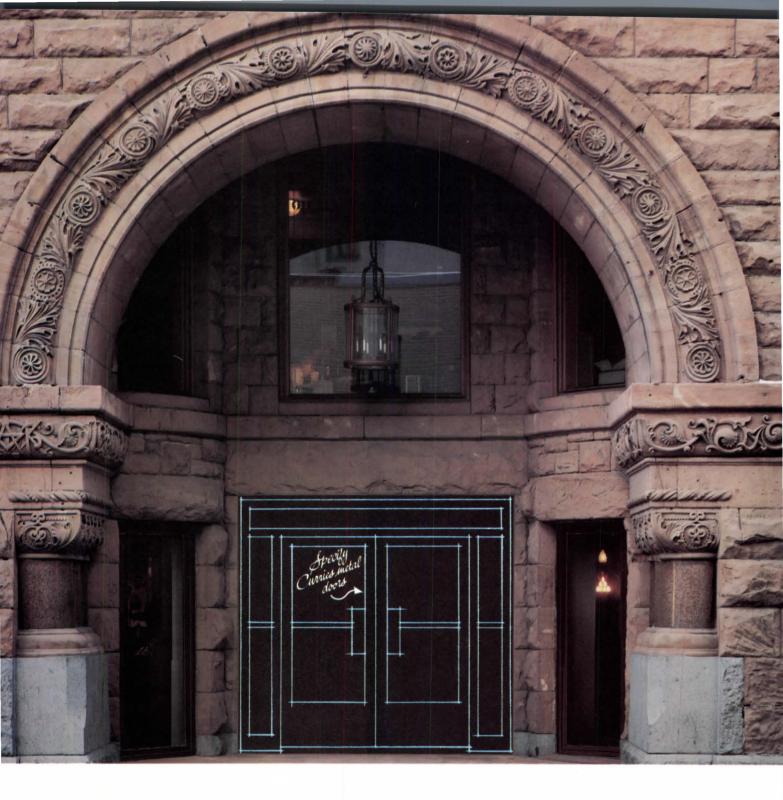
Among the 37 honorable mentions were "Overlooking Zone" (4) by Tom Van Cleave, Sarasota, Fla., and "Gray Building/Red Trucks" (5) by James Palma, Miami.

The AIA Press will publish a 1987 calendar with images taken from the photo contest winners.

News continued on page 14 5







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Memorial Design Selected to Honor Kent State Victims

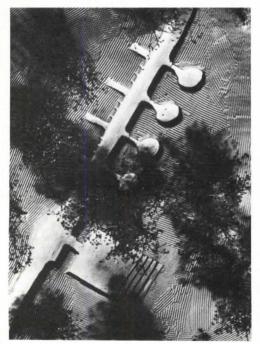
A somber memorial with four circular rooms carved into a wooded hillside was selected as the winning design to commemorate the death of four students shot during an antiwar protest on May 4, 1970, at Kent State University. Chosen from among 698 entries in a nationwide competition, the winning proposal was submitted by Ian F. Taberner and Michael G. Fahey under the firm name Telesis. The entry also credits 10 University of Michigan students and four technical assistants.

The idea for the competition at Kent State had its beginnings three years ago when students formed the May 4 Task Force and petitioned the university for a permanent memorial to honor the four students killed and nine wounded by the Ohio National Guard.

The design consists of a 130-foot path cut into the crest of the hill between the commons area, where the protest began, and the parking lot where the four students died. Set into one wall of the walkway are four open, circular "rooms," each representing a student killed. These four spaces, each approximately eight feet in diameter, are described by the architect as "sanctuaries nestled in the hillside for reflection and contemplation: a container, refuge, or home for spirits scattered many years ago in a parking lot." The four rooms will be carved into the earth in depths ranging from 2½ feet in the shallowest to four feet in the deepest.

On the opposite wall of the eight-footwide path, four deep "wounds" will be cut from the level of the walkway to the grade of the hill. Nine smaller "gashes"

Below, the winning design for the Kent State memorial has four recessed sanctuaries to represent the slain students.



will be carved into this wall to represent the nine students injured during the shooting.

In addition to the four open sanctuaries, the memorial will include a larger rectangular space for small gatherings and services. Measuring approximately 24 feet long and 18 feet wide, the area will have broad steps along the back that will allow access up to the hillside with a view overlooking the campus commons.

The memorial will be constructed of natural materials, including stone, and will be inserted into the landscape. In his design statement, Taberner said the "finished material textures would create the effect that the memorial was carved from existing rock below the grass surface with vines, greenery, and ground attempting to heal the wound."

The jury said that the winning design responded to the university's requirement for a memorial that would "emphasize inquiry, learning, and reflection" while serving to "elevate the thoughts of visitors to a larger realm of awareness." In citing the Telesis design, the jury said, "It can be inserted into the landscape with minimum disturbance, so as to provide places of reflection while offering a continuity of movement across the wooded knoll."

Taberner, a Canadian citizen who graduated from Pratt University and now serves as an adjunct professor of architecture and urban planning at the University of Michigan at Ann Arbor, subsequently was disqualified because the rules of the competition specified that it was open only to American citizens. Team member Fahey, who practices in New York, refused the \$20,000 cash prize.

Although disqualified in the competition, Taberner will be involved as a design consultant. At a meeting in early May between Kent State President Michael Swartz and Taberner, an agreement was reached to allow Taberner to play a role in the implementation of the memorial, according to Joe Durbin of the university's communications department. No mention was made of the prize.

Grady Clay, Hon. AIA, who served as chairman of the jury, said that he believes this competition and the building of a memorial commemorating the events of May 4 will serve as a catharsis for the university. Clay also said he hopes the Kent State memorial will encourage cities that experienced racial violence in the '60s and later to consider holding competitions for memorials "to deal with their collective memories and to acknowledge the sometimes tragic events that took place."

In addition to Clay, the jury was comprised of William N. Morgan, FAIA, of Jacksonville, Fla.; William C. Muchow, FAIA, of Denver; landscape architects William A. Behnke of Cleveland and Robert M. Hanna of Philadelphia; and artists Richard H. Hunt of Chicago and Alice Aycock of New York City.

Paul D. Spreiregen, FAIA, of Washington, D.C., served as the professional adviser.

The second place was awarded to a joint design by Bruno Ast and Thomas J. Rasmussen, both of the Chicago firm of Ast & Dagdelen. Third place was presented to a design by Michael Joseph Wilkinson, Kevin A. Kemp, and Scott D. Bernhard, all of Chicago.

Four entrants were given honorable mention: Gary Michael Fishbeck of Cambridge, Mass.; Peter Lindsay Schaudt of Winooski, Vt.; Jay David Kammen of San Francisco; and a joint design by George J. Hargreaves, Chester Glenn Allen, Brian Costello, Mary Margaret Jones, Katherine L. Lehman, John S. Loomis, and David Bruce Meyer, all of San Francisco.

Eberhard Zeidler Named to Receive Canada's Gold Medal

Eberhard Zeidler of Toronto has been selected to receive the 1986 gold medal of the Royal Architectural Institute of Canada. Established in 1930, the medal is awarded in recognition of "great achievement and contribution to the knowledge and inspiration of Canadian architecture and for the forwarding and the development of Canadian architecture and its recognition abroad."

Zeidler was born in 1926 in Braunsdorf, Germany, and was educated at the Bauhaus and the Technische Hochschule in Karlsruhe. He emigrated to Canada in 1951 and joined the Toronto firm of Blackwell & Craig as an associate in charge of design. Named a partner in 1954, Zeidler has maintained responsibility for design through the successor firms, now called Zeidler Roberts Partnership/Architects.

Although his earliest works included a number of churches and the Beth Israel Synagogue in Peterborough, Ontario, Zeidler gained recognition for his 1.75 million-square-foot McMaster Health Sciences Center in Hamilton, Ontario, completed in 1972. He has acknowledged that McMaster changed his approach to architecture and influenced other health care facilities that followed, including a number of smaller hospitals in several Canadian cities, the Detroit General Hospital, and the University of Alberta's MacKenzie Hospital (see Aug. '83, page 124).

In addition, Zeidler is known for his two mixed use megastructures in Toronto. Ontario Place, a recreational facility completed in 1972, is a cable structure with tent forms and a dome, located offshore in Lake Ontario. Its parts are connected with a series of pedestrian bridges. Completed in 1981, Eaton Centre is a mixed use project with a multistory shopping arcade and offices. The nautical theme is repeated in a series of connecting escalators and bridges, exposed supports and mechanical equipment, and glass and railings. News continued on page 16

PRACTICE POINTERS: DOCUMENT CONSEQUENCES OF REDESIGNS

Requests to downgrade invite lawsuits.

Frequently, architects are required to revise designs to meet reduced budgets. But, revised designs can lead to costly lawsuits as the claim files of CNA Insurance and Victor O. Schinnerer & Company show.

One common example is a request to change the heating/ventilating/air conditioning system. When such changes are requested, you usually tell the owner that modifications may result in a less effective system. Generally, however, these warnings go unrecorded. Then, when there are complaints that

the system does not function as expected, there is no proof that the architect acted responsibly.

We recommend that you give the owner a letter stating possible shortcomings of any downgraded design. Such documentation can be the key to successfully defending you in a lawsuit.

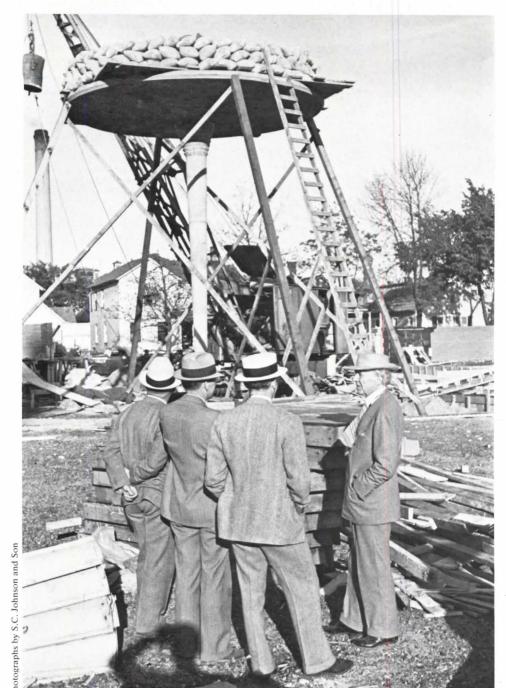
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Exhibitions and Conferences Commemorative Exhibit Honors Wright's Johnson Wax Buildings

Frank Lloyd Wright's Johnson Wax buildings in Racine, Wis., are the subject of a 50-year commemorative exhibit encompassing original drawings, models, correspondence, furniture, and materials.

In 1936 Johnson Wax became Wright's first commercial commission since 1922, and it, with Fallingwater, re-established his national reputation. When he received the commission he immediately began conceptual sketches and, a month later, proposed the start of construction based on a 20-foot column grid. In what must be one of the first examples of fast-track design, Wright continually modified details during construction, sending original drawings to the building site.

Among the innovative ideas employed in the building are Wright's tall, slender concrete and steel mesh columns, whose capitals splay out nearly touching each other, the interstices filled with glass tube skylights. The elegant spareness of the columns, however, came under the scrutiny of state code officials who pronounced them unsafe. A test column was ordered and, under Wright's direction, was weighted down with 60 tons of sand-five times the expected load. The column stood.

The exhibit opened at the Renwick Gallery in Washington, D.C., and will travel to Ithaca, N.Y., Milwaukee, Grand Rapids, Mich., New York City, Houston, Providence, R.I., Los Angeles, Minneapolis, Atlanta, and Chi-News continued on page 19 cago.

Left, Wright and Johnson Wax officials observe column test on the building site; below left, executive office with Wrightdesigned desk and chairs; below, interior detail of administration building.





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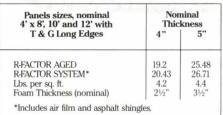
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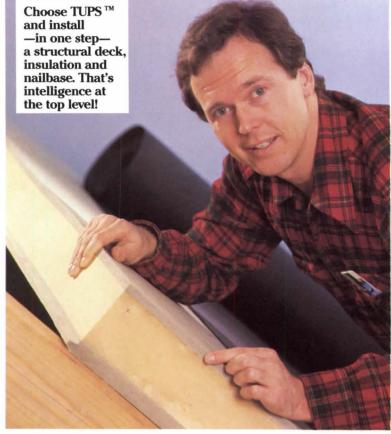
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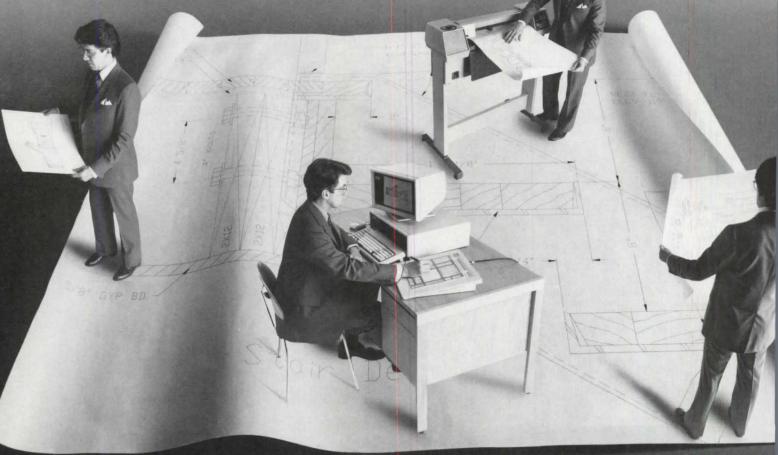
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Circle 10 on information and

Regionalism in Architecture Explored at Texas Symposium

New Regionalism" is a tantalizing symoosium title because it raises the possipility of insight into an important but often implistically and sentimentally presented ubject. A dozen speakers and several nundred observers gathered at the Uniersity of Texas at Austin in late April in earch of precisely this. But after two days of lectures and slide presentations by, mong others, Kenneth Frampton, Ricardo egorreta, Hon. FAIA, and Robert Stern, FAIA, the closest anyone got to a definiion of "new regionalism" was "appropriate rchitecture," architecture adapted to the pecifics of place, culture, and climate.

The more the panelists talked about new regionalism, the more it sounded like he old regionalism, only more academic and abstract. Several attempted to disense with the term altogether, substitut-

ng "tradition," "place," and "culture."
"The only thing I can figure out," Charles Moore, FAIA, admitted, "is that t lies somewhere between universalism, which is too big, and personal individual nnovation, which is too small." Legorreta howed slides of several of his buildings n which prominent features of Mexican ernacular architecture—open plazas, ininterrupted masonry walls, pools and ountains, deep windows—are incorpoated into buildings that are unmistakably nodern, yet which retain an obvious affinty to their place. But he too shunned the new regionalism" tag. "I do not emphaize forms or shapes," he said. "Those re immaterial. I'm just trying to make eople happy."

Albuquerque architect Antoine Prelock, FAIA, began his presentation by ossing a sack of ground chili peppers into the stage, then talked about his ttempts to tap the "surreal Ray Bradury quality of the desert." His most familar example was an apartment complex n Route 66 that borrows equally from he low-rider culture of the strip and the imelessness of the desert and mesas. He ot closer to a mythic and ritualistic conept of regionalism than anyone else.

attoe offered the Phoenix Municipal Cener competition as an exercise in critical egionalism, though without evaluating ne merits of the submissions or the qualy of the regionalism expressed in each. Frampton, in a surprisingly mellow and icid mood, contributed a manifesto entied "Ten Points on an Architecture of egionalism." Although a partial reprise f his well-known essay on a critical regionlism, it contained enough contentious pinions to fuel several days of debate.

University of Texas visiting critic Wayne

Unfortunately, debate and contentiousess were not on the symposium agenda. xchanges were few and mostly polite nd guarded. Dissenting opinions were uietly absorbed into a comfortable midle ground. - DAVID DILLON

Hunt Exhibition: The Metropolitan Museum of Art's exhibition "The Architecture of Richard Morris Hunt," which closes this month, will travel to the Octagon Museum in Washington, D.C., this September and to the Art Institute of Chicago in early 1987. The exhibition includes watercolors by Hunt while he was a student at the Ecole des Beaux-Arts in Paris, detailed drawings of cast-iron facade buildings, skyscrapers, apartment buildings, and public projects such as the base of the Statue of Liberty and four unbuilt proposals for entrances to New York's Central Park, in addition to photographs and drawings of his mansions along Manhattan's Fifth Avenue and in Newport, R.I., and a large model of Biltmore, designed and built for George Vanderbilt near Asheville, N.C. (shown above). News continued on page 83



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The Arts

Courthouse Walls Become a Canvas

Dramatic fresco mural paintings by New York City artist David Novros have transformed a 1930s Mediterranean-revival style federal courthouse in Miami into a work of habitable art.

Funded by the federal government's artin-architecture program that allocates 1 percent of a building's budget for art, the project involved paintings covering more than 6,300 square feet of walls, archways, and ceilings of the spaces encircling the interior courtyard. Novros spent six months developing his artistic plan and almost five months working on ladders and scaffolding to execute the murals.

The artist revived the technique of fresco buono, which required replastering all the wall surfaces before the painting could begin. Novros also cleaned the columns and arches and installed baseboard

tile on the ground floor.

Novros draws from a traditional palette of ochres, reds, greens, and blues and arranges the colors in a cyclical pattern changing from bright and cheerful tones to dark and somber hues. - Lynn Nesmith











Above left, contrasting warm and cool colors on the walls and ceilings facing the interior courtyard; above, cleaned and restored columns and pilasters against the blues and reds of the murals. Left, Novros during the execution of the paintings; far left, limestone archway of the interior courtyard frames the mural.

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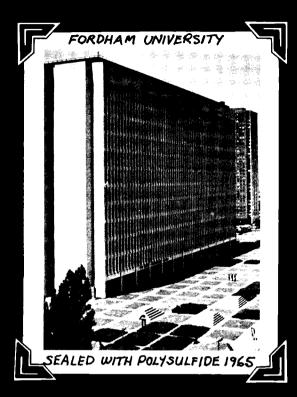
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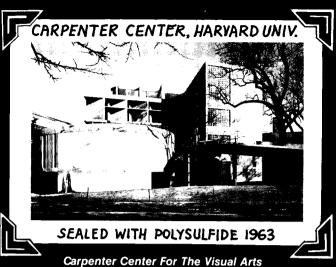
The Designer's Element

What Do These Prestigious Buildings Have In Common?



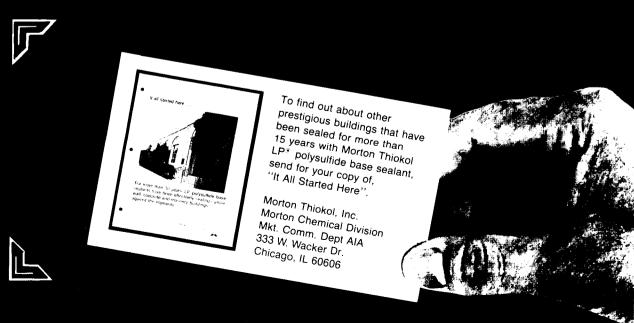
Lincoln Square of Fordham University New York, NY Architect: The Perkins & Will Partnership

United Airlines Headquarters Libertyville, Illinois



Carpenter Center For The Visual Arts Harvard University Cambridge, Massachusetts Architect: Le Corbusier







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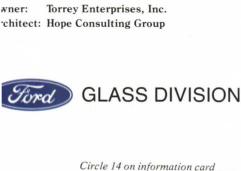
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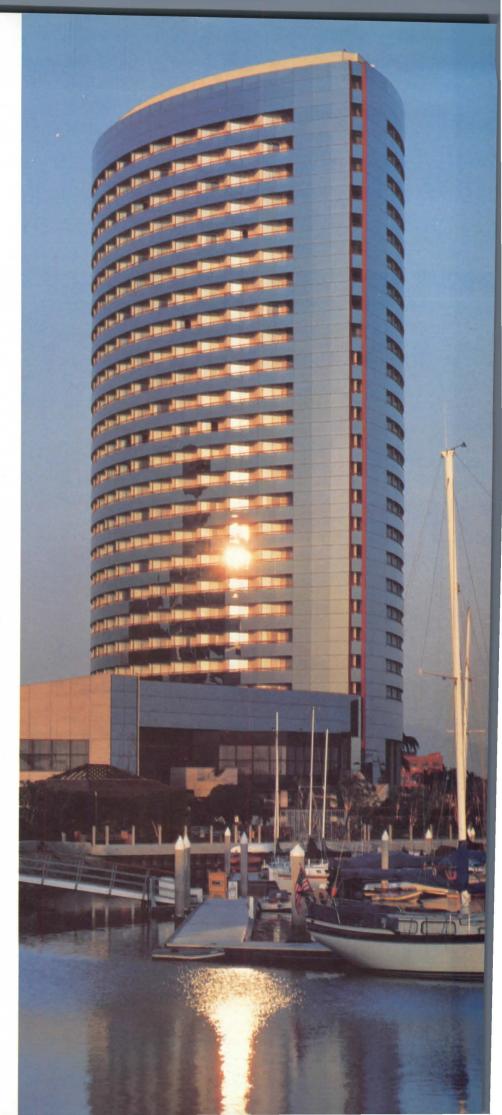
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ARCHITECTURE

n the following pages is our second "discovery" section presenting buildings by architects who have never before had work published in a major architectural magazine. They are presented with considerable pride. Our call for submissions brought forth a heartening, even overwhelming, number of first quality works. In fact, in addition to the ones shown here, we will be doing a good many others in future issues.

Following "discovery" is a report on the current architectural activities of one of the country's largest and most prestigious clients, IBM, which is discovering anew the validity of its former president Thomas J. Watson Jr.'s famous dictum that "good design is good business." It's a dictum being proven with increasing frequency in that toughest of arenas, the developers' balance sheets.

On a more somber note, we would like to announce a change in the way that we report the deaths of members. Until now we have included a list drawn from records of AIA's membership department. However, there have been all too many instances in which, for reasons beyond anyone's control, the list has contained errors. Also, simply printing a name on a list seems a rather cold way of recording the loss of a valued member.

So, with the help of our readers, we would like to institute a new system. We will publish notice only of those deaths of which we are notified directly. And if the notification is accompanied by biographical information we will publish a brief obituary.

We will publish the first such in the September issue, for which the deadline for receipt of material is July 15. So please let us know of the death of any member, for that or subsequent issues, and send along some information about him or her. It need only be a paragraph or two, or a copy of an obituary published elsewhere. -D.C.

Discovery



'California on the Outside, Jewish on the Inside'

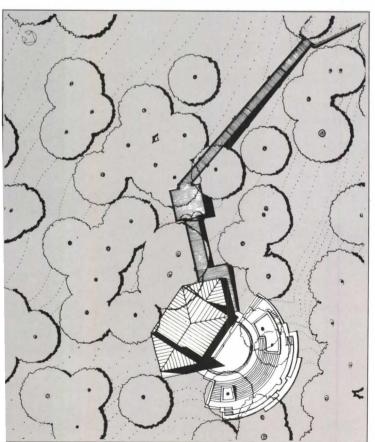
The little synagogue for children at Swig Camp near Saratoga, Calif., successfully embodies the notion that a memorial to six million killed in the Holocaust can affirm life's continuation. The product of collaboration among an architect, the camp's sculptor-in-residence, and hundreds of children, it is an original work of architecture.

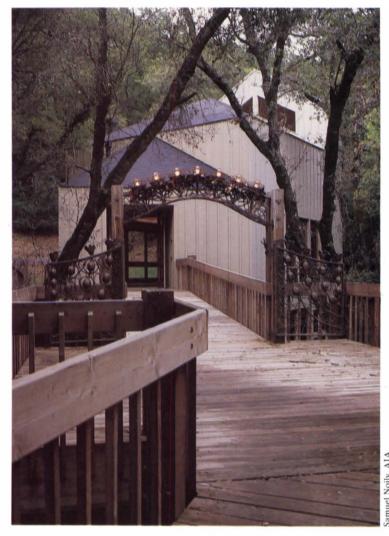
This is a building with two distinct characters, each relating to a specific place and time. The exterior is contemporary Northern California rustic, an angular, barnlike board and batten presence at home among the dense madroños and oaks. In unexpected contrast, the interior is curvilinear, a series of vault and dome forms abstracted from 17th and 18th century Polish wooden synagogues—all destroyed in the Holocaust—which in turn were adapted from the stone temples of ancient Jerusalem.

The architect, Samuel Noily, AIA, an Israeli and a Berkeley graduate now practicing in San Francisco, offers an analogy and rationale. This synagogue, he says, is like the children who use it, "California kids who come to find out about their heritage, about their spirit, about their insides. . . . Californian on the outside, Jewish on the inside."

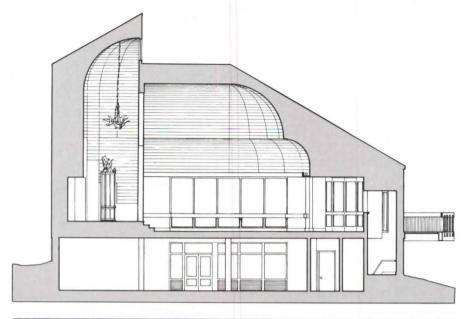
Noily's words don't imply undue didacticism; symbolism here is mostly laid back. The only explicit reference to the Holocaust is a low mosaic wall at the entrance inscribed "In remembrance is the secret of redemption." From this vantage, remote from all other buildings, the synagogue itself is barely seen through the trees at the end of a gently rising wooden bridge. Two-thirds along the bridge's length it widens into a platform (which San Francisco Chronicle architecture critic Allan Temko aptly likens to a station of the cross) turns slightly, and wel-

Left, the ark of the covenant. Right, two exterior views, through the gates on the main approach and from the amphitheater side.







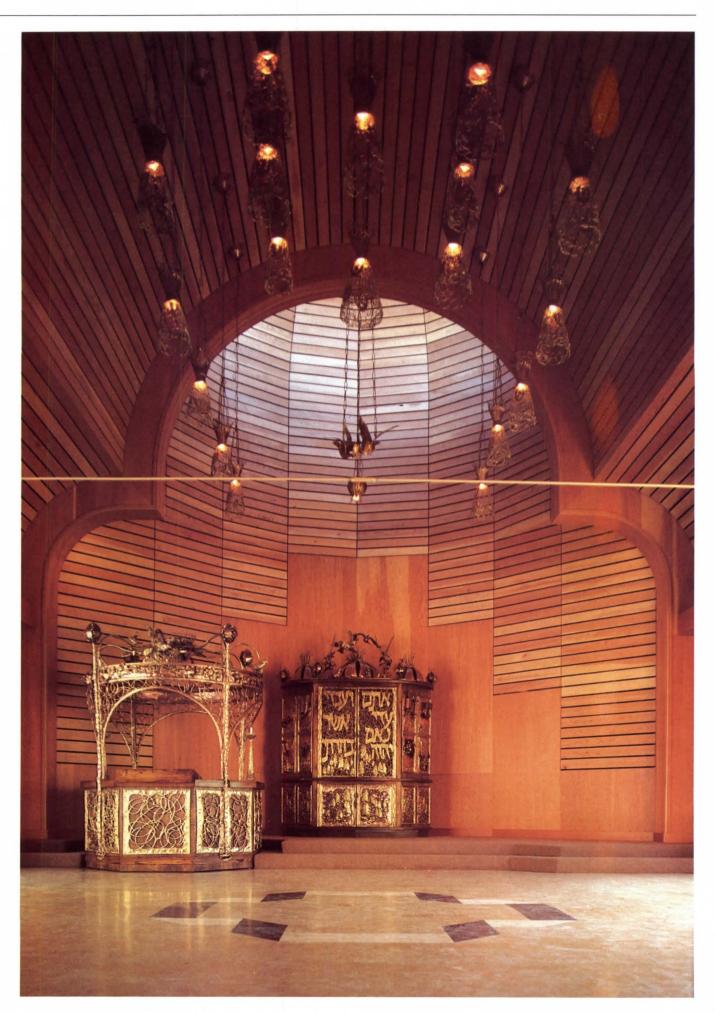




Above, metalwork arches enhance plain windows on the south side; right, the slatted east wall with centered, copper-crafted ark.

comes you through delicate copper gates crowned by a lovely arch-as-menorah. The processional climax is the unexpected interior, a single room whose ceiling and end wall are craftsmanlike applications of five-inch fir slats spaced three-quarters of an inch apart. Centered against the end wall, lit from above by a concealed clerestory, is a richly decorated, copper covered ark of the covenant, which is complemented by a movable lectern, five simple window arches, and 18 hanging lights, all crafted in metal.

A window wall on the northern, upslope side of the synagogue opens to a semicircular mosaic platform that becomes an outdoor stage, with the building as backdrop, for performances by the young campers. (Landscaped amphitheater seating is yet to be accomplished.) The platform is paved in a wonderful, child-like mosaic depicting the tribes of Israel in pie-shaped pieces. It is, like the metal gate and interior pieces, the work of children who have attended the camp in recent years. Their gentle mentor is Helen Burke, the empathetic artist-in-residence, teacher of children, and collaborator with Noily on the modest, evocative building. Their synagogue is a rare fusion of art with architecture, building with setting, utility with spirit.—Allen Freeman







The skin and lobby are about all an imaginative architect gets o play with on a small, speculative office building. An admirer f the work of Philadelphia architect Frank Furness, Amy Veinstein, AIA, designed an 11,000-square-foot structure in Washngton, D.C., for Stanton Development Co. that solves with unuual panache a common architectural problem—adding a new uilding to a historic neighborhood.

Furness was an appropriate model, given the fact that the buildng was to be located at 317 Massachusetts Ave. N.E., in the apitol Hill Historic District. He was a pattern freak, and outde as well as in, his visually complex buildings are fascinating xercises in color, texture, and material. Weinstein's interest in urness and in pattern, developed during the time she worked rith Robert Venturi, FAIA, prior to opening a private practice ½ years ago, helped create a building that relates well to its ictorian row house neighbors.

Short, squat concrete columns that match the color of the

ed brick hold up an entrance arch that along with the facade highlighted with black bricks to recall old corbeling patterns. he massing derives from the three-story, multibayed configuation of the adjoining buildings, and, most importantly, con-

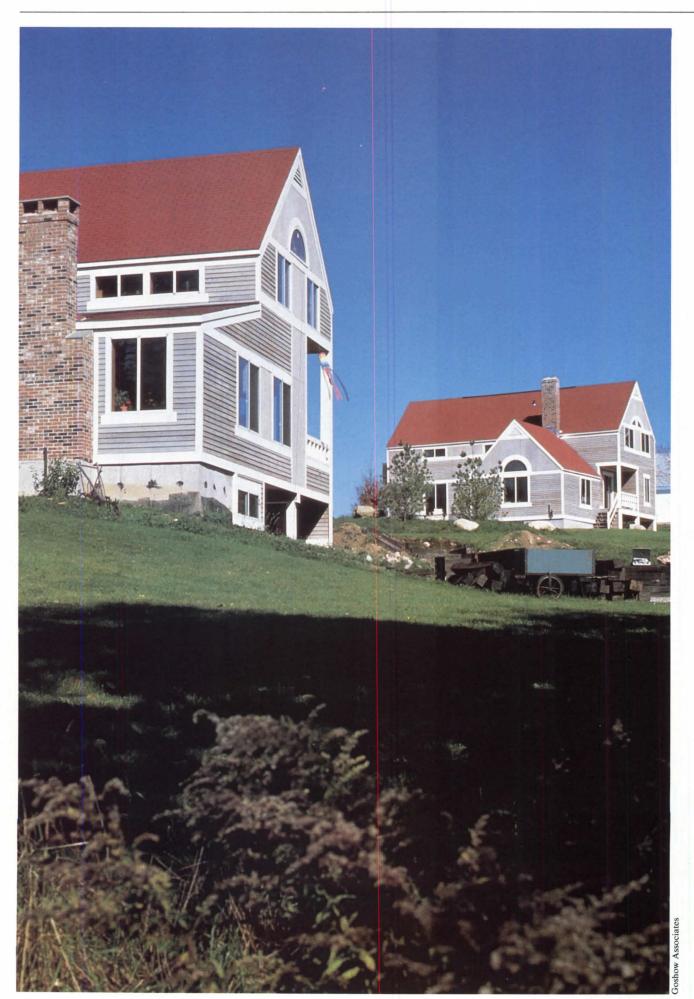
op, stylish facade with freestanding pediments. Opposite, lobby eatures updated Victoriana—elaborate stenciling, patterned lework, and carved wood detailing.

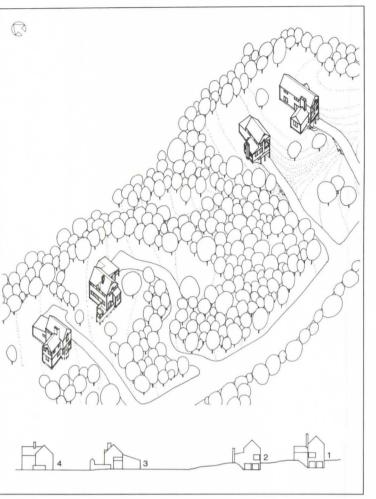
tinues the streetline. But then, as if to say emphatically that this is a new building, the facade is pulled away from the frame. Freestanding pediments, which reach above the cornice line to celebrate, as the Victorians did, the top of the building, accentuate this effect, achieved by placing greenhouse-like glazed boxes with chamfered tops behind each pediment.

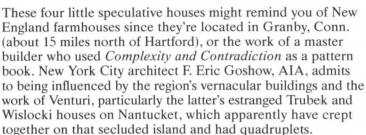
But the exterior is simple compared to the stylish lobby. Gold stars under the entry arch act as a precursor to the pseudo stenciling—created economically with a Victorian wallpaper—on the vaulted ceiling. Within the deep barrel of this vault, abstracted Victorian pendants are pierced by a long, tubular, modern brass light fixture creating a striking contrast between old and new. The stair is demarcated by a stepped pair of elaborate, carved oak newel posts, while the floor is tiled in gray, white, black, sage, and terra-cotta. A routed chair rail with dots of color completes the composition in applied decoration.

Developer Kenneth A. Golding and Weinstein met musically -he plays the flute and she the violin in a chamber music group and when Golding and his partners decided to carve a niche for themselves developing small office buildings, she was recruited. Despite difficulties—such buildings do not benefit from economies of scale and sites for they are hard to find in Washington-Golding is pleased. "You can do something creative. It's not just another repititious facade," he says. Not surprisingly, the neighbors like it too. - CARLETON KNIGHT III

Cluster of Engaging Houses Reflects Vernacular and Venturi







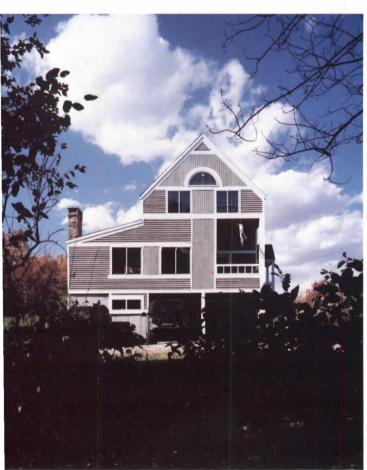
Goshow, as architect and developer, designed these houses as alternatives of the popular "ranch burgers," as he calls them, found outside Hartford, New York, Chicago, Los Angeles, and just about everywhere else. The four houses are sited in pairs, each on a two-acre lot. Unlike the typical raised ranch, whose long side is parallel to the street, Goshow's houses turn their gables out, flaunting their profiles and looking like a child's drawing of "home."

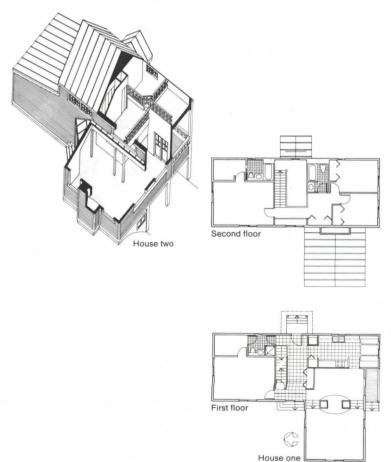
The entrances are highlighted by porches, either open-air, gabled, or partially enclosed. While the ranch burger usually displays its garage proudly, in these houses garages are nearly hidden by being pushed around back or (in the two houses whose sites slope dramatically) tucked underneath.

With an eye toward cost and the familiar, the exterior materials were kept simple: naturally stained cedar clapboard siding that is weathering to a silvery gray; crisp, white trim; and contrasting red shingle roofs (Goshow had wanted standing seam metal roofs, but the cost was prohibitive).

The tight, sharply defined exterior of each house expresses its compact floor plan. They range in size from 1,800 to 2,200 square feet and are L shaped. In suggesting the architecture of farmhouses, the use of the L shape works to Goshow's advan-

Across page, houses one and two on east side of site, which slopes dramatically; left, front elevation of house two.















Top, house three, the largest of the four, was built first and has expansive deck with gazebo; above, house four in meadow.

tage. Each house appears to have started life as a simple, twostory rectangle that was added on to over time with sheds or one-story gables.

The plans usually bend at the point of entry, which in most cases delivers you to the kitchen/dining area. Where possible Goshow has included a double-height space, either in the living area or the foyer, to celebrate the fact that these are two-story houses, not ranch burgers. In each living area a fireplace takes center stage. The interiors are trimmed with oak railings in a lattice pattern, while windows and doors are in stained pine.

Goshow sold all four houses after completion of the first one at a construction cost of about \$45 per square foot.

-MICHAEL J. CROSBIE

A 'Thoughtful, Personal Place' Thoroughly Grounded in Theory



This house—which is home to architect Glenn Robert Lym, AIA, and family—is located on a steep, narrow block of little San Francisco houses on Bernal Heights, a maze of short streets on the south end of the Mission District. It stands out by reason of its corrugated steel and stained plywood facade: sure sign, in a contemporary California house, of "Architect at Work." A single, oversized second story bay window (double the typical San Francisco size) projects five feet out from the face. A thick wall, apparently of whitewashed masonry, steps up to and crashes into the house on the west. (The house's long axis runs north and south, pointing toward downtown.)

This thick white wall (actually hand-slapped plaster over studs) is one of a parallel pair of walls, 10 feet apart, that help define and give character to the interior spaces. From the stair area between them, or the open living areas fore and aft, one can see the full, 40-foot rise of the roughcast wall as it ascends (nar-



rowing as it rises) from entry level to roofpeak. Its neighbor wall, sheathed in the eight-inch horizontal wood siding found on many old San Francisco houses, rises to about half that height and projects out the rear of the house, as the plastered wall projects out the front.

Both read as exterior walls turned inside out. From the stairway between them, the visitor feels as if he were standing in a communal fire-escape or areaway between two houses. There are even window-like niches cut into these walls, and a tiny industrial metal "fire escape" balcony high up on the west side wall.

The dining area, on the first level up (on grade with the back garden; the lot slopes up 10 feet from north to south), is actually one large factory-made half-round topped greenhouse (9x13 feet and 11 feet high). Lym disassembled its frame to paint it green. The copious southern light it admits is controllable by an inside awning. Surrounding the greenhouse is a small, bright garden half-enclosed by a rosy, hand-plastered Barragánesque back wall. Behind it, old gable-roofed houses climb up the hill.

Tucked out of sight behind the white "stone" wall is an alcove room and a bathroom; behind the thick wooden wall hides a narrow, in-line kitchen. Green lath trellis from the garden continues in to cover part of the roughcast wall.

Up another level of the square-turning central stairs, skill-fully railed in smooth maple, is the semi-octagonal, north-facing living room, three of whose facets form the giant bay window seen from the street. Six-foot-high windows in each facet offer

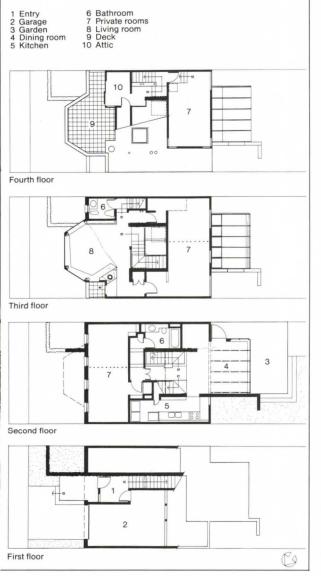
spectacular views over San Francisco, from the Golden Gate Bridge towers on the west to the Bay Bridge on the east. On top of this bay, at the highest level, is an open-air deck. Thanks to the large areas of glass at either end of the house, skylights in the roof, and the tall, wide open core, all the public spaces can be flooded with light and warmed by the sun.

With ingenuity, Lym has also fit into this open-hearted Chinese box three large and closable private spaces. These can be bedroom, playroom, study, or studio, as the need arises. Two of them run the full 25-foot width of the house, but are dividable at will. From the public spaces, these rooms are identifiable in part by their unpainted undersides, the woodgrain of joists and subfloors sandblasted and exposed—"as if their covers were peeled away." Otherwise, the colors of the walls ascend with the landscape, moving up from green to pale terra-cotta and mauve to foggy gray and blue.

Lym helped build the house himself over a period of three years and has filled it with his labor and affection, as well as the provocative ideas that inform his 1980 book, A Psychology of Building. This is one theory-generated house in which ideas do not dominate over livability (presuming you don't mind vertical travel or corrugated sheet metal), but rather enhance one's sense of being in a special, thoughtful, and personal place.

—David Littlejohn

Mr. Littlejohn teaches journalism at U.C. Berkeley.





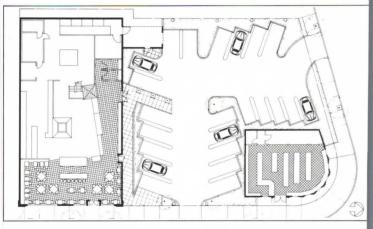




An 'Aggressively Architectural' Place to Buy a Hamburger







This spacious, provocative, idea-filled restaurant is visible evidence of the success of its parent branch in north Berkeley, two miles to the south. The cozy Berkeley Fatapple's gained such a reputation for the high quality ingredients of its simple menu that long lines formed out the door almost every evening. So when a reconverted supermarket in El Cerrito became available, owner Hildegarde and manager Albert Doherty decided first to lease part, then all of the 6,000-square-foot space. David Baker, AIA, who had already rebuilt the basic shell, designed an interior that satisfies their needs as well as his own highly refined architectural notions.

The restaurant building was part of the redevelopment of a 15,000-square-foot corner property in a quiet block of neighborhood shops. The developer planned to build a small grocery store of his own on the corner itself, retain most of the old parking lot, and convert the old market into three new stores. Before Fatapple's decided to lease the whole market, both buildings—old and new—had been decorated by Baker in a Gravesian palette of baby blue and sea green, with sophisticated trellis and window shapes. Hints of a fashionable postmodernism (columns, medallions, rustication) appeared as something of a shock on this distinctly unfashionable street.

Inside, Baker took full advantage of the freedom the restaurateurs offered him. After 13 years working in the cramped quarters of his Berkeley restaurant, manager Albert Doherty knew what he wanted here: a giant, open "production size" kitchen. This, plus the fact that regulations limited seating space (75 places) to a factor of off-street parking, explains why the kitchen seems so vast for a relatively small restaurant.

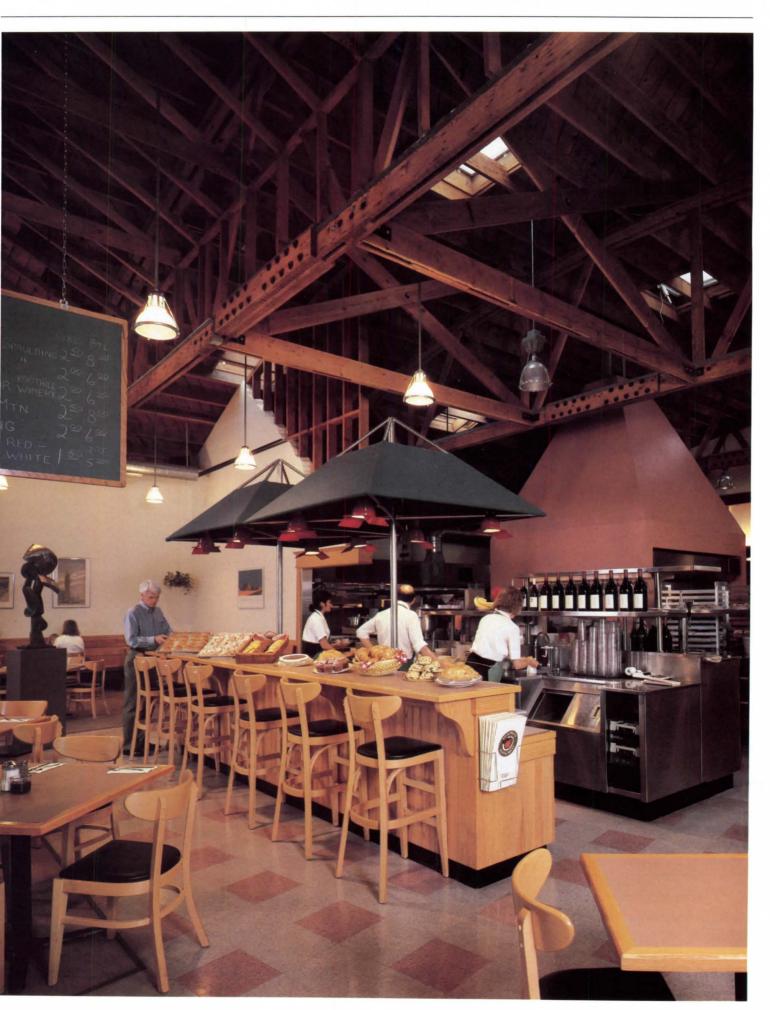
Two other elements contribute to the sense of mock grandeur. The 22-foot-high, bow-trussed ceiling of the old supermarket was retained through its entire 100-foot length. ("I wanted people to *see* the old shell," Baker says, "to feel the collision between old and new.") In addition, this branch now serves as the baking, sauce- and chile-making, and burger-shaping facility for both restaurants, as it may serve future branches.

One enters from the parking lot (its size and effect minimized by planning and planting), under a fascia of green Vermont slate tiles punctured by an almost symmetrical arrangement of square windows. To the north, a vine-supporting trellis repeats the proportions of the entry portal. Once inside, patrons are cranked clockwise along a tiled path, past a wide retail sales area and a narrower waiting space, to tables, wooden banquettes, and a dining counter symbolically roofed by two square green umbrellas meant to stand for apple trees. The floor tiles and warmer wainscot-level colors help to define the dining space.

Between the dining and preparation areas, part of a transverse stud wall was built, as a semitransparent divider of the space. It was then partially covered by pale green gypsum board, carefully "eroded away," a la SITE, to make some important conceptual point. Diners don't get the point, but they like the odd wall. The high pastry oven (stuccoed in warm terra-cotta) was built as a freestanding volume—a pyramid atop a cube, venting through the roof. It reads as a kind of primeval kiln, surrounded by stainless steel work counters. Toward the rear, the manager's office is a similar freestanding volume, which looks like a wooden windowed playhouse with a green cap roof. At the back, another "deconstructed" wall with window openings half-hides the mezzanine level.

The kitchen spaces, and the little buildings within them, are oriented on the axis of the old building and its trusses. The sales counter and the dining area tiles are set about 10 degrees off. The colliding grids create a mildly jarring dissonance for diners, who feel they are looking into an alien world as they stare at the cooks. All the fat, snaking metal vent pipes, of course, are exposed, beneath the raw wood of the great ceiling trusses and vault, punched through for six new tent-shaped skylights.

It may seem a bit peculiar to buy a pie or eat a good hamburger in a space so aggressively "architectural." But a popular, casual Northern California restaurant may be the perfect place to experiment with such cerebral, genially disorienting games. —D. L.



Employee Cafeteria Made into a 'Symbolic Garden and Terrace'



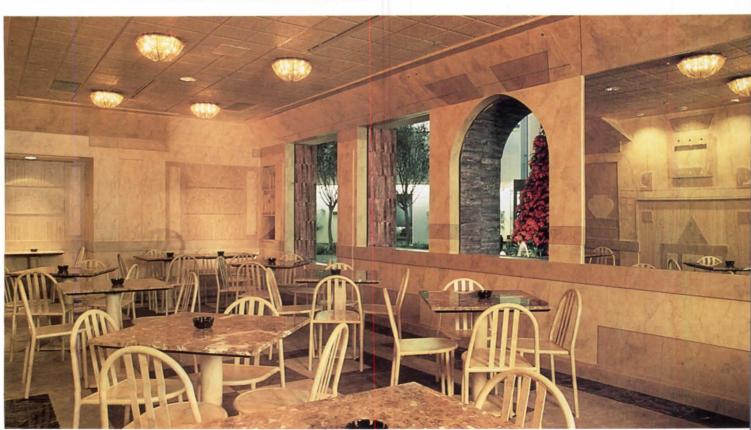
Blurring the line between what is real and what is not was the intent behind the design of the Corporate Club, the employee cafeteria at the Great Northern Corporate Center in North Olmsted, Ohio. There, in an unusually shaped portion of the first floor, Thomas Clark & Associates of Baltimore (in association with Richard Carlisle of the Biskind Development Co.) created a dining room that appears more lavish and larger than it is and seems to overlook downtown Cleveland rather than being miles away in an eastern suburb. The food service area is a fantastical metaphor of a garden terrace.

The 378-square-foot kitchen and the 707-square-foot food line area are roughly the shape of a partial fan. Due to the presence of an existing staircase, the passage between the food service area and the dining room is a relatively narrow hall. The 546-square-foot dining room is a rectangle with three small nooks carved out.

The Corporate Club's entrance is marked with ceramic-tiled columns and archways, announcing that you have arrived in the garden. Once inside, the symbolic garden and terrace unfolds with a touch of wit and whimsey: The bluish-green serving line counter doubles as a hedge; the purple column is a tree reaching into the clouds; the red banners are foliage. In addition, there is a pink trellis and pink walls surrounding the stairs. A bulletin board announcing "today's menus" seems to float above a representation of a Cleveland bridge.

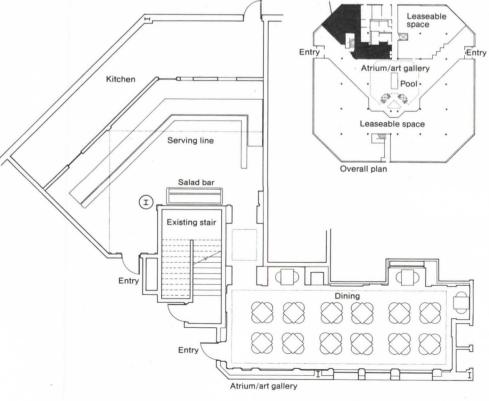
The hallway is an "Escher-like transition space," in the words of Clark, where the "hot" tones of the serving area give way to the quieter mood of the dining room, where the make-believe continues: The walls are gypsum painted to look like marble, as are the tabletops; two mirrors on opposite walls are meant to portray the real windows and in a playful gesture create an infinity box; a window seems to overlook the Great Northern Corporate Headquarters and Cleveland beyond; a false fireplace is flanked by a real vase set on a real shelf on one side and a false shelf and false vase on the other; and over the mantle is a fake television set, Clark's favorite icon of our times.

-Nora Richter Greer









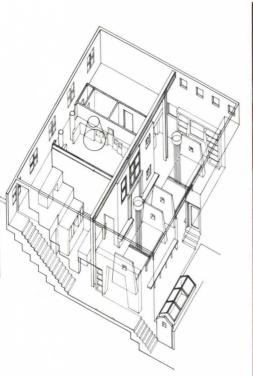
Segment of overall plan shown in black

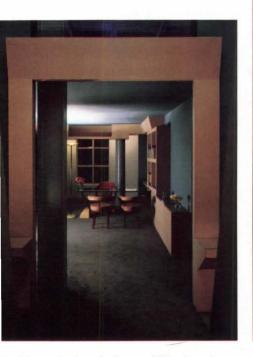
An Office Building That Is Both Billboard and Sculpture

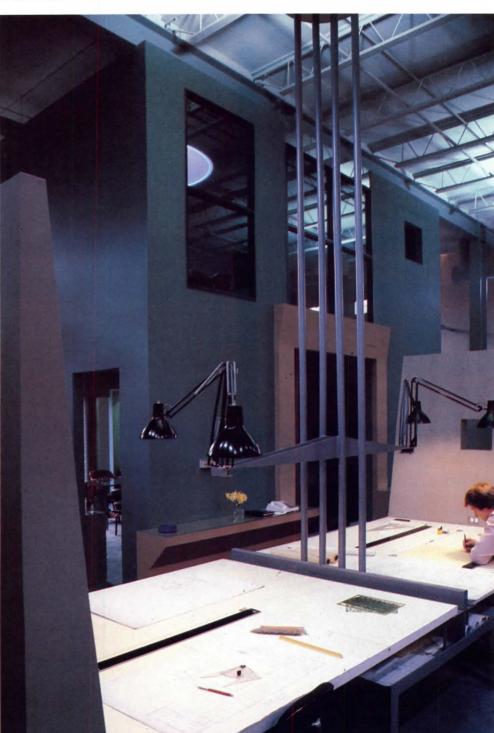












Architect Arthur Lubetz of Pittsburgh approaches architecture s sculpture. He is fascinated by the work of Richard Serra, and particularly, as Lubetz explains, how Serra's sculptures appear to e sliced, rotated, chopped, split, torn. In his architecture, Lubetz reats the building as an "object that is acted upon," slicing, plitting, and chopping like a Teppanyaki chef.

For an office building that houses his firm, Lubetz created a ox that has been carved up and painted vibrant colors. The uilding is actually an addition to a defunct, single-story garage, whose remnants are rendered in gray brick. As the building faces he street it becomes an urban billboard. On the ground floor, ne garage's bays have been filled in with glass block. Above, quare-paned windows in green frames and black sash slide into cored stucco panels or notch into ground-faced concrete block. In the parking lot side, materials are layered in a collage, with n oversized window, staircase, and column poised at the corLeft, clockwise from far left, building as it faces street with red wall defining entrance; detail of parking lot side; gabled office sign. Above, clockwise from right, architect's studio with freestanding 'building'; interior of 'building'; axonometric of studio.

ner. Lubetz magnifies and dramatizes the building's pieces, he says, "to awaken the public's deadened architectonic sense by making them more aware of the built environment." Lubetz reports that the building's been well-received by the neighbors.

Inside, the architect's office occupies 2,500 square feet of the 12,000-square-foot building. The architect wanted to preserve the close-knit quality of his former, one-room office, so within a double-height space is a small "building," housing his personal office and a conference loft. Freestanding, tapered walls provide some privacy around the drawing boards. Two light pylons illuminate the studios, with task lighting over desks. -M.J.C.

High-Tech Prototype Toll Booth Plaza for Indiana Highways

Sometimes referred to as the "main street of the Midwest," the Indiana toll road crosses the northern part of the state, passing through farmland in the east and heavy industrial areas in the west.

To provide better commuter access to the heavily traveled toll road, the Indiana highways department developed a program for 10 new toll plazas that would use a new computerized collection process. Cole Associates of South Bend, Ind., was commissioned to design a prototype toll plaza that could be adapted to different traffic patterns and site conditions. The architect designed a flexible scheme that is comprised of three major components: toll booths, utility support building, and a canopy.

One of the first plazas completed and one of the smallest is Milepost 83 (shown on these pages). Located between the cities of Mishawaka and South Bend, Milepost 83 is a new interchange for a proposed north-south extension beltway that will provide a third access for the metropolitan area.

Although the forms and functions of the 10 toll plazas are similar, they range in size from as few as two collection booths to as many as eight in each direction. The architect developed three prototype plans for the adjacent utility building to meet the varied support and administrative requirements of the 10 different sites.

Virgil Magerfleisch, AIA, says that materials were selected to visually connect the various components of the plaza while suggesting a high-tech image. To continue this theme, the architect also exposed the mechanical system and the steel struc-

tural system. The freestanding prefabricated collection booths have a steel tube frame and are clad with aluminum bond panels with rounded edges. The smooth aluminum panels are repeated on the utility building, although the forms are more rectilinear.

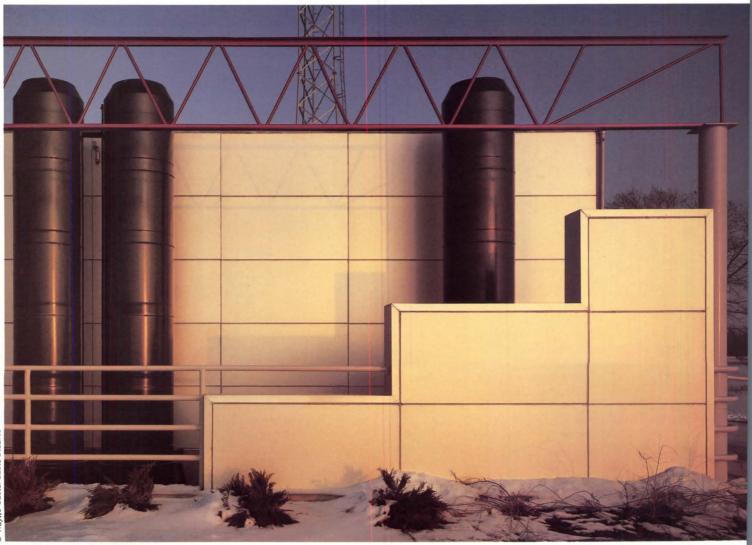
As the support facility for the toll plaza, the utility building houses mechanical equipment, locker rooms for staff, and administrative offices. The booths and the utility building are connected by a walkway tunnel that also serves as an umbilical cord to provide heating, cooling, and electricity.

Numerous windows allow natural light to penetrate throughout the rectangular utility building. Magerfleisch says the bands of alternating tinted and reflective glass were intended to recall the open road and the prairie.

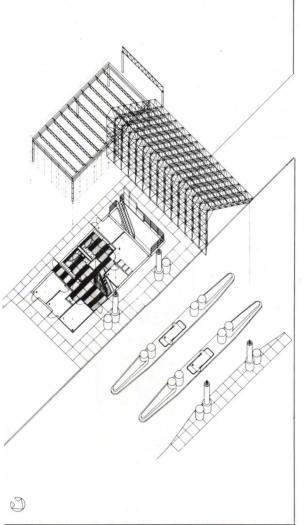
Visible from a far distance down the highway, the large canopy draws attention to the plaza and assists in slowing traffic. The canopy is a delicate lattice of five-foot-square space frame modules with a prefinished corrugated steel roof deck. The bright red frame is raised on four concrete columns.

The eye-catching canopies of the 10 new toll plazas provide a protective covering over the freestanding booths while suggesting a series of symbolic gateways to motorists as they travel down Indiana's "Midwest Main Street."—Lynn Nesmith

Below, three large exhaust ducts and the bright red truss identify the utility building's west facade. Opposite page above, space frame canopy announces toll plaza and covers collection booths; right, the prefabricated booths.



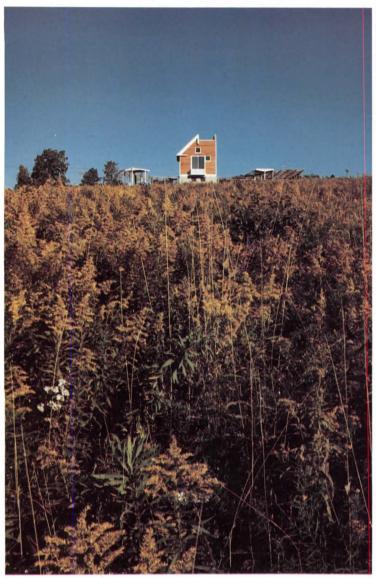






© Wayne Cable/Cable Studios

Architect's Own Small House As 'Postgraduate Education'



Fiddler's Green is a heaven reserved for sailors. It is the name Paul J. Byrne, a Cape Cod native and avid sailor, chose for his first house, which he designed for himself and his wife on an abandoned upstate New York vineyard that overlooks Lake Cayuga, the city of Ithaca, and Cornell University, from which Byrne graduated in architecture five years ago.

The three-story house commands its sloping, treeless, six-acre site with a presence belying its modest (1,400-square-foot) size. Its appeal is a crisp use of vernacular materials. The first floor is wrapped in concrete block, the second and third in natural cedar siding; a band of four clapboards painted white provides transition between the two.

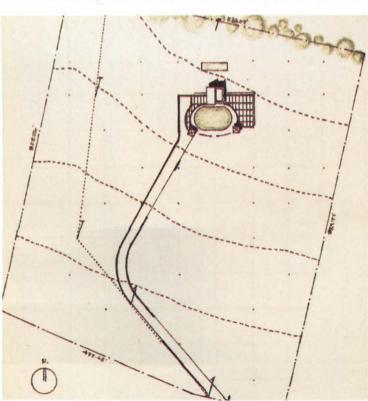
Swinging out like welcoming arms from the east and west sides are trellises that define an oval space in front of the house on axis with the lake view. A pair of pavilions bookend the open side of the oval, setting up a symmetry that is countered by the odd, asymmetrical south facade of the house. The left side of this elevation with its half gable seems trying to be unconventionally conventional in a Venturiesque sort of way, while the right side with its flat roof and parapet wall evokes a memory of a Le Corbusier villa. Surprisingly, it works.

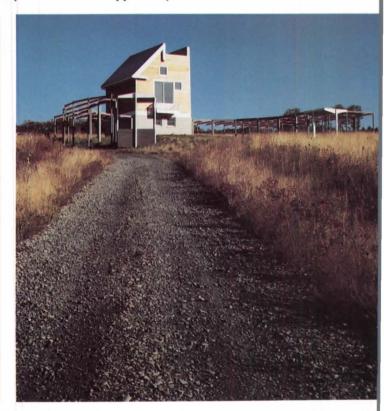
In plan, each of the three enclosed levels is divided in two: The kitchen takes half of the ground floor, and the living/dining room occupies half of the second story. Vertical circulation is via first a straight flight of steps in the core, then a twisting flight at the northeast corner up to the master bedroom suite, and a final twist to a roof deck. Windows frame views as you wind up to the top.

Byrne added oak horizontal banding and high shelves, which span the width of both ends of the living/dining room and wrap out at the corners, after he had lived in the house for a while. His attempt was to reduce the scale of the big, white volume of the room; the shelves also echo the enclosure defined by the trellis outside.

The young architect sees the house as his postgraduate education. "The theme was to take the main house and two pavil-

Left, the main elevation from the south across the former vineyard. Below, the approach from the southwest. Site is six acres.





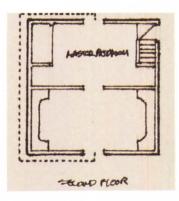
Photographs by Lee Melen

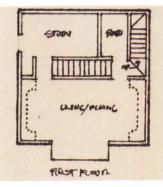
bove, the main entrance on est elevation. Materials are oncrete block, cedar clapbard, and composition tile ingles. Right, the east-side wilion.

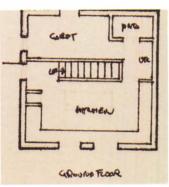








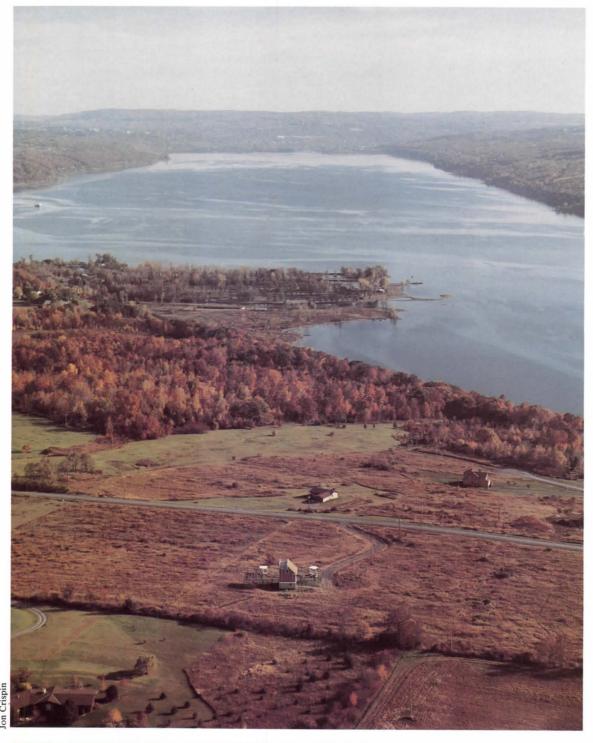




Top, east side of living/dining room with architect-designed shelves. Above, the kitchen. Opposite, aerial from the north.

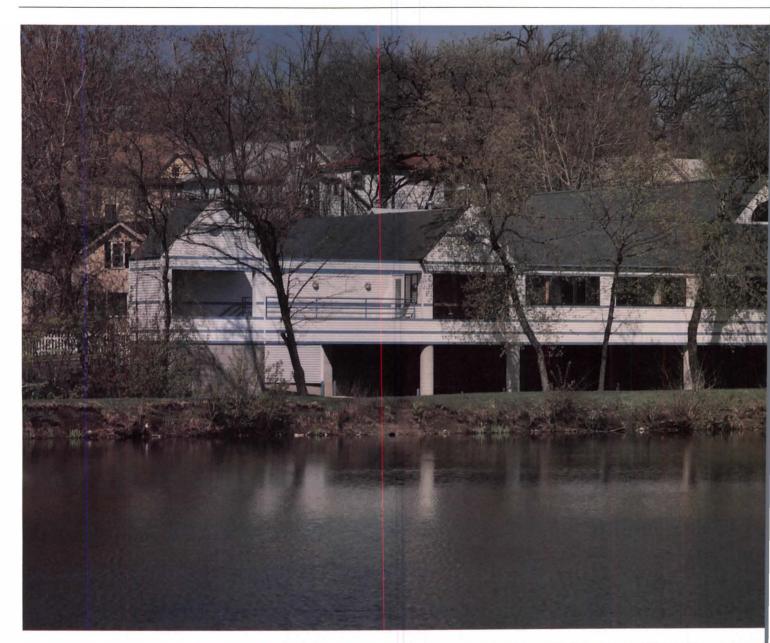
ions and make tightly defined spaces with a minimal number of elements and still provide the feeling that you get in a space carved out of a denser fabric," Byrne says. "I felt that before I subjected clients to my architecture, I'd try living in it myself. One thing I learned is that it is impossible to please everyone. The minute it went up, some of my neighbors said they hated it. There are a lot of ranch houses nearby. And whenever someone would say, even mildly, something like, 'Oh, I don't know if I like the color,' or 'I don't know if I like it being so tall,' I took it personally. But it also hardened me up. . . .

"I think it was a good investment of three years of my life because it left a strong impression, gave me confidence, and solidified the direction I want to go in."—A.F.

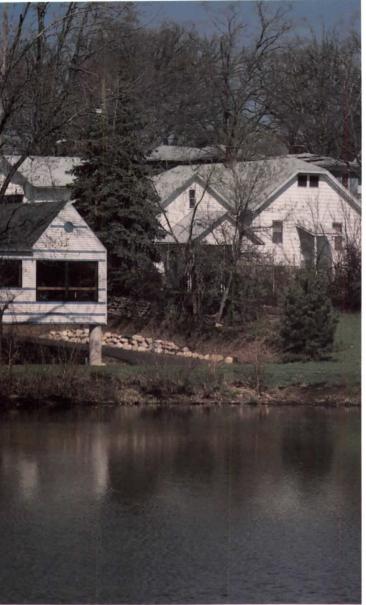


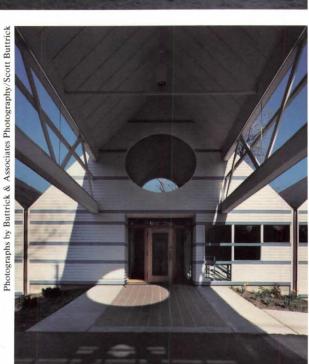


Gabled Eye Clinic Related to the Forms of the Houses Around It







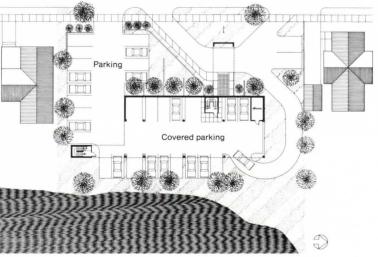


Doctors' offices in residential areas are notoriously bad neighbors. They're always easy to find because they're so often out of place—uninspired, flat-topped boxes floating in a sea of parked cars. This ophthalmology office in Kalamazoo, Mich., by contrast, minds its manners in one of the city's older neighborhoods, located on a major artery that runs into the heart of the city. Wood-frame houses of the late 19th and early 20th century, most with clapboards and gable roofs, surround the site, with a large pond to the east. Richard Wordell, AIA, of the local firm Eckert/Wordell, says that the design intent was to respond to these contextual issues—the street, the houses, and the water—while creating a homey and comfortable place for the patients, who may naturally be anxious about visiting the doctor.

One of the pitfalls of contextual design is the tendency to try to relate to so many stimuli at once that the building becomes less than the sum of its contextual parts. That doesn't happen here. Wordell took the surrounding houses as his cue, breaking the front facade into a series of gabled bays. Two old houses were razed to make way for the clinic, thus interrupting the rhythm of facades. Since the clinic, at 5,000 square feet, is much larger than the surrounding houses, its bulk was held back. One bay, however, advances to the street in line with the older houses to reinstate the rhythm and create a porte-cochère. This gable end functions as a large sign for the clinic, punctured with an ellipse to signify, of course, an eyeball, a device repeated in the background gables. This cyclopes family is banded together in blue, meant to suggest the pond behind the building. It's also the favorite color of the doctor, whose eyes are blue.

Circulation on the site and through the building is clear. One can be deposited at the porte cochère or enter from a parking garage beneath the building. The double-height reception area recalls the exterior gables in stained cedar and a wink. Patients proceed south from the waiting area to the screening room and then on to the examination rooms, which are windowless. The waiting room, offices, an employee lounge, deck, and staff entrance are on the building's west side overlooking the pond. Throughout, the same cool blue is used as a soothing color, while warm oak furnishings incorporate the eyeball motif.—M.J.C.

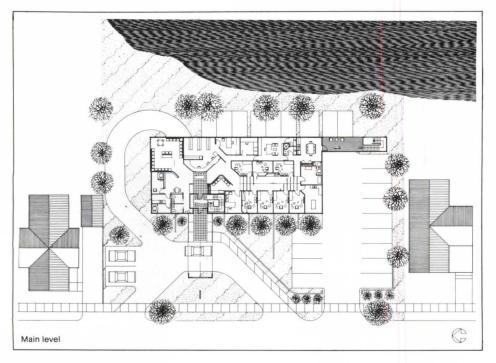
Across page, bottom left, clinic's east side as it faces street, with concealed staff parking; left, glazed west side with parking below; below left, porte cochère with eyeball penetrated gable.







Below, winking reception area in transparent stained cedar, with ornamental oak grillwork around reception desk. Waiting area is to left in photo, examination rooms to right. Left, view toward reception area and angle-walled screening room where patients are briefed on examinations and other procedures. Right top, reception area from behind screening room. Right bottom, waiting area in blue, with custom-built oak furnishings and grill. \square









Dollhouse-like Projections Enliven a Box of a Gymnasium

The new Green Acres School activities center in Washington, D.C.'s Maryland suburb of Rockville seems assembled in a child's imagination. A rectilinear, flat-topped form with gabled appendages, it might be a decorated cigar box for childhood treasures. Some of the children call it "the castle."

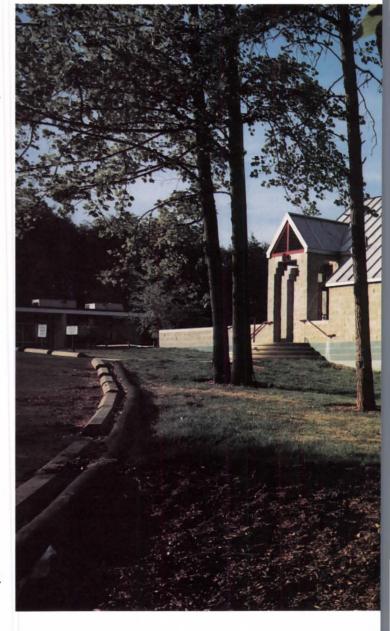
Green Acres is a private school, nursery through eighth grade. The main building is a '50s modernist, rambling, modified openplan design by Davis, Brody. School officials originally suggested building the new facility adjacent to the older building along the rear of the little wooded campus. But the architects, Bowie-Gridley of Washington, convinced them to place it prominently near the grounds entrance as a signature building. The architects sliced it into a down-slope to conceal some of its considerable heft and further mitigated the mass by cladding sections in glazed concrete block laid in horizontal stripes.

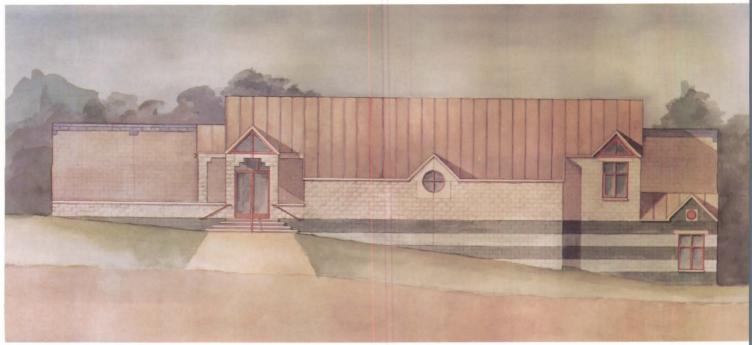
At \$600,000 or about \$60 a square foot, it's not an expensive or complicated building. The program called for a gymnasium that could also function as an auditorium, plus an exercise area, an office, and a tutorial room. Each major program component is readable on the building exterior. An entrance pavilion near the northeast corner, the highest ground, opens into a skylit spine that parallels the building's longer dimension along its side. The spine serves as a lobby/mezzanine and exercise cove and affords views into the gym while admitting daylight—indirect from the gym floor—through the linear clerestory. Stairs down to the gym floor terminate the spine; beyond, at the north corner, is the small tutorial room, expressed as a squared, steppeddown mass.

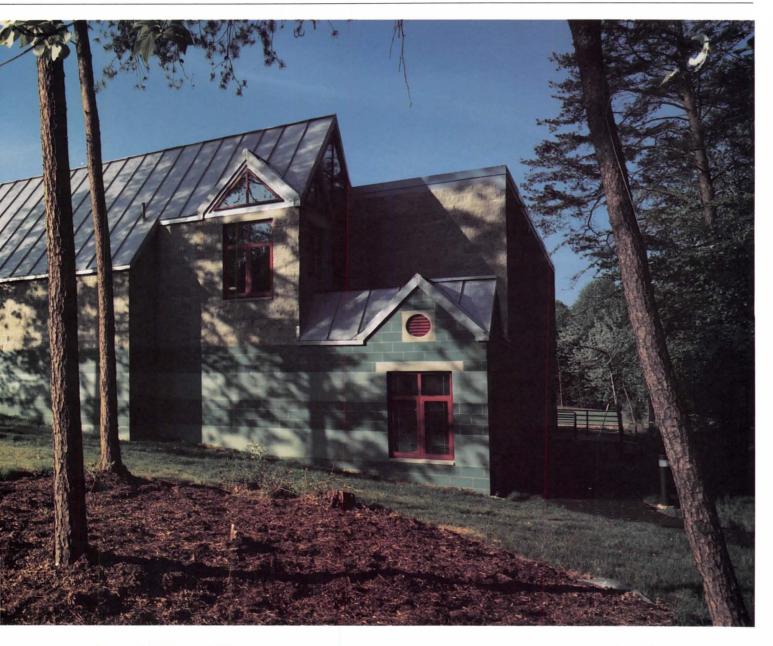
At the opposite corner, gables over the faculty office echo those of the tutorial room. A short, shed-roofed segment links the office to the stage house that projects in a broad, shallow bow. This backside, which is seen only from the adjacent playing field, is the building's least convincing: The flat-roofed bulk of the gym and the striped but essentially blank stage house overpower the architects' attempts to diminish the mass.

But in all, it is an efficient little building that meets its program with economy, style, and that elusive quality of charm. Green Acres is so pleased with its new building that school administrators have made the old building conform by painting the metal trim red to match the mullions on "the castle."—A.F.

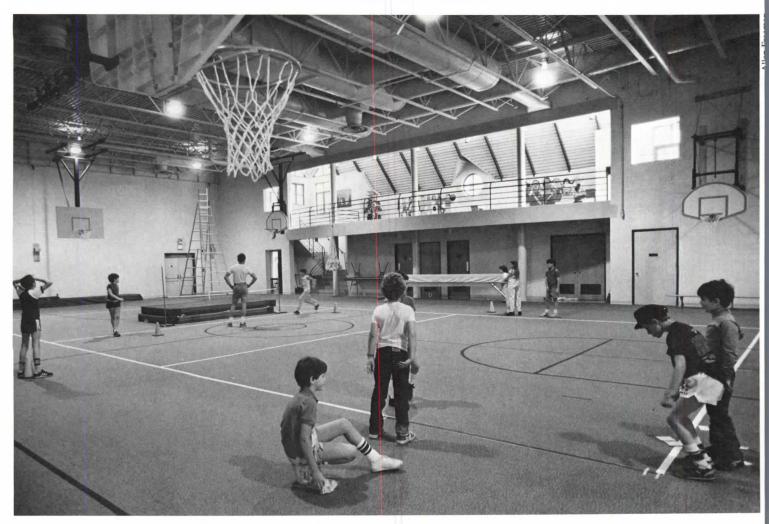
Right and below, the front. Below right, rear with stage housing.

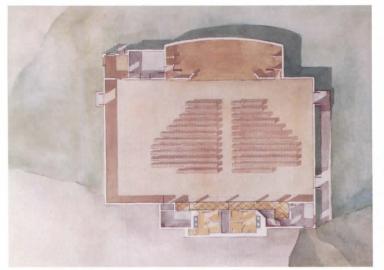














Top, the large multipurpose room in use as a gymnasium, its main function. Floor is a carpet material with enough resiliency for basketball and good noise dampening properties. Behind bowed railing high on the north wall is the narrow space (photo right) that runs two-thirds of the building's length along the front and serves as foyer, exercise area, light scoop, and balcony. Drawings show building set up as a theater that seats up to 450 and as gymnasium. □



Clients: IBM Returns to Its Roots

The latest phase in its off-and-on pursuit of architecture. By Carleton Knight III

Nearly 25 years ago, International Business Machines Corporation unveiled a new, stylish, striped logo. Today that emblem, still in use, appears on a vast and growing number of buildings that house the company's 400,000 employees. With some 180 million square feet of space in urban, suburban, and rural locations around the globe, IBM is believed widely to be the architectural profession's largest private client.

The firm's 1985 annual report indicates that during the year more than five million square feet were completed with another 4.8 million square feet under construction. Although IBM is publicity-shy in the extreme and does not reveal the amount it spends on construction, the 1985 annual report states the company "invested \$6.1 billion in new plant, property, and equipment."

It is hard to think of an American corporation with a more illustrious architectural reputation than IBM, which began its design program three decades ago under the direction of architect Eliot Noyes. He was succeeded in 1978 by Gerald M. McCue, FAIA, who has taken an increasingly active, consultative role.

From conversations with IBM officials and with architects who have designed for IBM, it would appear that the corporation's design efforts, which have had their ups and downs, from full architect control to design-build, is on a definite upswing. IBM today appears to be returning to its architectural roots. Once again it is engaging the profession's biggest stars.

The idea of quality architecture had a somewhat curious beginning at IBM, Chairman Emeritus Thomas J. Watson Jr., explained the gestation recently. Shortly after World War II, the company's engineers had come up with a new electric typewriter, and seeking an improved design, IBM turned to industrial designer Norman Bel Geddes. One day, pleased with the result, Watson went to Bel Geddes' studio and asked to be introduced to the man who had done the work. It turned out to be Eliot Noyes, whom Watson had met several years earlier when both were in military service during the war. Noyes taught Watson to fly gliders, but the two—neither knew the other's background—had lost track of each other.

Sometime after seeing Noyes again, Watson happened to visit the Olivetti showroom on Fifth Avenue in New York City where

typewriters in a variety of bright colors were placed on pedestals out front and available for use by passersby. Up until that time, Watson told business executives in 1975, like Henry Ford's Model T, "you could have an IBM typewriter in any color as long as it was black." Watson discovered Olivetti's wide-ranging design program that involved graphics, product design, and architecture, of its plants and even employee housing.

IBM subsequently invited Noyes to a design conference, and the firm tried to get him to work fulltime. Noyes, however, preferred the role of adviser, and agreed in 1956 to spend about half of his time as an IBM consultant, an arrangement that continued until his death in 1977. He also designed a few buildings for the company, including the stone-walled Management Development Center in Armonk, N.Y., where Watson has his office today. Noyes brought graphics designer Paul Rand into the IBM fold—he did the striped IBM logo—as well as exhibits designer and film maker Charles Eames.

Between 1956 and 1971 while he was in charge, Watson says, IBM built some 150 office buildings, manufacturing facilities, and laboratories. Watson puts his design concept for IBM succinctly: "We were trying to look like what we produced. We were on the cutting edge technologically and wanted to be on the cutting edge architecturally." He credits architects with enhancing the image of the company and believes that IBM, by using the best architects, advanced the cause of architecture.

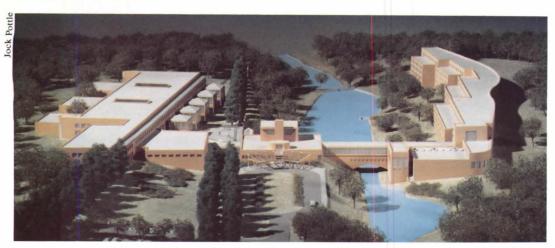
In reviewing all IBM-related design, "Noyes was," says Watson, "a design dictator, but he never dictated." The architectural selection process, with Noyes suggesting five or so names for review—Watson compares the approach to the civic role taken by J. Irwin Miller, Hon. AIA, in Columbus, Ind. (see June '84, page 62)—evolved gradually.

In 1956, at about the same time that IBM decided to build a new manufacturing plant in Rochester, Minn., Eero Saarinen

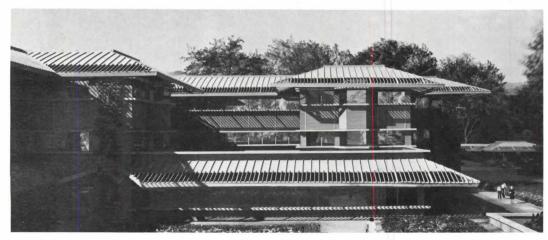
Opposite, Edward L. Barnes' green granite tower for IBM in New York City. Below, two stylistically disparate designs by MBT Associates for IBM near San Jose—the decade-old Santa Teresa laboratory (left) and the just-finished Almaden laboratory.

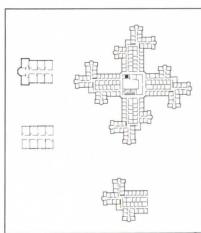






IBM projects in the works. Across page, model of the 50-story, copperroofed Atlantic Center, an IBM joint venture with Cadillac-Fairview in Atlanta's Midtown neighborhood, designed by Philip Johnson and John Burgee. Left above, model of Mitchell/Giurgola's curvilinear scheme for a domestic-scaled executive education center in Palisades, N.Y. Left below, model of threelevel Hudson Hills, N.Y., research laboratory by Kevin Roche, who organized facility by combining individual offices into ever-larger groups in repeating pattern (see plan).





appeared on the cover of *Time* magazine. Noyes suggested Watson invite him to lunch. That was the beginning of a lasting friendship, and Watson recalls with feeling that IBM placed a plaque to Saarinen's memory at the Thomas J. Watson Research Center in Yorktown Heights, N.Y. IBM commissioned Saarinen to design that facility in 1958 and it was completed in 1961, the year Saarinen died. Evidence of Saarinen's IBM connection still crops up today: Those ubiquitous television and print advertisements for the IBM personal computer feature a Charlie Chaplin look-alike working at a Saarinen-designed pedestal table and chair.

Saarinen proved himself with the Miesian-styled Rochester manufacturing complex, for which his firm devised a 5/16-inch-thick porcelainized aluminum exterior wall panel that would insulate against the severe cold of the northern plains (it was the equivalent of a 16-inch brick wall). For the research center, he designed a huge arc of a building sheathed in black glass. The end walls were constructed of locally quarried stone. The building, which cost only \$23 per square foot when built, started out as a fifth of a circle, but in recent years has been expanded twice, to about a third by Roche Dinkeloo. The additions, planned from the start, are seamless.

Kevin Roche, who likens the task to "finishing a painting," has just designed a new laboratory for IBM only a half-mile away in physical distance but light-years in concept. Constructed in brick with trellises and awnings, the residentially scaled Hudson Hills lab, due to start construction this summer, almost seems the antithesis of the sleek modernism of the Yorktown Heights facility.

Shortly after Saarinen got his first IBM job, Marcel Breuer was suggested to Watson by Noyes as someone who understood European architectural problems, and Breuer designed an IBM laboratory at La Gaude, France. (After that, says Watson, "We began to get noticed for our architecture.") As at the Watson Research Center, IBM has returned to a successor firm for changes, and Gatje Papachristou Smith is working at La Gaude as well as at Boca Raton, Fla., another Breuer-designed facility.

In the early 1960s, IBM established a real estate and construction division (RECD), and at the same time embarked on a cost-cutting crusade. Package builders began to appear along-side illustrious architects on lists of IBM building designers. Some

saw simple economy as the motivation for the cutback, others believed that the flourishing corporation was trying to project a leaner image. As *Architectural Forum* reported in March 1966, "IBM wanted austerity at any price."

In a letter to the magazine published two months later, Watson took issue with the story, contending that IBM had not given up on its concern for architectural quality, but, he wrote, "We want quality at the least possible cost."

Clearly, however, times had changed, and IBM was no longer the small manufacturer it once was. As one measure, IBM's gross income from sales, service, and rentals of equipment jumped from \$734 million in 1956 to \$4.3 billion a decade later (it would nearly double in the next five years to \$8.3 billion; in 1985 the figure was more than \$50 billion). Thus, for a huge company with interests all around the world, Watson had many more things on his mind than architecture.

In 1971, Watson stepped down as chief executive officer, and what had been for him a personal cause was not for his successors. As in any company, a new CEO wants to make his own mark. Furthermore, there was growing interest in the company's bottom line and a desire to spend capital on research and equipment, not on buildings.

Lastly, with sustained economic growth, there was a tremendous increase in the number of employees—from 72,000 in 1956 to 265,000 in 1971. As a result, IBM became very corporate, some would say bureaucratic. Thus, a variety of factors was to the detriment of architecture.

There were exceptions: For its offices in Chicago, IBM commissioned what was to be one of Mies van der Rohe's last buildings. Gunnar Birkerts, FAIA, designed two superior IBM buildings, a mirrored box in the woods at Sterling Forest, N.Y., and mid-rise office building in Southfield, Mich., whose innovative, narrow windows were designed especially for energy savings. McCue Boone Tomsick designed a sleek, gleaming silver machine—IBM's Santa Teresa Laboratory—in a natural, grassy bowl near San Jose, the first IBM building to win an AIA honor award (1977). That success led to the appointment of Gerald McCue as design consultant. Edward Larrabee Barnes, FAIA, completed the headquarters for IBM World Trade, a recessive building in

a park-like setting in Mount Pleasant, N.Y., a job that led to his commission for IBM's 43-story, green granite, New York City building at 590 Madison Avenue.

McCue reports that in 1978, when he started his job as design consultant, he was "startled at the mixed quality of IBM architecture there was around the globe. The batting average was low. For every one published in a magazine, there were several that were clunkers." He attributes the decline to two reasons—RECD was not very architecture-conscious and no attention was paid to leased space. One close observer explains that Eliot Noyes, whose role at IBM was based on his friendship with the chairman, saw his work diminished with Watson's departure, and he spent less and less time there in his last years.

Starting slowly after succeeding Noyes, McCue took a "pep talk" approach, a method favored by the Watsons. Describing his efforts as "consciousness-raising," McCue says he tries to give design a higher profile by educating the RECD staff. "My role is to bring up issues and questions IBM should be worried about," he says. Both here and overseas, McCue, who has been described as IBM's "architectural conscience," reports he will take IBM managers to dinner and talk about architects and architecture. Notes Edward Barnes, "McCue travels everywhere. He gives the same scrutiny to Spain as to St. Louis." James S. Polshek, FAIA, who is remodeling a 1960s-modern office building in White Plains, N.Y., for IBM, says, "McCue is IBM's Baron Haussmann."

Increasingly, IBM is making use of another real estate solution—joint ventures with developers. Although a small percentage of the company's total real estate portfolio, they are receiving a lot of media attention because of the designers involved.

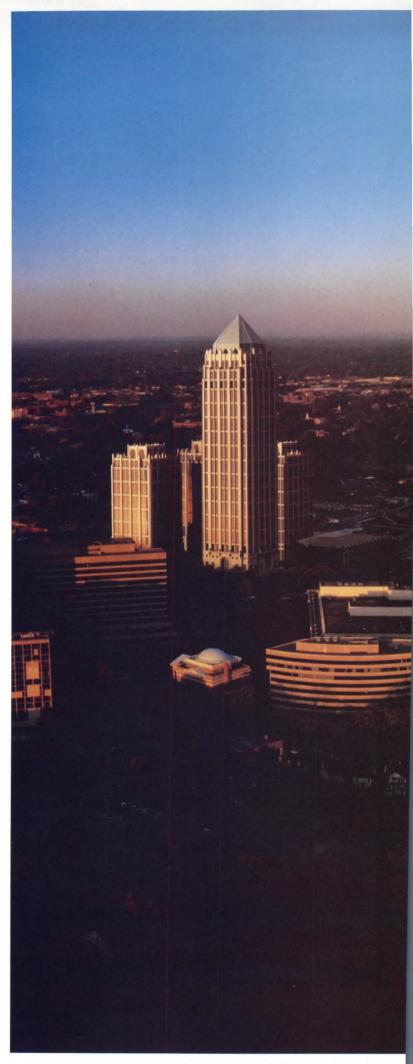
Developer Robert F. Magurie III of Maguire Thomas Partners, which has three joint ventures in the works with IBM—in Philadelphia, Minneapolis, and Dallas—says that "most corporate clients, unless there is a strong chief executive officer, don't want to experiment with design architects. They are obsessed with the budget and are terrified to work with Pei or Johnson. They are more comfortable with a good production firm." Maguire's approach to development is studying it as urban problem-solving with teams of architects, planners, and landscape architects. He finds that IBM welcomes this method, which "indicates their willingness to innovate. You're not dragging someone along."

In Philadelphia's Commerce Square complex—twin, 40-story towers designed by Henry N. Cobb, FAIA, of the Pei office—Maguire is trying to figure out "what we can do as a cultural contribution to the city" and has a team that includes Cobb, landscape architect Laurie Olin, and Venturi, Rauch & Scott Brown. "That's the fun of this," says Maguire. "Lots of companies would say you're nuts, but IBM is very receptive."

Such projects appeal to RECD President Arthur J. Hedge Jr. because, "We can make a statement." To IBM that is important. "The company believes it ought to contribute to the urban environment," Hedge explains. "Why do something badly?"

Hedge, who took over last August and, unlike most of his predecessors at RECD, has a sensitivity to and growing knowledge of architecture, insists that prominent architects are not the issue—competence is. Hedge says that "IBM is not interested in trendy things. We want buildings that will contribute over a long period of time." As Malcolm S. Whyte, AIA, IBM's manager of architectural and interior design and the company's senior registered architect, puts it, the company is not concerned with "the flavor-of-the-month." And, Hedge declares, "We're not looking for the most acclaimed building in town. We're trying to add to the environment."

Hedge's claim notwithstanding, John Burgee, FAIA, believes IBM is "very interested in how the public perceives them. They are progressive, on the cutting edge, but wouldn't build the Pompidou Center. Humana couldn't be theirs. This is about as far out as they would go." "This" refers to Atlantic Center, a four-building complex whose centerpiece is a Gothic-looking, stone-clad tower with a pointed copper roof. The project, now in construction in Atlanta, is a joint venture with Cadillac-Fairview. Says Burgee, "They liked it, but weren't sure it projected that they



were a company on the leading edge of the mainstream. They are not stodgy, but not avant-garde either, and wanted to know where their building fit in architecture today."

That also raises the elusive subject of image. At another meeting concerning Atlantic Center, Burgee recalls that after the architects proposed a design concept, an IBM official said, "That doesn't project IBM's image." RECD President Hedge interjected, "You can't use that term. You've got to be able to say what IBM's image is, and there isn't any such image you can project."

Theodore J. Musho, AIA, of the Pei firm, which has completed two projects (one, an office building in Purchase, N.Y., is a 1986 honor award winner—see May, page 214) and has another three in design or construction, says, "The image is not stated, but they can recognize it when they see it." Romaldo Giurgola, FAIA, who is working on two buildings for IBM—an executive education center in Palisades, N.Y., and the office complex in Dallas—says, "IBM doesn't try for a global image. Their buildings reflect their concern for the environment and local issues." Hedge puts it quite simply: If IBM wanted a precise design image, the corporation would "hire the same architect each time. But IBM, most assuredly, does not."

Architect selection for IBM is very subjective, and is one area where design consultant McCue treads lightly. He will comment on the suggestions of firms for specific jobs, but makes it very clear that he will not interview potential architects. IBM makes use of a computerized data base of architects and their work, but does not limit selection solely by firms doing only office buildings, for example. Notes Malcom Whyte, "We are always looking for new and young firms, and we look for evidence of continuity in design." IBM does try to use local architects where possible, believing that, especially overseas, those professionals will better understand the culture. Adds Whyte, who went recently to Denmark to evaluate firms, "It is subjective, but we are looking for appropriate architecture. If you pick the appropriate architect, you will get appropriate design." IBM avoids the cookie-cutter syndrome, opting for the local vernacular.

The company makes up a list of three to five firms, and, according to Whyte, the firms are ranked in order of preference by a panel of RECD staff that will be working on the project. Then the first-rated firm is interviewed, and if an agreement on the scope of work and the fee is reached, the process ends. Notes Whyte, "The others never knew they were on the list." It is a procedure that IBM likes because it precludes bidding, or the appearance of bidding, says Whyte, for architectural services. Having done as much work as they have around the world, Whyte explains that IBM has a sense of the appropriate fee.

Procedurally, IBM is very tough with its architects. "The contract is an awesome and intimidating document," says Robert F. Gatje, FAIA, a partner of Marcel Breuer who has worked extensively for IBM, "designed to safeguard the company's interests." Notes one architect who has been through IBM's well-designed hoops several times, "If you don't read the contract carefully, you could wind up in jail." According to another architect who has worked with IBM, "The language is self-serving, but IBM thinks the AIA documents are self-serving to architects." In practice, however, contracts are "interpreted in a more humane, reasonable manner," says Gatje. Despite the tough language, an architect who is demanding can win concessions if IBM wants that designer bad enough. Gatje says IBM changed several clauses for Breuer, for example.

Many architects express concern over the lack of user input, especially for office buildings. The company justifies its approach, believing its office space should be nearly generic and available for use by any IBM division. Gunnar Birkerts describes the architecture as speculative in quality, not corporate, so that IBM "could recycle the building if necessary, or sell it." For the mammoth mixed use complex in Dallas for IBM and Maguire Thomas Partners, Paul Broches, AIA, the Mitchell/Giurgola partner in charge, worries that in the emphasis on skin and core, IBM may lose something. But, notes Gerald McCue, "RECD's business is not creating architecture. It is housing employees, managing space, and meeting environmental standards."

Architects do receive user input on such buildings as laboratories, and that is one reason that the new Almaden Research Center, just a few miles from the Santa Teresa facility, looks the way it does. The scientists wanted something different, says Michael M. Hearn, AIA, of MBT Associates. Because of the neighboring universities, and IBM's relationship with them, "they wanted a building more like a campus, more ivory towerish." RECD had been thinking in more straightforward, egalitarian terms, which left Hearn stuck in the middle of a skirmish, he notes.

Design review of the initial concept is second in importance only to architect selection among RECD's development tasks, says Malcolm Whyte. IBM often requires architects to develop alternate schemes—Edward Barnes reports he did two for 590 Madison and Theodore Musho of the Pei office says that for the 1.2 million-square-foot office complex now under construction in Somers, N.Y., there were three and for the light-filled pavilion addition to the corporate headquarters in Armonk, a half-dozen.

Hedge declares, "Our job is to critique, not to design." (Hedge also believes it would be a mistake to "hire a great architect and not let him design.") He oversees a staff of 1,000 at RECD, half of whom are connected with development activities—there are 70 architects and designers—and the remainder who are involved with construction building management functions such as engineering, purchasing, security, and cafeteria operations. Ironically, for a company so concerned about design, RECD is housed in a 1970s-modern, speculative office building of little esthetic interest in White Plains. (It is scheduled to move to Stamford, Conn., early next year.)

The company believes that design review, which includes money for testing and for building facade sections and work stations, for example, offers the benefit of many eyes seeing possible problems to be avoided before the concrete is set. Whyte, whom one architect describes as IBM's "inside design guru," says IBM welcomes innovation, but is aware from its years of experience what will work and what will not. Robert Gatje notes that they "always respond to arguments based on better architecture." But they also know the difference between quality and luxury.

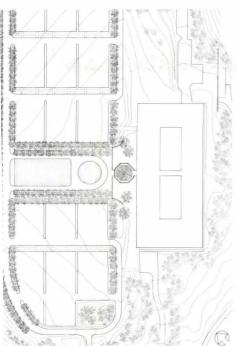
McCue plays a large role in design review, where he says he calls the shots as he sees them. "Architects expect me to be on their side," he says, "and IBM expects me to take their position, but I speak my mind with no concern for the political consequences." That, McCue notes, is the best part of being an outsider, and it seems to be working. He says that the company seems in no mood to change.

There seems to be near universal belief among architects that IBM is a very knowledgeable client, albeit a very tough and demanding one that knows its business. Notes MacGregor Freeman of Benjamin Thompson Associates, which has been working on a variety of IBM jobs since 1977, "They are able to field a greater team of experts than you on any issue." That said, IBM can be bureaucratic, like any large company—meetings with as many as 25 RECD staffers are not unheard of—and despite the fact that decisions are reached, some architects think buildings take a year longer than if done by a developer. Edward Barnes says, "The process has all the benefits of checks and balances, leaving little chance for error." He adds that because of their system, "IBM is not a Medici. They don't make mistakes, they get very solid, good buildings."

Kevin Roche says that despite the bureaucracy and "everyone watching his tail," IBM is "very proud of its architecture and maintains its buildings well. That makes them good to work for. . . . They really make you work. They challenge architects."

Overall, the climate for architecture is much improved, even in the last year. "Hedge has simplified the process and made work for IBM much easier," says I.M. Pei, FAIA, who adds, "He is doing what has been missing since the days of Watson." Robert Maguire agrees, adding that under Hedge he sees "a huge change in receptiveness to architecture." Declares James Polshek, "IBM today is like the IBM that used to be."

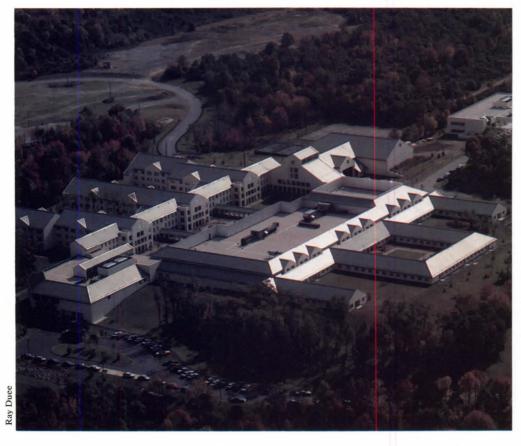




Tn the early 1960s, Gordon Bunshaft, FAIA, of Skidmore, Owings & Merrill/ ■ New York designed IBM's corporate headquarters in Armonk, N.Y. The entrance was on the second level, accessible from concrete ramps resembling those on an interstate highway. Recently IBM, dissatisfied with that entry, asked I.M. Pei, FAIA, to try his hand at a new solution. After considering a number of possibilities, Pei decided that a glazed, pyramidal pavilion, totally sympathetic to the original design and employing the same tapered, precast concrete columns, was best. Says Pei, "You gain by reinforcing, not ignoring each other. What you lose in originality, you earn in respect." The octagonal space, under a skylight composed of 192 reflecting-glass triangles, encloses 5,000 square feet. Visitors now arrive via a tree-lined ceremonial drive, entering on the ground level where a reception desk is flanked by broad, curving stairs on either side. -C.K. III



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he latest manifestation of IBM's long-standing commitment to education of its employees is the consolidation of three schools formerly located in New York City into the Corporate Technical Institutes at Thornwood. N.Y. Ted Niederman, AIA, of RTKL, the architect of the 285,000-square-foot complex that opened last fall, combined the Westchester County country house vernacular with that of grand resort hotels to create a hilltop facility that is compatible with the baronial architecture of the area. "We did not want it to look like a community college," he declares, pointing to the large, sloping roofs covered with green-painted steel decking, individual punched windows, and cream-colored brick, all of which helps contribute to the non-institutional appearance, day and night.

The facility is carefully zoned (aerial

view, above) with the 250 single-person rooms in three-story wings separated by courtyards from the academic block, which includes classrooms and a 250-seat auditorium. Faculty offices extend out from the academic block creating additional open and closed courtyards. At one end, the double-height lobby (photo, right) and gymnasium are paired and divided by the porte-cochere entrance, while at the other the employee cafeteria overlooks a pond. Architectural interest is created in the lobby and cafeteria by large openings that pierce the upper walls. All the units are interconnected by glazed passageways across and around the edge of the interior courtyards, providing year-round weather protection. These courtyards, combined with the heavily wooded site, gives students, who spend up to 10 weeks there, a constant sense of the outdoors.

-C.K.III

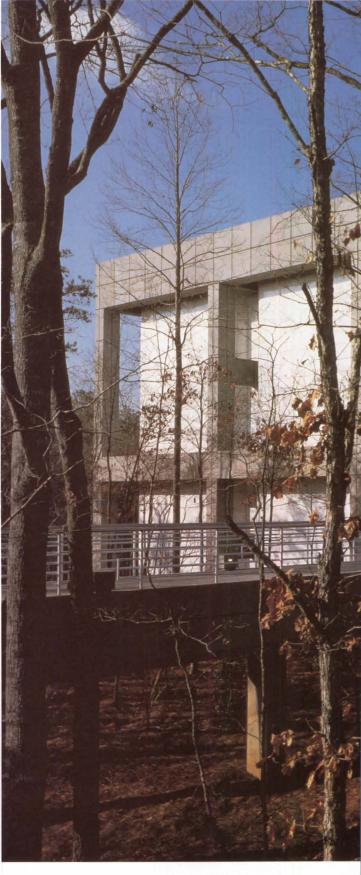












In this Northwest Atlanta building next to the Chattahoochee National Forest, IBM trains its field engineers, the people who repair, maintain, and modify the company's computers nationwide. The architect, Cooper Carry & Associates of Atlanta, preserved the rolling site, nestling the 220,000-square-foot building among tall oaks and pines. A pedestrian bridge, visible at lower left in the exterior photo above, connects the top level of the

parking garage to the second level of the building.

Cooper Carry separated the building's two major components—laboratories and classrooms—and put them on the top floors of two four-story blocks. The second floor largely contains support functions, including a cafeteria and meeting rooms, and the first has a graphic arts studio and a television studio where IBM produces instructional tapes and then

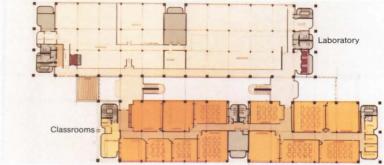
transmits them worldwide via satellite.

Between the two parts of the building is a 30-foot-wide corridor spine crowned by a barrel-vaulted, aluminum-frame skylight (top left). The spine's cladding is the same as the exterior's: precast concrete strongly expressive of structure, inset curved porcelain enamel panels, and glass set off by deep mullions that provide texture and shadow lines. The floor is granite with a polished accent band. Upper level



orridors are carpeted in wool.

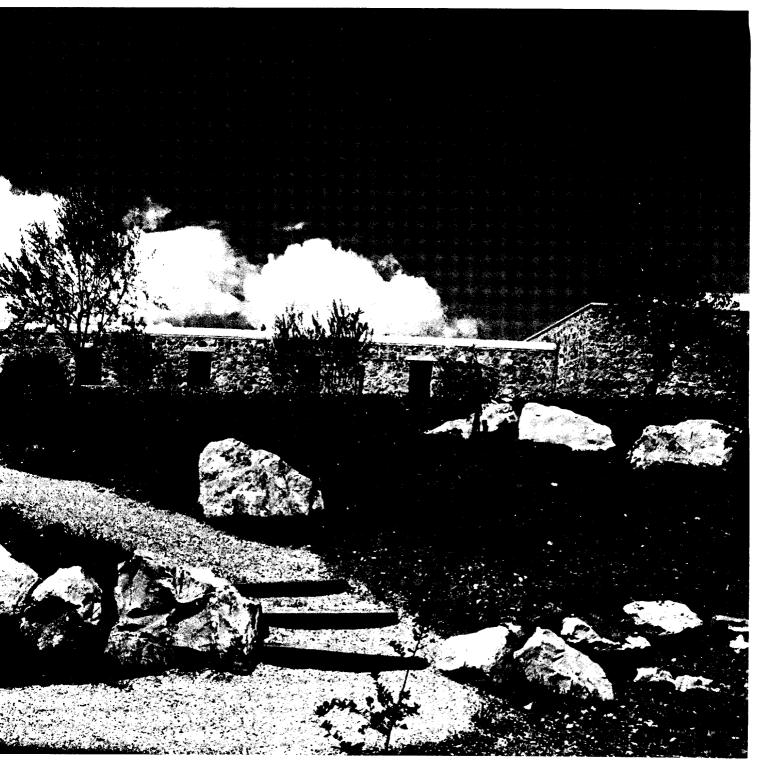
Because the building is used around the lock—there are three eight-hour training essions to get the most use out of expensions. essions to get the most use out of expenive computer equipment—the architect vaid close attention to lighting design within the spine. Here neon strips, partially concealed by aluminum baffles, occupy vertical niches in the precast panels above left), a cool touch for warm Georia nights.—A.F.

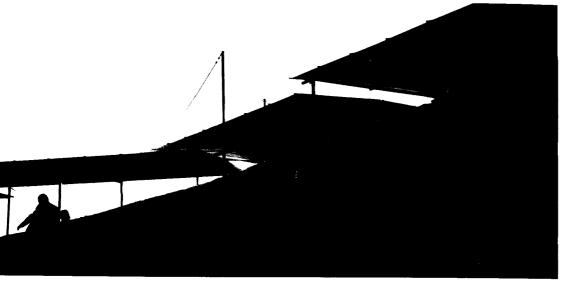


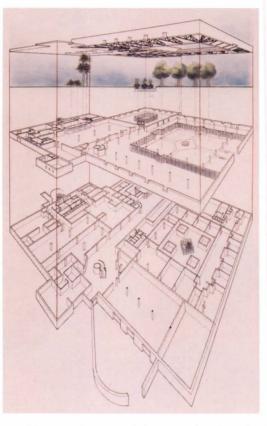




This building provides food service and communal facilities for employees of a large IBM plant in Montpelier, France, a rugged place situated between the mountains and the Mediterranean. As designed by the architect and industrial designer Marc Held of Paris, it is very much of the place. The two-level, partly underground building, in fact, seems to grow from its rocky site. There are three principal elements, a restaurant seating 1,000 ringing a dining courtyard serving 400 in pleasant weather (above left); a large coffee lounge surrounding a two-story light court with pool and fountain (overleaf); and the kitchen and support facilities. The food service areas are walled in rough-hewn stone, with wooden joinery and sloping roof.

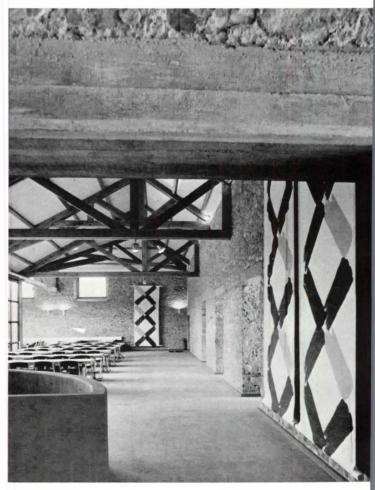




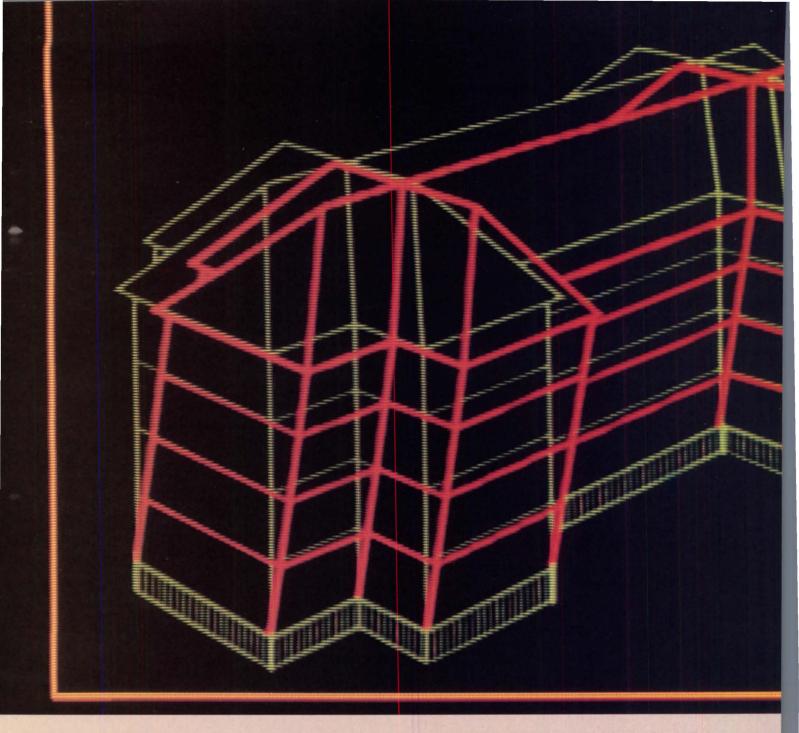


The massiveness of the stone is relieved by playfulness of detail and decoration. The coffee lounge, above right, is elegant in black and white, with supergraphics on walls, tiled floor, and sculpted columns. The restaurant, right, is more rugged and countrylike, with exposed trusses, stone walls, and laminated wood columns sitting on mushroom-like pods of concrete. The chairs here, which perch on tables when not in use so the floor can be cleaned, are of the architect's design. Far right, the glass walled water court off of the coffee lounge displaying one of the wooden columns. Landscaping is as rugged as the building and relies on local plant materials.-D.C.









HOW TO COPE WITH EXTREME STRESS.

When the rumbling subsided on May 2, 1983, much of downtown Coalinga lay in ruins. It was the fourth largest quake to hit California during this century, jolting the Richter scale at 6.5.

Amidst the rubble of brick and concrete block, however, newer "stick-built" structures remained intact. So much, in fact, that many escaped visible signs of damage.

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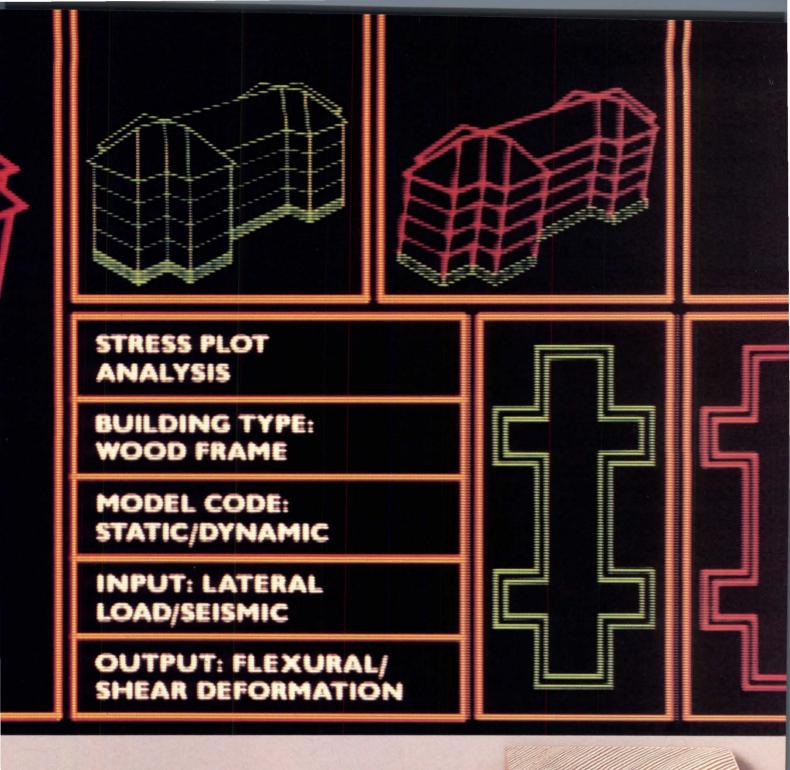
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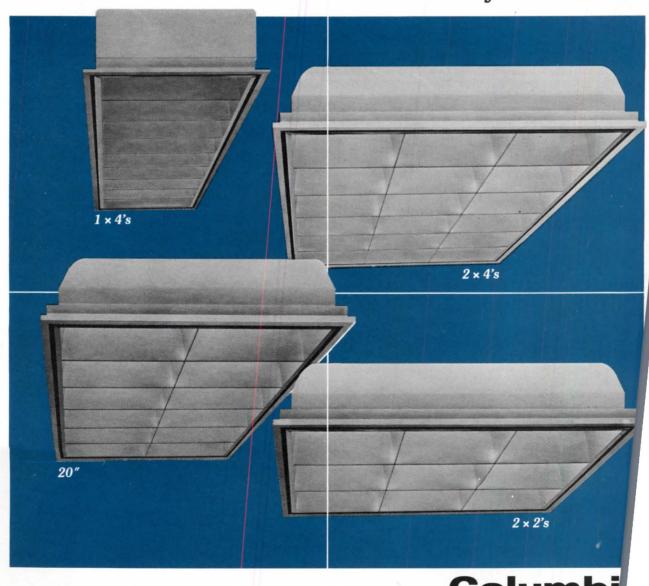
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BOOKS



Erik Gunnar Asplund's Compelling Compositions

Asplund. Claes Caldenby and Olof Hulton. (Rizzoli, \$35.)

Those who have walked along the stone pathway leading to Erik Gunnar Asplund's Woodland Crematorium (1935-40) in Stockholm have experienced one of the truly compelling pieces of 20th century architecture. The positioning of the primary architectural elements-loggia, wall, and cross—allows the naturalistic qualities of the environment to dominate the composition. As one is struck by the naturalistic qualities of Woodland, one is just as taken by the urbane, sensitive tension created between Göteborg's old Town Hall of 1672 and Asplund's law courts addition (1934-37), which bespeaks an architecture of acknowledgement and respect two distinct elements that necessarily rely upon each other to achieve their full compositional potential. Such was Aspund's ability, recognized by his contemporaries and still appreciated today.

In the past half dozen years, interest in

Asplund has grown substantially. Books about him have been published, and recently three major exhibitions were mounted in Stockholm to mark the centenary of his birth (1885). In concert with the informative catalog that accompanied the exhibition is this beautiful volume. With its large, square format and superb selection of color photographs, this book is an excellent addition to the corpus of literature currently available on the architect. Six essays comprise the body of the text, giving appropriate background information, along with the critical assessment necessary for evaluating the illustrative material. Complementing the text are the splendid color photographs of 15 works that span Asplund's 30-year career. Arranged chronologically, the illustrations range in scope from overall views to details.

Claes Caldenby provides a synoptic overview of Asplund's career in his essay, "Time, Life and Work." Carl-Axel Acking, who worked for Asplund during Asplund's last years of practice, furnishes an intimate glimpse into Asplund's working methods and design concerns in the essay

Above, the Way of the Cross at Asplund's Woodland Cemetery south of Stockholm.

"Artist and Professional." In "Snellman Step by Step," Gosta Drugge analyzes the evolution of the plans and facade composition of the Villa Snellman in Djursholm (1917-18), using Asplund's early pencil sketches and drawings to illustrate the design process.

Three essays focus more specifically upon interpreting and critically assessing the content and meaning of Asplund's architecture. Elias Cornell, in "The Sky as a Vault," analyzes Asplund's conception and articulation of space, emphasizing two recurring themes: Asplund's concern with the sequence to and through his buildings and his focus on the ceiling as a surface for articulating and imparting spatial qualities.

Kenneth Frampton's "Stockholm 1930" assesses Asplund's exhibition within the wider context of Scandinavian functionalism, not only drawing attention to the influence of Russian constructivism upon the design of the exhibition, but further

continued on page 78

Books from page 77

addressing the particular legacy associated with Swedish modernism in the 1930s.

In "Landscape and Architecture," Stuart Wrede discusses the sensibilities that formed Asplund's attitude toward landscape design as an essential part of his architectural compositions. Asplund's ability in this area contrasts sharply with the apparent indifference toward landscape design generally witnessed in modern architecture.

Together, these three essays provide valuable insights into the rich and expressive architectural language developed by Asplund.—WILLIAM C. MILLER, AIA

Mr. Miller, author of Alvar Aalto: An Annotated Bibliography, is a professor at Kansas State University's department of architecture.

Frank Lloyd Wright and Le Corbusier: The Great Dialogue. Thomas Doremus. (Van Nostrand Reinhold, \$35.)

The premise of this book is that, contrary to common belief, the two great architects that are its subject were closely aligned in their theoretical and practical

approaches to architecture. Doremus makes the claim that both men were modernists and used similar criteria for developing their architecture.

Doremus begins by comparing their careers, noting how similar their experiences were in apprenticeship to designers famous for their work in the development of modern structural systems, an early eclectic period of prototypical house designs, publicity, retrenchment, and renascence. What made the two different from other 20th century architects was the "phenomena of their late careers."

More important than the discussion of chronology, however, is Doremus' development of a critical framework within which the work of Wright and Le Corbusier may be analyzed. He uses the Vitruvian triumvirate, modified by Christian Norberg-Schulz, which results in the categories of form (venustas), function (utilitas), building technology (firmitas), and iconography (symbolic and archetypal elements). Noting that Charles Jencks has included communication as one of the failures of modern architecture, Doremus asserts that the communicative ability of Wright's and Le Corbusier's architecture

was the clearest property that set them apart from their contemporaries.

Doremus admits that it would be impossible to prove the notion that either of these two master architects directly influenced the other. It is in this regard that the book's chief deficiency lies, for we are asked to accept on faith that the two were not only aware of each other's work, but acknowledged the other's influence. Though Doremus admits to the paucity of the material linking these two great architects, he nevertheless asks the reader to imagine how strong the links might have been. Although the premise is an intriguing one, it is not clear how the tenuous relationship between Wright and Le Corbusier could be termed "the great dialogue," as the book's subtitle suggests.

Doremus writes clearly, without obfuscation, and his ideas are readily understood. The chapter on "modernism defined" is the strongest in the book, showing how Wright and Le Corbusier were participants in modernism and, therefore, adhered to common principles. Doremus makes the point that architecture is a process, and both Wright and Le Corbusier were constantly interacting with the social, economic, and technological influences of their lives in order to develop their work. In the end, Doremus' argument is provocative, but not quite convincing.

-PHILIP S. KENNEDY-GRANT, AIA

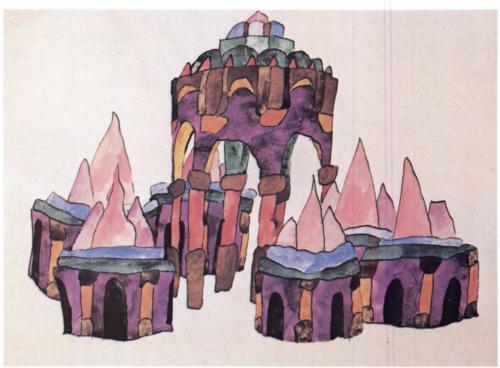
Mr. Kennedy-Grant is coordinator of design, Office of Architect & Planner Barrett Allen Ginsberg, AIA, Bedminster, N.J.

Dallas Architecture 1936-1986. Doug Tomlinson and David Dillon. (Texas Monthly Press, \$29.95.)

The intent of this volume, according to the authors, is to present "... the first critical history of Dallas architecture, and the first to take a close look at the consequence of the biggest building boom in the city's history. . . . " To accomplish this task they have played off an elegant set of beautifully reproduced photographs (taken by one of the coauthors, Doug Tomlinson), against the text written by David Dillon, the architecture critic for the Dallas Morning News and Architecture contributing editor. The authors have opened their tale with a glance back at the art deco styled Texas Centennial Exposition held in Dallas in 1936; and they conclude with a discussion of the restoration of the buildings and grounds of that exposition which is currently taking place. Between these two events they have woven in a history of the city's architecture, and a separate chapter dealing with city planning in Dallas from the early 1900s to the present.

As occurs quite often, it seems, the title of the book does not really reflect its contents. Essentially this volume encompasses two highly independent parts: a

continued on page 81

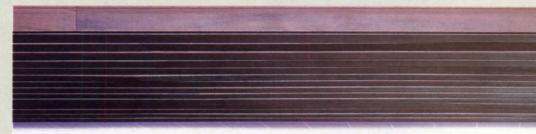


Expressionist Architecture in Drawings. Wolfgang Pehnt. (Van Nostrand Reinhold, \$24.95.) This handsome book supplements Wolfgang Pehnt's authoritative work Expressionist Architecture (1973). Collected here are 115 representative drawings (12 in color) done by German and Dutch expressionist architects during the period that movement flourished, especially in the 1920s. Architectural commissions were hard to come by in the days following World War I, but with drawings the architects "could envisage crystal domes, bridges between Alpine peaks, skyscraping cities, and humanoriented settlements regardless of the division of labor and its strictures. Only when they were content to rule over a sheet of paper were architects truly kings. . . . " Paul Goesch (1885-1940), who was executed by the National Socialists, is not as well known as other expressionist architects, among them Bruno Taut, Hans Scharoun, Erich Mendelsohn, and Otto Bartning, but his study in watercolor and india ink of a temple (ca. 1920) shown above is indicative of work done by expressionists when the sketchbook was a substitute for commissions at a time when "pencil and charcoal, pen and brush, enabled them to capture, far from the compulsions of the building site, every passing fancy and heartfelt wish."

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Books from page 78

picture book presentation of buildings and he landscape of present day Dallas, and a group of loose, almost impressionistic, essays. Neither of these sections adds up o anything approaching a traditional hisory of an urban environment. The authors provide themselves with an out, to be sure, referring to their approach as "selecive and highly personal," which indeed t is. In their chapters presenting the hisory of Dallas architecture by decades, hey have discussed certain episodes, buildngs, and personages that happen to interest them. And their major interest is anything in the community that is major and big, i.e., highrise office buildings, najor commercial/office complexes, the airport, the freeway system, and a small number of public buildings.

In reading the story of architecture and city planning in Dallas since 1936, one comes away with a feeling that if this or hat specific event and the names were changed, then what the authors portray s no different in essence from the hisory of other major American cities. And he authors end up playing a game with heir readers. At one moment they are perceptive and critical, and at other noments they display an optimism that s usually not very convincing. But in the end, the text and the photographs are well worth reading and looking at, for they do pointedly illustrate America's generally lismal record in city planning and the equally dismal results of the architectural professionals who have lent themselves o the gross world of unbridled speculaive development.—David Gевнаrd

Professor Gebhard teaches at the Uniersity of California, Santa Barbara.

etters to Clients. Frank Lloyd Wright. elected and with commentary by Bruce Brooks Pfeiffer. (California State Univerity Press at Fresno, \$21.95 hardbound, 12.95 paperbound.)

Frank Lloyd Wright's Letters to Apprences (1982) and Letters to Architects 1984), previously reviewed in these pages, re now joined by this book. The letters ere have been selected from thousands) focus primarily upon 16 of Wright's uildings. Among them are letters to and om Edgar Kaufmann about the much Imired Fallingwater, but there are also tters to and from 12-year-old Jim Berger ho wanted a doghouse designed to match ie house Wright had built for his father. Il the letters reveal a close relationship; right chides the clients, advises them, lmires them, reminds them constantly out overdue fees and payments. Bruce rooks Pfeiffer's commentary is insightful. here's an interesting note on the back the paperback edition that points to the

ct that there is one omission in this book there's nothing about the Guggenheim useum. The long struggle over that iilding is "more the stuff of drama than of architecture. Its small mountain of correspondence is a volume in itself, and essentially a statement in human terms." It will be published separately as *The Guggenheim Correspondence*.

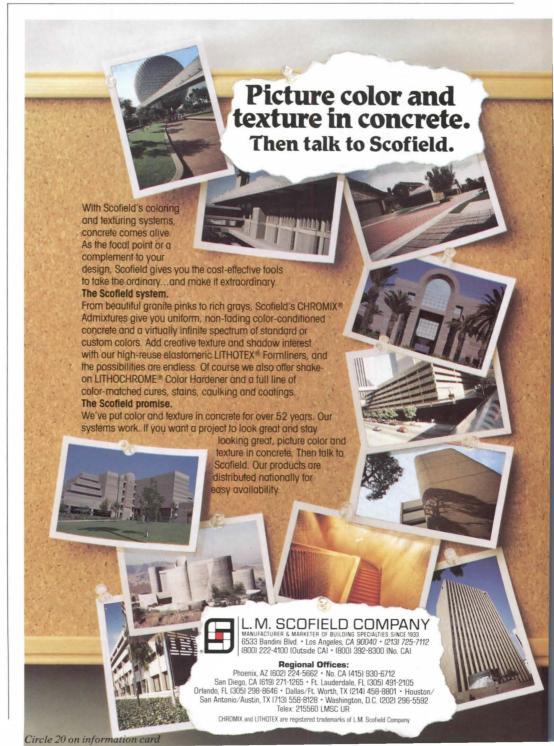
Hudson River Villas. John Zukowsky and Robbe Pierce Stimson. (Rizzoli, \$45.)

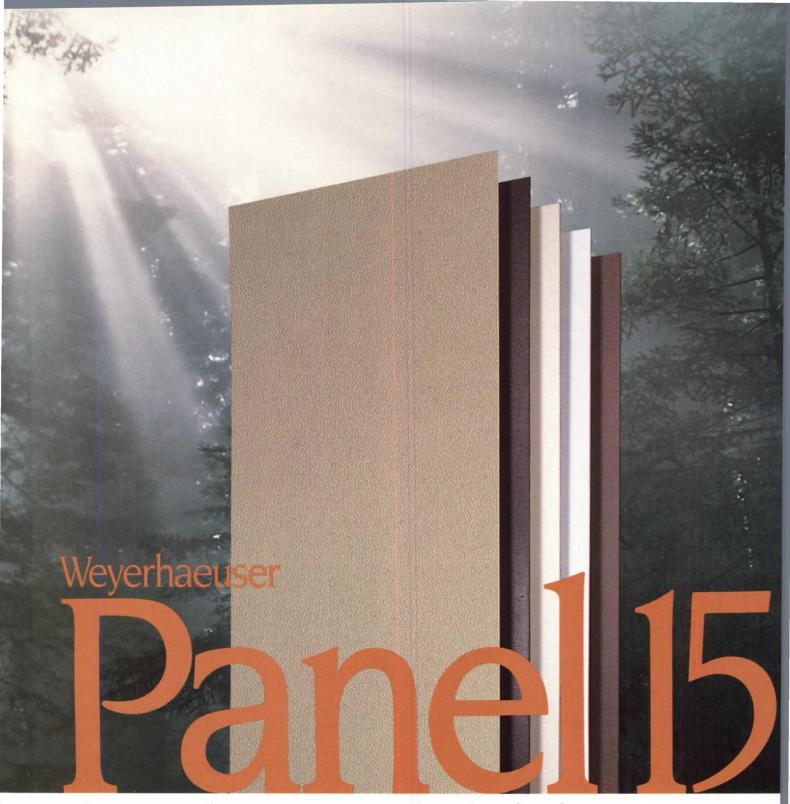
Since the late 17th and early 18th centuries, luxurious villas have been built by affluent people along the banks of the Hudson River between Manhattan and Albany. These opulent estates reflect the architectural fads of their time, ranging from early Dutch colonial manors through Gothic revival castles to Beaux-Arts mansions. They have been designed by the likes of such architectural masters as Delano & Aldrich, Richard Morris Hunt, and McKim, Mead & White. This handsome book, filled with photographs, documents 123 of these splendid residences.

Richard Neutra: Promise and Fulfillment, 1919-1932; Selections from the Letters and Diaries of Richard and Dione Neutra.

Compiled and translated by Dione Neutra. (Southern Illinois University Press, no price given.)

Married to Richard Neutra (1892-1970) in 1922, Dione Neutra not only provides invaluable insights into the architect's life and work but also gives glimpses of his relationship with other architects, among them Erich Mendelsohn, Louis Sullivan, Frank Lloyd Wright (for whom he named his eldest son), and Rudolph Schindler. The record starts in 1919, with an excerpt from Neutra's diary about meeting Dione. Through letters to and from Richard and Dione Neutra and also to and from many other people, the reader learns about the marriage, Neutra's early struggles, his impressions of American cities, his development as an architect.





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Industrial Fabrics Newsletter.

"Awnings & Architecture," a quarterly newsletter published by the Industrial Fabrics Association International, features awning applications in restorations and new construction and describes different fabrics and their characteristics. For more information, contact the awnings division, IFAI, 345 Cedar Building, Suite 450, St. Paul, Minn. 55101.

Concrete Buildings Awards Entries.

The Portland Cement Association is accepting entries for the 1986 concrete buildings award program. Concrete buildings of all types in the U.S. and Canada completed between September 1984 and September 1986 are eligible for the competition. Entries must be submitted by Sept. 30. Contact Glen Simon, Portland Cement Association, 5420 Old Orchard Road, Skokie, Ill. 60077.

Buffalo Urban Design Competition.

A design competition of ideas for the downtown Buffalo retail core is being sponsored by the City of Buffalo and the School of Architecture and Environmental Design, State University of New York at Buffalo. Prizes totaling \$60,000 will be awarded to the winning designs. Competition packets will be mailed upon receipt of a \$35 entry fee payable to the University of Buffalo Foundation. Aug. 30 is the deadline for submissions. Contact Robert G. Shibley, AIA, School of Architecture and Environmental Design, 3435 Main St., SUNY/Buffalo, Buffalo, N.Y. 14214.

Survey of A/E Billing Rates.

A survey of 1985 design fee structures reports that billing rates for personnel in all design categories increased by 5 to 10 percent over 1984. Sponsored by the *Professional Services Management Journal* and *A/E Marketing Journal*, the survey also contains data on the billing policies of firms and the fee levels for 44 project types. The report is available for \$95 from Practice Management Associates, 10 Midland Ave., Newton, Mass. 02158.

Rome Prize Fellowship Winners.

The American Academy in Rome has named seven winners for the 1986-87 Rome Prize Fellowships in architecture, landscape irchitecture, and design. They are: Nornan Krumholz, president of the Amerian Planning Association and director of he Cleveland Center for Neighborhood Development; William P. Bruder, presilent of his own architectural firm; Jeanne Giordano of the urban division of Rouse & Associates; Julie Riefler, an associate n the graphic design firm of Donovan nd Green; Frederick Biehle, an associte with WPG Design Group; Kathryn 1. Dean, currently with Kohn Pedersen ox; and Elizabeth Dean Hermann, landcape architect with Sasaki Associates.

317 Massachusetts Avenue, Washington, D.C. (page 32). Architect: Weinstein Associates, Washington, D.C. Entrance doors: Dudderer, Floors: Dal-Tile, Cushwa. Handrails: Dudderer, W&W Fabrications. Lighting: Peerless. Bathroom accessories: Bobrick. Water closets: American Standard. Wall surfacing: Cushwa, Cloud Ceramic, Arban. Skylights: American Plate Glass. Locksets: Medico. Panic exit: Von Duprin. Door pulls: Forms + Surfaces. Paint: Benjamin Moore.

Granby Houses, Granby, Conn. (page 34). Architect: Goshow Associates, New York City. Ceiling surfacing system: U.S. Gypsum. Entrance doors: Stanley. Floor surfacing: J.M. Benson. Lighting: Conrans, Progress. Foundation: Ron Cary. Roofing: Owens Corning. Flush valves: American Standard. Plumbing fittings: American Standard. Kitchen: Merrilot, Whirlpool. Stairs: Sanson. Windows: Security. Skylights: Velux. Paint: Cabot, Sherwin Williams, Benjamin Moore.

Lym House, San Francisco (page 37). Architect: Glenn Robert Lym, San Francisco. Framing/exterior contractor: Ryan Associates. Electrical subcontractor: Dan Dodt Co. Doors: Buckley Door, Bonelli Window. Environmental control system: General Electric, Honeywell. Floor surfacing: Trend Manufacturing, Endicott. Lighting: Juno, Prescolit, Lightolier. Waterproofing and sealants: Bird & Son, Lawsar Roofing. Plumbing fittings: American Standard. Tubs and lavatories: Kohler, American Standard. Kitchen: Smithaus. Security and fire detection: Ademco. Wall surfacing: Simpson, Curoco. Windows: Bonelli, Andersen. Skylights: O'Keefe. Hardware: McKinney, Schlage. Paint and stain: Fuller-O'Brien.

Fatapples Restaurant, Berkeley, Calif. (page 40). Architect: David Baker & Associates, Berkeley, Calif. Door entrance: Woodworking Company. Lighting: Abolite, Killark, Manville. Stairs and treads: Burke. Windows: Blomberg. Skylights: Natural Energy Products. Hardware: Norton Traditional, McKinney, Schlage, Von Duprin. Paint: Dunne, Zolotone. Flush valves: Sloan. Plumbing: Chicago. Lavatories: Eljer. Washroom and bathroom accessories: Bobrick. Water closets: Eljer. Kitchen: Hobart. Public seating: Empire.

Arthur Lubetz Associates Office, Pittsburgh (page 44). Architect: Arthur Lubetz Associates, Pittsburgh. Washroom and bathroom accessories: Toobs. Water closets: American Standard. Kitchen: Dwyer. Security and fire detection: Westec. Ceiling surfacing system: U.S. Gypsum. Environmental control systems: Trane. Interior and exterior floor surfacing: Walker & Zanger, Musa. Interior lighting: Ron Rezek, Atelier International,

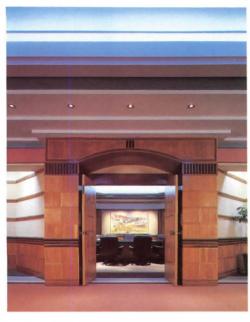
Greater Pittsburgh Neon, L.S.I. Interior and exterior wall surfacing: Trendston, STO Industries, Pittsburgh Corning Glass Block, U.S. Gypsum, Columbus Coated Fabrics. Skylights: Plasteco, Velux, Normbau. Paint: Watson-Standard.

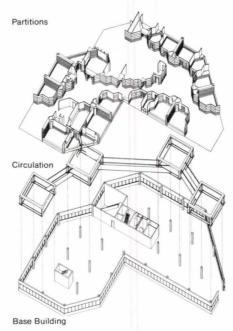
Fiddler's Green House, Lansing, N.Y. (page 48). Architect: Paul J. Byrne, Lansing, N.Y. Doors: Pella. Environmental control systems: Mitsubishi. Floor surfacing: Armstrong. Lighting: Stonco. Waterproofing and sealants: Owens Corning. Toilet stalls: American Standard. Tubs and lavatories: Owens Corning. Laundry: Westinghouse. Windows: Andersen, Vinyl Clad. Exterior paint: C.W.F. Kitchen: All Mode.

Ophthalmology Office, Kalamazoo, Mich. (page 52). Architect: Eckert/Wordell, Kalamazoo, Mich. General contractor: D.V. Builders, Inc. Structural engineer: Stuart H. Eddy, P.E. Landscape architect: O'Boyle, Cowell, Blalock. Consultant: Gordon P. Rogers. Ceiling surfacing system: U.S. Gypsum. Environmental control systems: Bryant. Interior and exterior floor surfacing: Alexander Smith, Armstrong, American Olean. Handrails: O.I.K. Industries. Lighting: Halo. Roofing: Lithonia. Waterproofing and sealants: Celotex. Lavatories: Kohler. Washroom and bathroom accessories: Bobrick. Water closets: Kohler. Water fountains: Elkay. Communication: Utronics. Security and fire detection: Omega. Signage: Mills Manufacturing. Stairs: O.I.K. Industries. Windows: Eagle, U.S. Gypsum. Hardware: Sargent, Stanley, Russwin. Paint: Benjamin Moore. Wood structural trusses: Ottawa Truss. Plaster soffits: U.S. Gypsum. Wood Sheathing: Potlatch.

Green Acres School, Washington, D.C. (page 56). Architect: Bowie-Gridley. Washington, D.C. Interior doors: Ivan C. Dutterer, Allied Steel Products. Environmental control systems: McQuay Group. Floor surfacing: Robbins, Rubber Products, Collins & Aikman, Lee Burlington. Foundation: Trowbridge Steel. Handrails: American Ironworks. Lighting: Hubbell, Emergi Lite, Prescolite, Metalux. Roofing: Follansbee Steel, Carlisle Tire & Rubber. Waterproofing and sealants: Carlisle Tire & Rubber. Roof structure: Perry Steel Sales, Inc. Stairs: American Ironworks. Wall surfacing: Spectra Glaze, Balcon, Arban Association, Pecora. Hardware: Norton, Kawneer, McKinney, Baldwin, Schlage. Panic exit: Van Duprin. Silencers and plates: H.B. Ives, Lindstrom. Paint: Tnemec, Duron. Flush valves: Sloan. Sprinklers: V.A. Sprinkler. Toilet stalls: The Sany Metal Products. Tubs and lavatories: Eljer. Washroom and bathroom accessories: Bobrick. Water closets: Eljer. Water fountains: Eljer, Haws. Public seating and bleachers: Porter. Security and fire detection: Ellenco, Buckeye, J.L. Industries. \square

Interiors







Arranging building blocks horizontally within an irregularly shaped space was the approach of Charles Herbert & Associates of Des Moines, Iowa, for the executive offices of U.S. West, Inc., in Englewood, Colo.

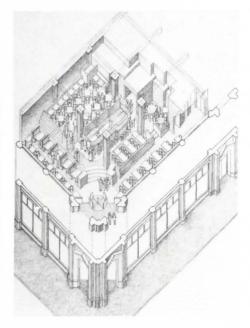
In this 19,000-square-foot space, the architect first placed a series of pavilions, starting at the entrance and ending at the opposite end of the floor—the dining room. Supported by the building's existing columns, the four pavilions are brightly colored; walkways between them are delineated by multihued carpet and indirect linear lighting running the length of the path on either side (left). Both the entrance and dining pavilions have marble floors.

Set along this meandering pathway are partitions that are partially cherry, with mahogany, wenge, and paduak wood trim. Some, but not all, of the administrative assistants' mahogany work spaces are in the open areas; the rest are behind the partitions.

Between the partition walls and the pavilions and pathway is generous space for plants, seasonal flowers, and the company's growing art collection. While seemingly arranged in a random way, the partitions are actually placed on the building's grid or on the diagonal. The overal result is a lively dialogue between the disparate parts. A desire on the part of the client for "openness and informality' lead to glazing office doors and inserting windows into the partitions.

The organization of the office is appropriately horizontal. The seven vice presidents, their administrative assistants, and the employee lounge is in roughly the front half of the office. The chief financial and chief legal officers and the CEC are in the rear, as is the board room.





Baitz, In



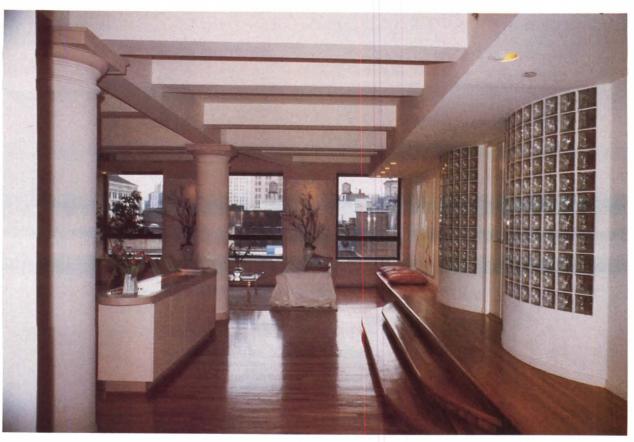
Daitz Inc

T he restaurant Positano is on the first floor of a renovated, 12-story, neo-Gothic building at Park Avenue and 20th Street in New York City. Inside, it is suave Italian, a design based on images from that country's Amalfi Coast. For its design, the New York City firm of Croxton Collaborative borrowed from the notion of an Italian hill town with a piazza at its heart.

One enters through a revolving door, or side doors, and up three tiled steps. This arrangement creates a formal place of arrival, a place to "see and be seen," according to Randy Croxton. Off to the either side of the entrance are seating

areas. The next level has more tables, although the bar—the piazza—becomes the focal point (top). Proceeding up a staircase, one finds an upper level of tables; half-walls conceal the tables from below. This is an especially useful device for closing off this section while not creating a sense that the restaurant is empty.

Formerly the home of a small cardboard manufacturing company, the 17foot-tall space was entirely gutted. The only finished ceiling is over the bar, between columns. Elsewhere, the mechanical, electrical, and structural systems are exposed. Hard finishing surfaces were chosen to create an acoustically loud space.

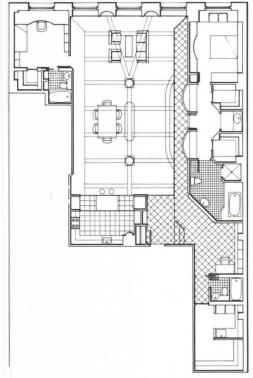




T he design of this lower Fifth Avenue loft is meant to metaphorically represent a country house and its garden. The architect was David Estreich & Associates of New York City.

The "house" contains the master bedroom, bath, and dressing area. It is raised on a terrace-like plinth, so the entrance overlooks the loft's more public spaces. Flanking the front door are glass-block bay windows (top), which serve to enhance the houselike quality of the facade and to allow light from the "outside" to filter into the "housed" suite of rooms.

The living and dining area—"the garden"



—has natural oak floors and two "tree-like" columns that support branching overhead beams. A softly tinted soffit carrying mechanical equipment ducts wraps around the entire space and "acts as the eaves of a manor house," in the words of the architect. It also serves to separate the open kitchen (above) from the rest of the "garden" space. The child's room and bath are tucked in a front corner off the living area. This area is meant as a garden pavilion, a theme visually enforced by the use of floral tiles in the bathroom. The bathrooms in the "house" are more formal and urbane.



Crisp lines, a cheerful palette, and an abundance of natural light characterize the San Francisco offices of ID Two. Designed by Holly Hodnick and Stacy Cooper of Hodnick Design, Palo Alto, the precision of this interior, set on a 14-inch grid, befits the client, an industrial design firm.

The 500,000-square-foot office takes the shape of a rectangle with a 45-degree triangle attached at one end. Arched windows run along the two short ends; skylights are placed at each side of midcenter. Along the shortest side wall are stairwells, entrance, and bathrooms. Along the diagonal exposed wall are three office cubicles, which continue to run down the party wall (eight cubicles) and form an island in the middle (10 cubicles and an employee lounge). The other wall has both a large and a small conference room and the main reception and waiting area (above).

Overhead are exposed beams and trusses, except in the large conference room where the ceiling is perforated metal set at the lowest edge of a truss. Portions of two of the conference room walls are glass. When desired, light can be closed out by pulling shades on one side and a sliding wooden door on the other.

All desks and wall surfaces are white, except any horizontal surface on the walls, such as upper edges, which are painted one of four colors: yellow, periwinkle, coral, or aqua—soft, cool colors that come alive when bathed in natural light. Exceptions to the rule are the accent blocks, solid colored blocks that fit into any of the wall cutouts (photo above shows accent blocks as well as an opening through which a model of a bicycle is seen).—N.R.G.





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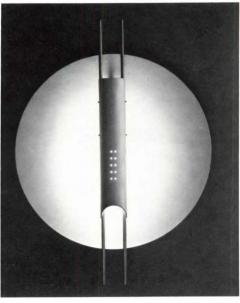
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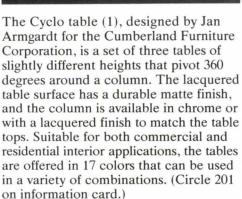
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Products







Koch + Lowy's Copernicus wall lamp (2), designed by Piotr Sierakowski, has an anodized aluminum dish covering that measures 15 inches in diameter and six inches deep. The 20-inch-high shade is available with either anodized black or anodized aluminum finish. The wall-mounted lighting fixture accommodates either a 60-watt or a PL13-watt bulb.



The cord is black plastic. (Circle 202.)

The Table W/Toys (3), designed by Steve Ditch, is a beautifully crafted coffee table that doubles as an overscaled pegboard. The playful table measures 60x24x16 inches and is made of maple, black painted steel, and Tufftop surfacing material. Fifteen wooden and ceramic "peg toys" in various colors and shapes are designed to be rearranged or played with on the table top. (Circle 203.)

New York City architect Belmont Freeman's collection of tension wire bird cages are made of thin cables held in tension over a rigid metal armature. Measuring 20 inches square and 33 inches high, the Bird Cage II (4) is constructed of stainless steel cables with a painted steel and acrylic base. The elegant cages are fabricated to order by Treitel-Gratz Co. (Circle 204.)—Lynn Nesmith

Products continued on page 90



Glazed Tiles.

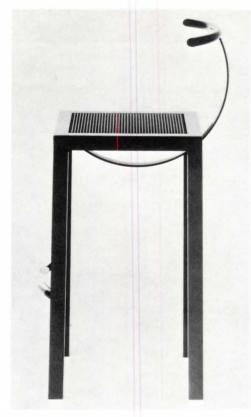
Porcelain and stoneware tiles are wet cut, dried under forced hot air, hand-finished, glazed, and then single fired to 2,400 degrees in a reduction atmosphere. More than 100 different glazes are offered, and tiles are available in 13 standard sizes as well as trim pieces and accessories. (McIntyre Tile Co., Healdsburg, Calif. Circle 217 on information card.)

Window System.

Magnum tilt-turn window is made of fine-grain Ponderosa pine with a choice of aluminum cladding, polycron finishes, or exposed wood. A sill-weep system channels rain and moisture away from the window. The window tilts in at the top and opens to the side a full 180 degrees to serve as an emergency exit. Glazing options include single glazing, insulated glass, solar bronze, solar gray, solar cool, or low-E glass. The weatherstripping is welded at all four corners, and the adjustable lock has a three-position handle. (Marvin Windows, Minneapolis. Circle 220 on information card.)

Prefinished Siding.

DropSide textured hardboard lap siding has two six-inch-wide laps embossed onto each 12-inch-wide course. The prefinished siding is available in three colors. (Masonite Corporation, Chicago. Circle 216 on information card.)



Bar Stool.

The Sarapis stool (above) is made of square steel tubing with a metal mesh seat and is suitable for residential or commercial use. Philippe Starck designed the stool for Driade. (Interna Designs, Ltd., Chicago. Circle 230 on information card.)

Ceramic Tile.

Pro Architectura collection of ceramic tiles is comprised of 19 coordinated colors designed for creating simple accents, stripes, diagonals, checkerboard patterns, and color sequences. The four-inch-square vitreous tiles are suitable for interior and exterior use in commercial and residential applications. (Villeroy & Boch, USA, Pine Brook, N.J. Circle 232 on information card.)

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Light Fixture.

Odyssey Illumination's wall mounted lighting fixtures are designed for high traffic, interior commercial applications. The frame is constructed of cold rolled steel with a thick matte finish available in eight colors. (RWL Corporation, New Haven, Conn. Circle 236 on information card.)

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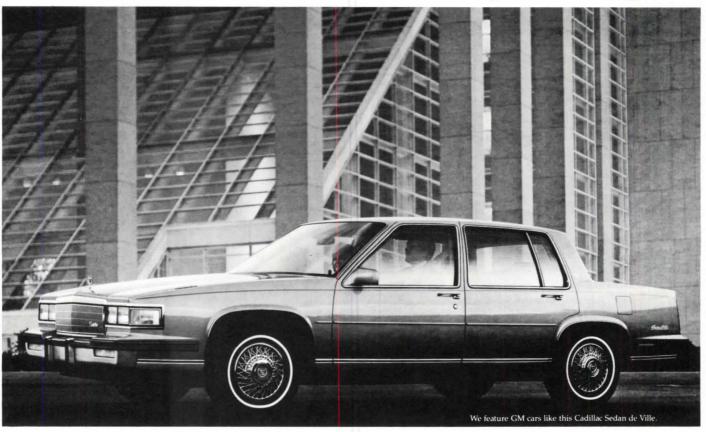
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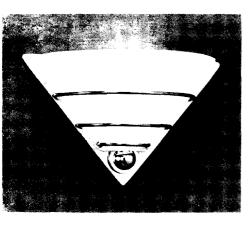
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Wall Mounted Lamp.

Visa CB 1300 wall sconce (above) has a 12-inch-diameter prismatic glass half cone with polished solid brass retaining rods and backplate. The wall mounted fixture measures 8½ inches high and 13½ inches wide with a 6½-inch extension. (Visa Lighting, Milwaukee. Circle 234 on information card.)

Mobile Storage Unit.

Prefabricated modular mobile filing and storage units are designed to be placed directly on existing flooring, including carpeting. Unlike conventional mobile storage systems that require installing track systems bonded to the floors, the units have self-contained modular floor sections with rails, floor panels, and supporting wing channels. The channels are spaced on one-foot centers with built-in leveling feet. Units can be used as standard single aisle systems or open face lateral systems. About 19.5 square feet of space is required for a 1,000-inch filing capacity system. Computer printouts, magnetic tapes, books, pharmaceuticals, parts, and color-coded files can all be accommodated in the system. (Spacesaver Corporation, Fort Atkinson, Wis. Circle 198 on information card.)

Concrete Additive.

Force 10,000 is a high performance concrete admixture that is designed to increase the durability of Portland cement concrete in applications including tunnels, concrete pipes, parking garages, and bridge decks. The mixture contains microscopic particles that fill the gaps between the cement grains and aggregate to create denser and less permeable concrete. (W. R. Grace & Co., Cambridge, Mass. Circle 188 on information card.)

Barrier Free Water Cooler.

'Hands off" electric water cooler has an electronic sensor that automatically activates the water stream as soon as a user enters its range. The water stream can be programmed to flow as long as 35 seconds before automatically shutting off. A built-in delay feature prevents the senor from being accidentally activated. The unit has a highly polished stainless teel sensor plate with wiring harness, solenoid enclosure, and brass body. It is not recommended for outdoor use because direct sunlight may disrupt the sensor. (Haws Drinking Faucet Co., Berkeley, Calif. Circle 190 on information card.)

Kitchen Faucet.

Mamoli kitchen faucet, constructed of brass and finished in chrome, has a spout and spray combination for the economical use of available space. The single lever faucet uses a ceramic disc valve for consistent water flow. (Ginger U.S.A., Inc., New York City. Circle 191 on information card.)

Flooring.

Five-ply acrylic-impregnated flooring is available in panels measuring 3x18 inches. The flooring is offered in a variety of wood species, colors, and patterns. (PermaGrain Products, Inc., Media, Pa. Circle 192 on information card.)

Door Closers.

LCN Sentronic life safety door closer/ holder is designed for use on fire and smoke barrier doors in hospitals, schools, and offices. The closers are designed to automatically close the door when smoke is sensed by a remote or built-in detector. (LCN Closers, Princeton, Ill. Circle 197 on information card.)

Casement Windows.

Casement windows have internal miniblinds that are hermetically sealed between a 11/8-inch glazing channel. The glazing system is designed to provide the additional space needed for the blinds while increasing energy efficiency. The blinds are available in a variety of hues to match interior or exterior colors and are magnetically operated for full length opening and closing. The rigid vinyl casement unit has a vent opening of more than 90 degrees to allow cleaning of the outside glass from the inside. Insulated glass and multiple weather seals are designed to reduce air infiltration. (Poly-Tex Co., Oakmont, Pa. Circle 196 on information card.)

Siding Panel.

Three-course cedar shingle siding panels have an interlocking end design of overlapping layers of felt and shingle that is intended to provide a weathertight vertical joint. The added seven-inch exposure course provides 50 percent greater panel coverage and reduces application time. The double fastening construction of galvanized steel staples and glue bond the tapered shingles to sheathing plywood backing. Matching prefabricated corner units complete this new system for renovations and new construction. All facing is made of clear, vertical grain, tapered Western red cedar shingles. (Cedar Valley Shingle System, San Jose, Calif. Circle 195 on information card.)

Products continued on page 94

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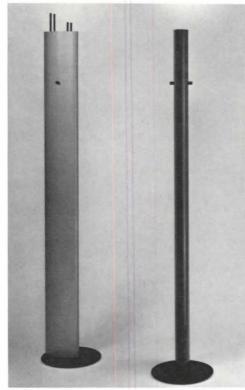
Weathermaster roofing panels are made of heavy gauge aluminum with a PVC coating. The self-supporting 12-inch ribbed panels have three-inch vertical sides and interlocking joints designed to resist water penetration. Structural anodized aluminum extrusions and fittings are available in either bronze or natural aluminum finishes, and a concealed rain gutter is also offered. (Homemark, Orlando, Fla. Circle 184 on information card.)

Lighting Fixture.

Eight-inch-diameter, tubular lighting fixture is available in a number of colors and polished finishes. The radiused shielding design provides a true circular shape for continuous light flow. The parabolic convex louvers are designed to control glare from both parallel and perpendicular viewing angles. (Staff Lighting, Inc., Highland, N.Y. Circle 218 on information card.)

Laminated Beams.

Exposed beams made of Southern pine are bonded with waterproof adhesive to prevent glue-line deterioration from exposure to moisture. Beams may be ordered straight or cambered to a standard radius and are square end trimmed. They can be stained or painted. (Koppers Co., Pittsburgh. Circle 219 on information card.)



Floor Lamp.

Monolith floor lamp (above), designed by Piotr Sierkowski, has a 72-inch-high elliptical column with a 13-inch base. The column is finished in either Pullman gray or burgundy glossy enamel; the base is matte black. The fixture accommodates

a maximum of a 500-watt halogen bulb and features a full-range dimmer. (Koch + Lowy, Inc., New York City. Circle 225 on information card.)

Office Chair.

Signa ergonomic office chair has a dark brown frame, with or without arms. Two-inch dual wheel casters are mounted on a five-leg pedestal base 24 inches in diameter. Two pneumatic cylinders adjust seat height and back tilt. (Fixtures Furniture, Kansas City, Mo. Circle 240 on information card.)

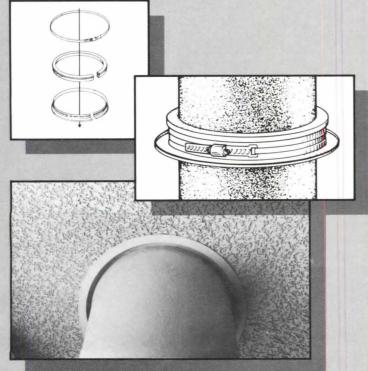
Halogen Lamp.

The Daphine lamp, designed by Tommaso Cimini, is available as a floor, desk, or clamp model. An adjustable arm extends 30 inches, and the reflector rotates 360 degrees. Available in red, black, or white, the lamp has a two-stage switch that accommodates 50- or 25-watt bulbs. (Lighting Associates, New York City. Circle 239 on information card.)

Vertical Wall Closures.

Expand-O-Gard is a weather-resistant, elastomeric closure piece for vertical abutment and expansion joints. The fittings are available in four-, six-, eight-, and teninch-wide cured and calendered neoprene bellows with stainless steel or aluminum flanges. The flanges are attached to both

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sides of the neoprene bellows by adhesive and a continuous metal edge crimp. The closures are designed to be installed in conjunction with erection of building facades either as an exterior attachment or behind the exterior wall panels. Factory-fabricated fittings are also available to connect to horizontal joints at the roof or at setbacks. (Manville Building Materials Corporation, Lewiston, Me. Circle 238 on information card.)

Vinyl Floor Covering Adhesive.

Finyl Bond floor covering adhesive is designed to provide a strong bond for flexible, pure vinyl floor coverings. The adhesive offers a 30-minute open time, and surfaces bonded with the material can support foot traffic 12 hours after application. A highly water resistant material, Finyl Bond is suitable for application to surfaces subjected to moisture in interior and exterior installations. The adhesive is also designed to be used on other conventional floor backings including jute, felt, mineral fiber, and latex. (H. B. Fuller Co., Palatin, Ill. Circle 199 on information card.)

Skylight System.

Motorized skylight system can be automatically opened and closed by the flip of a switch. The unit has a solid copper flashing, a low-profile insulated

double dome, a molded dome edge, and a built-in screen. All skylights are available completely assembled. (Ventarama Skylight Corporation, Hicksville, N.Y. Circle 189 on information card.)

Dining Chair.

Designed by Philippe Starck for the Italian manufacturer Driade, the Costes dining chair (below) is constructed of curved plywood, tubular steel, and leather. (Interna Designs, Ltd., Chicago. Circle 179 on information card.)



Wallcovering.

Fibrewall woven wallcoverings made of 100 percent glass fiber are nonflammable and abrasion resistant. Suitable for commercial, industrial, institutional, and residential applications, the wallcoverings are available in a number of weave patterns in coarse, fine, twill, and herringbone textures. They can be applied directly over concrete, roughcast walls, or gypsum wallboard. (Regal of Scandinavia, Los Angeles. Circle 194 on information card.)

Light Fixture.

Parabolume series of fluorescent parabolic luminaires is available in standard sizes to fit most suspended modular ceilings. The fixtures have louvers in four different finishes and are avilable with nine air handling functions. (Columbia Lighting, Inc., Spokane, Wash. Circle 193 on information card.)

Ceramic Tiles.

The Earthstone Impressions series of ceramic tiles has a matte finish in 10 colors—blue, burgundy, coral, silver gray, taupe, mauve, jade, evergreen, rose, and pecan. The series is designed for most residential and light commercial installations. The tiles are also suitable for countertops and back splash areas. (Florida Tile, Lakeland, Fla. Circle 186 on information card.) □



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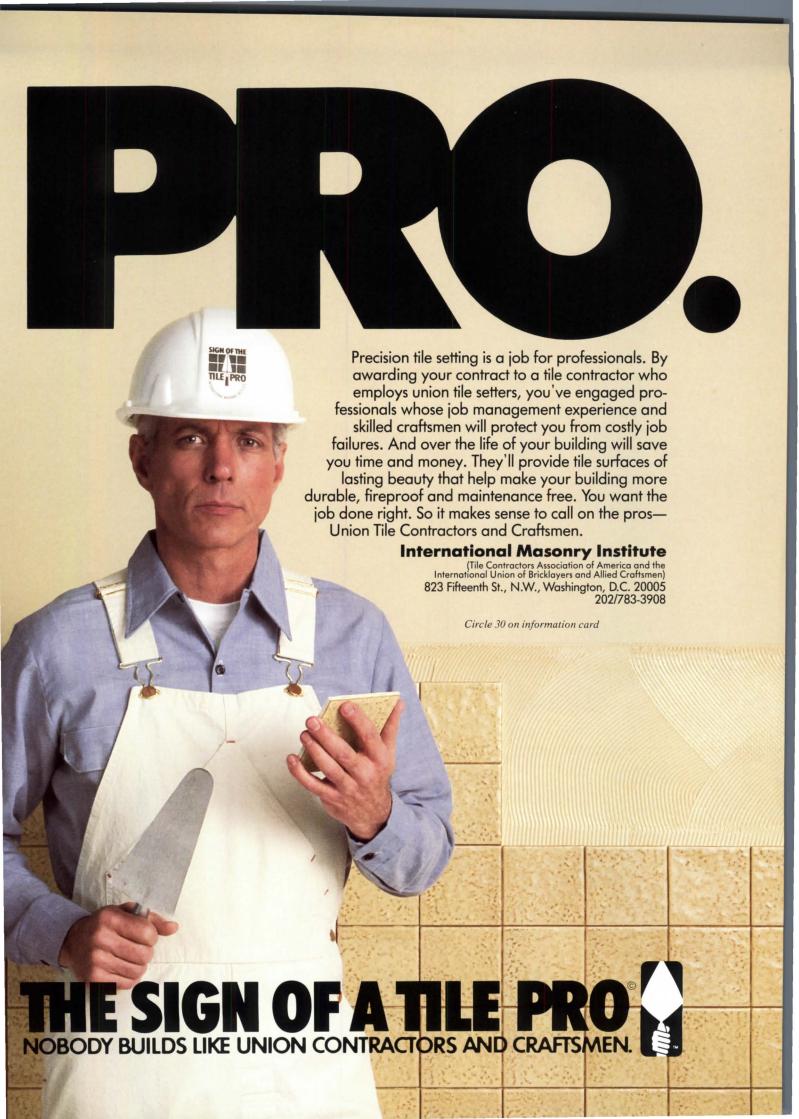
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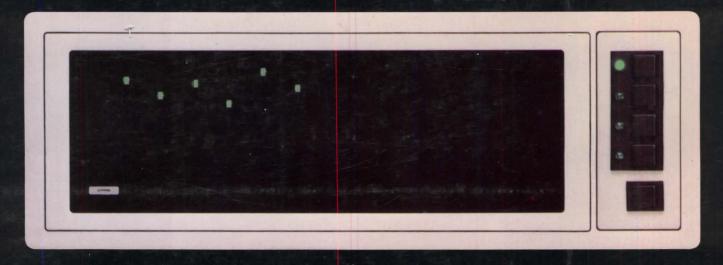


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