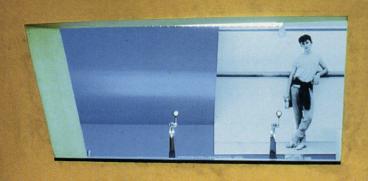
# ARCHITECTURAL

# RECORD

Business Design Engineering A McGraw-Hill Publication, Seven Dollars April 1988

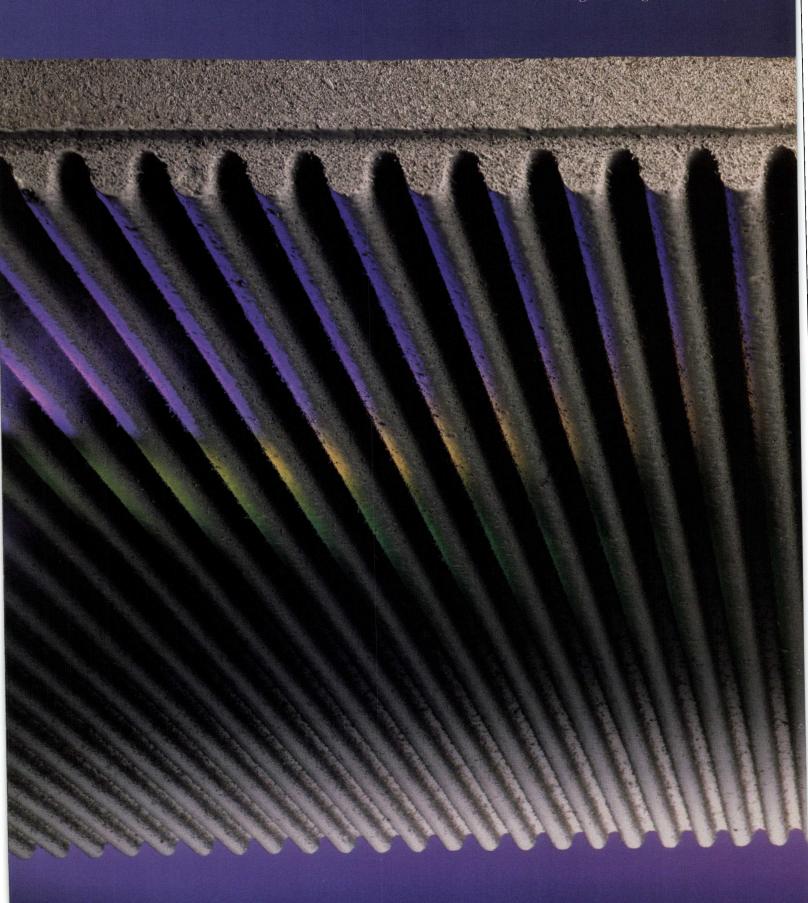


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Corrugated Crossgate introduces a striking ribbed look to acoustical ceiling design.

Available in four neutral colors, this 2'x2' panel fits into narrow, %16" Suprafine\* grid.

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Letters Calendar SMEPA ABP

I was pleasantly surprised by your recent editorial regarding apprenticeship in the architectural profession [ARCHITECTURAL RECORD, November 1987, page 9]. I was beginning to think the apprentice system would vanish as a possible route for aspiring architects.

I am one of those caught in the transition to the system now used by the National Council of Architectural Registration Boards [NCARB], which requires a degree from an accredited school. I passed the exam in 1986 on the first try in New Hampshire (where there is no degree requirement), but was rejected by NCARB due to the lack of a degree. It puzzles me that one can pass an exam given across the country and yet not be eligible for the exam-giver's certificate.

I earned the opportunity to take the exam after two years of technical education, nine years in the office of an architect, and two years attending the Boston Architectural Center for two nights a week (a two-hour trip each way) while working in the architect's office during the day.

Several of the people I have worked with over the years have traveled a similar route. As a matter of fact, in the office I recently left to start my own firm, half of the technical staff either had a degree other than that required by NCARB or no degree at all. Each of these people is responsible for sizeable projects and is well able to handle them. I suspect there are many more like them throughout this country who are being squeezed out in favor of those who have taken the narrow route approved by NCARB.

There are several things wrong with the way we train and license architects in this country, and I hope that your editorial will revive this debate.

Keith P. Hemingway, AIA

Plymouth, New Hampshire

Carl M. Sapers's timely commentary in the March 1988 issue of ARCHITECTURAL RECORD [pages 36-38] underscores an alarming chaos in the construction industry.

It is my firm conviction that the overwhelming cause of such chaos is the presence of the function (or, shall we say, pseudo-function) called "general contracting." Nowhere in ancient history do we find the general contractor's counterpart. Presumably he surfaced as a temporary measure in the last century for the servicing of what was to become the largest building program of all time, where architects, as the historical master builders, could not be produced in time to meet the demand. Architects' services were reduced to design only, while carpenters and masons stepped out of their traditionally limited roles to implement the design.

Continued on page 149

## Corrections

I was very pleased with your article on our Fishdance Restaurant [RECORD, January 1988, pages 80-87]. We notice, however, that a very important name was inadvertently left off of the credits. At the head of the project team for the World Company was Hidezoh Terai. Although the participation of each member of the Japanese team was incredible, it was Mr. Terai's unwavering commitment to this project that ultimately made it happen. C. Gregory Walsh, AIA Frank O. Gehry and Associates Inc. Venice, California

The January 1988 column on *Manufacturer sources* failed to list Carmel Steel Products, metal suppliers for library window frames at the Museum of Contemporary Art in Los Angeles.

## Through April 22

Mostra B. B. P. R., an exhibit of drawings, photographs, and documents from the Milanese firm Banfi, Belgiojoso, Peressutti, and Rogers; at the Istituto Italiano di Cultura, 686 Park Ave., New York City.

## Through May 27

Reweaving the Urban Fabric: International Approaches to Infill Housing, an exhibition sponsored by the Architecture Program of the New York State Council on the Arts, the New York Landmarks Conservancy, and the Paine Webber Gallery; at the Paine Webber Gallery; 1285 Avenue of the Americas, New York City.

April 15 through June 15
An exhibition of Victorian
architecture, furniture, and
accessories in the area of
Springfield, Mass., sponsored by
the Springfield Library and
Museums Association; at the
Connecticut Valley Historical
Museum, Springfield, Mass.

## April 29 through May 1

"Innovative Design Technologies," the First Annual National Symposium for Health Care Interior Design; at the La Costa Hotel and Spa, Carlsbad, Calif. For information: National Symposium for Health Care Interior Design, Inc., 4550 Alhambra Way, Martinez, Calif. 94553 (415/370-0345).

# May 15-18

Art in Architecture, National Convention and Design Exposition, The American Institute of Architects; at the Jacob K. Javits Center, New York City. For information: AIA Convention Department, 1735 New York Ave., N. W., Washington, D. C. 20006 (202/626-7395).

## May 15-18

The first annual International Facilities Exposition (IFEX), sponsored by the International Design Center, New York City. For information: IFEX/IDCNY, 29-10 Thomson Ave., Long Island City, N. Y. 11101 (202/347-3660).

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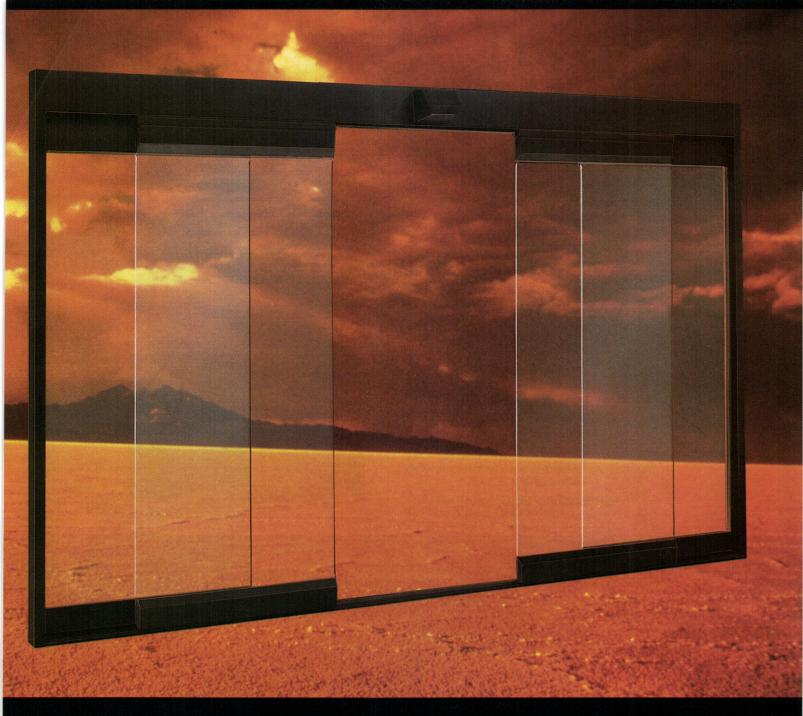
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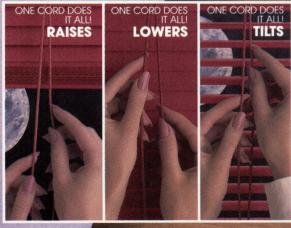
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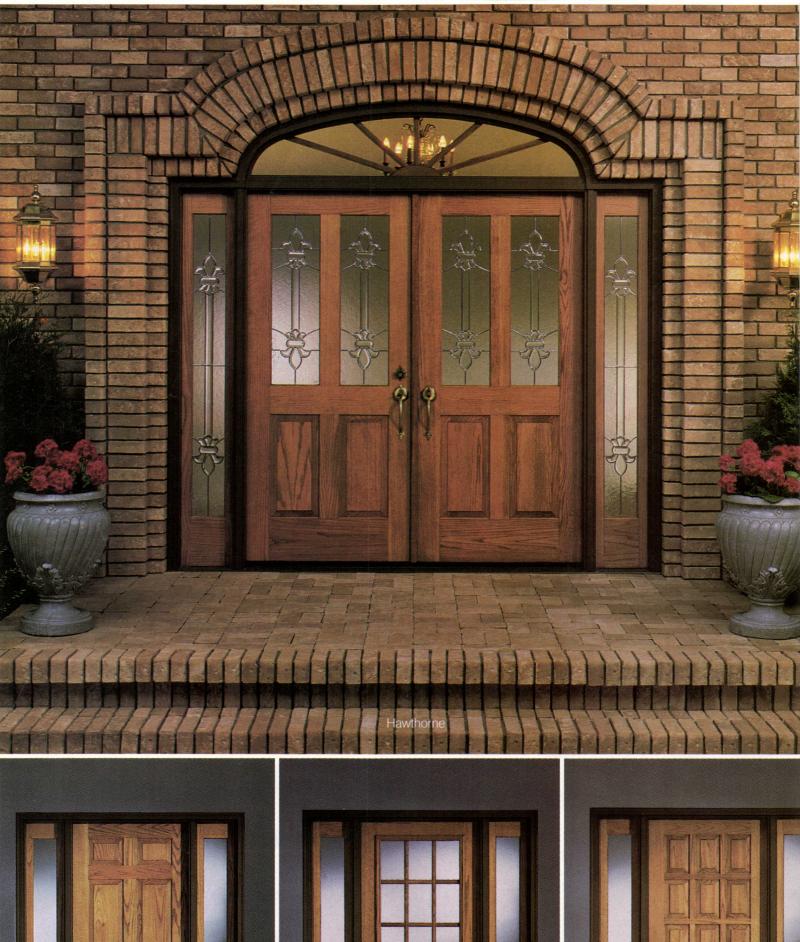
2,432, and 4,433,765, Canada Patent No. 1167791

# Noblesse oblige: H. R. H. gets it almost right

By now everyone who reads the papers knows that the Prince of Wales gave the concluding address at the Remaking Cities Conference convened in Pittsburgh last month by the American Institute of Architects and the Royal Institute of British Architects. The Prince has made no secret of his contempt for Modern architecture, in all its forms and periods, while advocating a return to Classical styles. He is less well known, however, as a champion of greater community participation in the design of cities, towns, and neighborhoods, and he chose the latter subject for his talk to an audience of professionals assembled to find ways to renew cities that have been hard hit by the decline of their industrial bases. The fact that the community architecture movement in Great Britain is seen in the U.K. as a protest against and an antidote to centralized housing and planning programs of the type that has been essentially dismantled in the U.S. did not cause the Prince to alter his focus significantly. Seemingly uninhibited, furthermore, by his audience of architects, planners, economists, sociologists, and housing specialists, he had but faint praise for the proficient or trained. "Although there is no one who appreciates or values experts more than I do," said His Royal Highness, "I do believe that it is important not to be intimidated by them. This, I need hardly say, has happened in the recent past. In the United States and United Kingdom we have had 40 years of practice at urban design and comprehensive planning and development. The results have been pretty disastrous, often with the best intentions." RECORD editor James Russell attended the conference and reports that the audience took the Prince's sweeping criticisms with good grace, pleased by the international media attention that came with him. Russell notes (page 59) that although the mass media focused on Charles's visit, the real news is that there is genuine hope for the Rust Belt. It is possible to bring new life to the old manufacturing cities. The tools that exist to do it have, needless to say, been created by the very types of expert the Prince decries.

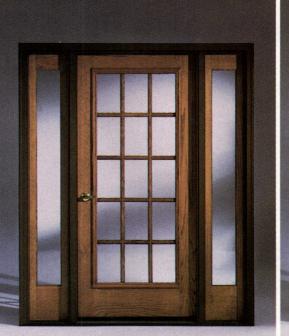
Among those who described available strategies was urban economist Harold K. Bell, who went on to challenge the conference with a summary of urban problems that he believes planners have the knowledge and skills to rectify. "We know how to have on-the-job child-care systems. We know how to create incentives to create jobs and onthe-job training, how to create new infrastructure across the nation through public works. We know how to rebuild our roads, aquifers, water- and sewerage-treatment plants to rid ourselves of environmental waste.... We know how to control and promote migration and immigration. We know how to stop drug traffic. We know how to support the mentally ill. We know how to save people. We know how to save farms. We know how to save industry. We know how to save cities and how to pay for it. What we haven't decided yet is how to galvanize support for this endeavor and when to face up to the task. It must be as great an effort as the Marshall Plan that saved Europe. It is time to save ourselves."

The process will require experts of all kinds, including architects. (There were few of them among the leading speakers and workshop leaders. Is this because they weren't asked, their contributions not considered important?) And the process will require the involvement of people and their communities, not just for public relations or the sake of appearances but because no planning that works can be accomplished without them. Prince Charles is right, at least, about that, and everyone seems to be paying attention. Mildred F. Schmertz











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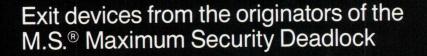
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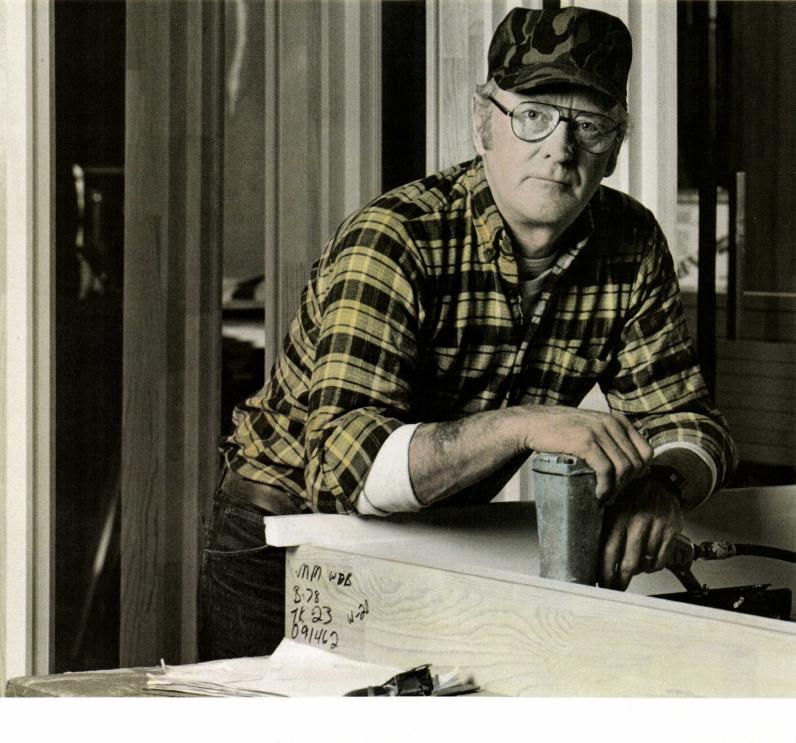
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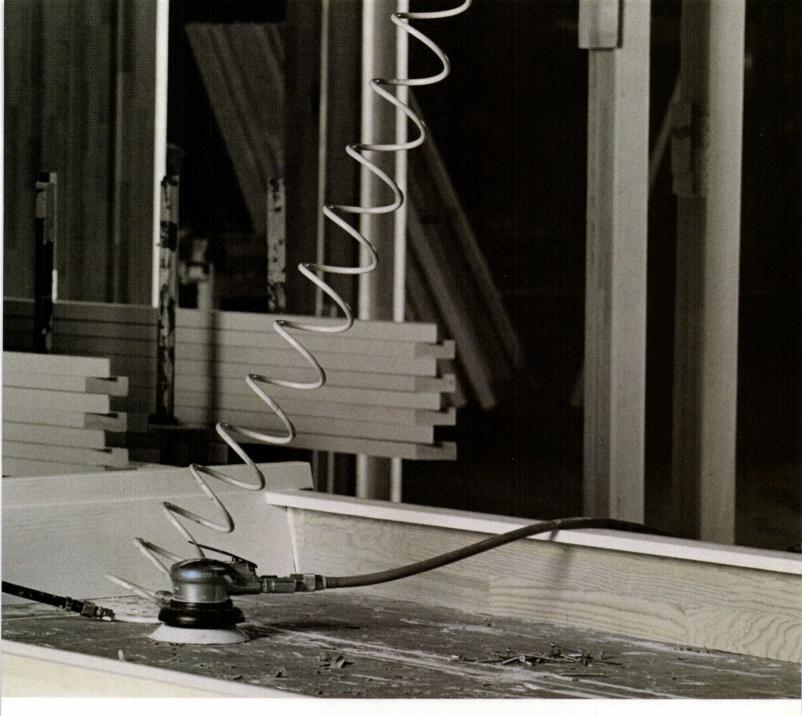
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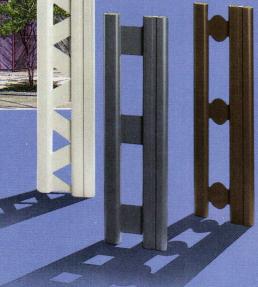
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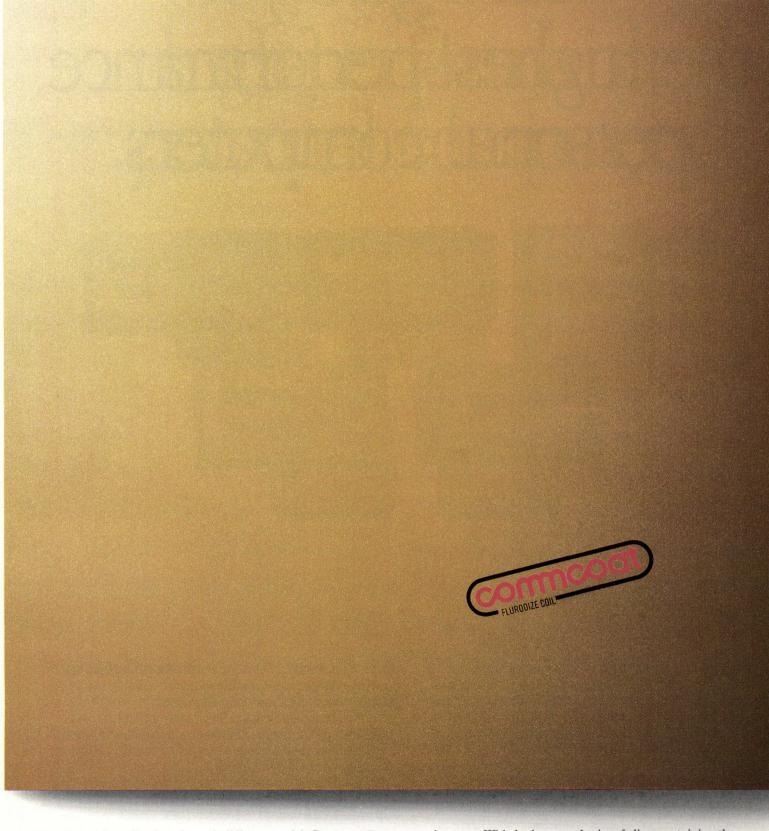
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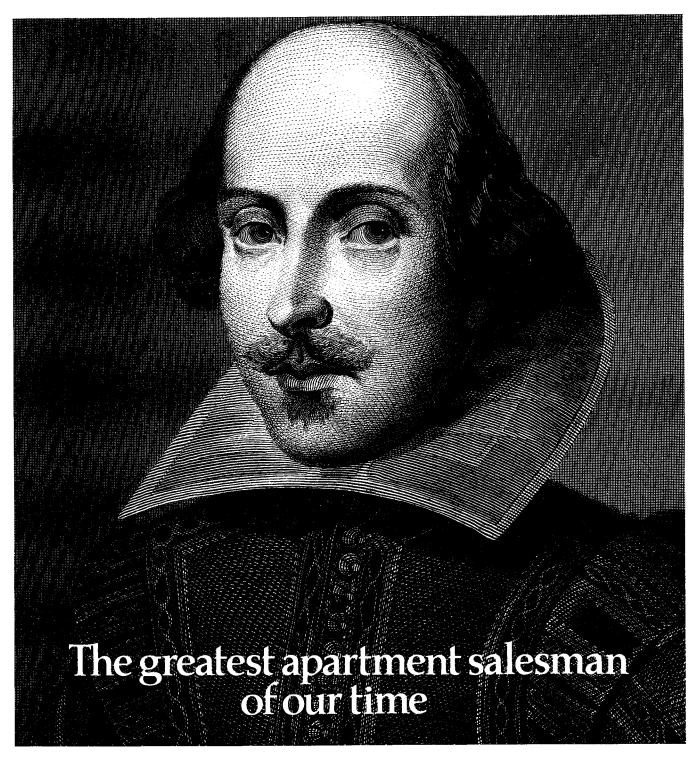
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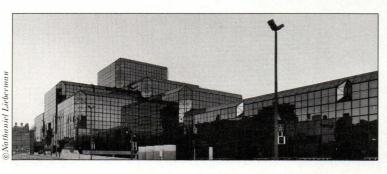
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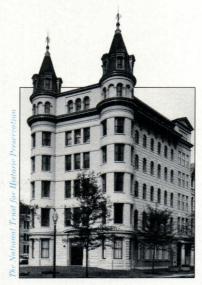
# **AIA** and American Consulting **Engineers Council** meet next month in **New York City**

New York's recently completed Jacob K. Javits Convention Center by I. M. Pei & Partners (photo) will be the scene of the national conventions of the two major design-profession organizations next month. The AIA convention, May 15-18, will be the first in the city in 21 years. The local chapter, the largest in the U.S., is going all out with seminar participation, tours of new and old buildings, and social events for the 14,000 architects and allied professionals who are expected to attend. The theme this year is "Art in Architecture," and presentations will include not only those by architects but those by artists and writers. Seminars will cover such hot topics as CAD: myth or dream unfulfilled? and Antitrust issues in the design professions. Opening day, Sunday, will be topped off by the annual Dodge/Sweets/RECORD gala. Business sessions and seminars will begin on Monday. For information, contact the AIA, 1735 New York Ave., N. W., Washington, D. C. 20006 (202/626-7395).



The other annual professional convention scheduled for next month at the Javits Center is that of the American Consulting Engineers Council May 8-12. Seminars will explore technical and marketing issues and attempt answers to management problems. For information, contact Susan Courtney at the ACEC, 1015 Fifteenth St., N. W., Washington, D. C. (202/347-7474).

# Zero dollars for preservation?



Fiscal 1989 is the seventh straight year for which the Administration has proposed no budget for the National Trust for Historic Preservation. Nor would it provide monies for the Historic Preservation Trust Fund to match grants to state preservation programs.

But it seems reasonably sure that Congress will vote funding appropriations. Despite intense budget-cutting pressures, the current 1988 fiscal year includes the largest amount ever for both the trust and state programs \$28.25 million.

At stake are programs that, for instance, certify structures for preservation tax abatements—such as monies used for the restoration of 633 Pennsylvania Avenue in Washington, D. C. (photo) as the Sears, Roebuck headquarters. National Trust president J. Jackson Walter isn't taking anything for granted: "All of us must work to make our case."

The executive director of the National Conference of State Historic Preservation Officers. Eric Hertfelder, calls the axing proposals "a painful annual ritual" that his group has come to expect. But "it is especially disruptive to state activities to have such continual uncertainty. We are now compiling the results of a nationwide needs' assessment, and we see from them the enormity of the unmet preservation needs in this country." Peter Hoffmann, World News, Washington, D. C.

# A/E/C Systems: Trying, once again, to break records

The annual computer show and seminar program for buildingdesign and construction professionals scheduled for the new McCormick Place North in Chicago May 2-5 may top last year's record attendance and exhibitor counts. (In 1987, some 26,500 professionals turned up to view the products of nearly 500 suppliers.) Exhibitions on the floor will spotlight touch-me, feel-me comparisons that will help consumers make decisions. The emphasis in the seminars will be on diversity. Because of a new association with the International High Technology Design and Construction Fair, seminars will cover subjects from design-firm employee evaluations (given by the National Society of Professional Engineers) to plans for building on the moon (given by NASA). For information, contact A/E/C Systems '88, P.O. Box 11318, Newington, Conn. 06111 (800/527-7943).

# More architectural work currently done within government to go outside?

The first stage of a review of design and other work currently done by the federal government (and its workers) is due this month. The purpose? To push an Administration effort to get more of the work into private hands. Executive Order 12615 requires a review of appropriate activities by April 29, cost studies by June 30, and sets up a job-placement program for federal employees who will be put out of work if the program is a success. Last year's creation of a new position in the Office of Management and Budget accompanied the thrust toward privatization.

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# Legal perspectives: An overview gleaned from great height

An eminent attorney, using recent important insight, looks at the pressing legal issues for architects and engineers: liability insurance, litigation precedent, and the new AIA contract documents and code of ethics.

By Arthur Kornblut, Esq.



For the past two years, the author has been chairman of the American Bar Association's Forum Committee on the Construction Industry, an activity that only now allows him to resume his regular contributions to RECORD. Established in 1976 and with a current membership of more than 3,500 attorneys, the Forum brings together, in a single, focused entity, lawyers from the United States and abroad who concentrate on construction matters. The Forum gives members opportunities to exchange information and education, and conducts special studies, such as one on arbitration. It thus contributes to an improved legal awareness in this era of increasing complexities and fast changes.

## Liability-insurance update

As you know, the insurance marketplace went through a period of severe retrenchment [RECORD, June 1986, pages 35-39]. Being highly cyclical in nature, it is softening once again. Rates have become more competitive, new carriers are attempting to enter the field, and some groups of architects have decided to "go it alone" by forming captive insurance companies under the provisions of the Risk Retention Act of 1986—a veritable journey into

Mr. Kornblut is a registered architect and practicing attorney in the firm of Kornblut & Sokolove in Washington, D. C.

terra incognita for design professionals more accustomed to being architects and engineers than running an insurance operation. Liability insurance continues to be an important, if not beloved, component of modern-day practice.

## On contract documents . . .

The AIA published its wholesale revisions to the core standardcontract documents including the General Conditions (A201) and the owner-architect agreement (B141). New editions of 12 documents appeared this past May, and almost every month since has seen articles extolling or condemning their virtues and vagaries [RECORD, March 1988, pages 36-42].

Not to let the written word outdo the spoken, national AIA and local AIA components, as well as bar associations and other organizations, have subjected the new editions to proselytizing publicity and critical analysis in seminars and symposiums. The new editions of A201 and B141 contain wholesale reorganizations and major and minor revisions to virtually every clause. (One legal commentator noted that only 12 sentences in the old A201 escaped intact.) Like professional-liability insurance, the AIA contract documents remain a central facet of architectural practice.

## One litigation issue stands out

The courts continue to be divided on whether contractors or other third parties can maintain direct lawsuits against architects when such plaintiffs claim economicloss damages. The Virginia supreme court recently rejected such an attempt by a contractor who wanted to sue an architect directly. The court said in part: "The architect's duties both to owner and contractor arise from and are governed by the contracts related to the construction project. While such a duty may be imposed by

contract, no common-law duty requires an architect to protect the contractor from economic losses . . . . "

The defense of privity of contract may not be as moribund as some have suggested.

## The new AIA mandatory Code of Ethics and Professional Conduct both cures and creates problems

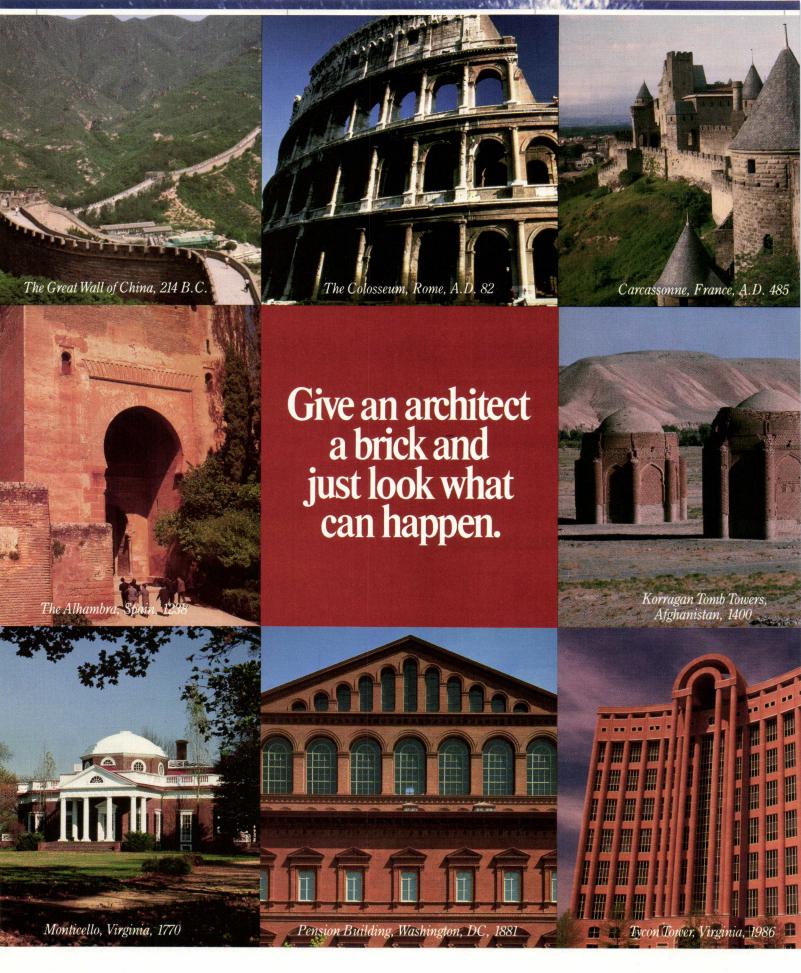
It is the first since antitrust concerns in the late 1970s forced the revocation of its predecessor. Although believed to be cured of antitrust problems, it is not without professional-liability implications. Rule 1.101 states: "In practicing architecture, members shall demonstrate a consistent pattern of reasonable care and competence, and shall apply the technical knowledge and skill which is ordinarily applied by architects of good standing practicing in the same locality."

This rule, while more or less restating the common-law definition of the standard of care applicable to architects as practicing professionals, would appear to make it unethical for an AIA member to have a "consistent pattern" of negligence. (Aside from the public-relations value of this rule, one must wonder about its practicality and fairness. Many architects practice in firms, so it would be virtually impossible to trace to a single individual a "consistent pattern" of failure to demonstrate care and competence; the rule is silent on how the determination of a consistent pattern of negligence will be made-independent investigation by the AIA or reliance on third-party information; and the imposition of civil liability for negligence probably ought to be punishment enough.)

Although it could be argued that a consistent pattern of negligence by a professional

ought to be unethical, should allegations of unethical conduct subject a professional to civil liability? Consider the following: When the new AIA ethics were being developed, concern was expressed that future plaintiffs would attempt to base claims against architects on alleged violations of the AIA ethicsi.e., would an ethical violation itself create a separate cause of action against the architect? This precise line of attack recently surfaced in two unrelated cases involving lawyers. In 1983, the American Bar Association developed Model Rules of Professional Conduct, which has been adopted (in whole or in modified version) by the courts in most states. The ABA Model Rules thus has become a set of mandatory rules of ethics for lawyers in those jurisdictions. In New Mexico and Montana, the state supreme courts recently rejected actions against lawyers based on alleged violations of ethics. In both cases, the courts referred to the preamble to the ABA Model Rules which states, in part: "Violation of a rule should not give rise to a cause of action nor should it create any presumption that a legal duty has been breached."

In contrast to the ABA Model Rules, the AIA Code of Ethics contains no similar disclaimer about the lack of a relationship between a violation of the ethics and liability to another party, and it specifically includes adherence to the common-law standard of care as an ethical obligation. If a plaintiff, in an action against an AIA member, alleges a breach of an ethical duty, it will be interesting to see whether the courts will follow the precedent set in the two lawyer cases noted above or will differentiate between the liabilities of the two professions in light of the differing approaches taken by their respective professional organizations in developing their current codes of ethics.



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<b>1988 Regional Estimates</b> Dodge Construction Potentials		First Update February 1988		
North- east	CT, ME, MA, NH, NJ, NY, PA, RI, VT	1987 Pre- liminary	1988 Forecast	Percent Change 1988/87
Contract Value	Nonresidential Buildings	<b>#44.005</b>	<b>0</b> 40.075	
(millions of dollars)	Commercial and Manufacturing Institutional and Other	\$11,325 6,850	\$10,675 6,225	- 6 - 9
	Total	\$18,175	\$16,900	— <del>- 7</del>
	Residential Buildings			
	One Family Houses	\$13,875	\$13,200	- 5
	Multifamily Housing Nonhousekeeping Residential	6,375 1,425	5,700 1,050	- 11 - 26
	Total	\$21,675	\$19,950	- 8
	Nonbuilding Construction	<b>\$2.1107.0</b>	<b>4</b> 10,000	
	Transportation	\$ 5,125	\$ 5,050	- 1
	Environmental Utilities	3,075 1,200	3,025 800	- 2 -33
	Total	\$ 9,400	\$ 8.875	- 6
	Total Construction	\$49,250	\$45,725	- 7
North Central	IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, WI	1987 Pre- liminary	1988 Forecast	Percent Change 1988/87
Contract Value	Nonresidential Buildings	¢12.500	¢11 150	11
(millions of dollars)	Commercial and Manufacturing Institutional and Other	\$12,500 7,125	\$11,150 7,175	-11 + 1
	Total	\$19,625	\$18,325	- 7
	Residential Buildings			
	One Family Houses	\$16,025	\$16,700	+ 4
	Multifamily Housing Nonhousekeeping Residential	5,300 1,225	4,650 1,175	- 12 - 4
	Total	\$22,550	\$22,525	
	Nonbuilding Construction			
	Transportation	\$ 6,150	\$ 5,950	- 3
	Environmental Utilities	3,325 425	3,425 525	+ 3 +24
	Total	\$ 9,900	\$ 9.900	
	Total Construction	\$52,075	\$50,750	- 3
South	AL, AR, DE, DC, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV	1987 Pre- liminary	1988 Forecast	Percent Change 1988/87
Contract	Nonresidential Buildings	•	2	
Value (millions	Commercial and Manufacturing	\$18,125	\$16,125	- 11
òf dollars)	Institutional and Other	12,850	12,550	- 2
	Total	\$30,975	\$28,675	- 7
	Residential Buildings One Family Houses	\$33,825	\$32,775	-
	Multifamily Housing	8,175	7,950	- 3 - 3
	Nonhousekeeping Residential	2,075	2,300	+11
	Total	\$44,075	\$43,025	- 2
	Nonbuilding Construction Transportation	\$10,450	\$10,000	- 4
	Environmental	5,750	5,750	- 4
	Utilities	950	1,200	+ 26
	Total	\$17,150	\$16,950	- 1
	Total Construction	\$92,200	\$88,650	- 4
West	AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY	1987 Pre- liminary	1988 Forecast	Percent Change 1988/87
Contract	Nonresidential Buildings Commercial and Manufacturing	\$12,950	\$11,450	- 12
	Institutional and Other	7,800	8,150	+ 4
(millions				
(millions	Total	\$20,750	\$19,600	- 6
(millions	Residential Buildings			- 6
Value (millions of dollars)	Residential Buildings One Family Houses	\$22,250	\$22,225	_
(millions	Residential Buildings			+ 5
(millions	Residential Buildings One Family Houses Multifamily Housing	\$22,250 7,550	\$22,225 7,950	+ 5 - 1
(millions	Residential Buildings One Family Houses Multifamily Housing Nonhousekeeping Residential	\$22,250 7,550 1,925	\$22,225 7,950 1,900 \$32,075	+ 5 - 1
(millions	Residential Buildings One Family Houses Multifamily Housing Nonhousekeeping Residential Total Nonbuilding Construction Transportation	\$22,250 7,550 1,925 \$31,725 \$ 5,700	\$22,225 7,950 1,900 \$32,075 \$ 5,450	- 1 + 1 - 4
(millions	Residential Buildings One Family Houses Multifamily Housing Nonhousekeeping Residential Total Nonbuilding Construction Transportation Environmental	\$22,250 7,550 1,925 \$31,725 \$ 5,700 2,750	\$22,225 7,950 1,900 \$32,075 \$ 5,450 2,950	+ 5 - 1 + 1 - 4 + 7
(millions	Residential Buildings One Family Houses Multifamily Housing Nonhousekeeping Residential Total Nonbuilding Construction Transportation	\$22,250 7,550 1,925 \$31,725 \$ 5,700	\$22,225 7,950 1,900 \$32,075 \$ 5,450	+ 5 - 1 + 1

(for the third consecutive year) to 550,000 units (F. W. Dodge basis). At the same time, singlefamily housing, reacting to rising mortgage rates, was forecast to retreat from last year's peak volume to 975,000 units in 1988. Circumstances have changed since the crash, but the numbers haven't. At least not yet.

The multifamily housing market has been out of touch with reality for most of the 1980s, and has been declining sharply since late in 1985 after starts soared to the extraordinary rate of just over 900,000 units. In the absence of tax shelters, building has fallen below 600,000 units, but still hasn't come down far enough to allow the huge surplus of vacant apartments to be absorbed. The latest data for 1987's third quarter showed rental-vacancy rates rising above 8 percent to a 20-year high!

Further declines of multifamily building-to 550,000 in 1988 and possibly below 500,000 in 1989—will be needed to balance the excesses of the mid-1980s. Even then, a vacancy problem will persist in the Southwest.

If Wall Street has altered the housing outlook for 1988, the place to look for new directions is not in the troubled multifamily sector but in the thriving singlefamily housing market. Side effects of the collapse of stock prices include weakened consumer confidence and lower interest rates. For housing, these opposing forces amount to a trade-off.

Two independent measures of consumer attitudes are saying the same thing: confidence plummeted in November, then rebounded in December when it became apparent that the stock market's plunge had stabilized. But neither indicator showed December's strengthened confidence coming close to its pre-crash buoyancy. October 19 clearly took some momentum out of the consumerdriven economy.

Lower interest rates in 1988 are bound to entice some marginal home buyers into the market to substitute for the ones whose shaken confidence has relegated them to the sidelines. The Wall Street event brought

an instant reversal of 1987's upward trend of interest rates as institutions shifted from equities to bonds. But more than that, by lowering expectations about the general business outlook for 1988, it added the weight of economic persuasion to already existing political pressure on the Federal Reserve to chart a more expansionary course for the year ahead. As confidence is gradually restored over the winter, the prospect of declining interest rates means that the middle quarters of 1988 could be good ones for house builders and their suppliers.

For reasons apart from the ones that seemed so compelling only a few months ago, 1988's housing outlook remains unchanged at 1,525,000 units. Allowing for modest inflation, this 5-percent decline in the number of newly built units implies only a 2-percent setback from last year's total residentialconstruction contract value.

## In summary ....

Since last October's Outlook, consumer confidence has been shaken, federal budgetary restraint has been tightened, and expectations for the economy's growth through 1988 have been lowered. At the same time, the outlook for interest rates has brightened. On balance, this mixture of favorable and unfavorable developments does not pose a serious threat to a credit-sensitive industry like construction as long as a general recession can be avoided.

Because the original 1988 Outlook was a downer, the financial and psychological shocks of the stock-market crash have not added greatly to the year's risks. Total constructioncontract value is now estimated at \$246 billion, a decline of 4 percent from the 1987 peak of \$255 billion. Two-thirds of the 1988 setback will be concentrated in commercial building.

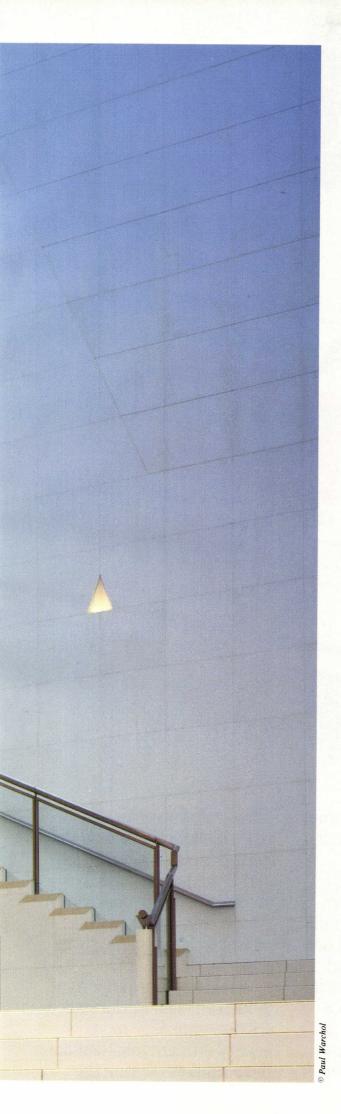
Prepared by the Economics Department of the McGraw-Hill Information Systems Company, George A. Christie, vice president and chief economist.

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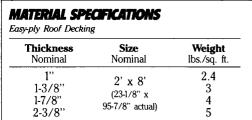
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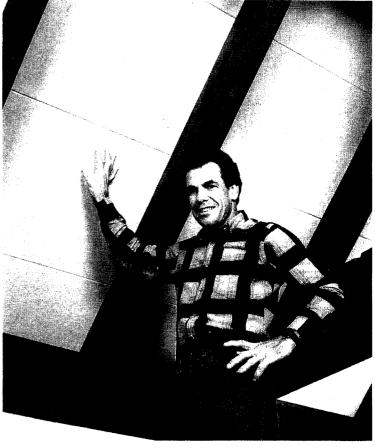
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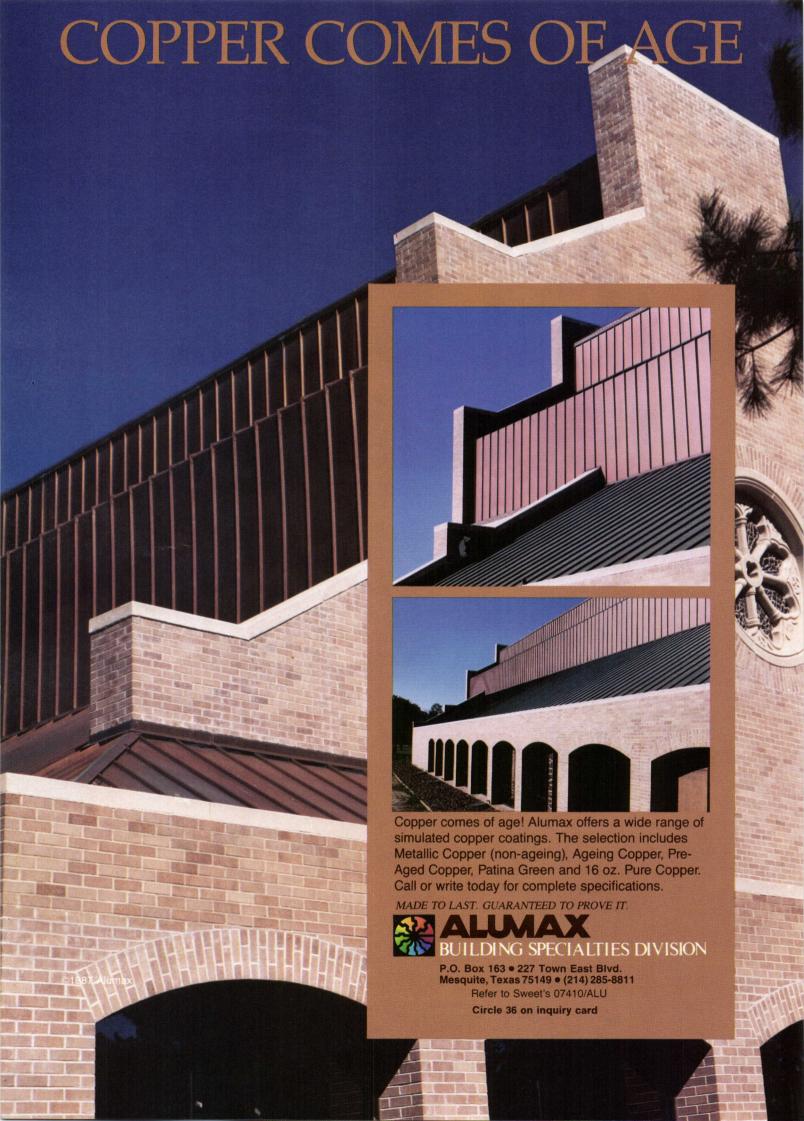
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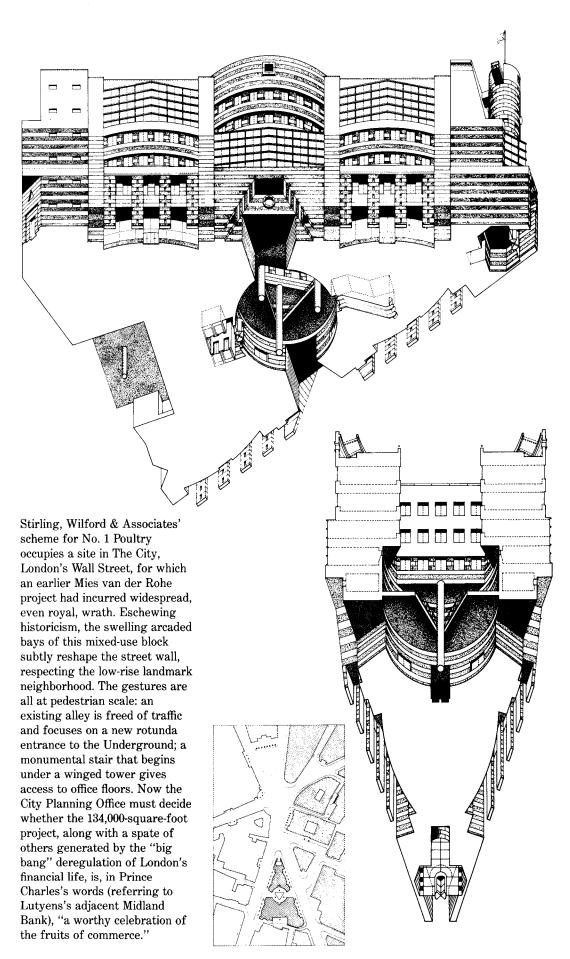
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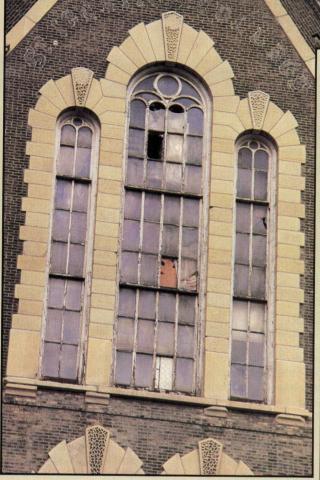


# Stirling's "big bang" in London



Architectural Record April 1988 55

# HISTORY REPEATS ITSELF

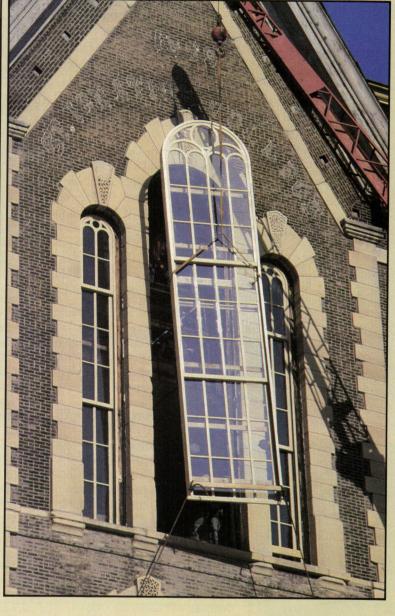


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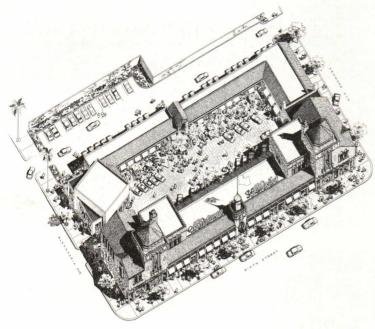
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# Antidote to mini-malls on mid-Wilshire

# Competition calendar

## If you had a flat tire, which door would you knock on?





Angeles Times Company

"Urban entrepreneurs" are expected to set up shops selling delicatessen items, produce, and fish in Chapman Market, a retail/office project combining restoration of the 1929 Spanish Revival detailing of architects Morgan, Walls and Clements, and renovation by Levin &

Associates. Once the nation's first drive-in market (photo above), the Los Angeles project is now being geared to compete with the latest novelty in roadside developmentthe split-block, mansard-roofed mini-mall. It will open in November 1988.

•Sponsored by RIBA, "Gasstop: A Place of Celebration," asks architecture students to bring imaginative rigor to the design of a filling station. Entries are due May 3, 1988. Information can be obtained from Anne Sinclair, RIBA Education Department, 66 Portland Place, London W1N 4AD England.

•The Builder's Choice Design & Planning Award recognizes excellence in the design and planning of new and remodeled housing and commercial buildings. Entry forms are available from Builder Magazine, 655 15th Street, N.W., Suite 475, Washington, D. C. 20005. The deadline is June 3, 1988.

"Excellence on the Waterfront" will recognize waterfront undertakings in nine categories. The deadline is June 1, 1988. Contact the Waterfront Center at 1536 44th Street, N.W., Washington, D. C. 20007.

· Bald Hill, one of the highest points on Long Island, is the site of the Suffolk County (N. Y.) Vietnam Veterans Memorial competition. Write to SVVMC Competition Liaison, Veterans Service Agency, 65 Jetson Lane, Central Islip, NY 11722. Applications are due August 31, 1988; submissions, November 11, 1988.



Quiz: Which of the houses above is most likely to be occupied by well-educated, upper-middle-class, young suburbanites? The answer, according to researchers from Ohio State University (who asked this question and two others of 118 Columbus-area supermarket shoppers), is the "Contemporary." The researchers were measuring perceived correlations between a home's style and the kind of people who live in it. Community leaders were felt to live in Colonial or Tudor houses; the Tudor would also be chosen by those who won a "dream house" sweepstakes. The saltbox was rated second-highest in friendliness (the flattire question).

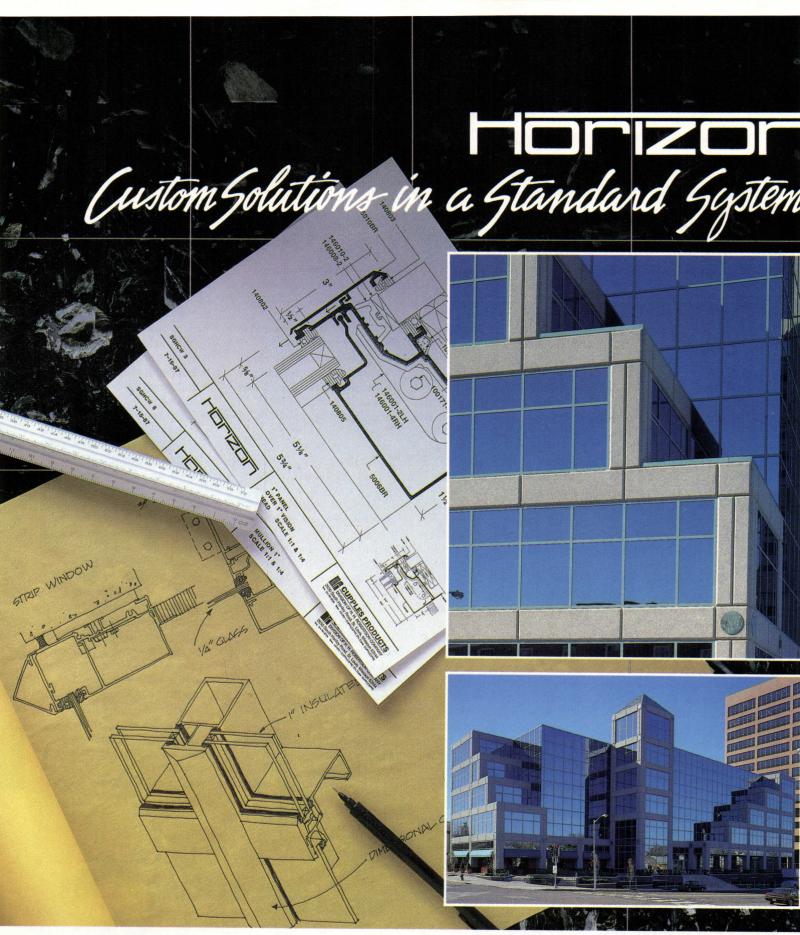
# Berkshire Classical: Stern wins Norman Rockwell museum competition

The firm of Robert A. M. Stern Architects, of New York City, is the winner of an invited competition conducted by the Norman Rockwell Museum at Stockbridge, Mass., to select the designer of its new gallery structure. A building committee chose the 12,000-square-foot

single-story design over those submitted by Hardy Holzman Pfeiffer Associates, of New York, and Thomas Gordon Smith, of Chicago.

Framed by mature pines and spruces, Stern's classically inspired pedimented entrance gives way to an octagonal gallery dedicated to Rockwell's famous "Four Freedoms." The new structure will be faced in white clapboard with green trim and Vermont slate, to comport with an existing early-Victorian marble house on the 40-acre site, and the Rockwell studio, which has been moved there from the center of Stockbridge.





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## Bearing witness in bricks and steel

Many monuments to the Holocaust have been proposed since World War II, but few have been built. The capacity of architecture to memorialize and to teach lies at the heart of three current American projects for "living memorials" to this world tragedy.

It is nearly 50 years since one of the cataclysmic events of our century: the Nazis' systematic extermination of Jews, Christian Scientists, Gypsies, homosexuals, and other "undesirables" during World War II. And now, far from the sites of the original atrocities, work is under way on three separate projects in New York, Los Angeles, and Washington, which, in individual ways, memorialize the Holocaust. Each project originated with a different group and each has its own focus, but all provoke the same question: can architecture "bear witness" to an event that, even after extensive, even painstaking representation in movies, novels, TV mini-series, and volumes of scholarship, remains nearly impossible for many people to grasp?

Because work on the New York project, A Living Memorial to the Holocaust, Museum of Jewish Heritage, is still in preliminary design, both client and architect (James Stewart Polshek and Partners) are as yet unwilling to reveal the scheme. The project will be located at the southern tip of Manhattan, visible from those other potent symbols for "survivors" of all kinds of oppression, the Statue of Liberty and Ellis Island.

The Museum of Tolerance at the Simon Wiesenthal Center in Los Angeles, designed by Starkman + Vidal + Christensen, Architects, is now under construction [RECORD, September 1987, page 57]. While the museum is a significant part of the building program, it is subsumed in the larger, institutional envelope of the center, which is primarily known for its work in combating anti-Semitism and tracking down Nazi war criminals. The museum relies heavily on video and interactive computer devices to simulate critical events and places on a guided tour through the history of intolerance and the



Model of the Hall of Witness at the U.S. Holocaust Memorial in Washington, D. C.; I. M. Pei and Partners, Architects.

Holocaust. While this approach reflects the media-saturated ambiance of Southern California, the building itself alludes to Middle Eastern architecture, its light-filled atrium "a symbol of hope after the eclipse of the Holocaust," according to Rabbi Marvin Hier, director of the Wiesenthal Center.

In the years since World War II, many proposals have been made for monuments, including unbuilt schemes by Louis Kahn and Erich Mendelsohn. The need grows to remember the lessons of the Holocaust, according to backers of the three projects, because the generation of

survivors is dwindling. All the committees charged with program development and fundraising resolved that the symbolic gesture of a monument was not enough: each project had to teach. As Rabbi Hier has observed, "Public schools and colleges can't really treat these issues with the totality that they need." It is hoped that the memorials can demonstrate that the specter of mass murder is still with us, from the slaughter of Armenians early in the 20th century to the forced deurbanization of Cambodia in the 1970s. All three of the projects, therefore, address not just the

Holocaust, but larger issues of intolerance.

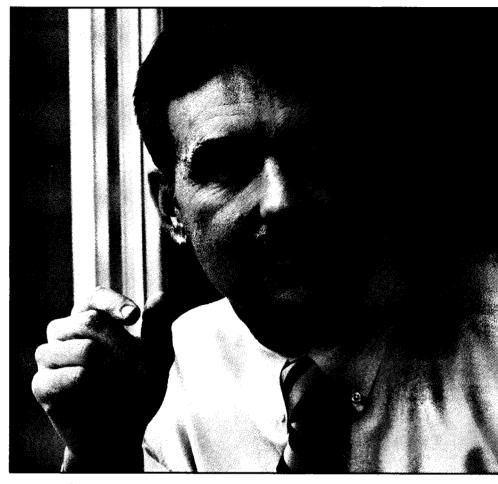
While the clients in Los Angeles and New York have programmed their museum and educational facilities as functional means through which to convey the profound issues raised by the Holocaust, the client and the architect for the U.S. Holocaust Memorial have decided, uniquely, that architecture itself could "say" something that an exhibit or educational program could not. The latter project, which is due to break ground this spring and open late in 1990, bears closer scrutiny as a case study for architecture in its most profound, memorializing role. The architects of the Washington project are I. M. Pei and Partners of New York, with James Ingo Freed as partner-incharge. Freed had an unusual ally in Arthur Rosenblatt, the director of the museum, who is himself an architect. Rosenblatt believes passionately in the power of architecture: "It can move; it can physiologically change people." He came to the project from the Metropolitan Museum of Art, where he was vice president for design, in part because he felt "it was terribly important for the most powerful nation in the world to make a statement on its own sacred ground against war, and against genocide." The project is indeed prominently sited on the Mall beside the Office of Engraving and Printing (one of Washington's most visited attractions) and along the axis between the White House and the Jefferson Memorial. In a recent interview, Freed indicated that he did not want the commission at first. He then felt that much bad art had been made about the Holocaust, and that any architectural essay on this theme would be problematic because "you can't estheticize the experience of the Holocaust." Continued on page 66

66 The DPIC education program has caused us to do continuing education, at the most basic contract level. that we probably wouldn't have gotten around to doing as a whole group. There may have been a person here or there that would have been enthusiastic about it. but their premium credit program requires all partners and technical staff to participate and take the exams. So, without the program, I think it would have been unlikely we would have gotten 100% participation. But because it is required, we do get it. In fact, we are considering making the DPIC tests, including reading the book, a requirement for all staff.

I can't imagine anybody not participating in the educational program, because of the cost savings aspect of it. I mean, let alone the fact that it can help your practice.

I think we've saved on the order of \$30,000 over two or three years. We've found DPIC's premiums, with and without the education program, to be generally competitive, so we do regard it as a savings.

You might find another carrier that could provide the same insurance for that net amount. But I think DPIC has been conscientious, in not saying, 'OK, we'll lower our price and forget about the educational program, and I think that speaks well for them. ??





Jack Corgan is a principal of Corgan Associates Architects, a 65-person firm based in Dallas, Texas. He is also a former Assistant Professor of Architecture at Oklahoma State University. We value our relationship with his firm, and thank him for his willingness to talk to you about us.

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# First position

Rem Koolhaas, of the Office for Metropolitan Architecture, makes the leap from theoretical projects to real construction with a major public building in his native Holland.

Rem Koolhaas is thrilled. One of his buildings has finally been built. The Netherlands Dance Theater opened in the heart of The Hague last winter, a Siamese twin to a new concert hall designed by another Dutch architect, Dick van Mourik. Though admirers of Koolhaas's Office for Metropolitan Architecture may be disappointed by the theater's facades—uncharacteristically sedate save for a golden cone at the entrance (opposite)—they will be glad to discover its interior is as "delirious" as OMA's theoretical work [RECORD, March 1988, pages 94-107]. Koolhaas maintains that the elevations are inconspicuous by design, in response to the theater's cramped site and commercial context. The building is framed by a bland high-rise hotel, two looming government office towers, a highway entrance ramp, and a spired 17th-century church, which stands as lonely testimony to the center's historic past. (Future neighbors will include a theater for drama, designed by Herman Hertzberger, and Richard Meier and Associates' competition-winning scheme for The Hague City Hall and Library—a commission that the jury originally awarded to OMA.)

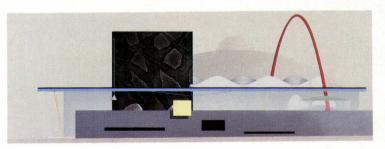
Sandwiched between the hotel and the concert hall, the dance theater looks so unassuming that it is hard to distinguish just where van Mourik's design stops and Koolhaas's begins. Although the two architects did not collaborate, their buildings' Modern geometries are serendipitously complementary, resulting in a dynamic intersection between the concert hall's gridded stucco box and sloping curtain wall, and the dance theater's conical restaurant and undulating roof (overleaf). The dance theater is the more informally composed of the pair, with a variegated grouping of low slabs that recalls institutional architecture of the 1950s, rendered in a monochromatic palette of corrugated steel, stucco, glazed brick, and glass. The only elements punctuating this assemblage are a jewellike conical restaurant and a painted billboard, designed by OMA co-founder Madelon Vriesendorp, which decorates the boxy volume of the upper stage. The low-key exterior of the completed theater, Koolhaas explains, is actually an inversion of two previous schemes for The Netherlands Dance Company. The 1983-84 proposal (below) would have added a new wing of studios, offices, and a rehearsal facility onto an existing theater-in-the-round in Scheveningen, a seaside resort west of The Hague. Colorful and extroverted, the earlier project deliberately imitated the honkytonk commercialism of its Coney Island-like setting through a collage of neo-Constructivist parts. When the site for the dance theater was switched to its final location, Koolhaas chose to develop a more sober building outside, releasing his esthetic energies inside instead.

From the moment you pass the ticket counter just inside the shared entrance to the two-part Hague complex, there can be no mistake which side belongs to the dance theater. Koolhaas has claimed his half of the lobby—essentially a covered slot between the two buildings—with a flaming red wall, which shrieks at the gentle pink and green outside the concert hall across the way. To further dramatize the public spectacle of entering the theater, the architect interjected a series of dynamic curves at various heights into the tall, narrow foyer, beginning with the brilliant, protruding arc of a conical café (cover) which straddles inside and outside. At the same time, Koolhaas ingeniously gained public space for the theater by appropriating the underside of the raked auditorium seating as a quirky angled niche for a copper-covered bar. Supported by multicolored columns, the niche's tilted ceiling boomerangs into the foyer to form a balcony reached by a twisting staircase. For theatergoers in search of further intoxication—visual or otherwise—OMA provided the "Skybar," a floating oval platform where champagne is served, which appears to balance precariously on a single red beam.

Behind the foyer's ecstatic mix of color and movement, Koolhaas sequestered the auditorium as an introverted black box. Subtle changes in color and texture between the hall's 1,001 midnight-blue velvet seats, charcoal walls, and wavy black ceiling achieve a dark intimacy that is enriched by shieldlike wooden acoustic wall panels and a stage curtain shot with gold. The restrained décor accommodates both avant-garde and traditional productions, and the combination of a generous stage depth of 65 feet and excellent acoustics lends itself equally well to dance or opera. Backstage, the architect has deliberately kept offices, rehearsal studios, workshops, and support areas as spartan as possible, with the exception of two marble walls and a swimming pool (a recurrent OMA motif).

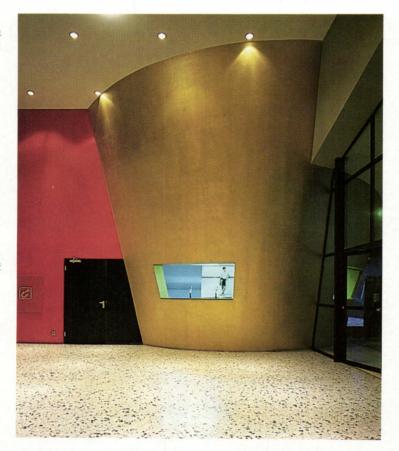
Despite bureaucratic constraints and a low budget (\$11 million), Koolhaas has attempted to imbue the theater with effects as striking as OMA's seductive drawings. Sadly, however, the detailing at prominent junctures between the building's disparate elements (such as the seam between the foyer's balcony and angled niche) does not measure up to the design's formal accomplishments—a nagging reminder of the 43-year-old Dutch architect's inexperience with working drawings. But OMA's production skills promise to improve as the firm's portfolio of built work steadily increases. Later this year, for example, the realization of Koolhaas's award-winning master plan for IJ-Plein, a social housing development across the Amstel River from Amsterdam's Central Station, will conclude with an apartment block of his own design. And in Paris, the completion of a luxurious hilltop villa will exhibit OMA's ability to control smallscale architecture on a large-scale budget. Koolhaas is slowly translating his ambitious metropolitan ideals into built form, but he has vet to produce a masterpiece worthy of his provocative rhetoric. As a first step toward achieving OMA's desired "culture of congestion," The Netherlands Dance Theater is a promising start. Deborah K. Dietsch

The colliding geometries of the concert hall's angled curtain wall and the dance theater's gold cone (opposite) recall the neo-Constructivism of an earlier OMA theater scheme (left). That unbuilt project was depicted on a Dutch air-mail stamp issued last year.

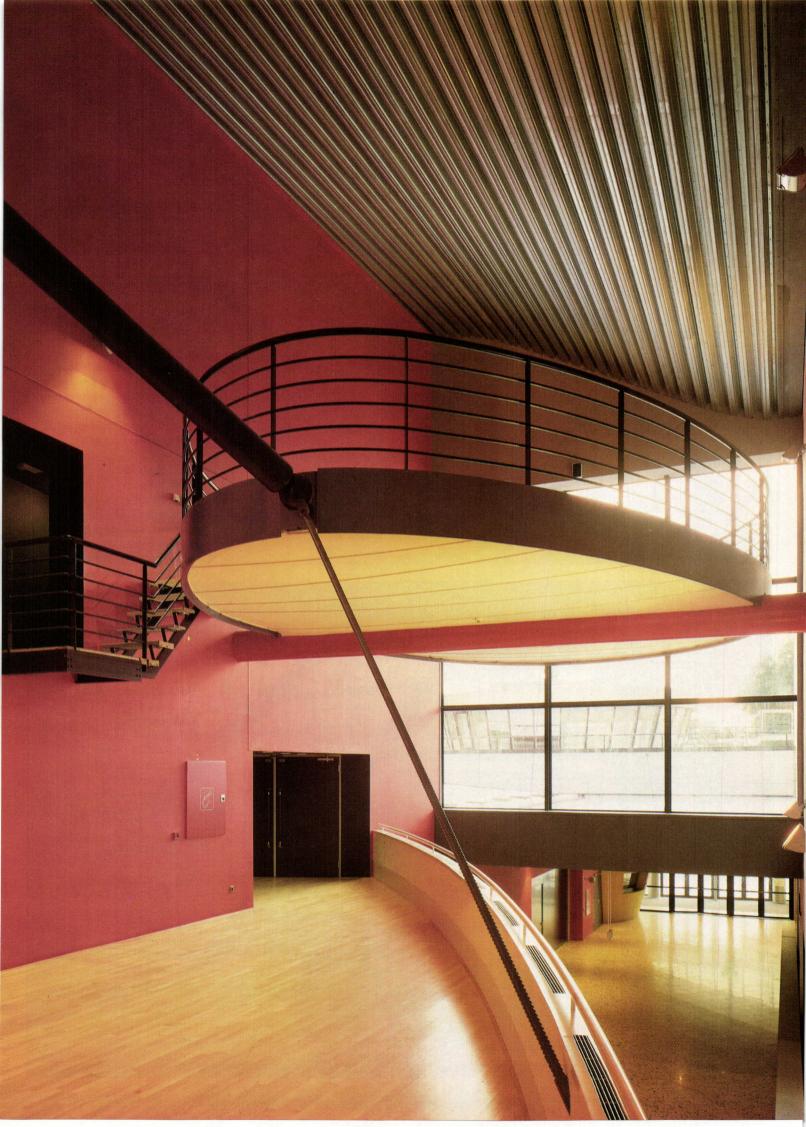


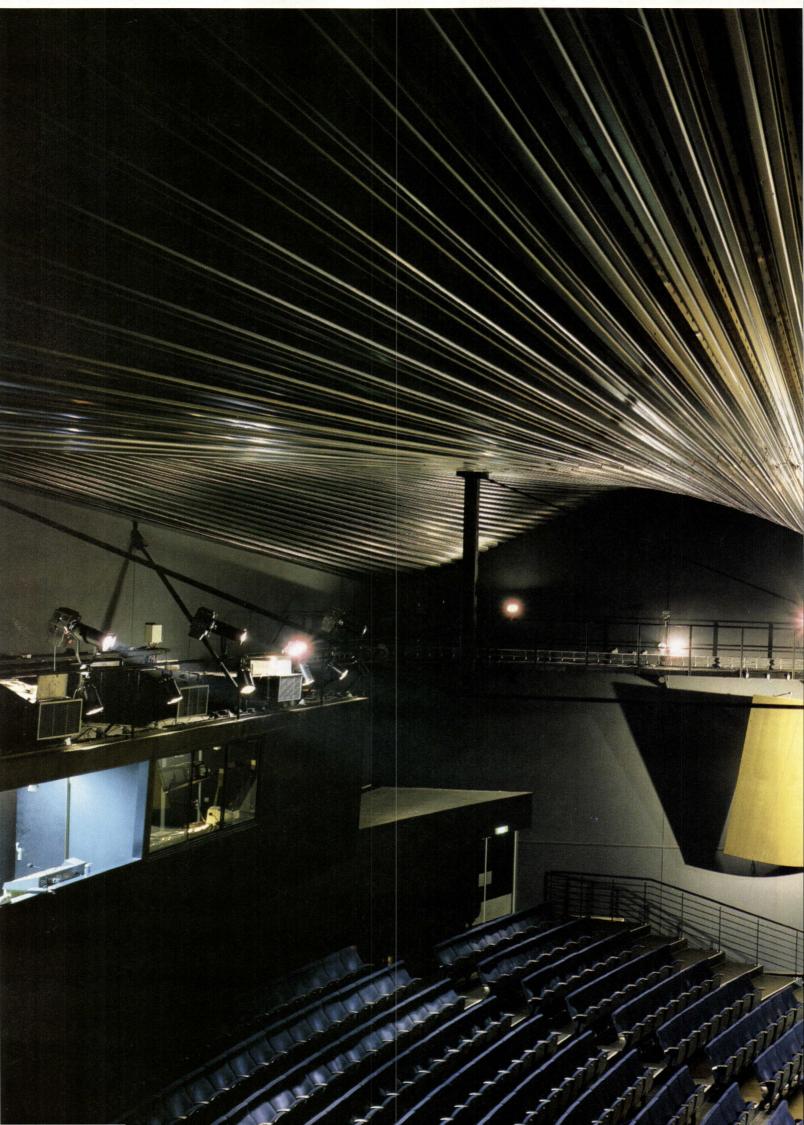
Architectural Record April 1988 73

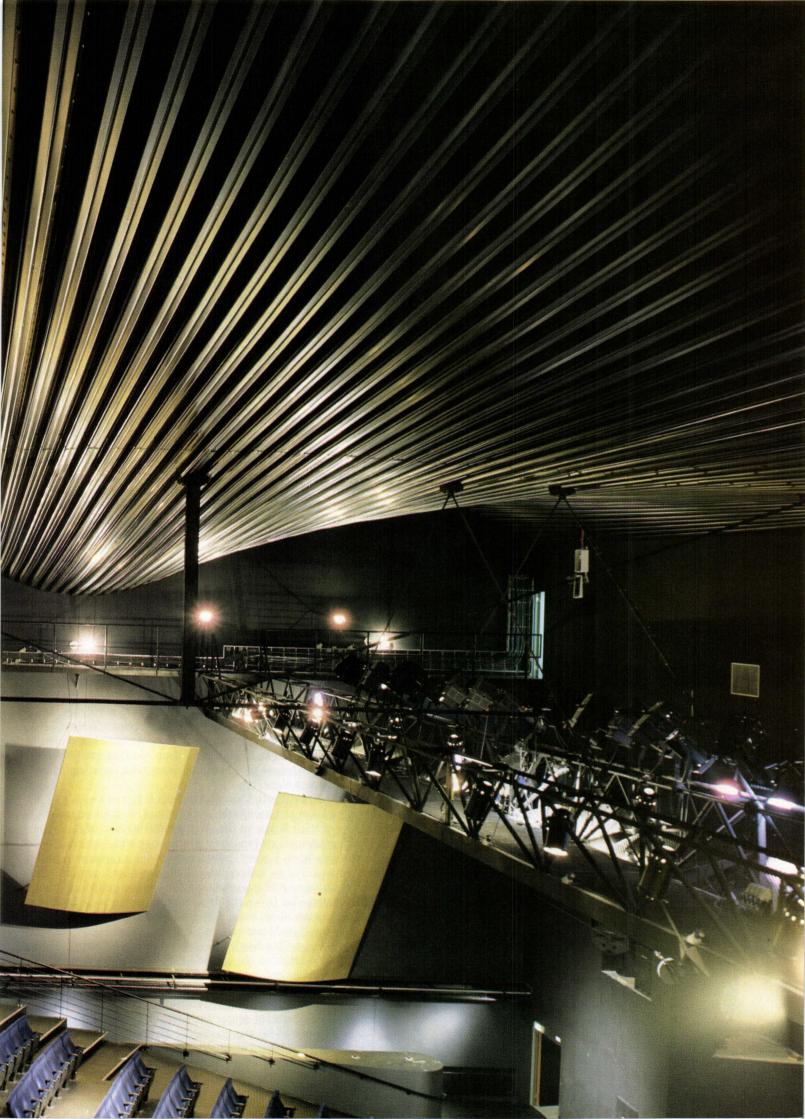
If the exterior of Koolhaas's dance theater makes peace with van Mourik's adjoining concert hall, its interior declares war. Emblazoned with red walls, the theater lobby explodes the confines of a rectangular slot between the two buildings with emphatically curved forms. At the entrance, the gold cone housing the Piccolo Mondo restaurant (top right) crashes through the exterior glass wall toward a door leading to the dance studio (visible through a window in the base). The auditorium is entered from a boomerang-shaped balcony that careens across the narrow lobby. Reflecting OMA's penchant for the "elegant vulgarity" of the 1950s and '60s, the balcony soffit is lined in perforated acoustic tile and supported by columns painted primary colors, and one pillar hand-finished by the architects in gold leaf. Refreshments are available both under the balcony, in a niche carved out from the raked auditorium seating (bottom), and above it, on an oval platform that resembles a wrestling ring. Dubbed the Skybar, the floating island appears to teeter on a single beam, but is in fact securely braced by a steel tierod and cable (opposite).





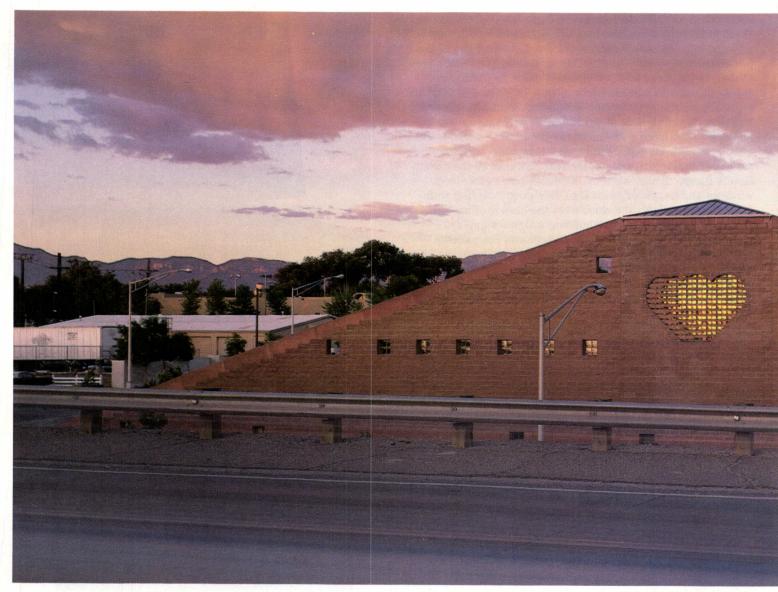


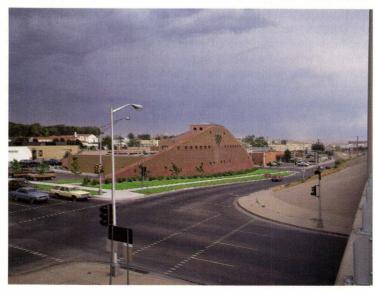




New Mexico Heart Clinic Albuquerque, New Mexico Antoine Predock, Architect Although the American West has a long tradition of roadside architecture, the federal Interstate highway system has added "a new level of scale and intensity to the strip," according to Antoine Predock. The New Mexico Heart Clinic, rising alongside Interstate 25

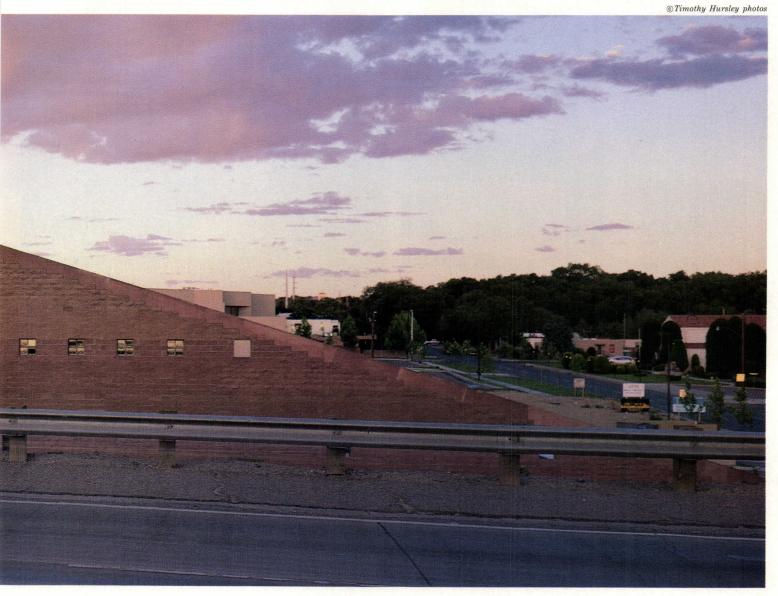
in a mixed-use area, is
Predock's latest contribution to
the culture of the open road.
The building's signature 275foot-long wall is made of roughtextured, 12-inch-thick concrete
block banded with earth-colored
pigments and scoria (volcanic
rock) aggregate. Curved in both



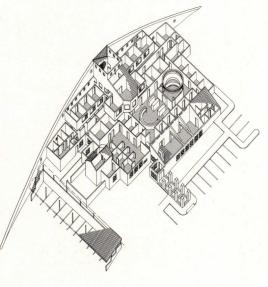


 $plan\ and\ elevation,\ the\ wall$ relates formally not only to natural features like the Sandia Mountains but also to the manmade concrete berms that support I-25 across the street (bottom opposite). Though softened visually by the clinic's speed-stripe heart logo,

 $the \ mason ry \ wall \ functions \ as$ a shield against the sights and sounds of the freeway. By contrast, the main entrance facade (bottom) is more inviting to patients and more open to mountain views, especially from the doctors' upper-level offices.

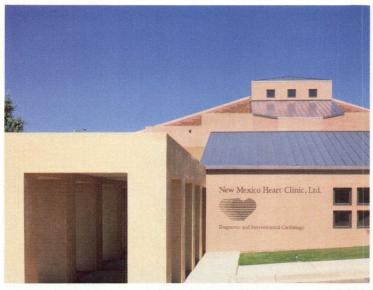


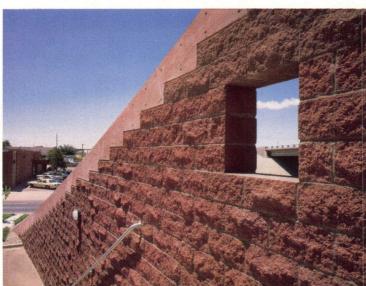


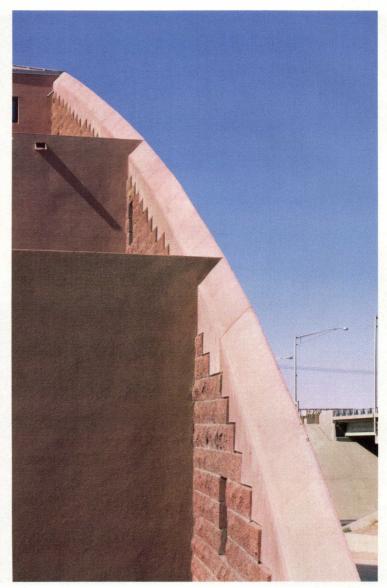


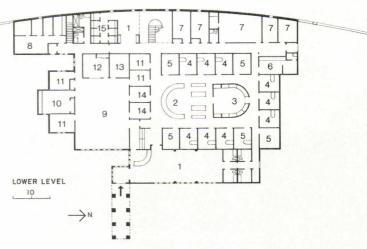
A knife-edged, poured-in-place concrete cap is intended to discourage daredevils from scaling the heart clinic's mountainlike wall (below right). Predock's awareness of ancient Pueblo architecture is  $most\ apparent\ in\ the\ building \hbox{\it 's}$ cubic massing (left this page

and top left opposite). In a juxtaposition of rock-faced masonry and small square openings (below left) that evokes the Anasazi Indian ruins of nearby Chaco Canyon, the architect's spiritual debt to such tribal progenitors is more profound. Even in plan, the







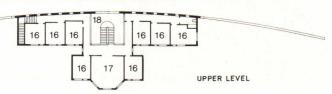


 $clinic\ unmistakably\ resembles$ clustered Indian dwellings, with their circular kivas, or ceremonial chambers, encased  $within\ a\ dense\ grid\ of\ small$ rectangular rooms. One of Predock's "kivas" is a patient scheduling desk (not shown); a second (bottom left) houses the physicians' "interact," a rotunda of lab-style minioffices that eight physicians use between appointments to study X-rays and compare notes with colleagues. Sunlight  $illuminates\ a\ stairwell\ through$  $a\ heart\text{-}shaped\ glass\text{-}block$ window (right).









- 1. Waiting room
- 2. Scheduling/charts
- 3. Physicians' interact
- 4. Examining
- 5. Consultation
- 6. X-ray
- 7. Diagnostic testing
- 8. Chart storage
- 9. Open-plan office
- 10. Employee lounge
- 11. Office
- 12. Computer room
- 13. Transcription room
- 14. Patient representative
- 15. Dressing room
- 16. Doctor's office
- 17. Library
- 18. Open to below

New Mexico Heart Clinic Albuquerque, New Mexico

#### Owner:

New Mexico Heart Clinic Ltd.

#### **Architect:**

 $Antoine\ Predock\ Architect-$ Jon Anderson, project architect; John Fleming, project manager

#### **Engineers:**

Chavez Grieves Engineers (structural); Lyon Engineering (mechanical); Telcon

Engineering (electrical); Bruce Wardin & Associates (acoustics)

#### **Consultant:**

Patrician Design (interiors)

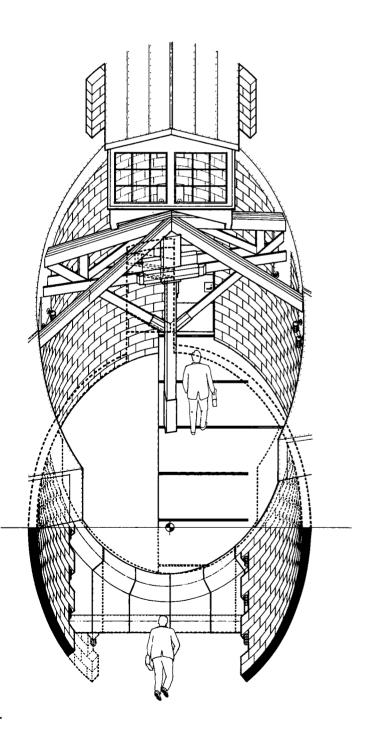
#### General contractor:

Bradbury & Stamm, Inc.

Architectural Record April 1988 87

8522 National Boulevard Culver City, California Eric Owen Moss, Architect

No project is more hackneyed than what developers dub the "unique" conversion of an old industrial building into "prestige" offices. Eric Moss defies the cliché.



# A hole in the sky

Talking about architecture in literary terms, no matter how erudite, goes only so far before it stretches paper-thin, as Eric Moss would be the first to admit. Weary of renown for being quick on the draw with arcane quotations but short on built buildings [RECORD, July 1985, pages 132-145], the architect is understandably proud of the latest notch on his T-square, a 60,000-square-foot commercial rehab in west Los Angeles commissioned by a market-wise developer. To the owner's credit, the recycling of a former plastics factory into rental office space was allowed to become something other than the cliché familiar from upgraded industrial lofts everywhere: minimalist whitewash and funky ducts for white-collar tenants bored with high-gloss veneer and ceiling tile. To Moss's credit, the metamorphosis of the extant structure (five warehouses spliced together helterskelter in the 1920s, '30s, and '40s) engages old and new in a dialogue so visually exhilarating yet pragmatically coherent that the onlooker doesn't pause to beg explanatory footnotes. From one's first arresting glimpse of the entry rotunda—a cutaway block-walled ellipse that rips open a bland facade to bare the wood-and-steel skeleton behind its stucco skin (drawing left, photo opposite)—it's easy enough to discern the building's allure for the proper sort of businessmen who people it in Moss's drawings. This real-estate offering is a call of the wild to the adventurous heart that beats even under Brooks Brothers worsted. The architect explains: "My hope for those who come into this kind of place would be for it to feel like somebody punched a hole in the sky. My buildings at least aspire to opening up new vantage points—insights into the idea that things are discoverable, losable, rediscoverable, and that this is part of being alive.

It's a relief to find revelations reaching beyond the trite intellectual conceit of geometric rotation for its own sake: in any case, walls askew from posts and trusses were already part of the existing warehouse fabric, a condition Moss chose to acknowledge but not glorify. He simply manipulated this given as one of a series of overlapping tectonic patterns that rhythmically articulate an L-shaped circulation spine and three elliptical nodes: the entry rotunda to the north, a second lobby at the junction of the two passageways, and a meeting room at the eastern end. The rest of the interior volume, outside these "public" zones, must temporarily remain indeterminate, pending subdivision or other tenant requirements. Moss likens his approach to those parts of the shell he could shape to drawing on a sheet where another hand has already sketched. The ideas of palpable survival, of emendation over time, and of open-ended inquiry which are implicit in this analogy, are also evident in Moss's diagrams. As one walks through the actual building, however, this rational schema becomes a choreographic tour de force; posts, arches, clerestories, transparent panels, and solid walls dance in and out of view, rise and fall, or shift from one side of the pathway to the other, in syncopated cadences. Only the most prosaic facilities manager could term such spaces "corridors," or call the ceremonial hall to which they lead a "conference room." The latter, strategically hidden, is encompassed by a skylit conical wooden tambour, aglow with golden radiance and tapering down to flamelike points where it meets the walls of a rectangular surround. That the drum is plywood and the outer shell of concrete block in no way dispels the magic of this inner sanctum. This is not a place to confer in so much as to commune. Here, gratefully, we are at a loss for words. Douglas Brenner



For the same developer who hired him to convert a dilapidated factory in the lowlands of Culver City, Eric Moss is also designing a parking lot opposite the northfacing entrance, next to train tracks in the median of National Boulevard; the

remodeling of another industrial building to the west; and two new houses across the way, in an existing neighborhood of modest bungalows. Though hardly the makings of a grand piazza, the projected complex will nevertheless enhance the focal

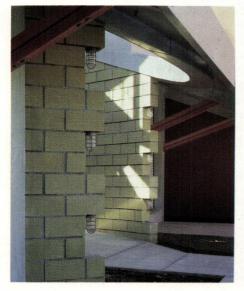


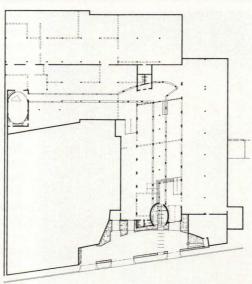


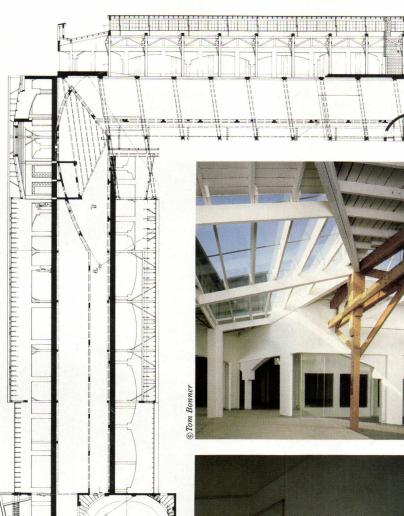
magnetism of Moss's concave entry to 8522 National (preceding pages, opposite, and below). The elliptical plan of the new opening is most apparent where its drum penetrates the slope of a new steel canopy. This curved cutout plays up the angularity  $of\ extant\ timber\ trusses$ (painted white where Moss has not encased them in steel) and the seemingly precarious jut of a ghostly roof monitor, its mullions unglazed beyond the line where block walls dissect the clerestory. Neatly toothed masonry flanking the outer

entrance reinforces the motif of fabric artfully torn apart and pieced back together, as do steel "Band-Aids" applied where blocks abut framing members below the smooth rotunda roof line. Similarly, the metal front door has a partial wooden "transplant."



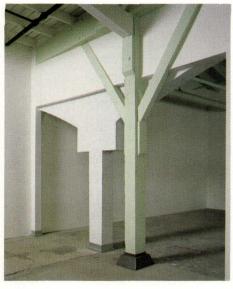












toward the convex entry pavilion (photo opposite), or south toward a corner lobby (bottom left), one sees the multiple strata of Moss's intervention. Posts and trusses from the original building are flanked on each side by an overlay of three distinct wall systems: a 2-by-4 frame sheathed in white-painted gypboard and punctuated by rectangular openings; a 2-by-6 stud frame coated in white plaster with pale blue speckles (imperceptible in photos), forming arches; and a screen of clear glass panels erected behind the arcade as a prototypical partition for as yet unoccupied offices (detail center left). Because each wall system follows an independent proportional scheme, the overlay of bay patterns yields fortuitously shifting rhythms especially when combined with skewed supports and irregular roof lines already here. Moss's syncopated beat is most complex at the elbow where the two passageways meet (drawing page 71; photos top, and center left). Around the bend, a partially elliptical perimeter wall echoes the geometric figures that start and end the entire sequence. The rhythm is simpler along the rear passage (in background of photo center left): here the rectangular openings and arches of the dual solid wall system eventually sort themselves out onto opposite sides of the path (elevations in lower left-hand segment of drawing above).

From inside, looking north



The conference room is essentially a truncated elliptical cone of wood inserted into, and intersecting with, an existing rectangular masonry surround. A double layer of birch plywood veneer, the inner shell is finished with matte sealer and attached by brass screws to fir framing. Panels, dimensioned so that joints trace a wavelike pattern across the curved surface, were fitted together like cabinetwork and honed to the thinnest possible edge around openings. The cladding "peels away" in a ring near the top of the room, and at the corners, to express the stud armature and to allow clerestory light to filter in from behind. There is also a triangular skylight in a plaster ceiling, and incandescent downlights whose wire guards cast radiating shadows. Eric Moss sandblasted all exposed concrete block here (original masonry elsewhere was left rough and painted white). Realestate agents and prospective tenants touring this space have voiced both unease and wonder (one visitor compared it to the haunting Marabar Caves in E. M. Forster's A Passage to India). Moss responds: "Well, maybe this is the sort of conference room where you feel you really ought to be talking to Buddha."

8522 National Boulevard Culver City, California

#### Owner:

Frederick N. Smith

#### **Architect:**

Eric Owen Moss-Jay Vanos, project associate; Scott Nakao, Carol Hove, Alfred Chow, Alan Binn, project team

#### **Engineers:**

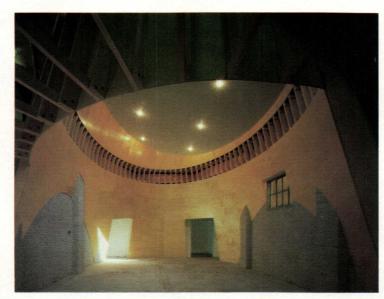
Gordon Polon (structural); Paul Antieri (mechanical); Paul Immerman (electrical)

#### Consultant:

Saul Goldin (lighting)

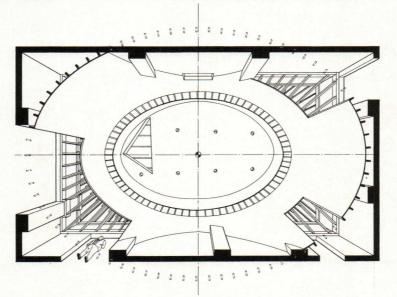
General contractor:

Kevin Kelley











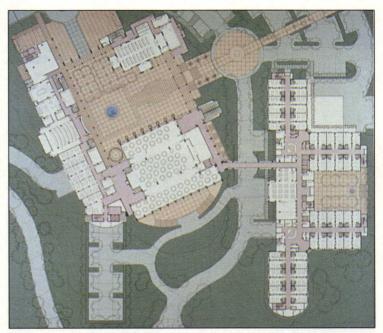
may carry a barb. The new image of potential buyers as trim silver-haired couples eager to swing on the golf course by day and in the disco by night is more appealing than the now-receding image of old folks rocking on the rest-home porch, but no more universal. Among the more stubborn remnants of stereotyping the elderly is the reluctance to recognize that aging is not a condition but a process—and it takes a long time. The elderly, strictly speaking, are merely those who have reached a societally arbitrated age: no one wakes up "old" on his 65th birthday. Tastes and interests remain intact (with more leisure, they may expand); so do personalities. Individually, we remain diverse. Collectively, we become more so, as aging layers physical change—as great in the last 20 years of life as in the first—onto personal quirks and characteristics. A true-to-life rendering of the elderly population as a whole, various to begin and changing with time, would be not a portrait but a DeMillean spectacle.

Professional observers of aging aptly, if unkindly, divide the scenario into three self-explanatory stages: go-go, slow-go, and no-go. The caution for those eyeing the heady demographics of aging is over-counting the hale, affluent, and independent. The go-go for the most part don't go into targeted housing. Having their own homes, people understandably prefer to stay there, and in overwhelming numbers (some 90 percent), do so. When further narrowed by income, the potential market for privately developed retirement communities, including the growing majority that offer lifecare, is reduced to about 4 percent of the over-65 population. Although "resort" communities oriented to recreation and leisure attract a small but significant segment of the "youngold" within this group, the principal clientele for continuing-care communities is people in their 70s and older, who are ready for respite from maintaining a household and foresee, if they have not yet experienced, the need for help in maintaining themselves. Entrants to facilities that provide housekeeping and/or personal services from the outset are, of course, even older.

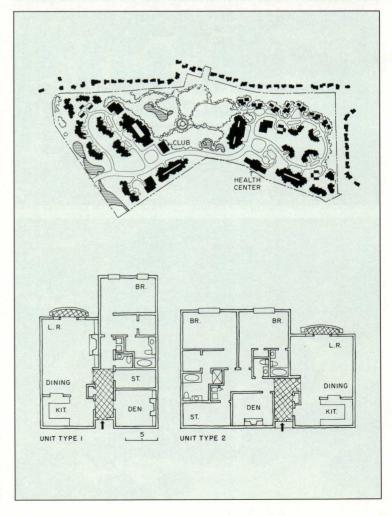
#### Aging in place

In the jargon of the field, "aging in place" (as if there were another way) affirms that old people, wherever they live, get older. Its import to developers and operators of CCRCs is its explosion of the myth of the swinging couple, who in fact soon transmogrify to a frail widow. As the go-go fade to slow-go and eventually to no-go, a project's balance shifts from residents who are largely independent to a high proportion who need living assistance and/or health care. In addition, since retirement communities, like suburbs, are prone to self-selection by age, newcomers tend to reinforce rather than offset the upward creep in average age—which typically takes a project's majority from go-go to slow-go within five to seven years of its opening.

Successfully weathering the process of aging in place requires that the project's planners and managers anticipate the change and ready strategies for coping with it—a frequent argument for specialized, stand-alone projects. Since the option of matching residents to services through a succession of outside transfers is closed to CCRCs by their guarantee of lifetime care, for them the argument is moot, even though the inevitably increasing frailty of a project's population imposes an ever heavier demand for services and, eventually, for added nursing capacity—both costly. Even so, many established retirement communities are not only expanding their facilities for long-term care—the area of severest



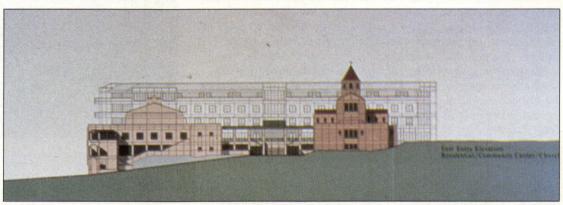


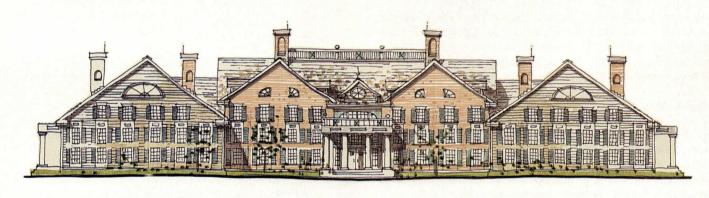


# Blurring age barriers

Integrating retirement housing with amenities for the broader community, the 10.8-acre Ararat Armenian Community Center planned by Bobrow/ Thomas Associates will be a social, cultural, and religious focus for Southern California's Armenian population as well as a home for more than 600 elderly residents. In addition to independent housing, skilled nursing, and congregate care, the plan calls for a community center providing services from dining and day care to clinics, a multipurpose banquet hall open to associated Armenian organizations, a chapel and museum, a 3,000person capacity public plaza, and three acres for outdoor recreation.











# Community advice, community consent

Although the 1401 Farmington Avenue lifecare community planned for West Hartford, Connecticut, was initiated by area residents, acceptance by more immediate neighbors in the well-to-do suburb bordering the site was a sine qua non. To win it, the founding group's

developer/manager, GHM, Inc., and architects Russell, Gibson, von Dohlen offer a low-profile, low-density (30 percent open space) complex of unusually large—and costly—neo-Colonial units (both singlefamily houses and apartments); unusually

luxurious common facilities centered on a "clubhouse"; and a full complement of health services. The site plan incorporates elements of a 1936 Olmsted Brothers proposal for an arboretum on the property, and includes walking trails to be shared by local homeowners.

shortage and so the largest immediate market—but exploring in these "worst-case" settings innovative design concepts that with trickle-down will provide better environments for their more robust residents as well.

#### Accentuating the positive

Only the very young are as vulnerable as the aging to environmental assault, or as responsive to the aid of environmental props. With this realization, plus an improved understanding of what props are most useful, providers of elderly housing are demanding as a hedge against premature aging of their projects facilities that can subtly adapt to minor changes in the residents' capabilities—the shrinkage of distances easily walked, or a need for two prepared meals a day instead of one.

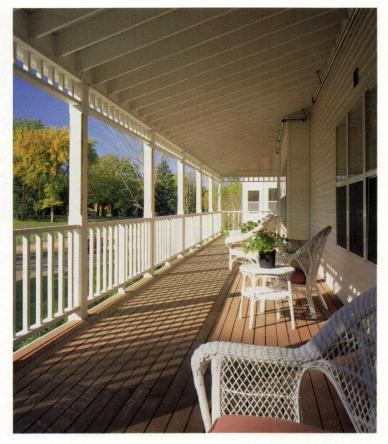
Barrier-free access, which, having been promulgated for the blind and for adept wheelchair users, in some respects (ramps are a notorious example) only increases the navigation problems of the old, is not enough. Nor is the "traditional" CCRC apartment described, without wince or wink, in a recent real-estate journal as incorporating "amenities such as a shower or bathtub with grab bars and seats, doorways and passageways that could accommodate a wheelchair, and an emergency call system."

The housing being sought, and in a growing number of projects realized, holds the promise of fostering both the self-image of independence even the frailest old people cling to, and its reality, by minimizing "excess" disabilities caused by environmental obstacles and providing unobtrusive aids to movement and perception without promoting reliance on their use. Such housing will not, however, be blazoned with an "E" for elderly. And since comfortable surroundings for the old are also more comfortable for younger people, it holds the added promise of attracting a flow of the young-old to balance a project's age-profile.

#### Old folks at home

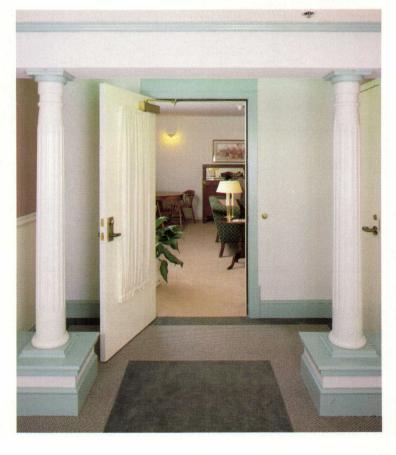
Architects who are designing housing for the elderly (or hope to) may not feel called upon to emulate the research conducted by architects Widom Wein Cohen before launching the design of a VA prototype nursing home (page 106), which included wearing vellow-lensed spectacles and earplugs to experience at first hand the sensory deficits that typically accompany aging. But it wouldn't hurt. Relatively few architects have been engaged in the field of elderly housing since battling public programs on the now-obsolete HUD model of stingy budgets, over-strict regulation, and a bureaucratic client to whom every amenity was an unnecessary luxury for an undeserving user. Fewer have grappled with the human issues raised by a better-understood aging process, or the new incentives, whether profit or philanthropy, for confronting those issues through design.

Until recently, moreover, nonpathological studies of aging have been sparse and often contradictory, forcing the architect's resort to an intuition that, unshaped by having "been there," has too often produced elderly housing juvenilized with supergraphics in happy colors or "senilized" by insultingly obvious prosthetic trappings. As more relevant studies have been made and compiled, the major permutations of the field have been reduced to checklists. The seamless design needed to smooth the individual's transit from young-old to old-old, however, is not to be found in even the most comprehensive cookbook, but requires donning, if only figuratively, Widom's marigold-colored glasses.



# Midwestern middle ground

Apart from its location in an established Minneapolis suburb, the Elder Homestead, with its steep gables, clapboard siding, and spreading veranda, offers few external clues that it is not the rambling rural farmstead it seems. A direct response to the Minnesota



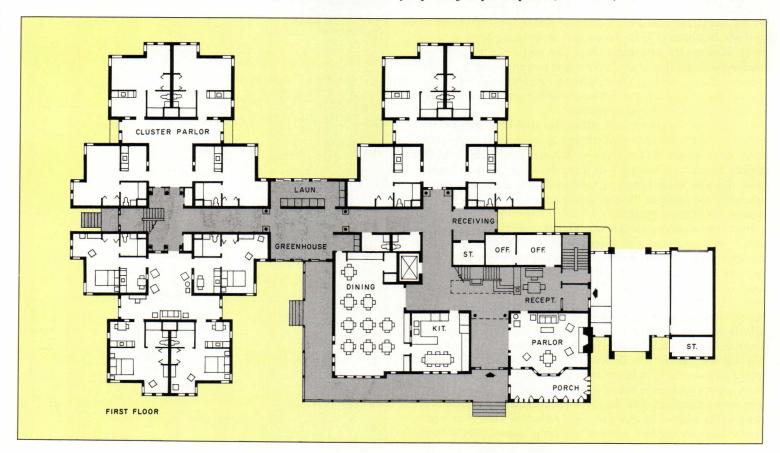


legislature's 1983 moratorium on nursing home construction, imposed in hopes of spurring more congenial alternatives, the Homestead is also a pilot for similar projects its sponsors, including planners Arvid Elness Architects, propose for other Midwest

locations. Taking the midpath between a nursing home and independent housing, the congregate home provides an around-the-clock nonmedical "watch," two prepared meals, limited personal care, help with shopping, and periodic needs evaluation. Its 28 75- to

90-year-old residents share the "main house" kitchen, dining room, and parlor-solarium (plan below). But their primary living spaces are efficiency units grouped in fours around a lounge (entrance bottom left) whose alcoves provide options for privacy or participation, as

do kitchen windows overlooking it, and Dutch doors that residents can open or close to invite or discourage visitors. Placing the laundry and greenhouse on a high-traffic route also encourages (while preserving personal control over) casual social encounters.



# A place for aging in place

With an informed awareness of the increasing frailty age brings, a dose of empathy, and a dollop of common sense, designers can readily predict the ingredients of the usual recipes for elderly housing. More important, a number of architects are subtly blending them in settings that better support the aging in activities they can enjoy and so de-emphasize, to themselves and others, activities they can no longer securely venture.

Exercises in empathy

Barring illness, the infirmities of age, one by one, are relatively minor, though pervasive, and in themselves rarely disabling. They become so, however, as overlapping deficits intensify over time, each compounding the others. The most incapacitating are the loss of physical mobility and stamina, which demand recognition in, for example, the choice and layout of project sites. Characteristically, the body's center of gravity slips forward with age, bringing a change in posture and gait, accompanied by precarious balance. A walk of any distance becomes problematic—and one man's gentle slope may be an older man's Everest. Even sitting and rising can be difficult if seating is poorly chosen, the worst offenders being the low, soft chairs deemed appropriate for lounges. Seating of varied shape and size allows people to find a fit: wing chairs, in addition, encourage changes in position; rockers even provide gentle exercise.

By the same token, juxtapositions of shared amenities and common spaces can be looked at from the unaccustomed perspective of a person whose day's scant ration of energy is husbanded against a trip to the mailbox. She may never cross or even enter the invitingly landscaped central courtyard, but will stop for coffee or make small purchases if facilities are convenient to her primary destination, and is yet more likely to do so if she has been able to "recharge" at resting places along her route. Because the automatic pilots that make routine activities routine fail with age, even the simplest enterprises may require concentration as well as effort, and energy spent in struggling against the environment is not available for exercising waning abilities or even for social interaction.

For most of the elderly, the difficulties posed by diminished mobility and stamina are exacerbated by reduced sensory acuity. At as early as age 45, for instance, the eye lens begins to yellow, thicken, and grow "bumpy." As a result, an 80-year-old needs three times as much light on a task as a 20-year-old, and glare—not only from lighting fixtures but from shiny surfaces and objects—is literally painful.

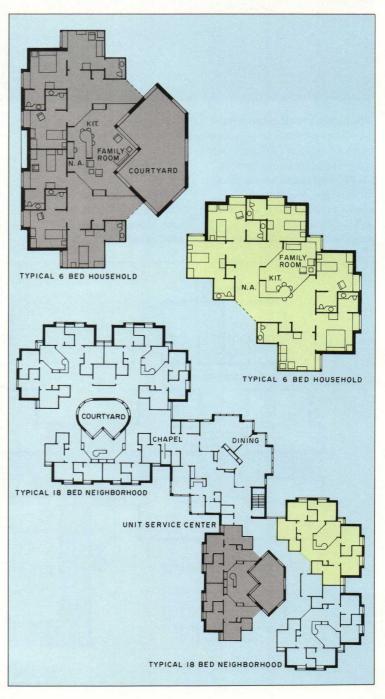
Such compensatory tactics as high but gently modulated overall light levels, combined with glarefree task and accent lighting for close work and space-defining contrast are successful, provided they are not carelessly negated by hot spots from chandeliers, downlights that add the insult of confusing pools of light and dark to the injury of visible lamps, shadowy "background" or "mood" lighting in passages and public spaces, or uncontrolled light from windows that, meant to provide views and a sense of expansiveness, instead make spaces behind them uninhabitable.

In addition, as the lens darkens, colors seem duller, and similar values placed side by side are hard to distinguish, particularly when objects and background are close in color and texture or seen under dim light. The intense hues architects are fond of using to "brighten" spaces may be seen by the elderly as near-identical muddy browns, while a "soothing" pastel palette blurs to

Evergreen Manor, a 300-unit continuing-care campus in Oshkosh, Wisconsin, is responding to the increasing frailty of its early occupants by expanding its total population to 500, maintaining the ballast of independent housing while adding a new skilled-care facility and converting the original nursing unit to assisted housing. The design by

Architects exploits researchbased and participatory planning to ensure the environmental fit of a scheme based on decentralized services and activities and "step-up" building blocks. Each of the project's three units comprises two neighborhoods with dining and bathing facilities shared by three "households" of six private rooms, which in turn share family rooms and kitchenettes near the nurses' stations. (A subprogram in the brief called for appealing to nurse assistants by combining autonomy within "their" households with support from "buddy" nurses in other neighborhood clusters.)

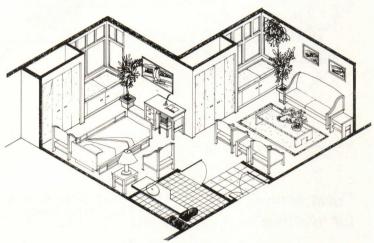
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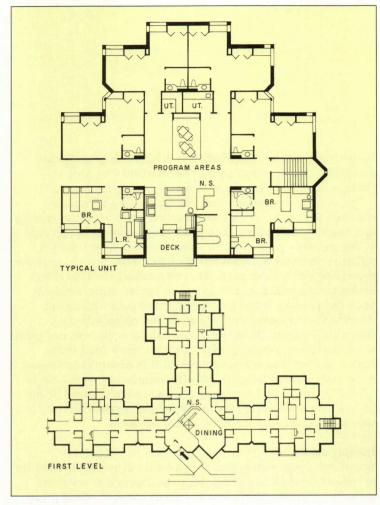


# Semi-private privacy

In its design for a remodeled health center and 91-bed nursing addition at the Glacier Hills retirement community in Ann Arbor, Michigan, Ellerbe Associates exploits the staffing

advantages and social amenities offered by small, manageable groups, deploying residents in six-room clusters centered on shared activity, lounge, and bathing facilities. The project's most salient feature, though, is the offset, biaxial, two-patient room that, for a relatively small premium in square footage, assures each occupant of both privacy and control over his share of the joint space, as well as ample scope for personalizing his own surroundings.

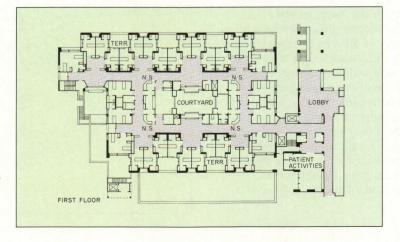




### Taking care of their own

The theme of the Motion Picture and Television Fund— "We take care of our own"—is borne out by a long-range plan developed by Bobrow/Thomas Associates to double the capacity of the fund-operated hospital and elderly-care community. The first phase, combining new construction with remodeled space in the existing administration building, tunnels surgery and outpatient and ancillary facilities beneath a two-story, 81-bed nursing unit. Patientcare floors include activity and reception areas, as well as clusters of four single rooms around an interior lounge. To take advantage of the Southern California climate, each cluster also includes an outdoor terrace, supplemented by a central interior court.





beige-tinged salmon. Color-coding is helpful only if colors are identifiable, but such signals may be sharpened by distinct changes in value or emphasis on figure-ground contrast.

The hearing impairment most elderly people suffer also suggests departures from usual practice. Even moderate hearing loss diminishes the capacity to pluck speech from a background of voices, machinery noise, traffic sounds, echoes from the hard reflective surfaces that also throw glare, "white noise"—and the music piped in to cover it all. By compromising the individual's ability to understand others, and so to communicate, ambient noise can provoke distraction, anxiety, and even withdrawal. whereas the cacophony can be largely controlled with such acoustic maneuvers as isolating air-handling equipment and other noisy machinery, orienting room openings away from traffic routes, and muffling extraneous sound with absorptive surfaces. A similarly straightforward, but often overlooked, assist can be offered by spaces and furnishings (private alcoves, small dining groups, movable seating) that allow people to select for themselves comfortable conversational distances.

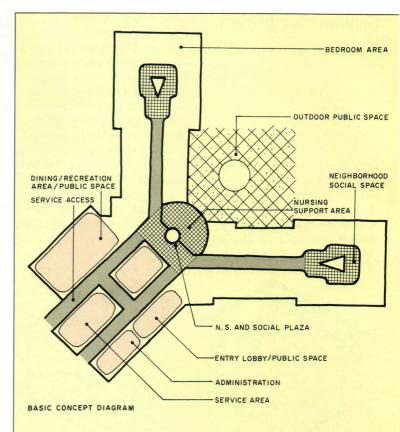
#### Looking ahead

The growing recognition that sympathetic environments can help to combat the debilities of age begs the question of the great majority of elderly people who remain at home, or would prefer to. As a result, some observers believe that, apart from long-term nursing care, the tacit emphasis on rehousing a large proportion of the population is both economically impractical and socially counterproductive. The individual's own home, they argue, offers the irreplaceable advantage of familiarity and, retrofitted, could also match the support offered by age-specific housing.

The "smart house" technology now reaching the market is pointed to as an invaluable aid in maintaining independence at home, as are the development and adoption of products ranging from the humble lever doorlatch to kitchens and baths with adjustable fixture and counter heights. Carried a short step farther, the concept of a compensatory home environment leads to the "intergenerational" house, which, with supports built-in from the outset, is seen as enhancing the comfort and convenience of young occupants (an infant in arms is as persuasive a reason for lever-opened doors as arthritic fingers) and adapting readily to the changing needs of middle and old age.

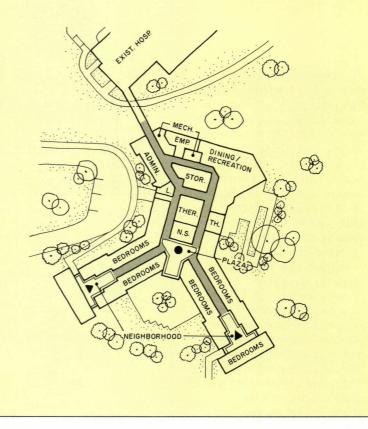
The argument against a presumptive transfer of the aging from their homes to special settings is strengthened by an already chronic and critical shortage of caretakers, which will worsen as older people increase in number relative to younger workers. Available helpers might, in this view, be more productively deployed in expanded, better integrated home-care.

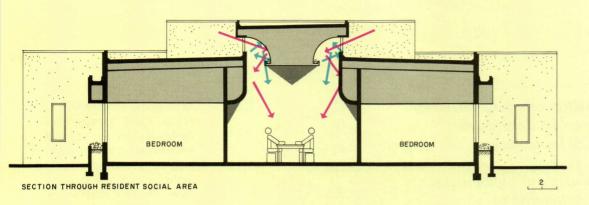
Meanwhile, New York's Museum of Modern Art mounts an exhibit of products—from lightweight wheelchairs to sculpted cane handles—designed for "people with temporary or permanent disabilities," home shows across the country spotlight model houses for the post-retirement market, and graying baby-boomers with aging parents are beginning to press employers for "elder care" benefits. In Naples, Florida, a developer, acting on his own interpretation of the message on the wall, is marketing to singles an apartment complex that features six-foot corridors, three-foot-wide doors with lever latches, baths large enough for a wheelchair, a walker, or a helper, and, of course, call buttons. Just in case. Margaret Gaskie

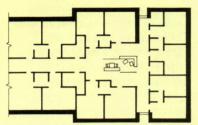


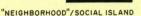
## "Last homes" for veterans'

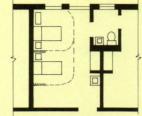
The assignment that prompted Widom Wein Cohen's "first-hand" venture into the experience of aging (see text) was to develop preliminary designs for nursing homes at Veterans Administration medical centers in Spokane, Denver, and Fresno (concept



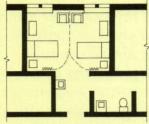








TWO - BED PLAN: SIDE-BY-SIDE



TWO-BED PLAN: TOE-TO-TOE



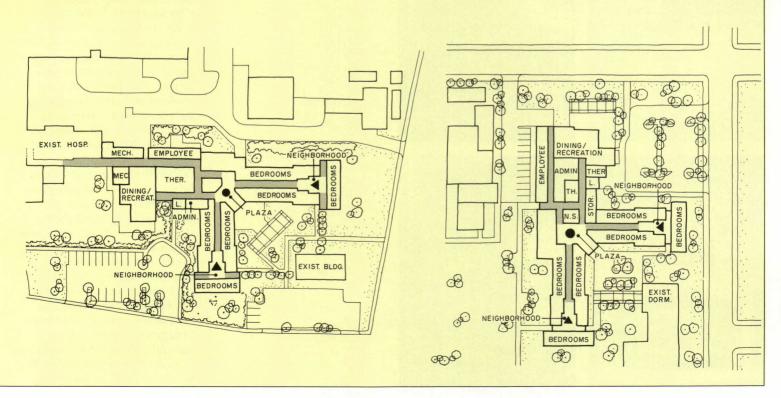
OPTIMUM: SINGLE - BED PLAN

plans below left, center, and right, respectively), the latter two to be carried through by local architects. The VA is gearing up for the coming deluge of aging veterans under severe budget constraints, which were passed to the architect along with a rigid

space program allowing only a 5 percent deviation in squarefootage on a per-room basis. The prototype that emerged (far left above) resolves the universal issues of privacy and socialization by placing patient rooms along "neighborhood streets" that lead to a "plaza"

at the nurses' station, and then to "downtown" service and activity areas located as sites dictate. Though private rooms were barred, Widom replaced the traditional side-by-side arrangement of semiprivate spaces with a toe-to-toe plan that gives each occupant a

defined territory, including clear views of the window and corridor (above). Visualized as a social space, the "street" was made wider than the VA's eight-foot standard, and includes "roadside turn-outs" with comfortable skylit seating areas (section above).



# Lighting: In the mood

More than in most specialties affecting building design, the "breaking news" in lighting has recently been concentrated on technical advances—the rapid progress of miniaturization, the evolution of high-output, low-energy sources, the harnessing of sophisticated control systems. The projects shown here take full advantage of the new tools where they best solve a given problem, but they also draw on the tried and true: simplicity and economy of means stand high among their common themes. More important, each brings ingenuity without eccentricity and wit without waggishness to the basic task of illumination. illuminating as well the term's underlying meanings of clarification and elucidation. In several of the projects, the interdependence of light and space approaches symbiosis. In all, it evokes, as no more tangible substance can, the emotive content of the designer's vision. M. F. G.









# Improving on nature

In designing the Sheraton Hotel at Oslo Fjord, Norway, Platou Architects hewed to the welltrodden path that turns inward to an enclosed atrium. But the proto-Portman trail stopped there. The hotel itself is neo-Wagnerian (i.e., Otto) with overtones of Nordic Postmodern, and the architects asked of the Edinburgh-based Lighting Design Partnership's Jonathan Speirs, IALD, a theatrical lighting approach that would play up its idiosyncrasies. The atrium, for example, is treated not as a vertically oriented lobby but as an "outdoor" courtyard. To abet the illusion, Speirs's lighting scenario simulates the natural diurnal cycle—though in tones warmer than the scant gray winter light of the far north, whose reality intrudes at glazed segments around the roof edge. Controlled by a computerized dimming system interfaced with a photocell and timer, the atrium lighting (reflected ceiling plan opposite) fades through three day scenes to three dusk scenes to night, and finally to a pre-dawn cleaning period. In the full course of the cycle, "flames" wash up the atrium wall; narrowbeam uplights on the trees are joined by high-mounted profile lanterns that throw soft-focus shadows of their leaves; shifting light plays on the courtyard's focal sculpture; and circlets of decorative lamps around petaltopped "streetlights" in the "sidewalk café" wax as the day wanes. The most dramatic scene, however, is enacted at dusk. Triggered by fading daylight, the photocell calls up a 30-minute sequence during which lights in the bar and restaurant dim, while the fingers of light that climb the atrium walls brighten. The ceiling is then gradually floodlit with red followed by blue to suggest a sunset fading to nightfall, when "stars" shine from the blue-flooded ceiling on the muted lights of the court.

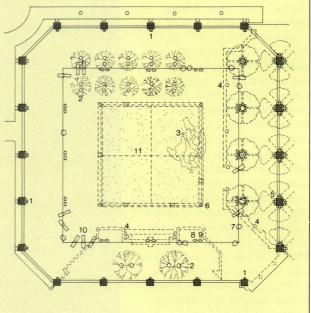
To mime natural daylight, the photocell- and timer-activated illumination of the "outdoor" atrium at the Oslo Sheraton (reflected ceiling plan below) increases through the day (photo left), then ebbs at dusk with a slow-fading sunset. The finale is a brilliant night scene (photo right) during which the luminaires that splash uplight on the atrium walls (detail bottom left) flare to full brightness, tungsten-halogen "stars" twinkle in a blueflooded sky, and well-placed accents highlight courtyard trees and sculpture.





tensioned stainlesssteel wires acoustic 240-watt, 12-volt tiles PAR56 VNSP grazing atrium wall pink aluminum channels brass trim detail 60-watt A-lamp in glass brick 10. High-level "gobo" projector

- 1. Wall-mounted, narrow-beam PAR56 uplight
- 2. White and blue floorrecessed narrow-beam PAR56 uplights
- 3. Floor-mounted, narrowbeam PAR56 uplight
- 4. GLS-lamp, opal glass spheres
- 5. Recessed opal and gold mirror lamps
- 6. Blue PAR56 uplight concealed in column capital
- 7. High-level, very narrow angle beam projector
- 8, 9. High-level "sunset" red and "night" blue tungstenhalogen ceiling floods
- 11. High-level tungstenhalogen-lamp "stars"



## Polished wit

Though conventionally downlit, the reception area (below) also introduces the Advantage showroom's dual system of neon ambient light (a tube in the metal-outlined canopy over the desk, "smoke" drifting to the ceiling) and low-voltage incandescent display light (the

even glow bathing the whiteplaster '30s-kitchen tableau). When the system is at rest (plan top right), the neon maintains a minimum light level in the gallery corridors (bottom photos this page and opposite left), augmented by pendants in the conference

Visitors to the Advantage showroom in Waltham, Mass., are instantly enticed by a wall-size white-plaster tableau of a 1930s kitchen, complete with dishes on the drainboard, a pie cooling on the oventop, and a curtainruffling breeze that wafts a rising stream of neon "smoke" from a plaster frying pan to the showroom corridor beyond—a broad hint at witty wonders to come. As the sculpture intimates, the showroom's wares are highend appliances, which JGL Interiors and associated architects Stahl Associates composed as art objects grouped in galleries around a racetrackshaped corridor with conference rooms at each end. The playful but purposeful conceit of the "kitchen museum" is brought to life by the kinetic two-part lighting scheme devised by Chris Ripman, IALD, of Ripman Lighting Consultants, to take advantage of the showroom's policy of limiting access to guided tours. For ambient light, the luminous line of neon smoke from the reception room snakes past a colonnade of display galleries, rounds a conference room at the oval's hub, and straightens for the return to reception via a second corridor of gallery "rooms" and alcoves. Display lighting, by contrast, is used only when and where needed. As the visitor is escorted through the gallery, a motion-sensor activates low-voltage MR16 and PAR36 lamps on tracks hidden against the blacked-out ceiling grid. Showcasing each gallery as the visitor approaches, then fading as he moves on to the next, their light compels attention to the product displays (and the comic relief of reprises of the opening tableau—a dismembered plaster chicken on a countertop, neatly folded plaster clothes atop a dryer). The controls consumed a third of the lighting budget, but keep energy use to a fraction of that required for constantly maintained display levels.





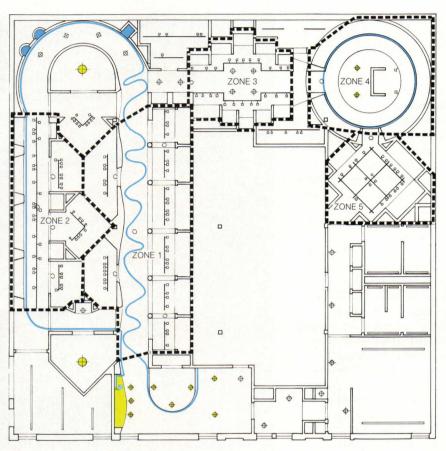
Peter Lewitt photos

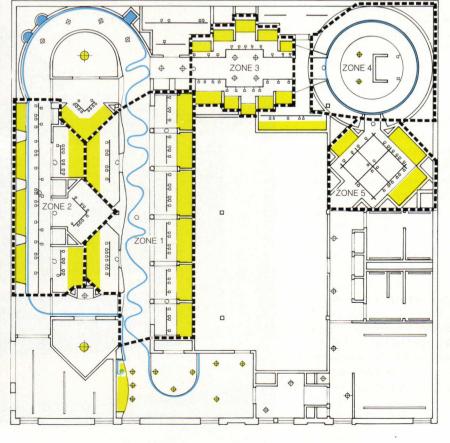
rooms (middle left below). In the circular "Great Hall of Refrigerators" (top left), however, the neon tube shifts from overhead to lighten the display platform ringing a half-opened plaster prototype. For accent lighting, the showroom is divided into five zones (plan bottom right), each with an ultrasonic motion-detector that activates trackmounted fixtures focused on the appliance groupings. As a visitor enters a zone, the sensor triggers a timed fade-up of the accent lighting, which slowly fades as he leaves.









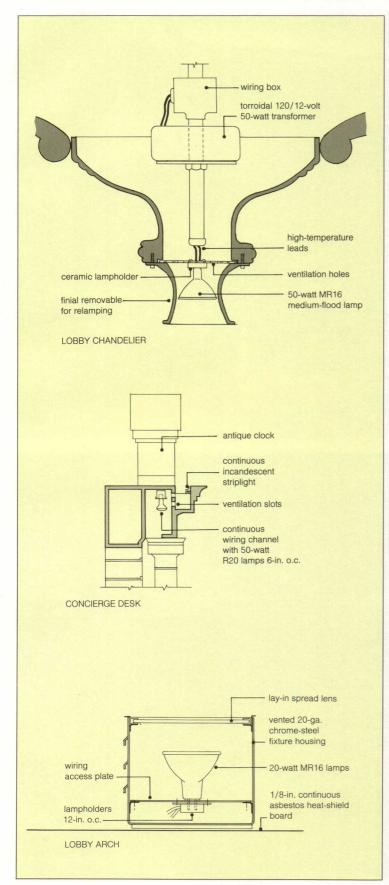


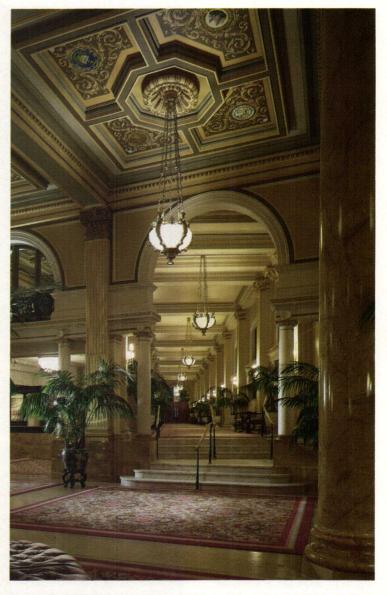
#### Better than new

Among the perils and pitfalls of restoring vintage interiors, few are more vexing than updating their usually rudimentary original lighting systems, without intruding anachronistic modern sources. The recent resurrection of Washington, D. C.'s landmark Willard Hotel, for instance, entailed replicating the lobby and adjoining promenade, which in the hotel's turn-of-the-century heyday were lit by chandeliers and wall sconces whose even, directionless light would to modern eyes seem bland in its lack of contrast. To retain the idiom but add sparkle. designer Babu Shankar, IALD, of Wheel Gersztoff Friedman Associates, adapted period pendants reconstructed from old photos to dramatize the column bays, which are crowned by coffers embellished with ornate plasterwork and colorful painted state seals, and floored by handsome patterned rugs. Faithful reproductions save for the omission of egg-shaped upper globes, the pendants combine three distinct lighting functions. Reflectors set between the suspension chains at the upper rim throw shadowless uplight on the coffered ceiling; the bowls' translucent moldedglass lenses shed glowing ambient light; and miniature flood lamps hidden in the bottom finials (detail top opposite) provide downlight. Other sources added to enliven architectural features were made "invisible." A linear lens, for example, casts an even wash on the arches over side balconies and highlights their decorative railings (detail bottom opposite). Similarly, a row of concealed downlights sculpts the pigeonholes behind the concierge desk (photo right and detail middle opposite), while a striplight tucked behind its cornice accents the antique clock above. Even the palms strewn about the lobby are given a chance to shine by tiny uplights planted in their jardinieres.



Highly visible recreations of the original chandeliers combine with concealed supplementary and accent lighting to preserve the turn-of-the-century ambience of the Willard Hotel's restored lobby and promenade while adding sparkle with 20thcentury lighting techniques.







#### **Guiding light**

Appropriately for Las Vegas, which derives its popular image from the clamorous, carnival lights of the Strip, the new passenger terminal at McCarran International Airport exploits its illumination to bring order and a sense of place to a building type that more often compounds confusion with tedium. The straightforward parti (plans opposite) places departure and arrival areas on opposite sides of an access road bridged by a vast esplanade, the hub linking the airport's major components. Like a photo so enlarged that the image is lost in close detail, however, the plan's clarity was at risk of being obscured by the terminal's sheer size. So lighting designer Stephen Lees, IALD, of Horton Lees, took as his charge a lighting scheme that would also guide circulation by subtly differentiating among the building's spaces and pathways. Early participation in the design, he says, allowed him to "paint with light," using a limited palette of sources heightened in expression by their integration with the structure. In the esplanade, for example, the warm glow of incandescents signals invitation and movement. The luminous base laid with downlighting is accented by coldcathode strips and clerestory slits that mark the layering of the upper ceiling's swooping, painted and polished-metal "clouds," and by blue-neon "capitals" that visually float the roof above its columns (photo top right, photo and section opposite). Circulation and "business" areas (e.g., ticketing) are defined by fluorescents, while metal-halide downlights outlining the carousels bring coolness and calm to the hubbub of baggage claims (bottom right). Despite low overall intensities and reticent lowbrightness sources, the play of direct and reflected light brings the terminal glitter and glamor, without descending to glitz.

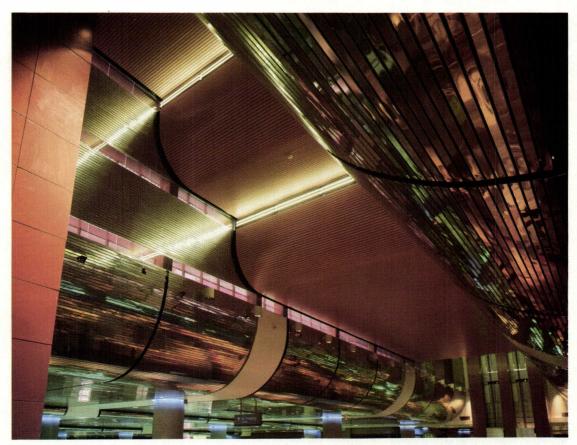
The inherent logic of the terminal layout is reinforced by lighting keyed to functional areas-incandescent with coldcathode and neon accents for the esplanade's lobby and retail areas (below), fluorescent for services and circulation, and metal halide for baggage claims

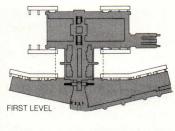


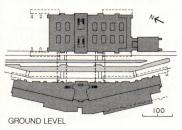


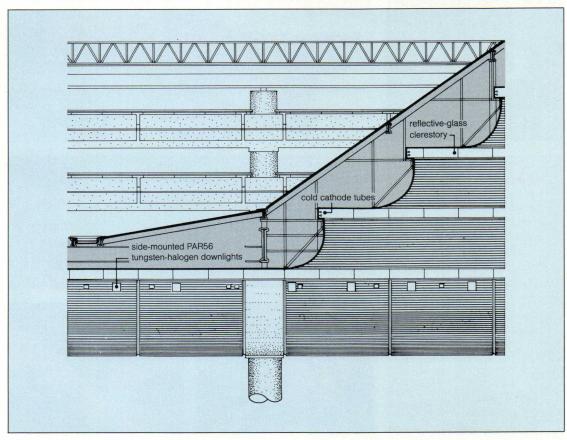
(bottom opposite). Standard downlights with cone reflectors and tungsten-halogen PAR56 lamps were modified for sidemounting to line the esplanade's inner spine, with similar PAR38 fixtures suspended in the lower side ceilings. To increase lamp life,

 $"bucking" \, transformers \, cut$  $voltage\ to\ all\ in can descent$ fixtures by 10 percent. Architects for the terminal were TRA Consultants and its parent firm, TRA, with the joint venture of Edward P. DeLorenzo, Architect Ltd., and the Benham Group.









The London scene is shifting, at least for the May 15-19 Interior Design International, which moves to Earls Court, where there is 20 percent more space. Some items on view:

#### 1. Credenza

The Portland II series of furniture is available in a variety of customized woods and finishes. Miles/Carter, Derby, England. Circle 300 on reader service card

#### 2. Luminous hardware

Modric Unilite items emit a bright luminosity from keyholes and other hardware. Charged by natural or artificial light, they glow for up to 8 hours. G+S Allgood, Ltd., London. Circle 301 on reader service card

#### 3. Executive furniture

The Berkeley range of office furniture in a new timber finish consists of desk, credenza unit, shelving, and castered chair in complementary colors. HK Furniture, Ltd., London.

#### Circle 302 on reader service card

#### 4. Wall tiles

A tulip motif is highlighted on Delft white background of tiles, tile panels, and borders. Dennis Ruabon, Ltd., Clwyd, N. Wales. Circle 303 on reader service card

#### 5. Commercial carpet

Fine-line patterns in Tactesse nylon include Velours, created on single-needle bar machines to produce striking graphics. ICI Fibres, N. Yorkshire, England. Circle 304 on reader service card

#### 6. Chintz-finish fabric

Marakesh Stripe cotton fabric comes in 25 colorways that accent the textural stripe overlay on a "ripple"-effect ground. Dovedale Fabrics, Ltd., Hengoed, Mid Glamorgan, Wales.

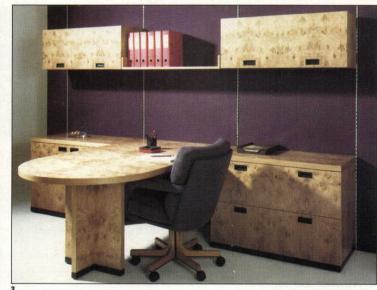
#### Circle 305 on reader service card

#### 7. Roll carpet

Musketeer floorcovering has a gridlike pattern to enhance visual interest and, at the same time, camouflage soiled areas. The Loboftor nylon carpet is available in six colorways. Bonar & Flotex, Ltd., Derby, England. Circle 306 on reader service card More products on page 123















# The dawn of a new era!

# The Problems



Stains from hot coffee.



Color loss from strong light sources.



Stains from wine.



Damage to the fibers from strong acids such as battery acid.



Oil-based stains.



Damage and loss of color from harsh bleaches and cleaners.



Stains from salad dressing.



Color loss from medications, and plant fertilizers.

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Amoco Fabrics and Fibers Company warrants to the original purchaser that for 5 years from the date of original purchase, carpets made entirely with 100% Marquésa® Lana and/or Marquésa® Lana/ST yarns, when installed and maintained for indoor commercial or residential use as recommended by Amoco Fabrics and Fibers Company, will not show a permanent, noticeable color change greater than one unit on the AATCC Gray Scale\* due to staining or fading and will maintain an AATCC Gray Scale rating of four or better, where five represents the original color of the carpet. This warranty is subject to the following stipulations and limitations.

- If the original purchaser believes they have a fading problem or a stain they cannot remove, they must call Amoco Fabrics and Fibers' PermaColor™ Service Line for assistance: 1-800-BY-AMOCO (1-800-292-6626)
- 2. If the original purchaser is unable thereafter to remove the stain using the procedures recommended by Amoco Fabrics and Fibers, they must allow a cleaning professional (contacted by Amoco within 10 days) to clean the stain. If the stain is removed by the professional cleaner, the original purchaser will be responsible for the cost of the cleaning.
- 3. If the original purchaser believes they have a fading problem, they must allow a certified carpet inspector (contacted by Amoco within 10 days) to inspect the affected area. If the certified inspector determines noticeable fading has not occurred, the original purchaser will be responsible for the cost of the inspection.
- **4.** If the stain is not removed by the professional cleaner so that a noticeable color change greater than one unit on the AATCC Gray Scale exists, or a fading problem is verified by the inspector, Amoco Fabrics and Fibers Company will repair or replace the affected portion of the carpet with new carpet of equivalent quality at no cost to the original purchaser, including installation cost.
- 5. The original purchaser should provide the date and place of purchase of the carpet to Amoco in the call to the Service Line and must present proof of purchase to the inspector or cleaning professional.
- \*The AATCC Gray Scale Rating is a nationally recognized system using a standardized comparison system to determine the extent of color differences.
- 6. This warranty does not cover staining or fading due to:
  - application of improper cleaning agents or maintenance methods;
  - (b) staining or fading occurring after the use of any additional carpet treatments or chemical applications;
  - (c) burns, cuts, or tears;
  - (d) normal soiling, abrasion, crushing or changes in texture of the carpet pile in any area;
- (e) abnormal usage of the carpet, faulty installation of defective carpet construction; or
- (f) staining or fading occurring after removal of the carpet and its reinstallation.

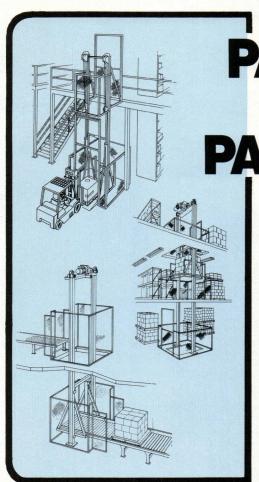
This warranty is validated upon Amoco Fabrics and Fibers Company's receipt of your warranty registration card. This warranty is a limited warranty that grants you specific legal rights, and you may also have other rights that vary from state to state. This warranty is void outside of the United States. For warranty questions or service, call the Service Line number above or write: ATTN: PermaColor™ Consumer Services, Amoco Fabrics and Fibers Company, 900 Circle 75 Parkway, Suite 550, Atlanta, GA 30339.

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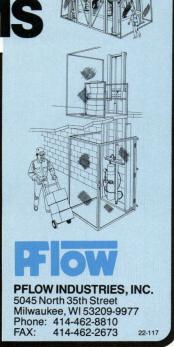
**PACKAGES PALLETS** PACHYDE

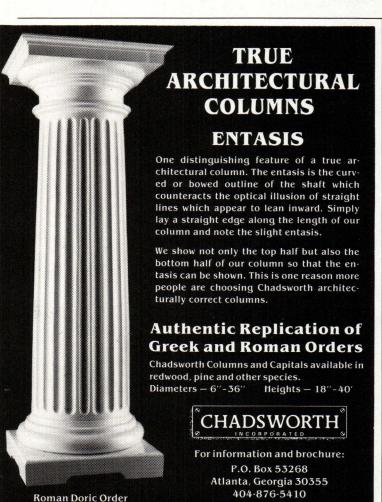
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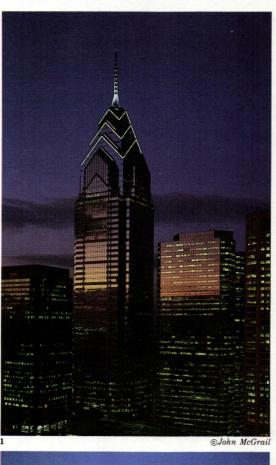
### STANLEY

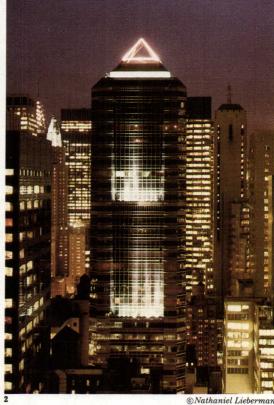
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Stanley Magic-Door® Division of The Stanley Works, Farmington, CT 0603

Circle 51 on inquiry core

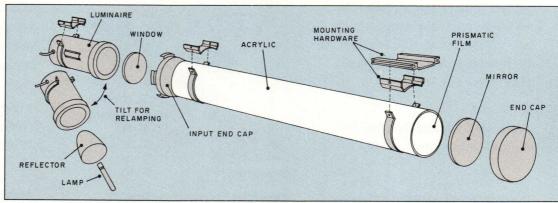
Combining the diffuse glow of fiber-optic illumination with the color splash of neon, the Lightpipe is a clear acrylic tube with a mirror at one end, lit by a standard H.I.D. lamp in a remote, integrated luminaire. The apparent simplicity of the Lightpipe conceals sophisticated physics. The sealed tube is lined with a micro-thin, clear prismatic film, which produces a total internal reflection, "bouncing" all available light evenly along the length of pipe. Shielding any side of the tube with a reflector intensifies the light diffused through the uncovered sides. And the light can be colored by placing a filter between the source and the clear window at one end of the tube. (4, a space-defining structure at Expo 86, Vancouver, shows the use of color.) Lightpipe has recently been installed as exterior architectural lighting to delineate skylines of tall buildings. Relamping and other maintenance on lighting fixtures can be very difficult-and dangerous—atop a skyscraper. But with the Lightpipe, the manufacturer explains, the bulb is easily reached in a hinged housing at one end. For example, the square-based aluminum pyramid crowning Park Avenue Tower, in New York City (2, Murphy/Jahn, architects) is lit by only 8 bulbs, all accessible from the roof level. Lightpipes over 40 ft long can be configured with the light source in the center, facing in two directions, with a reflecting mirror at each end. An installation at Liberty Place, Philadelphia (1), also by Murphy/ Jahn, uses Lightpipe in 44-, 66-, and 88-ft lengths. (3), Parapet lighting on One Minnesota Place, Minneapolis (Hammel Green & Abrahamson, Inc., architects), is flush with the wall, out of the way of window-cleaning equipment. TIR Systems Ltd., Burnaby, B. C. Circle 307 on reader service card More products on page 129

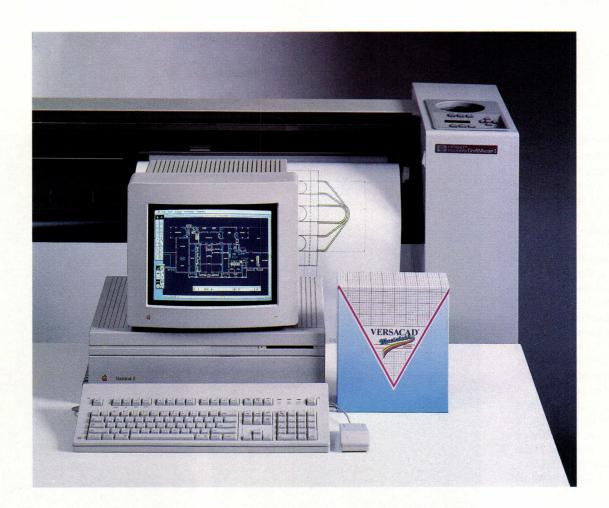












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#### Software reviews for architects

Intergraph uses a cartoon character, Opus, in its demo kit to show the versatility of its MicroStation package. (Author Ross wrote and placed the text in top photo.)

By Steven S. Ross

#### Intergraph **MicroStation** Version 2.0

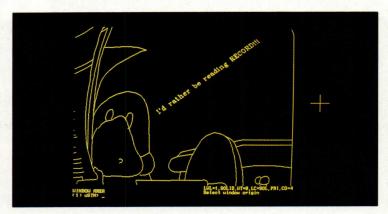
A fast, versatile graphics package that shares commands and files with the popular Intergraph VAX-based, minicomputer multiterminal software, but runs on an IBM PC, AT, or compatible. Ideal for the firm that has saturated its VAX equipment and needs an extra, inexpensive workstation.

Equipment required: IBM PC, XT, AT, or compatible, 640K, hard disk, PC-DOS or MS-DOS 3.0 or higher, at least one printer port, and two serial ports are preferred. Coprocessor chip (8087 or 80287) strongly recommended. Extra memory is useful to accommodate a RAM disk that can hold the MicroStation fonts.

Supports the following graphics: Hercules, CGA (in 640 x 200 monochrome mode), EGA, PGA, Metheus/Omega, Wyse WY-700, Verticomm H-16, M-16, M-256 and M-256VG, Control Systems Artist One, and One Plus. Supports keyboard, mouse, and digitizing tablet input.

Hewlett-Packard, Calcomp, and Houston Instruments plotters. LaserJet output is possible through the Insight Development Corp. LaserPlot package, Hewlett-Packard part HP35188A. Vendor: Intergraph Corp., One Madison Industrial Park, Huntsville, Ala. 35807. (205/772-2000).Price: \$3,000.

Steven S. Ross is past president of CCM, an educational software company in New York City, and now teaches journalism at Columbia University, where he also runs a large computing laboratory for students. He is often consulted on qualityassurance matters; his latest book, Construction Disasters: Design Failures, Causes and Prevention, was published by McGraw-Hill in 1984.





#### Summary

Manual: A mixed bag. Installation instructions are clear, but the tutorial is flawed by typographical errors. Ease of use: Fair. Like the VAX version. MicroStation is command-driven, not menudriven. But it comes with a menu sheet that can be pasted to a digitizing tablet. And MicroStation prompts users with information about what commands it expects next. Those who are used to the Intergraph system will have no trouble; for others, the command structure is not intuitive. Installation is easy, but the installation program does not update the PATH command in your AUTOEXEC.BAT file or your CONFIG.SYS file. The PATH command is particularly important, because MicroStation creates five subdirectories on the hard disk.

Error-trapping: Not up to current PC standards. Unexpected commands generate cryptic error messages, but do

no harm. Normal use of the EXIT or QUIT command overwrites the existing file. Always make a copy of previous work before updating it.

#### Review

Congratulations to Intergraph for translating its powerful VAX-based package to the IBM PC environment. The translation is indeed full-bodied. MicroStation is fast (acceptably fast even on an IBM PC or XT with 8087 coprocessor chip), and includes 2D and 3D manipulations, and easy file transfer back to the VAX or to a remote mainframe, if desired. The transfer can be done a number of ways, once the user exits MicroStation back to DOS.

The MicroStation package includes KERMIT, a flexible, public-domain file transfer program.

Think you might like to testfly some software before committing \$100,000 or more for Continued on page 127

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A word-processing package for those architects who want the advantages of desktop publishing, Lotus Manuscript allows user to preview and adjust document on screen before printing it.

a minicomputer system? Already have a minicomputer system, but need some extra capacity for a special job? A reasonably priced workstation to run this package can be had for well under \$3,000. That includes an IBM AT clone, Hercules monochrome graphics, and \$500 for a digitizing tablet. Many graphics systems for such equipment support two screens. Because each screen can be split into quadrants, up to eight independent views can be seen at once—on a microcomputer! Drawing files produced by MicroStation are absolutely compatible with files produced by the VAX-based Intergraph Interactive Graphics Design Software. Text data can also be sent to dBase III Plus files.

What's missing? Some of the ability to easily manipulate polygonal shapes, for one thing. And, of course, mainframe software allows several workers to share the same files, updating them constantly for easy coordination. With MicroStation, the files can be shared via dBase III Plus, but not until the dBase files are moved to a central computer.

Text handling turned out to be remarkably easy, once improperly given instructions in the tutorial were modified. Pressing RETURN, not ESCAPE, terminates text input and allows placement on the screen, for instance. And the user must specify text rotation before placing the text; otherwise, the text is placed twice. Font sizing also takes getting used to, although there is a dynamic, size-to-fit text option for quick drawings.

Database functions are also easy. Database records attached to a design element or section of a drawing can be reviewed from within MicroStation.

#### Lotus Manuscript Release 1.0

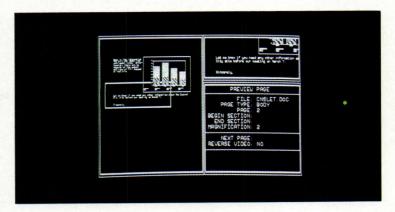
A word processor and document formatter optimized for technical professionals. Can mix text and graphics, and show the effect on-screen. Text goes onto the screen fast, but all other functions run a bit slowly. Manuscript allows easy tagging and moving of paragraphs and renumbering of subheads. Release 2.0, faster and even more flexible, is due soon. Equipment required: IBM PC, XT, AT, or compatible with 512K (640 recommended) and a hard disk. PC-DOS or MS-DOS 2.0 or above. Hercules graphics card, CGA, or EGA. Supports Compaq text-to-graphics switch automatically. Supports more than 40 printers, including Apple LaserWriter, LaserJet, Epson dot matrix, NEC, Okidata, Toshiba, and Diablo. Vendor: Lotus Development Corp., 55 Cambridge Parkway, Cambridge, Mass. 02142. (617/577-8500). Price: \$495.

#### Summary

Manual: Up to the high standards that Lotus sets for its products.

Ease of use: Good. This is a complicated program with lots of possible command sequences. But the on-line help is comprehensive and most commands are reasonably intuitive.

Error-trapping: Good. Invoking the DOS print-screen key in preview mode, however, froze the computer. It had to be turned off to restart. Pictures and other elements are added by noting their file names between backslashes. If the file can't be found during printing or previewing (perhaps because you misspelled it), the error is flagged on-screen.



#### Review

Intimidated by desktop publishing software, but in need of some way to merge text and graphics on the same page? Infuriated when you have to renumber subheads in a spec or similar document from the very beginning after a change that adds or subtracts a paragraph? Need a way to add mathematical formulas to normal text? Lotus Manuscript could be for you.

Release 1.0 allows documents up to 800 pages long. It also translates text to and from DCA (IBM's document content architecture, the file structure of DisplayWrite), and from Lotus 1-2-3 and Symphony files. Manuscript includes a powerful outliner itself, and can also read ThinkTank files. This allows you to move whole sections from one part of the document to another with just a few keystrokes.

To do that, of course, you have to mark the sections off as separate items. Lotus suggests doing that by making each paragraph a separate block. You can then assign various heading levels for different heads and subheads. Normally, the same heading structure carries throughout the document, but the format can be altered at any point.

To preview what the document will look like before printing, go to the PREVIEW menu. You can tell Manuscript to start previewing at a given page

rather than at the beginning of the document, and to end previewing at a given page, too.

Unlike a desktop publishing program, Manuscript works well both as a word processor and as a formatter. It checks your spelling, hyphenates, and even allows you to keep track of changes, comparing additions and subtractions with the previously stored version. It also puts words on the screen quickly (necessary for good typists, who get annoyed at the lag between pressing a key and the character's appearance), generates tables of contents, and allows more than one document to be open and worked on at a time.

The word processor offers easy ways to create attractive tables, adding rules between lines and columns, and even boxing them. Handling math isn't as easy (to get the Greek letter beta, for instance, you type /beta/), but at least it is possible.

On the other hand, text is simple white-on-black for most graphics boards; you can't set your own screen colors. Page headers are limited to a single line. And there's no way to create keyboard macros to automate repetitive functions.

Printer control is good, so long as your printer is supported by Manuscript. There's no way to embed your own printer escape codes (for special text attributes) in the text.

#### TECH WALL

Top Left: Margie's Bridal Boutique Chicago, IL Balsamo/Olson Group

Below Center: R.A.B. Motors San Rafael, CA Esherick Homsey Dodge and Davis Architects





Top Right: 1522 K Street Washington, D.C. Don A. Hawkins Associates

Bottom: Central Park Square Phoenix, AZ Clark — Van Voorhis Architects, Inc.





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THEC SGROUP

#### 1. Outdoor luminaire

An angled, aerodynamic castaluminum housing holding a clear, two-part polycarbonate prismatic lens, the Polygon area lighting fixture comes in black, bronze, silver, and white polyurethane finishes. Slots in the segmented reflector emit slivers of light, defining the shape of the fixture at night. Polygon is available in single-, double-, quad-, and wall-mounted versions. Staff Lighting Corp., Highland, N. Y.

Circle 308 on reader service card 2. Decorative luminaire Designed by Eric Fulford, of Browning Day Mullins Dierdorf, Inc., architects, as a custom "contemporary Italianate" fixture for the Indianapolis Lower Canal mixed-use development, the cast-aluminum Series SIC post-top luminaire is now available as part of the manufacturer's ornamental lighting collection. A photoelectric cell may replace the finial. Sentry Electric Corp., Freeport, N.Y.

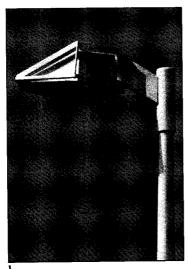
Circle 309 on reader service card

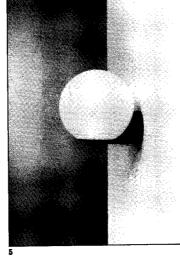
#### 3. Wireless dimmer

An infrared transmitter, the RanaX wireless control system dims standard and low-voltage incandescent and tungstenhalogen light sources from a hand-held linear slide used within 50 ft of the intensity-control receiver. Lutron Electronics Co., Inc., Coopersburg, Pa. Circle 310 on reader service card

#### 4. Downlighting

For indoor and outdoor applications, Cylinder Series aluminum downlights can use mercury vapor, HPS, metal halide, and incandescent light sources. Fixtures come in four diameters, from 6 to 13 in., finished in bronze, black, gloss white, and custom colors. Esco International, Chicago. Circle 311 on reader service card

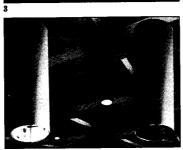


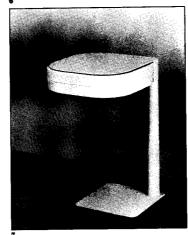


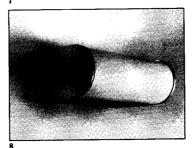












#### 5. European design

The expanded Bega line of location luminaires, bollards, and wall, ceiling, and pole-top lights includes new sizes and sources, such as compact fluorescents and H.I.D. lamps. Bega comes in black, white, and over 100 custom color finishes. Forms + Surfaces, Santa Barbara, Calif. Circle 312 on reader service card

#### 6. Self-cooling halogen

Widely used in retail and accent lighting, low-voltage halogen lamps are said to be prone to premature burnout due to heat build-up within the light. The ICE 16 low-voltage track fixture has an integral cooling element to dissipate the substantial heat generated at the seal and electrical connector, conducting it to an externally finned metal body that multiplies the surface area available for cooling. Tech Lighting, Inc., Chicago. Circle 313 on reader service card

#### 7. Portable tasklight

The Task-Mate's reflector and light-control system reportedly ensure superior performance from a 13-watt, 10,000-hour miniature fluorescent lamp; light level and reflected glare can be adjusted by the user. Shown here as a freestanding desk lamp, the Task-Mate can be mounted under a shelf or on the wall. Made of molded plastic, the light comes in a range of colors to match the trim of many furniture systems. Holophane Div., Manville, Newark, Ohio. Circle 314 on reader service card

#### 8. Wall bracket

The most recent addition to the Ensconce wall-mount fixture line takes a dimmable, tungstenhalogen bulb. Both the patented reflector and the cut-off shield can be adjusted to customize the distribution of uniform light to the dimensions of a particular space. Elliptipar, Inc., West Haven, Conn. Circle 315 on reader service card More products on page 133



#### TCS

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Surrounded by cropland on the outskirts of a farming community, this private residence is, as stated by the architect, "a response to the historical and physical characteristics of its site. Its sloped roof areas are covered with silver gray TCS (terne-coated stainless steel), suggesting the color and form of traditional rural architecture."

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#### **Product literature: Lighting**

For more information, circle item numbers on Reader Service Card

#### Custom luminaires

A color brochure describes the design and development of innovative lighting systems, explaining how Siemens product managers and engineers work with architects and end-users to produce specific solutions to commercial and industrial illumination problems. Siemens Lighting Systems, Iselin, N. J. Circle 400 on reader service card

Two types of low-level lighting are covered in a 12-page specifier's catalog: Bollard Ten, a large-scale, 16-in.-diameter luminaire, and square or round Standard bollards. The FormTen optical system is said to distribute wide, uniform, and glare-free light from an out-ofview lamp. Gardco Lighting,

Circle 401 on reader service card

#### Track fixtures

San Leandro, Calif.

·Site fixtures

A 14-page short-form catalog contains specifications for a full line of track fixtures, including low-voltage, Spotlight, MR, and tungsten-halogen products. Accessories such as C-clamps, color filters, dimmers, hoods, and louvers are shown. Lighting Services, Inc., New York City. Circle 402 on reader service card

#### ·Fluorescent troffers

A 4-page brochure outlines the advantages of 2- by 2-ft 3U fixtures that provide the same illumination efficiencies as 2- by 4-ft troffers. Diagrams illustrate compatible ceiling systems for D3 Deepcell, Parabaffle, Microcube, and Lensed fixtures. KLP, Wilmington, Mass.

Circle 403 on reader service card

#### Architectural lighting

Color photographs in a design brochure show round and square Magnu V bollards used to accent the architecture of commercial complexes, shopping malls, plazas, and colleges. Selection data, installation requirements, options, and accessories are included. Hubbell Lighting Div., Christiansburg, Va. Circle 404 on reader service card

#### · Energy-saving lighting

Meter Miser fixtures, said to cut lighting operating costs by 50 percent, are presented in a 22page color catalog. Light sources include fluorescent, H.I.D., incandescent, and quartz lamps, for applications ranging from noglare CRT fixtures to emergency and security lighting. Graybar Electric Co., Inc., St. Louis. Circle 405 on reader service card

#### · High-abuse lighting

Kenall lighting products are warranted against breakage for three years, according to a 24page specification booklet on incandescent, fluorescent, and H.I.D. fixtures designed for the abuse-resistant and environmental requirements of unsupervised public spaces. Kenall Mfg. Co., Chicago. Circle 406 on reader service card

#### ·Lamps and luminaires

Contemporary designs in floor-, table-, wall-, and ceiling fixtures are illustrated in a colorful 84page lighting catalog. Attributed pieces include designs by Piotr Sierakowski, Anthony Howard, Peter Hamburger, and Merle Edelman; a section on contract specification provides examples of lighting for office, healthcare, school, and hospitality use, and describes custom fabrication services. Koch + Lowy, Long Island City, N. Y.

Circle 407 on reader service card

#### Recessed lighting

A color brochure describes a full line of H.I.D. recessed architectural fixtures designed for easy installation and low maintenance, including Ellipsoidal Down-Lites and Wall Washers, and Lens Down-Lites. Most fixtures shown have adjustable socket positions for controlling light patterns. Juno Lighting, Inc., Des Plaines, Ill. Circle 408 on reader service card

#### ·Ceiling louvers

Louvers, lenses, diffusers, and baffles for both lighted and nonlighted ceiling applications are shown in a 12-page design catalog. Also included is the

Boardroom series of wood-look decorative ceiling tiles for 2- by 2-ft grids. A.L.P. Lighting & Ceiling Products, Inc., Niles, Ill. Circle 409 on reader service card

#### • Flexible track system

Q-Trak, introduced in a color folder, is described as a track system with unique fixtures that adjust laterally as well as vertically, allowing the uniform surface illumination to be precisely positioned. Track components are illustrated, and photometric data are listed for both HQI and quartz lamps. Guth Lighting, St. Louis. Circle 410 on reader service card

#### · Redwood fixtures

Standard and custom chandeliers and hanging fixtures for churches, restaurants, banks, and other public areas are illustrated in a Redwood Classics brochure. Fixtures range from single-lamp pendants and sconces to 17-lamp structures 11 ft wide. Sylvan Designs, Inc., Northridge, Calif.

Circle 411 on reader service card

#### ·Landmark illumination

An 8-page brochure explains the **Building Pride Through** Lighting program, and provides photographs and design ideas to encourage the nighttime illumination of landmark buildings, institutions, and other community structures. Projects illustrated range from the Hoover Dam to a small college chapel; text indicates the quantity and type of fixtures required for each application. GE Lighting Systems, Hendersonville, N. C. Circle 412 on reader service card

#### · Parabolic luminaires

Data sheets give dimensional, lamping, and photometric information for standard-sized P& Parabolume fluorescent luminaires for suspended modular ceilings. Louvers, in 4 finishes, are available with 9 separate air-handling functions. Columbia Lighting, Inc., Spokane, Wash. Circle 413 on reader service card

#### Outdoor lighting

Four-page technical brochures supply complete design data on three types of Infranor rectangular-beam floodlights for the illumination of building facades, parking lots, airports, sports arenas, and other facilities. Components, optional shields, mounting accessories, beam classifications, and ordering information are outlined. Sterner Lighting Systems, Inc., Winsted, Minn. Circle 414 on reader service card

#### ·Street and area lighting

The Granville luminaire is described in a color brochure as combining a turn-of-the-century appearance with state-of-the-art optical control, Circular, acornshaped prismatic glass refractors direct light into a rectangular pattern, said to permit long spacing, uniform beam spread, and minimal loss of upward light. Classically styled decorative poles are included. Holophane Div., Manville, Newark, Ohio.

Circle 415 on reader service card

#### Efficient sources

A Selection Guide presents a complete line of Sylvania incandescent, fluorescent, and H.I.D. lamps designed to reduce lighting energy costs. Application photographs show the various light sources used in retail stores, industrial facilities, homes, offices, and public buildings. GTE Products Corp., Danvers. Mass.

Circle 416 on reader service card

#### Interior lighting

A 28-page condensed catalog highlights fixtures for many interior lighting applications, from high-security housings with piano hinges and tamperproof fasteners to low-voltage Neolights suspended as a waterfall in a hotel lobby. Color photos show all products in use. Neo-Ray Lighting Products, Inc., Brooklyn, N.Y. Circle 417 on reader service card

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Illustration not to scale

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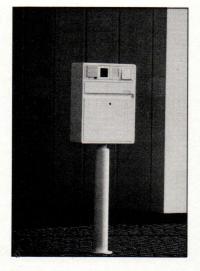
#### Continued from page 129



#### Color transfer

The Color Plus desktop processor is described as the only practical method available for enhancing documents created on many laser printers, such as LaserWriter and LaserJet. A sheet of transfer film in the desired color (over 50 hues are offered) is sandwiched with the laser-printed page and passed through the processor, which bonds color to the toner image in about 30 seconds. Kroy, Inc., Scottsdale, Ariz.

 $Circle\ 316\ on\ reader\ service\ card$ 



#### Mailbox/intercom

Recently approved by the U.S. Postal Service, residential and multifamily mailboxes are made of Lexan, extruded aluminum, and stainless steel in a number of anodized and enameled finishes. Intercom and videocamera modules may be included, as shown in this pedestal-mounted box, providing communication between the mailbox and the residence. Units may also be flush- and surface-mounted, and ganged for use in multiple dwellings. Siedle/ Intercom/USA, Broomall, Pa. Circle 317 on reader service card



#### German design

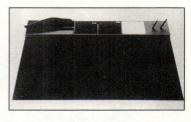
Desanta Series seating provides flexible support by replacing a rigid molded seat pan and back with elastic webbing stretched over a tubular frame. Kusch USA, Inc., Centerport, N. Y. Circle 318 on reader service card



#### **Ergonomic seating**

Task chairs have user-adjustable features; the teardrop design of Ergo chairs (center) allows a range of upper-body movement. The backless Balans seat (left) opens posture 120 deg to reduce stress and fatigue. Mayline Co., Inc., Sheboygan, Wis.

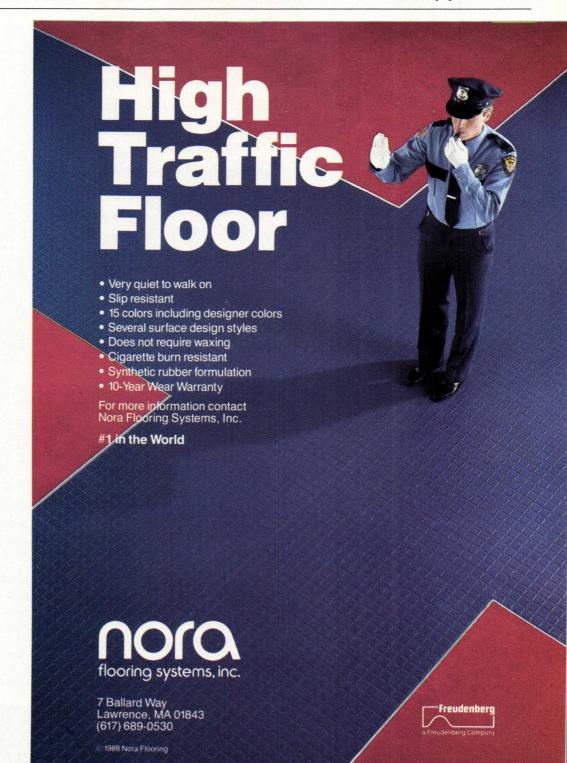
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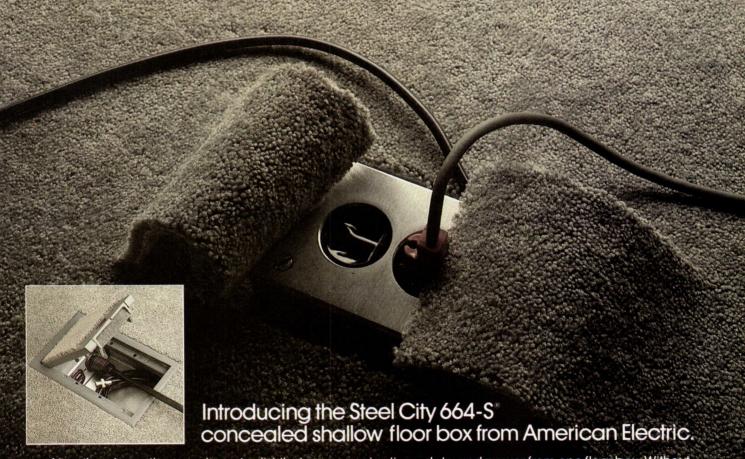
#### Desk accessory

Designed by Vignelli Associates for OUN of Japan, fittings for the executive desk include a gray enameled-steel organizer with a sandblasted appearance, a covered clip tray, and a black rubber writing pad. Becker, Inc., Westport, Conn.

Circle 320 on reader service card Continued on page 135



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CITCLE 58 on inquiry card

#### Continued from page 133



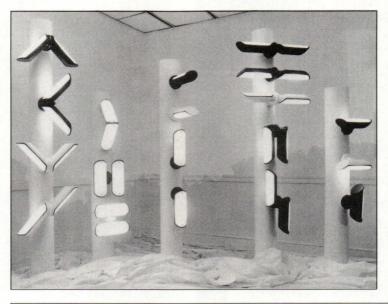
#### Church pew

Constructed of 7-ply Douglas fir plywood and finished with solid oak ends, this church bench is described as ergonomic, with a two-piece back that provides separate lower- and upper-back support. It is offered with a range of upholstery options, compatible kneelers, and accessories. Overholtzer Church Furniture, Inc., Modesto, Calif. Circle 321 on reader service card



#### **PVC** floor covering

A corrosion-resistant sanitary flooring, Serrofloor is suggested as an economical, long-lasting alternative to acid-brick or quarry tile in industrial, foodprocessing, and other areas exposed to chemical attack. The flexible PVC material has a nonskid texture; 4- by 20-ft sections are welded into continuous, selfcove area-size sheets. Special contours such as trenches and curbs can be pre-molded into Serrofloor material. Serrot Corp., Huntington Beach, Calif. Circle 322 on reader service card



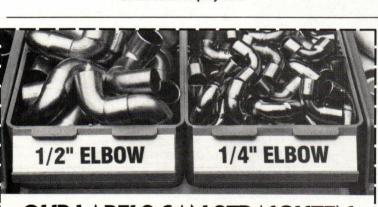
#### Modular lighting

Mitre-corner Ovalla components for indoor and outdoor lighting—light pods, canopies, and uprights-can be installed in various horizontal, vertical, or 45degree angled configurations. Wall-mount fixtures are shown here. All lights are UL-listed for wet locations, and come in chipand salt-resistant bronze, black, or white finishes on a castaluminum housing. Progress Lighting, Philadelphia. Circle 323 on reader service card Continued on page 141





Circle 60 on inquiry card



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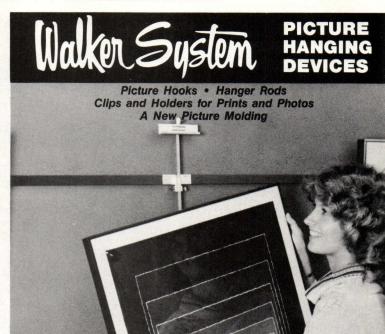
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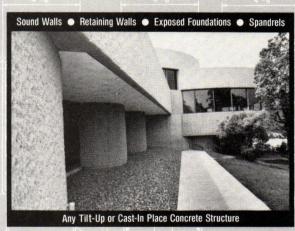
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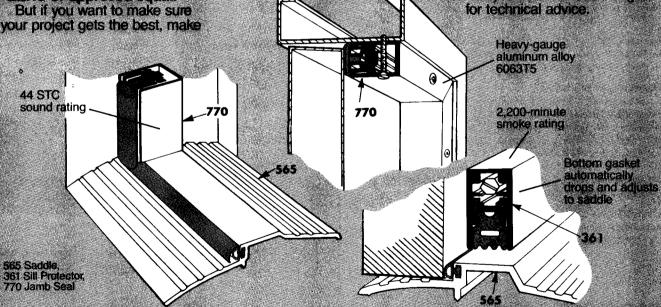
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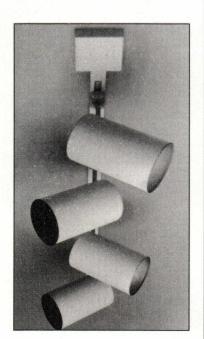
WHEN NOTHING ELSE IS GOOD ENOUGH FOR LONG ENOUGH.

#### Continued from page 135



#### Metal roof coating

Polaroof SP, an elastomeric roof coating, is available pigmented in custom colors to meet historicrenovation requirements. The application pictured matches a 19th-century paint made of pulverized red bricks and linseed oil originally used on a tin-roofed Victorian house. Plastics & Resins, Inc., Moorestown, N. J. Circle 324 on reader service card



#### **Dual-circuit track**

An end connector mounted to an outlet box, the Smart Start separates and controls two groups of lights on the same two-circuit, one-run track. Lights go from all-on, to some-on, to others-on, at the flick of a switch, changing the light available for task or wall-wash illumination. No rewiring is needed to retrofit the device. Capri Lighting, Los Angeles. Circle 325 on reader service card



#### Traditional desk

One of over 50 pieces now available in The Georgian Collection, this executive desk stands on Chippendale-style legs. A leather top is optional; file units can be selected to replace the two-drawer configuration shown. Kittinger, Buffalo. Circle 326 on reader service card



#### Beechwood chair

The frame of Metro's new contract chair is laminated beechwood formed by a computerized routing machine, a manufacturing technique said to combine the appearance of handiwork with the economies of volume production. Designed by Brian Kane for restaurant, library, and conference use, the chair comes in clear lacquer and white or black stained finishes. Metropolitan Furniture Corp., South San Francisco, Calif. Circle 327 on reader service card Continued on page 143



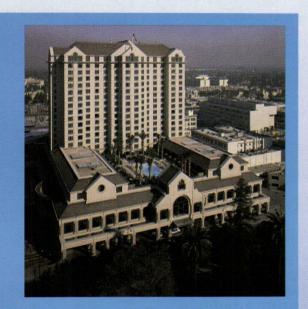
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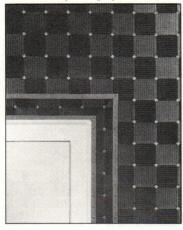
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#### Continued from page 141



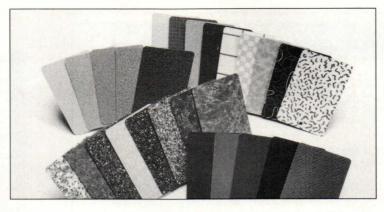
#### Vinyl borders

Designed by Patty Madden to work with Geotech embossed vinyl wallcoverings, metallic-look borders can be used to create a molding, frame a door, or provide an architectural element on an otherwise plain wall. Innovations in Wallcoverings, Inc., New York City. Circle 328 on reader service card



#### Radiation shielding

A lead-impregnated, optically transparent plastic sheet, CLEAR-Pb is supplied in prefabricated modular barriers and windows for use in X-ray and special-procedure rooms. Shatter-resistant sheets come in 0.3- to 2.0-mm lead equivalencies, permitting specification of the exact amount of protection needed. Panoramic panels up to 6 by 8 ft provide distortion-free observation of both patient and equipment. Nuclear Associates, Carle Place, N.Y. Circle 329 on reader service card



#### **Custom-color laminates**

A new designer program, Strata II includes multicolor silkscreened patterns, dimensional textures, and "stone-looks" that

can be specified in any of the 168 Pionite laminate colors with no minimum. Sterling Engineered Products, Inc., Maumee, Ohio. Circle 330 on reader service card



Boss office seating, designed by Michael Knoll and Hannes Wolf, is now available as a sled-base pull-up chair, finished in mirror chrome. The extended line also includes tilt/swivel chairs in three back heights. Brayton International, High Point, N. C. Circle 331 on reader service card Continued on page 151





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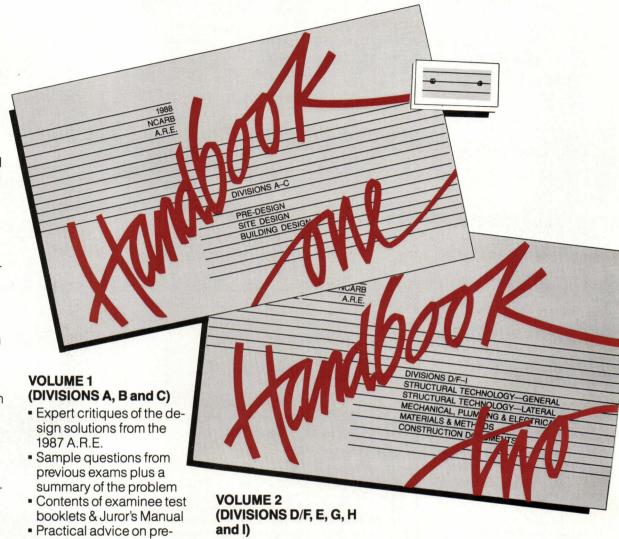
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From my point of view, general contracting has outlived its time. The trend of many major companies to function merely as construction managers (where owners do not necessarily benefit from guaranteed maximum prices, where they are forced to contract directly with the various trades, and where cost-control recommendations during design are often unreliable) suggests to me that general contracting is on its way out. It is time for the historical owner-architect-tradesman relationship to be re-established.

Mind you, even in the perception of today's public, the architect is associated as much with the building of a project as with its design. Witness the movie industry's portrayal of the architect as the hard-hatted director of forces in the field.

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must overcome his severe inferiority complex, roll up his sleeves and recognize his real role as master builder.

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mesmerized by a monumental bluff on the part of the general contractors who participated? Is it reasonable to suspect that their successful insistence on eliminating critical responsibilities for themselves reflects their own fear of continuing in their traditional role? Is taking on the task of the general contractor asking too much of oneself? I think so. Perhaps that's why their offspring are pursuing realestate development instead. Robert Ringstrom, Architect Culver City, California



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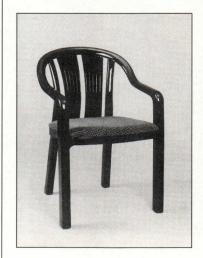
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Continued from page 143



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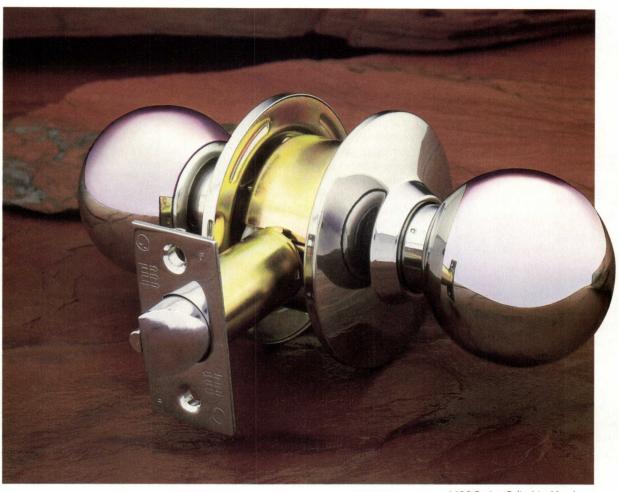
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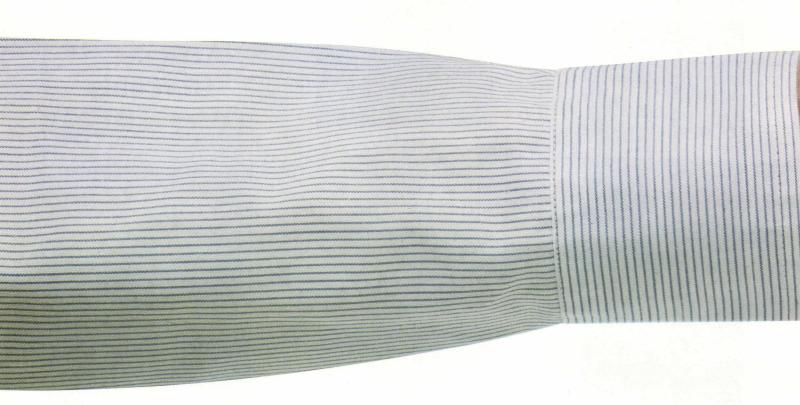


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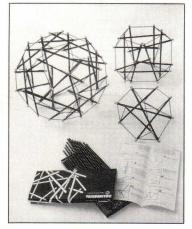
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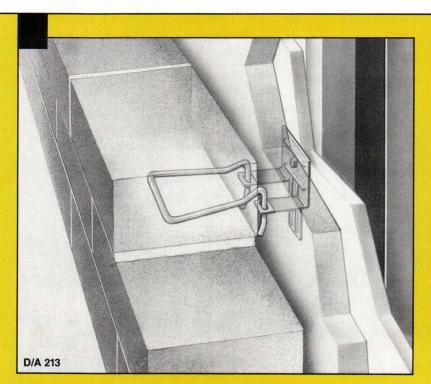
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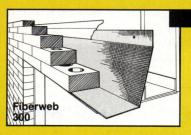
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# Manufacturer sources

For your convenience in locating building materials and other products shown in this month's feature articles, RECORD has asked the architects to identify the products specified

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New Mexico Heart Clinic Ltd. Antoine Predock, Architect Pages 84-86 - Modified bitumen roofing: Owens-Corning Fiberglas Roofing Products (Derbigum). Standing-seam metal roof: Berridge Mfg. Co. Stucco: Dryvit System, Inc. Skylights: Skyline Products, Inc. Metal doors: Curries Mfg., Inc. Aluminum-clad windows: Oldach. Outdoor lighting: Kim Lighting. Page 87-Glass block: Pittsburgh-Corning (Vue). Paints: Sherwin Williams. Flooring: Armstrong World Industries. Carpet: Stratton. Seating: Herman Miller (Equa). Oil paintings: Frank McCulloch.

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Owl Café

James A. Kaufman & Associates Owl's head: Styrofoam (Dow Chemical Co.); stucco: El Rev stucco; fabricated by the architect and Casev Seis. Coved ceiling and laminate-covered shapes: fabricated by Tom Penner and Jim Jeralomic. Laminate: Formica. Flooring: Armstrong World Industries, Inc. Paints: Benjamin Moore.

# Pages 90-97

8522 National Boulevard Eric Owen Moss, Architect Uplights: Hubbell, Inc. Paints and sealants: Dunn Edwards. Woodframed windows: custom by architect. Rolling shutters: Porvene. Locksets: Schlage. Splitface concrete block: ORCO. Crossrib rubber runners: American Floor Products. Sprinklers: Viking.

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Elder Homestead Arvid Elners Architects Shingle roofing: Certain Teed Corp. Siding and gutters: Alcoa Building Products. Windows: Acorn Building Components, Inc. Paints: Devoe & Raynolds Co.; Benjamin Moore. Doors: Custom Millwork Products. Columns: E. A. Nord.

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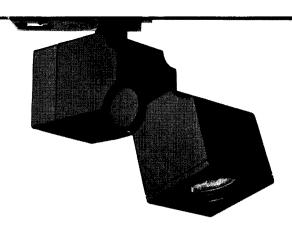
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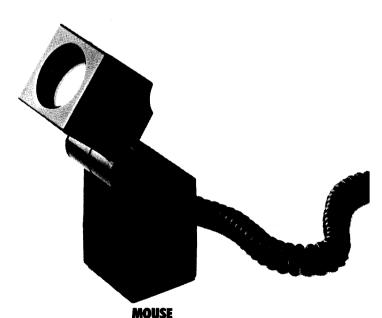
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