AGA KHAN SCHOOL OF NURSING, KARACHI, BY PAYETTE ASSOCIATES AND MOZHAN KHADEM
A SCHOOLHOUSE IN MANHATTAN BY CONKLIN & ROSSANT
"IS MODERN ARCHITECTURE DEAD?" BY ADA LOUISE HUXTABLE
EUROC HEADQUARTERS, MALMO, SWEDEN BY STEN SAMUELSON
BUILDING TYPES STUDY: INDUSTRIAL BUILDINGS
FULL CONTENTS ON PAGES 10 AND 11

ARCHITECTURAL RECORD

OCTOBER 1981

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I read the article "Caveat Architectus: Facade Inspection and the Design Professional" by Barry LePatner in the July 1983 issue of ARCHITECTURAL RECORD [page 57 et seq.]. Our office has spent many hours of time researching the various problems involved with the Chicago Municipal Code requirements for inspection of masonry buildings. In addition to the information contained in Mr. LePatner's article, there are several additional major stumbling blocks that make it difficult for architects and engineers to perform these inspections.

The first major problem involves union work rules, which forbid more than two persons to be present on a scaffold at any time. Additionally, the union requires that both men on the scaffold be union workmen. Therefore the architect or engineer would have to become a member of the union and would have to be one of the two men on the scaffold. This additional requirement makes it virtually impossible for architects and engineers to perform this type of work directly.

Another problem that we have encountered is one of liability. If we proposed that the actual inspection work be done by a skilled masonry workman, who is a member of the union and can be present on the scaffold, we would then have to rely upon his experience and thoroughness in reporting his findings to the architect or engineer, who would then write the report. Our insurance carriers indicated that if this individual was not an employee of ours, they would not be responsible for liability created by his inspection work.
The American Institute of Architects (AIA) has announced that an architect who was suspended from its ranks for an ethics violation has been given a new lease on life. The case, which involved the architect's violation of the AIA's mandatory code of ethics, was settled through mediation, and the architect was reinstated into the AIA.

The settlement includes the architect's reinstatement into the AIA, the payment of $700,000 to the American Academy in Rome, and the enrollment of the architect in a one-year residency program at the Academy.

The AIA has taken steps to ensure that such violations do not recur, including the implementation of a new ethics program and the establishment of a new code of conduct. The AIA also announced that it will increase its enforcement efforts to ensure compliance with its ethical standards.

The settlement was reached after a long and contentious legal battle, during which the architect was suspended from the AIA and faced a variety of legal challenges. The settlement includes the payment of $700,000 to the Academy, which is now free to focus on its mission of promoting architectural excellence.

The Architectural Record is committed to upholding the highest standards of professional ethics and will continue to monitor the situation closely to ensure that the AIA and its members remain accountable to their clients and the public.
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Peter Frank, Industrial Design Magazine correspondent, used this chair for three weeks and then wrote: “FS... achieves that rare, harmonious blend of visual distinction and functionality that ought to be any designer’s ideal target.”

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Budget wringer may squeeze subsidized housing again

Subsidized housing is going to be put through the Reagan budget wringer at least one more time. The "safety net" for the poorly housed isn't going to get much bigger than it is now, and all likelihood the net is going to let more poor people pass through without catching them.

This seems clear from the proposal of Housing Assistant Secretary Phillip D. Winn who, in a department memo that was leaked to the press, proposed to cut spending authority in the 1983 budget for subsidized housing down to $13.8 billion, compared to the 1982 figure of $22 billion. There are about three million units now under Federal subsidy.

At that level it would take about 20-to-40 year period to add another 140,000 subsidized units to the program in 1983, compared to the 50,000 additional units provided for in the 1982 budget fixed when Congress decided to add fewer subsidized units than the 175,000 units Reagan asked for in his budget at the beginning of the year. Originally, President Carter had asked for 260,000 additional units in his last lame duck budget last January.

Winn's memo indicates that budget-cutter David Stockman still is the biggest housing policy-maker in the Reagan cabinet. Winn even suggested that one option would be not to add any units in 1983. But his recommendations are subject to acceptance or modification by Housing Secretary Pierce before they go through Stockman's budget shredder. Winn wants to convert existing apartments to subsidized housing rather than construct new units.

Winn, other top HUD officials and President Reagan's housing commission keep seeking new, less expensive ways to deliver housing subsidies. Various voucher proposals are being considered, but insiders say that they tend to be too expensive, and therefore don't stand a chance. Housing block grants to states and large cities are also under consideration, but, so far, HUD officials and housing commission members show no signs of reaching a consensus.

The government is attempting to cut back on effective demand for subsidies by re-defining those who are "truly needy". One change, already enacted, limits housing subsidies to families with incomes of no more than 50 per cent of the median income of their area.

According to Rep. Charles E. Schumer (D-N.Y.), the "ultimate impact will be to destroy the healthiest and most viable public housing projects" by ruling out most working families. But he points out that Pierce can "cushion the impact of the law" since it allows him to allocate ten per cent of the national total of vacancies to families earning more than 50 per cent of the median income in their area. —Donald Loomis, World News, Washington.

Engineers worry that Brooks Law architect/engineer selection process may be endangered

The American Consulting Engineers Council (ACEC) is worried that Federal agencies will begin following a procurement directive that could undermine the Brooks Law Architect/Engineer selection process.

The Directive, known as Office of Management and Budget Circular A-76, tells the agencies they must compare the cost of acquiring goods and services from the private sector with the cost of using federal workers or contractors.

To do this, some agencies have started asking for price proposals from potential suppliers of goods and services.

This runs right up against the Brooks Act, according to which agencies must rank A&E Design firms on the basis of competence, thereby disqualifying firms and thereby eliminating competition for the contract.

Nevertheless, ACEC firms are "deeply concerned that use of the term 'support services' (for professional technical services procurement) may prove a continuing vehicle whereby all DOE Architect-Engineer service will henceforth be obtained using price submissions by interest firms," according to Spiller.

Now ACEC president William R. Ratliff has entered the fray. In a letter to Donald S. Bowl, Administrator of the Office of Federal Procurement Policy, he argued that Office of Management and Budget Circular A-76 should be modified to clearly state that fee quotations cannot be solicited for Brooks Law-type procurements. —William Hickman, World News, Washington.

African and Asian desert architecture: exhibit on sand castles at Columbia University

The exhibit "Spectacular Vernacular: Traditional Desert Architecture from West Africa and Southwest Asia" being shown at Columbia University this fall proves that the deserts of Africa and Asia may be dry, but they are not barren.

The exhibit's black and white photographs were collected and shot by Jean-José Bourgeois, an architectural historian, and Carlos Pelos, a photographer. "We were stalking the desert for beauty," said Bourgeois. "African art has a proud place in world art history. Now it's the turn of African architecture."

Buildings from Mauritania, Senegal, Mali and Niger, as well as Afghanistan, Pakistan and India are represented in the exhibit. These buildings are made of sun-baked brick or simply desert-dried sand that, according to Bourgeois and Pelos, can be fashioned into pillars, facades and walls like those of the west African mosques.

"Our show illustrates the beauty cement is replacing," said Pelos. "Far more expensive than mud and far hotter, cement in the desert is cruel. Desert architecture needs to advance back to mud."

The exhibit at Avery Hall from Sept. 17 to Oct. 14, weekdays, 10-8, and Saturday afternoons, has been sponsored by the Columbia Graduate School of Architecture and Planning as part of its Centennial. Admission is free. —A.G.

Seminars offered in Florida, New York and Wisconsin

A variety of seminars are being offered for architects and engineers in Wisconsin, Florida and New York, during October through December.

The seminar on "Design Loads for Structures" offered by the University of Wisconsin-Ext./Engineering on Oct. 15-16 will address the sort of structural problems that make bridges blow in the breeze. Although the idea for the program was conceived before the Hyatt skywalks crumbled under the rhythm of hundreds of dancers, the Kansas City collapse should trigger greater than usual interest in one of the Department's seminars, according to Rolf Kilingsstad, Program Director. The Program will address such factors as floor, wind, snow and seismic loads and how to recognize when extraneous conditions may make code minimum design loads inadequate. The fee is $220.

The University of Wisconsin-Ext./Engineering will also offer a workshop, "Passive Solar Building Design and Construction," on November 10-13. The program is an introduction to passive solar design principles, solar orientation, design, cost details, costs of building materials and retrofit possibilities. Calculation procedures for all phases of passive solar design, insulation systems and thermal storage and computer simulation techniques will also be covered. Donald Schramm is the Program Director. For information or for seminar contact: the University of Wisconsin-Ext./Engineering Building, 1432 N. Lake St., Madison 53706; 608/262-3748 or 608/262-2061. Fee is $220.

A "Symposium on Thermal Insulation, Materials and Systems for Energy Conservation in Buildings" will be held in Clearwater Beach, Florida on December 8-11 at the Surfside Conference Resort. The symposium will discuss the testing of thermal insulation materials and systems, and will focus on economic and health considerations. The program is being sponsored by the American Society for Testing and Materials Committee C-16 on Thermal Insulation in cooperation with the Department of Energy and Oak Ridge National Laboratory.

The Downtown Research & Development Center, in conjunction with KBS Development Associates, Inc., veteran seminar organizers, will offer a seminar, November 16-18 in New York City, on "How to Plan, Package and Develop Mixed-Use Centers Downtown." It will cover all stages from initial conception to construction and rent-up. This is the 22nd in a series of conferences offering the variety of seminars offered by the Center. For information contact: Mary Dalesandro, Coordinator, Downtown Research & Development Center, 270 Madison Ave., Suite 1505, New York, NY. 10016; 212/889-5666. —A.G.
From time immemorial to time immemorial black and white remain the classic colors. Sherle Wagner enjoys working with them because they make shape bear the full esthetic burden. And Mr. Wagner, ever the sculptor, responds to the challenge by shaping these new china basins into the classics of tomorrow. Think too, of the imaginative ways you can accessorize them.
r ago, this riverfront plan
t Cambridge, Mass. won
0 HUD award for urban
r that will change its
r of warehouses and
ig lots. Now Skidmore,
gs, and Merrill, winners
design competition by
-Manley Developers,
designed one of the
first buildings, a
office building and muse-
illery adjacent Lechmere
The Canal Office Park, is
it, two-and-four-level,
use structure, with a
fing four story atrium
pended exhibits. The
features one level of
and a restaurant, three
of office space, and
ground parking.
ithink the project has
potential because of its
ity to downtown Bos-
ton," said David Geller, of Wil-
der-Manley. "It's similar to the
Quincy Market and Boston
Waterfront." Other construc-
tion or rehabilitation projects
are an old unused courthouse
will be refurbished, an
addition to the Sonesta Hotel,
an office tower and the Park
that links the new area to the
county courthouse and shops
that act as a buffer between
the older neighborhood and
its new neighbors on the
Charles. The building is sched-
uled to begin construction in
spring of 1982, and to com-
plete construction about
spring of 1984.

**Combination office building and
exhibition gallery for award-winning
East Cambridge riverfront**

Portland's mixed-use
ClockTower to enliven
downtown

The ClockTower in Portland,
Ore. has adopted the "live,
work and play in the center of
the city" theme of Seattle's
Heron's Market Place. The
mixed-use, 29-story, highrise
was designed by Stastny Gra-
ham Architects, David Wright
of Bumgardner Architects and
James Hamilton. The project,
by the Heron Development
Company, contains 17 floors
of office space, retail shops, a
restaurant, eight floors of
housing, and a 4,000 member
athletic club. It also contains
underground parking. Con-
struction is scheduled to begin
in early 1982 and to be com-
pleted by 1983.

designs a new Hartford insurance tower

two-faced 24-story Hart-
Steamboiler Inspection
Insurance Co. building in
ord, Conn. was designed
Skidmore, Owings and
ill. From the freeway and
River it appears as a
form divided by de-
ing bays, and from the
town side as a tower
ading in a series of set-
backs. Large landscaped
terraces lead to the building from
a pedestrian bridge and ga-
rage. The lobby is also four
levels connected by a stairway
and landscaped terracing. The
walls of One State St. are
flame cut and Napoleonic Red
granite, the windows of dual-
paned, tinted glass. It is sched-
uled for completion in 1982.
DESIGN AWARDS/COMPETITIONS

American Institute of Steel Construction 1981 Architectural Awards of Excellence. A broad range of building types is represented among the six winning designs in the twentieth AISC Architectural Awards program (illustrated below and on the following five pages). The impressive variety of formal means and structural ingenuity displayed in these buildings reaffirms the stated purpose of the Institute's citations: “To recognize and honor outstanding architectural designs in steel and to encourage further exploration of the many esthetic possibilities inherent in steel construction.” This year's entries were judged by Jacques C. Brownson, director of the Colorado State Buildings Division in Denver; Bruce J. Graham, FAIA, of Skidmore, Owings & Merrill in Chicago; Philip J. Meathe, FAIA, of Smith, Hinchman & Grylls Associates in Detroit; Walter P. Moore, Jr., Ph.D., P.E., of Walter P. Moore and Associates in Houston; and R. Randall Vosbeck, FAIA, president of the AIA.

HARBORPLACE
Baltimore, Maryland
Architects: Benjamin Thompson & Associates
Structural Engineers: Gillum-Colaco
General contractor: The Whiting Turner Contracting Company

A year-round focus for Baltimore's downtown renewal area was the aim of architects Benjamin Thompson & Associates in their design for Harborplace, an $18-million project developed by The Rouse Company (RECORD, October 1980). Over 200,000 square feet of restaurants, cafes, retail stores, stands, and kiosks create the lively atmosphere of an urban marketplace, while providing access to pleasure boats and a public waterfront promenade. The two low pavilions that frame the L-shaped site were limited to 40 feet in height in order to protect views of the harbor and an historic schooner permanently moored there. Although devoid of period detail, the pavilions were intended to recall old buildings that formerly stood on nearby wharves. Cast-in-place concrete columns inset from the transparent outer walls support lightweight steel-frame roofs. Porticoes announce major entries to the colonnades, balconies, and walkways that encourage circulation throughout every level of the complex. For maximum flexibility and natural ventilation, glass lean-tos projecting into the walkways open with overhead garage doors. Awnings, balcony overhangs, heavy roof lips, and tinted glass minimize heat gain during the warmer months. Roofline illumination and glowing dormer skylights signal nightly programs of commercial activity and entertainment. The AISC award jurors observed: “There is a very high level of quality here, as opposed to the shopping center quality usually found in America. This excellence, in both management and architecture, has done more than anything to revitalize the Baltimore Harbor. Its impact on the people is tremendous: it attracts them and they are comfortable here.”
"This is an amazing structure for an industrial plant," one juror commented. A sense of well-being among employees was a top priority for architects Caudill Rowlett Scott in their plans for the first segment of a three-unit seating-component factory in Holland, Michigan. The nucleus is a skylighted, landscaped "people place." Shared by executives and factory workers as a common entry and social area, this atrium will also be available for community activities. Daylighting is used throughout the building to combine energy efficiency with a pleasant ambience. Angled strip windows at eye level offer views of the surrounding countryside. In order to finish construction within an 11-month schedule, "off-the-shelf" systems were used. A two-way open-web steel joist system spans the one-story, 40-foot grid. Insulated, pre-assembled wall panels are faced with stainless steel outside and high-gloss white enamel inside. "The acrylic clerestory both top and bottom definitely makes the project," the jury concluded. "The mechanical system is very well integrated, and the stainless-steel skin is just plain classy."
Architects Krueck & Olsen conceived this house on Chicago's Near North Side as a harmonious component of the urban grid. Yet, even though the rectilinear modules of plan and structure repeat the geometry of a standard city lot, their orientation and the materials with which they are clad furnish the light, openness, and accessibility more commonly associated with suburban living. Enclosing a central garden court, the U-shaped 5,000-square-foot house is organized into three pavilions: a two-story living area, the owner's sleeping quarters, and a service wing with guest accommodations and a sun terrace overhead. The building's delicate lattice-like framework was realized with an all-steel structure. Shop-fabricated angle frames are bolted to steel beams spanning the second floor and roof, and bar joists bear floor and roof loads. "Superbly detailed," said the jury. "The steel erectors would like the way all of the bolts are in the same direction and all of the bolt heads are lined up on axis."

A prefinished steel window system inset with insulating glass units of varied translucency is carried by the angle frames. Ribbed steel siding blocks the view from adjacent buildings and stairwells serves as an entry screen, luminous variant on the structural grid is provided by glass block in a curve stairwell, the floor of a steel bridge over the living room, and a strip window, all of which glow with artificial illumination. The jury praised the elegance of the design no less than restraint: "One of the nicest things about this house is that you're completely unaware it is there on the street. It fits just right in the neighborhood. The use of materials and color is almost traditional. . . . It really belongs in Chicago."

HOUSE IN CHICAGO
Chicago, Illinois
Architects: Krueck & Olsen Architects
Structural engineers: Gullaksen & Getty
General contractor: owner
Sixty-four acres of sloping land along a highway in Menomonee Falls, Wisconsin is the site of this 744,000-square-foot complex designed by J.D. Ferris & Associates of Chicago. The client specified 420,000 square feet for light manufacturing, with a clear height of 22 feet and a three-ton load capacity at panel points 10 feet on center; 300,000 square feet for a service-parts distribution center, with a clear height of 28 feet; and 24,000 square feet of column-free office space. The architects minimized earth work by mounting the manufacturing area on a concrete slab that steps down six feet (following the slope of the site) to the warehouse, while maintaining a uniform roof line. Offices occupy a free-standing structure linked to the main building by a series of passageways and courtyards. The use of a 30- by 50-foot structural bay throughout the project met all requirements for loading and ceiling height, and permits flexibility in equipment placement and mobility for workmen and machines. For rapid construction, totally shop-fabricated, prefinished steel curtain-wall panels with insulation and finished interior surfaces were employed. Varied in height to fit the slope, the panels resemble a series of 10-foot-wide ladders, with "stringers" of T-sections and "rungs" of eight-inch channels five feet on center. Steel plates were welded in place within the five- by 10-foot module. Installation of panels as soon as the structural frame was complete enabled the client to move in six months ahead of schedule. "The beautiful articulation of the wall shows that quality detailing pays off," the jury commented. "This industrial building will be a good neighbor by esthetically adding to the community."
UNPLAIN GEOMETRY

The solution for the Augusta Richmond County Civic Center was Alcoa Alply panels.

Architect: I. M. Pei and Partners
Wall Panel Distributor: Whelan Manufacturing Co. — Trenton, N.J.

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Circle 38 on inquiry card
Some positive thoughts amid economic gloom

ince taking office in January, the Reagan Administration has faced the twin economic problems of pervasive inflation and a sinking economy. Although the Administration has consistently advocated an ambitious four-part strategy for resolving these problems, it had immediate access to only two of the four policy tools—deregulation and restrictive monetary policy—that it needed to implement its plans. Unfortunately, deregulation is slow-acting, whereas a tight money policy is such a blunt instrument that it must clobber the economy—specially construction—before it can affect inflation. Now the situation is changing. Congress as given the Administration the two remaining, more positive, parts of its program—budget control and tax cuts—to bring to bear on the economy’s difficulties.

Of course, not everyone is convinced that recent changes in economic policy are for the better. Shortly after Congress passed the tax and budget bills, but before they were fully implemented, doubts about the effectiveness of this approach crystallized, particularly within the financial community. Investors’ concerns stem from the likely (in their view) continuation of the aggressively restrictive monetary policy which has smothered financial markets for most of the past two years. In effect, this sustained policy has generated a substantial backlog of credit demand by forcing many businesses, state and local governments, and potential home buyers either to borrow short-term at ever higher rates or to give up borrowing altogether. Whenever rates appear to soften, these denied borrowers pour into the financial markets in search of longer-term, relatively cheaper credit. Consequently, the financial community is deeply troubled about the availability of sufficient funds to finance both this pent-up credit demand and any additional credit demands arising from an economic expansion.

During the summer, first the Congressional Budget Office and then the Administration confirmed Wall Street projections that the 1982 fiscal budget could run $20 billion higher than initially forecasted, even with the recently legislated shearing. This news heightened the financial community’s phobia that continued large Federal borrowings would combine with an extremely restrictive monetary policy to crowd private borrowers out of the markets, thereby intensifying the economic slump without providing any lasting improvements in inflation.

Clearly that is one possibility. On the other hand, passage of the tax and budget bills offers the Administration and the economy new, badly needed maneuverability. No longer must the Administration rely solely on an unrelenting monetary policy, with its attendant adverse effects on economic growth, to curb inflation. Instead, judicious employment of the new policy tools could create room for a more flexible monetary policy—a very valuable option in the delicate operation to stimulate the economy without rekindling inflation.

For instance, having successfully challenged the sacrosanct belief that the non-defense portion of the Federal budget is uncontrollable, the President and his aides are currently (early September) reviewing his belief that defense expenditures must rise dramatically. A prompt Presidential announcement of a stretch-out in defense spending next year would go a long way toward alleviating investor worries about bigger Federal deficits. It would also help to soothe mounting fears about the ability of the military-industrial complex to increase 1982 defense production substantially without triggering another round of higher inflation.

Cumulatively, over the coming months, the recently enacted multi-year tax cuts have tremendous potential as an anti-inflation policy and producer of additional savings (both of which would considerably ease the burden on monetary policy) because they are stimuli to economic growth. Any initial reduction in tax flows to the Treasury (which would adversely affect the Federal deficit) could be more than offset through the benefits of larger flows of money into the hands of businesses and consumers.

Consumers have three choices for using the additional dollars, all good. They can spend them, save them, or repay debts with them (another form of savings). The two savings acts will place more funds in the financial markets for business, government, and consumer use, while the spending act will beef up the currently lagging demand for goods and services. Businesses will respond to the stronger demand through increases in production and sales, raising their cash flows. Now able to keep more after-tax dollars, they can use these internally generated funds either to restructure their balance sheets through repayment of expensive short-term debts or to finance new investments. Debt repayment will increase the available supply of funds for investment in the markets, whereas investment decisions will expand economic activity.

Frustratingly, since we have been struggling so long, even these new policies cannot lower inflation, or turn the economy around, overnight. The diverse sectors of the economy, particularly the financial markets, will need some time to acclimate themselves to these new policy initiatives. For residential and nonresidential construction, this means several more months of listlessness before the rumblings of a recovery are heard early next year.

Phillip E. Kidd
Director of Economic Research
McGraw-Hill Information Systems Company

ARCHITECTURAL RECORD October 1981 65
WHEN SKYLIGHTS OF EXOLITE™ SHEET JOINED THE PAERDEGAT RACQUET CLUB, ENERGY COSTS DROPPED 40%. NET.

And tennis buffs could keep their eye on the ball better than ever.

From the moment the Paerdegat Boat and Racquet Club opened in Brooklyn, New York in 1974, tennis activity at the huge prefab steel building soared. So did the club’s electric utility bills. To fight the rising costs, and still not raise court fees, the club decided to raise the roof instead.

Sixty-four skylight panels made from EXOLITE double skinned acrylic sheet were installed in October 1978. The result has been a whopping 40% reduction in electric bills. With natural light to brighten the courts during daylight hours, artificial lighting is rarely used during the day in the 60,000 sq. ft. building.

EXOLITE sheet's high light transmission prime factor for choice of skylights.

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The 4 ft. x 14 ft. EXOLITE panels are load-bearing but non-structural. Combining physical properties of structural rigidity and light weight, the panels were easily fabricated and installed.

And on-site installation did not interfere with the “point, set and match” activity down on the courts below.

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Designers and architects find that the sky’s the limit when they use EXOLITE sheet for skylights. But it’s also ideal as a glazing material for solaria, swimming pool enclosures, greenhouses, curtainwalls and for passive solar energy installations for homes, schools, and commercial and industrial applications.

Caution: EXOLITE double skinned sheets are combustible thermoplastics. Precautions used to protect other common combustibles should be observed. Building Codes should be followed carefully. Further data are available from CYRO Industries.

CYRO Industries
A Partnership of Cyanamid Plastics, Inc. and Rohacryl, Inc.

Circle 39 on inquiry card
SETTING A STANDARD FOR ARCHITECTURE IN ISLAM:

The Aga Khan School of Nursing in Karachi, designed by Payette Associates and Mozhan Khadem

ARCHITECTURAL RECORD OCTOBER 1981
His Highness the Aga Khan is probably the world's leading patron of architecture. In March 1978 he established the Aga Khan Award for Architecture to teach the Muslim world how architecture and planning can affect their way of life for better or worse, and to encourage Western architects to pay more attention to the culture of the Islamic people for whom they are presently building in great volume. To this end the Aga Khan has already held five seminars (March 1979, pages 117-124, August 1979, pages 87-92; August 1980, pages 86-89), awarded a half-million dollars in prizes (November 1980, pages 104-127) and established a joint program at Harvard and MIT to train architects to build in Muslim countries.

Not so many architects in the West know, however, that long before he brought his concern for Islamic architectural environment into such brilliant and generous focus, the Aga Khan had been an active builder of schools, medical facilities and housing in his role as head of the Ismaili Community, a small Muslim sect engaged in construction all over the Islamic world. Last February he opened the Aga Khan School of Nursing in Karachi, Pakistan (these pages), phase one of a $100 million teaching hospital to be completed in 1984. Although the design of the entire hospital was begun in 1972, six years before the Award for Architecture was officially launched, the completed segment must, of course, embody many of those aims of the Award which are applicable to a huge secular complex constructed for humanitarian purposes. Consequently the School of Nursing can and will be judged by criteria the Aga Khan himself has done so much to formulate.

The design of this new medical facility is being done by Payette Associates, Inc., a Boston firm distinguished for its hospital work, and design consultant and specialist in Islamic architecture Mozhan Khadem—an Iranian architect who formerly had a practice in Teheran. Khadem, who has been working on the project from the beginning, has since moved to Boston and has only recently become a member of the Payette firm. Payette and Khadem were joined at the outset by landscape architect Garr Campbell, who first began work...
The Aga Khan Hospital and Medical College in Karachi, Pakistan is scheduled to open by 1984. Undertaken by the Ismaili Community, a Muslim sect for whom the Aga Khan is spiritual leader, the teaching hospital will be the largest health project of the many they have built. The first major component of the complex to be constructed is the School of Nursing (photos above and left) dedicated last February, and now housing and teaching approximately 110 young women. The school lies to the northeast of the complex (as indicated on the site plan). Focused upon ten landscaped courtyards, this inward orientation as well as the building’s proportions, structural system, materials and details prefigure the architectural vocabulary of the entire $100 million facility.
on the hospital while a member of Sasaki Associates. Campbell continues on the team as a member of the staff of the Aga Khan.

THE AGA KHAN SCHOOL OF NURSING

fit for the hard life in the rural villages where they are needed. This argument, however, assumes that the primary motivation of the typical nurse is to acquire and enjoy material comfort, a reductivist theory which does little justice to the humanitarian aims of the nursing profession.

Payette, Khadem, and Campbell have paid unprecedented attention to the development of ornamental themes within the interiors and gardens, because these aspects of the design are among the particular interests of the Aga Khan and his brother Prince Amyn. The style, materials and execution of the ornamentation for the nurses' building and courtyards is the first manifestation of the decorative system the designers have established for the complex as a whole. It does connote luxury—more by the intense effort that has been lavished upon design and craftsmanship than by the conspicuous consumption of expensive materials. The ways in which marble, tiles, and teak as well as their decorative motifs have been selected and used, however, belong to Muslim court craft traditions, not the vernacular craft of the villages.

This seems appropriate. The complex when complete will be the largest and most consequential single building project undertaken in the Karachi region since Pakistan became a country. It will be an eminent cultural manifestation like a great university. Thus there is good reason for its ornament to emulate the grand, rather than the village, tradition. The application of craft, whatever the social provenance of the materials and designs chosen, revalidates ancient building traditions. Hand skills are labor intensive, an important criterion in the developing world. Their use by architects, honors, trains, and gives work to masons, carpenters and artisans of all sorts. Indeed, the medical complex is perceived by the Aga Khan and Payette as providing not only an education in medicine but in the neglected building trades.

If the ornament in the Nursing School can be said to partake of court traditions, it is contrastingly true that the building forms themselves derive from the regional vernacular. They are horizontal, oriented inward toward courtyards, and have flat terra cotta roofs shaded and cooled.

The structural frame of the School of Nursing is of reinforced concrete with concrete slab floors. Because the climate of Karachi is hot and dry except during June and July when humidity becomes extreme, walls are of double masonry block with insulation between the layers to reduce the absorption of heat. Because this method of construction is familiar to the local Pakistani craftsmen, it will be used not only for the School of Nursing but throughout the entire project. The textured cement plaster finish used upon all exterior wall surfaces—except those which are accented with marble—is known as "weeping" plaster. For this building the color pigment has been mixed with the plaster, not as is more usual in Pakistan painted on the surface. The mix is dribbled onto the wall surface by an ancient handcraft method not unlike decorating a cake. The tiny vertical shadows produced by this method reduce glare and the light color, matching the surrounding desert, lessens heat absorption. The terra cotta roof tiles are within the same range of warm tones.

Landscape architect Garr Campbell devised the planting schemes for all the courtyards. The drawing below is based on one of his sketches.
by wind scoops, ancient thermal devices still to be seen in the local villages. The wings of the nurses’ unit have been constructed economically (concrete frame with cement block infill) and surfaced with “weeping plaster,” a dribbled striated finish characteristically used on humble surfaces and never until now on a major Pakistani building. “By chance we stood next to a garden wall,” recalls Payette. “We liked its texture and found the local craftsmen who knew how to do it—so we worked it out with them.” Thus the design team has demonstrated, by selective use of ornament and appropriate adaptation of vernacular forms and finishes, that the traditional regional language of Islamic buildings can be suitable for contemporary use.

Since the Aga Khan Award for Architecture jury cited many of its award-winning buildings for demonstrating this very quality, it is more than a happy circumstance that the Aga Khan’s first megastructure should possess it too—but with a difference. Most of the award-winning buildings which draw from tradition are small structures closer in scale to the older prototypes from which their forms and ornament were derived. The Hospital and Medical College, when complete, will be comparable in size to other major projects under long-term development in the Muslim world. Few of these structures appear to make any but the most superficial use of traditional language. By building what may be the first that does, the Aga Khan once more sets a standard.

—Mildred F. Schmertz

Each nursing student has her own private room and sink. The room functions as a private study as well as a bedroom. Although, as has been noted, each of these rooms is oriented to the prevailing breezes and cross ventilated, provision has been made for eventual installation of air conditioning units. Each bedroom opens upon an outside gallery soon to be covered by a trellis of bougainvillea which will provide shade and privacy for students on their way to the toilet and shower facilities at the junction of each wing. The cabinet work and furnishings of these student rooms are of the highest standard.

Thomas Payette and Mozhan Khadem are working closely with the Aga Khan and his brother Prince Amyn Aga Khan in the development of appropriate Muslim ornament for the entire hospital facility. The sketch (left) by Payette Associates renderer Jim Gabriel is one of an elegant series he has made to help refine and present various Islamic decorative treatments to these most exacting of clients. The first distinguished results of this effort can be seen in the photographs below of a lounge in the School of Nursing, ornamented in teak and tile.

As Mozhan Khadem describes it, the use of decorative motifs will follow Muslim artistic traditions. For example, throughout many of the corridor elevations and medical school waiting areas, a horizontal band of colored tiles will delineate the wall or entrance, wind around a corner, and continue to thread its way through the complex. According to Khadem, the interior wall treatments will be part of a continuous exercise of surface treatment, which also includes courtyard landscaping in an integral way. While such wall treatments will seldom depict a story, they are imbued with symbolic cultural and theological meaning, as are the wall surfaces of most major Islamic monuments.
A NEW-FASHIONED SCHOOLHOUSE

The strategem that gives the baffling facade of the Ramaz School its arresting presence uses the artist's tricks of perspective to indicate three dimensions on a flat surface. Seen in that way, arched windows become bay windows, and slanted windows become a painter's garret. The "garret" does in fact face north, and the windows do in fact light the school's art studio. Thus William Conklin weaves fancy and function in one master stroke.

The flat face of the school carries "post-modernism" well beyond the experimental hesitancy that often characterizes the early stages of a sweeping esthetic change. Describing his design approach at Ramaz, Conklin writes, "As architecture moves away from modernism and the ideological identification of form with function, the role of architectural form as a conveyer of meaning begins to emerge."

The design indeed encompasses all the concepts so dear to contemporary architectural theorists—imagery, context, symbolism, historical reference—and does so commendably, if in unexpected ways. At the same time, Conklin has not simply discarded worthwhile theories of modernism, such as functional expression. "The facade serves both the frontispiece and the 'key' to the building," he says. "It can be analyzed several equally valid ways, revealing many layers of imagery and meaning."

Built in a side street on Manhattan's E Side, the school has as neighbors brownstones, townhouses and larger apartment buildings. Its height was restricted to seven stories (there are two full floors below grade), and the facade is divided into five well-defined bays proportioned to suggest the houses that used to occupy the site.

The new building accommodates some 500 students in grades 8 through 12 (kindergarten through grade 7 are taught elsewhere). The Orthodox Jewish day school established 109 years ago, offers its coeducational student body a dual curriculum that includes conventional Western disciplines...
well as Hebraic and Talmudic studies.

In plan, the floors are pinned by a vertical axis with stairs and two-story student lounges. Large windows above the entrance mark this axis on the front facade, the compositional element becoming a metaphorical school tower. Still pursuing this metaphor, Conklin sees at the top, interrupting the parapet, "lyrical aluminum waves [that] suggest the ringing bell of the mirage school."

Beyond secular images like art studios and school bells, however, Conklin wanted to convey the religious nature of the school. The arches at the pinnacle of the tower can also be read as the Tablets of the Law, or as the domes of Jerusalem. And important spaces like the Beth Midrash (religious study) are distinguished by "bay windows."

The most important of the school's religious spaces is, of course, the chapel. Here Conklin has allowed himself an almost painterly approach to symbolism. The chapel's blue-glazed "bow window," isolated at one end of the second floor below a pulvinated "course," hovers above the city's skyline as depicted by glass blocks set in the granite base. The chapel also sits on a high podium approached by "steps" from the sidewalk. (The ghost of the old townhouse stoop? In any case, "it is no surprise to discover that there are twelve steps.""

The building also contains conventional educational facilities—classrooms, laboratories, a library. Seniors, who carry especially demanding courses in Hebrew history, law and languages, have classrooms of their own on the fourth floor, one of them sporting an honorific "bay window." Ordinary class-

![Diagram of the Ramaz School floors](image-url)
The shaped windows that punctuate Ramaz School's street facade individualize interior spaces. Above, from left to right: the art studio (an artist's garret in perspective on the exterior), the Beth Midrash (a bay window), and a student lounge (a school tower, or Tablets of the Law). In the chapel (below), the Tabernacle is framed by an arched blue window. The mehitzah, grilles behind which women sit at Orthodox services, are pocket screens that drop into the faces of the pews when not needed.
rooms and faculty offices have tall, narrow operable windows.

The school, which insists on extensive physical education and which supports a busy program of extramural games, required a gymnasium with a full basketball court. The building also accommodates a separate auditorium and a dining room, which is served by separate meat and dairy kitchens.

Indoors, corridors and student lounges are color-keyed in subtle, carefully calculated combinations of medium-intensity pastels—two cool (bluish and greenish, say) with one warm (pinkish, perhaps), or, it might be, two warm and one cool. Classrooms, which all have windows, have simple white walls. The auditorium takes a quieter atmosphere with the same pewter-colored aluminum used on the building’s exterior: flat metal panels cut to resemble drawn theater curtains frame real curtains of aluminum beads. Seats are upholstered with dove-gray wool.

One finishing touch remains to be completed: landscaping on the third-floor terrace for student lounging. The architect now has in design a demountable wood sukkah, an arbor that supports hanging fruits and vegetables for the harvest festival.—Grace Anderson

The main stairway at the Ramaz School occupies stacked two-story atriums in a vertical axis running from the school’s entrance lobby (left) through two student lounges. Next tiered plates with donors’ names (composite), an arched mirror visual expands the volume of the lobby at the overhanging gallery. Major circulation spaces use a palette of medium-intensity pastels, such as the yellow staircarpet with its apricot lining. The aluminum bead curtains that cover the wall of the auditorium (below) can be drawn to unveil a small tabernacle at special services (above).
VARIATIONS ON A THEME

Diners at Levana’s Bakery on West 67th Street in Manhattan would be surprised to hear that they are sitting in a restaurant with New York City as its stated theme—there’s not so much as a passing reference to the Empire State Building or the Statue of Liberty. Though architect Rodolfo Imas intended to capture and recall the spirit of Manhattan in Levana’s, he rendered the motif abstract rather than literal, oblique rather than direct—opting for ambience over caricature.

Four years after leaving Buenos Aires to establish a practice in New York, Imas makes his U.S. architectural debut with Levana’s. The commission was provided by his accountant, who, along with two brothers, owned a kosher carry-out bakery: when the twin space adjacent to the bakery became available, the brothers decided to expand their operation and include table service.

Despite the addition of a restaurant, the clients wanted to maintain their carry-out business; staggered shifts for each operation suggested a clear separation of the two. Imas pushed the tables to the rear, creating a single-access cruciform enclosure (axonomic overleaf); dropped the ceiling to create a more intimate scale and add definition; and inserted an oak floor to further articulate the dining area. The sales area was placed along the transparent street facade to ensure maximum visibility of the baked goods, and for minimal intrusion upon the restaurant: the black rubber flooring is a response to the heavier flow of customer traffic. In addition to providing a display window, when the twin space adjacent to the bakery became available, the brothers decided to expand their operation and include table service.

Given expression in his design: they are collectively, the motif by which Levana’s achieves its New York City-theme-restaurant status. And though the source list is arbitrary, a true architectural execution highly personal the resultant design does, if only figuratively, convey the urbane character of Manhattan while acknowledging the structural facts of two distinct spaces now combined to make one. Imas draws parallels between the massive grid facade and a subway grate—between the wooden benches and Central Park seating, and between the steps pulling out from the facade and a brownstone stoop. And to remind diners that “the structure belongs to the building, not to the restaurant,” Imas outlined the transverse beams with narrow strips of mirror—creating the illusion of a section cut through the building.

Although most customers will not find meaning in all the abstract and symbolic features Imas employed to provide Levana with its urbane character, it is, according to its owners, a rare customer who does not notice and applaud the design. The owner adds—not incidentally—that, since the bakery’s re-opening, business is better than ever and the restaurant is flourishing.—C.K.C.
By choosing a cruciform plan for the restaurant—reinforced by the track lighting, and by the intersection of transverse and longitudinal beams—lmas effectively isolated the table-service area from the bakery: the seating plan also provides every table with a corner. The benches and tables are transparent, making the diminutive space seem larger. Take-out service is facilitated by being placed between the two oversized doors—customers can enter and exit unobtrusively.
A brilliant red line cuts through the center of the kosher restaurant to signal an erstwhile wall that once divided Levana's from an adjacent retail shop: the gesture is repeated along the longitudinal beam to signal structure. A massive fountain was attached to the center column (photo top) to recognize and permit the Orthodox Jewish ritual of washing hands prior to eating.
Modern architecture has been declared dead and the wake has been held in the better art journals. News of its death has finally filtered down to that part of the popular press that is always on the alert for cultural trends to exploit. The word that modernism is out and post-modernism is in is being spread systematically and redundantly on the lecture and exhibition circuit. The schools of architecture, coming out of the chaos of the '60s and the drift of the '70s—belatedly responsive, as usual, to the call for revolution—are beginning to turn out post-modernists instead of modernists, which means that a new set of mannerisms is being substituted for an old set of clichés. Those of us who are inveterate observers of the half-truths and false premises that fuel the fashionable intellectual world are watching with mixed feelings.

I do not mean to sound cynical, because I am very much concerned with the directions now being taken. Something legitimate is going on; in the customary and inexorable way that architecture makes worlds that we cannot escape, post-modernism is beginning to set the stage—slowly, and in special structures—which is always how new styles begin. I find some of these directions just as intriguing as those who see the break with the conventions of modernism as the sign of a new age; I only differ with their somewhat overwrought assessment of what makes a revolution.

Other attitudes I find disheartening and even dangerous. Because, as usual, the rush to join an international coterie of tastemakers who appear to be onto something special obscures reason and judgment. The need to embrace, rather than to analyze, the fear of being branded reactionary if one does not accept the new unquestioningly, the inability or unwillingness to separate that which has genuine architectural merit from that which is merely novel or momentarily seductive, are all characteristic of our times. These are times that feed on sensation and opportunism rather alarmingly. But I suspect that we are also witnessing the classic attitudes of any period in which the proponents of change have seen themselves as apocalyptic messengers with the mandate to convert.

What is already clear, however, is that it is a moment of some importance and more than routine interest in architectural historiography; with the doctrines of modernism being severely questioned, and new approaches being sought. In fact, the changes that are taking place in theory and philosophy are far more important than much of the architectural work, and the publicity, that is generated by them. And the signals are being given in what seems like record amounts of obscure and pretentious language. Why, embracing the new means rejecting the old and when doesn't it?—a lot of mistakes are bound to be made. The modernists are suffering from those mistakes now; it is just that kind of messianic shot-sightedness and self-absorption that has made them vulnerable to attack. The postmodernists are heading for a different set of troubles.

It can be far more revealing and helpful to take a longer view, if possible, of the architectural turmoil today; to see what death and failure are metaphors for; to try to understand the unique contributions of building this century rather than to condemn them out of hand. Taste, of course, is a pendulum, an every artist is an explorer who wants to be on the leading edge of the new. Among those who follow there is a distinct inclination to stand outside fashion and miss the action. The historian of architecture has a sense of having seen it all before. If it is much too early to write the history of this century, it is still worth seeking a perspective beyond the grasp of a single, and understandably self-serving, generation.

I believe that the art of architecture is an uneasy but significant transition. The high period of modernism is over; the Age of the Masters—Frank Lloyd Wright; Mies van der Rohe, Le Corbusier—is finished. We are clearly—or I should say, unclearly—moving on toward something else; in fact, we have been doing so for some time. But whatever comes next will be the product or inheritor of modernism, not the radical break that the new work is advertised to be. It will have its heart the 20th-century revolution that we call modern architecture. Anything that follows now would be impossible without those unprecedented technological and esthetic innovations. No renunciation will get rid of this fact of art and history. No catalog of misuses and abuses will change it. Modern architecture is too much a part of us and our world, for reasons at once simple and profound, to be finished by fiat. It takes a very small vision or a very large ego to think that modern architecture can be banished as an act of will, or tossed on the historical rubbish heap. It is just not possible to repeal the style of our time.

However, the issue is not really death; it is failure. What we are being told is that modern architecture failed—in philosophy and practice. The inadequacies and imperfections of modernist doctrine suddenly loom

**IS MODERN ARCHITECTURE DEAD?**

by Ada Louise Huxtable
ary large. I don’t mean just for the bad
buildings that litter the landscape—bad build-
ings are always with us. But there is a kind of
onsenst that modern architecture was
me grand, failed illusion, with the argu-
ments ranging from the ideological to the
mctional. We are given the irresistible
cher that most never liked it anyway.
I cannot help wondering whether the
phisticated designs of Borromini appealed
uch to the man in the street as to popes
ed princes. Or just what the popular
pense to some of the brilliantly perverse
mpieties of the Laurentian Library might
ave been in Michelangelo’s time. Bernini
elled that his buildings had a divine inspi-
ition, and I doubt if he was concerned about
essage’s trickling down. High art has
ained consistently and stubbornly inde-
endent of the reactions and values of most
opie.
I suspect that the high art of the 20th
ntury will be equally resistant to opinion
ells. The curious thing today is the increasing
osity toward modern architecture by the
ctual and esthetic elite. But that, I think,
a function of fashion and changing genera-
gons, and the need of the avant-garde to
ove on.
There are compelling reasons to look at
odern architecture with a fresh eye—to see
hat worked, what didn’t, and why. From
 point of view of history, modernism as a
ovement has already grown old; it can be
asured across two centuries. It has pro-
duced an enormous body of work, good and
ad. And it is beginning to be possible to
ulate aims against results. That kind of
smom comes only with hindsight. We have
fter understanding the context of which it
as a part in books like Carl E.
horske’s Fin-de-Siecle Vienna, Peter Cay’s
rt and Act, John Willett’s Art and Politics
 the Weimar Republic. The re-evaluation is
ell begun; important questions are being
ked; revisionism has become a scholarly
ndustrial. The challenge is to rewrite
istory of the recent past with understand-
ing and detachment. It is not easy to
ss judgment on the dreams and achieve-
ements of an age. This is an exhilarating
ngorous moment for facts and balance.
has modern architecture really failed? Or
re we loading onto it our perceptions of
other kind of failure—something far be-
ond the architect’s control? I believe that
re are addressing a much larger theme: the
ure of a moral vision and the breakdown
 of ideals of a society in transition. What we
ave lost is what sociologists and psycholo-
gists call our “belief systems”—those com-
only held convictions that guide our acts
nd aspirations. No society can function
ithout them. Those articles of faith have been
ghen everything from architecture to social
olicy in our time. They were based on an
rriding idealism and optimism; they were
able to survive the cataclysmic changes of
the century. The pendulum has swung to
dissillusion and despair.

These systems of belief were surely
xtraordinary. From the end of World War I
to the 1960s, we believed devoutly in social
justice, in the perfectibility of man and his
world, in the good life for all. The Bauhaus
taught that the machine would put beauty
nd utility within the reach of everyone. Le
Corbusier’s “machine to live in” and “radiant
cities” would reform human habitation. We
believed that the world could be housed and
fed; that we could bring order to our cities;
that misery and hunger are not eternal veri-
ties. We joined hands and sang “We shall
overcome.”

We also believed that everyone had a
right to beauty, and that esthetic values
ualized moral values. What was useful was
beautiful and good, and what was good was
good for all of us. We had only to look
round to see examples. Le Corbusier singled
out factories and grain elevators as admirable
esthetic artifacts, because their form and
function were intimately related, and their
purpose was clear and uncultivated.
The arts, used properly, could bring both
pleasure and practical benefits to society.
Architects sincerely believed that health and
happiness were the natural corollaries of the
right way of building; they even believed that
human nature could be conditioned or
changed by the right physical environment.
This was the century that equated art, tech-
nology, and virtue, and concluded that the
better life, and the better world, were finally
within our grasp. Walter Gropius’s “team-
work” and Mies’s modular simplicity were
meant to alleviate the inequities and inade-
quacies of the man-made environment.
The architect was to be central to these esthetic
and social solutions—ineextricably linked—of
age-old problems, and the gratification of
new expectations.

In retrospect, the hopes and beliefs of this
century have been both admirable and naive,
but they have also been humanitarian to an
extraordinary degree. Perhaps in the
advanced Western countries have come as
close to genuine civilization as we ever will, if
we define civilization as the unselfish preoc-
cupation with the betterment of the human
condition at the highest level of shared expe-
rience and universal concern. The 18th-cen-
tury Age of Reason was followed by the
19th-century Age of Scientific Inquiry, which
exploded, in the 20th century, into the Age of
Perfectibility through science and art. It was,
of course, an impossible dream.
The changes that were heralded as liber-
ating forces turned out to be vast and shat-
tering, with shock waves beyond anyone’s
comprehension. Those changes eventually
structured—or unstructured—society.
They radically altered the sense of time and
the rhythms of life, and uprooted personal,
family, community, and global relationships.
Communications, mobility, and industrializa-
tion created a new economy and new styles
of life. This “progress” had a high price—
there were racial and social dislocations of
universal dimensions. To the transformation
of environment and expectations was added
the unsettling knowledge of the complexities
of human behavior; vast explosions of scale
did nothing to help disoriented inner lives.
Tradition was destroyed, and the destruction
was celebrated.

In the end, everything that was meant to
illuminate or improve the human condition
struck heavy blows at basic beliefs and val-
ues. The “center” was increasingly dissolved
in violence. Today, the sustaining standards
and restraints of centuries are gone. We live
in a time of failed human relationships and
unprecedented dangers, from nuclear war-
fare to random death. The 20th century has
given us too much, too soon, too fast; it has
delivered toys and triumphs and devastation.
We are all victims.

René Dubos, in a recent interview, had
to defend his confidence in the existence of
some ultimate, Olympian plan of nature; in
fact, he apologized for using the word faith.
What he was actually apologizing for was
aving faith. He calls himself the despairing
optimist. For the rest of us, pragmatism and
cynicism are more common defenses.
 Clearly it was the age, not architecture,
that was coming apart during the last half-
century. How innocent, how vain, of archi-
tects to take the blame for such cosmic
catastrophes! What touching tunnel vision its
speakers have demonstrated! Modern archi-
cture was just one aspect of this century’s
flawed dream and vision of reality. Things
were promised that could not be delivered.
The architect produced no brave new world;
he could heal neither the ills of cities nor the
ills of mankind. Architecture—and archi-
tects—are now taking a terrible beating for
trying.

But in the process, modern architecture
literally changed the world. There is a great
deal more to this remarkable story than
where it fell sadly short of its own aspirations.
This century’s extraordinary creative en-
geeries, its genius for the new, infused all of
the arts. Only premise, stated before, is that mod-
ern architecture is one of this age’s most im-
portant achievements, paralleled only by a few
periods of comparable creativity. Its structure
and style have already taken their place in the
history of art.

Modern architecture united revolution-
ary theory and technological development
for an unprecedented, far-reaching, and
unsurpassed creative and cultural synthesis. It
offered the most cohesive, innovative,
expressive, and universal art form since the
Renaissance. And it created masterworks to
stand with any of the past, from the greatest
of Wright’s Prairie houses and his master-
piece, Falling Water, at Bear Run, Pennsylva-
nia, to Le Corbusier’s chapel at Ronchamp.
The skyscraper is a marvel of structure and
design that has survived even the greed of
speculators and bad city plans. But the 20th
century encompasses a much greater, and
more subtle and various, work than has been
commonly understood. And modern archi-
tecture did something never done before: it
addressed itself to the humanitarian and
"Modern architecture is too much a part of us and our world . . . to be finished by fiat. It takes a very small vision or a very large ego to think that modern architecture can be banished as an act of will, or tossed on the historical rubbish heap. It is just not possible to repeal the style of our time."

Social concerns made urgent by the industrial revolution and the 19th-century city.

These are the facts that no one is mentioning now. Crying failure makes a much more dramatic scenario than a balanced analysis. It was the script that served Robert Hughes so stunningly in the television series and book on modern art called The Shock of the New. But he recognized where art and building met in the 20th century; Tom Wolfe reduced it all to the level of cocktail chatter in his two Harper’s send-ups. Le Corbusier’s Villa Savoye, a landmark of the modern movement, Mr. Hughes told us, ended up “cracked, stained, crumbling and otherwise ruined after a few years’ exposure to the elements.” That ignores a long history of abandonment and abuse before and after the Second World War. What the enchantment often seems to come down to, in the English critic Martin Pawley’s words, is that poor maintenance equals worthless architecture. This was apparently the architect’s fault for not inventing an indestructible, glistening new material to build with. This condemnation is as logical, Mr. Pawley says, as dismissing classical sculpture because the Venus de Milo had no arms.

No one claims that modern architecture has been nothing but smashing successes. No one denies the tragic shortfall of intentions, or the Olympian wrong-headedness of some of its most popular practitioners and ideas. Neglect and restoration are a part of all cultural cycles.

I have never been an apologist for the modern movement. My job, as a critic, has been to question a lot of the modernists’ favored clichés. I have watched with a great deal of uneasiness as revolutionary doctrine turned into dogma. I have often marveled at the blindness and the credulity of the faithful.

But as a nonarchitect, I was able to be a nonbeliever. I embraced history and preservation when the past was taboo. As a historian, I was an unreconstructed partisan of periods and buildings consigned to oblivion. I never accepted the visionary, sanitized planning of modernism’s neat division of life into segregated zones of activity. I have always detested the open-plan house as an assault on both privacy and sanity. I have never revered the high-rise blockbust as an aesthetic icon; it may be impressive on the drawing board but it sterilizes the street. I praised variety, accident, and incident long before Robert Venturi, and I will always be grateful for his short and influential volume of 1966 called Complexity and Contradiction in Architecture. Many viewed his book as an attack on modern architecture; I thought it was much more important as a civilized lesson in how to see.

I have been fighting some of these battles for a long time, when it was very unfashionable to do so. But I have never believed, at any time, that calling the bad shots out loud denigrated or destroyed the validity of the art of our time. Now everyone has discovered history and the environment. And architects have even discovered doors.

But it was the architect who was the last to realize the high price paid for two of his basic beliefs: the renunciation of the past and the high hopes for the future. The rejection of history led to the unthinking destruction of the historic urban heritage and the symbol and landmarks that anchor us to meaning and place; it dehumanized the environment and denied the continuity of culture. Out of the thang for the future came the ambitious but badly aborted attempt to solve one of the world’s most intractable problems—housing. And out of civilization’s most enduring collective illusion came the promise of Utopia. No one has delivered Utopia yet; it remains fable for this—or any—time.

It is true that the architect determines the forms that serve contemporary uses—but only up to a certain point. Those forms—Mies’s pure glass and metal geometry; Le Corbusier’s brute poetry in concrete—are snatched out of his hands or off the drawing board by other interests. They are co-opted, corrupted, and exploited. On the way from revolutionary concept to “bottom-line” reality, much gets lost in the translation; only Parisian couture gets knocked off as consistently a fable.

The idealistic, abrasive, and visionary manifestations of the early 20th century are curious precursors of the bland, conformist structure that set the modern city’s style. To blame modern architecture for these perversions dilutes, and falsifies too easy a distortion of the truth.

Again, with hindsight, it is not hard to find some basic things that went wrong. For one, the architect simply did not understand the economic power structure of the 20th century. I do not refer to his frequent penchant for exceeding the budget in the interest of art. The key to his disenchantment from society was his failure to come to terms with consumer capitalism. Kenneth Frampton has pointed out that the architectural leaders of the early part of the century had a sort of adolescent star, and their hopes, like the traditional idea of enlightened, paternalistic patronage. They designed villas and mansions for the rich, and if the patrons were industrialists, they sometimes got a factory to do. They built the prototypes that remained as singular monuments—the elite cultural or educational institution, the occasional public building, the demonstration project. Their radical innovations eventually became established platitudes and, ultimately, popular clichés.
Bernini believed that his buildings had a divine inspiration, and I doubt if he as concerned about the message’s trickling down. High art has remained insistently and stubbornly dependent of the reactions and values of most people.”
"Has modern architecture really failed? Or are we loading onto it our perceptions of another kind of failure—something far beyond the architects' control? I believe that we are addressing a much larger theme: the failure of a moral vision and the breakdown of ideals of a society in transition."

gained in creativity, discipline, and understanding that it would be tragic to lose again. The anger and frustration that set the modernists against a dictatorial art bureaucracy and stuflifying academic convention have long since faded; nostalgia has replaced outrage, and the excesses that inspired revolt are being re-embarked as benign. The conviction that beauty and utility were to be found in new materials and techniques, and that form and function could be united for a singular esthetic truth, has simply been dumped. The results are often appalling. What is really being revived, alas, is not the past so much as its familiar errors, not history so much as its mistakes. What is being jettisoned is critical to great buildings.

The reason that a man like Philip Johnson can be followed like a pied piper of architecture is that he has always been a front-line runner in the pursuit of the new, and this is a generation for which that is more important than anything else. He has a quicksilver intelligence and the ability to recognize instantly genuine talent and creativity. His own judgments of the work of others are often flawless. He is also quickly bored. What his young, and not-so-young, followers like is the shock value, as well as the hedonism, of his insistence that art is all, and his assurances that the earnest social and structural concerns of the modernists were expendable nonsense—that anything goes.

This exclusive emphasis on esthetics gives a certain consistency to his dramatic rejection of the modern movement, which he once believed in so strongly, and his easy jump into post-modernism, which turns those beliefs on their head. But his position has great appeal to architects no longer interested in saving the world because they think that it can't be saved, and that they are not the ones to save it. What they are doing, however, is trivializing architecture, reducing it to something less than its traditional role as the one art capable of uniting the real and the ideal as an expression of body and spirit, society and symbolism. The results are small, narcissistic exercises that range from the exquisite to the empty, lacking passion or conviction.

There is more pettiness and pedantry than passion in architecture today. There is no longer the catalyst of a common enemy to fight. There are only endless and tiresome semantic arguments and the factional infighting about style. There are no heroes, and no architectural giants, because there are no causes. The causes that once united and inspired the profession have been abandoned. The sad truth is that no revolution is ever won.

Perhaps it is success that kills. Modernism was an exhilarating and seductive campaign for a long time. But it is hard to remember when anyone had to battle for a modern building. And when the struggle ceases, the victory loses meaning. Revolution leads to counter-revolution and the attack is turned against the victors. Success, as much as power, corrupts.

According to Nicholas Perry, in a review in the Times Literary Supplement of Charles Jencks's latest primer on post-modernism, style today is conceived of as something like a trademark. "Competitive idiosyncrasy," he tells us, "is the chief impression received from the promoters of the post-modernist faith. The result is often a calculated pastiche filled with private references and in-jokes. That is not enough.

I do not mean to suggest that there is such thing as style, or that it is unimportant. Style is the essence of art. It is the cult index to a particular society and time. Modernism said that style is the spirit or expression of age. Now that eclecticism is respectable again and Dilanian design is in vogue, it is fashionable to put down that definition. But Modernism was essentially right. Le Corbusier titled his 1923 manifesto Vers une architecture—simply, "Toward an Architecture"—and I think it fair to call it "Toward a New Architectural Style."

Architecture is a great deal more than style. A building is the sum of many things over which the designer has little control. Contrary to popular belief, those dislocations of scale and relationship that are so much part of the contemporary scene are rarely the architect's invention. I find it necessary to point out continually that a building is shaped as much by law, codes, economics, client programs, investment patterns, social needs and speculative competition as by any esthetic act. Corporate size and power, the change from cheap to expensive energy, all those engineering developments that serve modern large-scale enterprise and investment well—like the technology of artificial climate—play as much of a part as program, structure, and image. The architect does not see himself as victimized by these factors; he prefers to view them as patronage opportunities. But most of the time he is arranging the deck chairs on the Titanic.

The creative act in architecture is basically an act of survival against tremendous odds. To give these conflicting and complex concerns form, or style, is not only a challenge of epic proportions; it is the ultimate object of the art of architecture. When this transformation occurs, in palazzo or skyscraper, from Strozzi to Seagram, it is more than a superlative building; it is one of civilization's most notable achievements.

But the dilemma the architect faces is that he either designs for his art or for the world—and there is actually no choice if he is to build at all. The act of design is in conflict with everything that is part of the process of bringing the design into being. Sometimes the result is richer for its complexity, and sometimes it serves both art and society well. But architecture has been called a curious undertaking in which the incompatibility of the irreconcilable is raised, occasionally, to the level of art. The result is never pure art; it always is a compromise.

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The architect Arata Isozaki finds sources in Pierre Chareau, but both build solidly on a modernist foundation. All of them are now receiving international commissions.

I do not mean to fall into the trap of proclaiming a new world, or a new art, or of offering versions of the latest great new truth. Like Mies, I do not think you can invent a new architecture, or a new truth, or a new world, every Monday morning. They rarely live up to the advance billing. Our world is as imperfect as we found it, and neither art nor ideology has changed it. Utopia eludes us. Groucho Marx often seems more to the point than Karl.

What I hope is that today’s architects will discover some old truths. Like the nature of art, for example—something the modernists understood very well—far better than the world of the future. Today architecture is treated as an exercise in language and ideas; but art is an act, not an explanation, an experience of space, light, form, and function shared directly by artist and viewer.

Like all great performances, a great work of art makes complexity look simple; it is executed with style, skill, and grace. Any genuine work of art is created through tremendous discipline, not put together out of a grab bag of random references and trendy trim. Great art eliminates everything superfluous and nonessential to deliver a strong, clear message in the language of its time. It intensifies all of our responses. It is not an uncomplicated message, however, and its many levels of meaning add both subtlety and power.

In architecture, that subtlety and power come primarily from the relationships of structure to space, and the image, or style, this produces. Beauty is the experience of that image in its most basic, concentrated, and moving form. It is no accident that Euclid looked on beauty bare.

In the pursuit of a misconceived freedom, this essential structural determinant of style is being downgraded today in favor of superficial effects and questionable polemics. The art of architecture is being dangerously weakened and betrayed by some of its most vocal practitioners.

After architects have tired of their new toys and nostalgic games and run out of self-indulgences, they may go back to the real and difficult business of creating art again. They are setting a more difficult task for themselves now; removing modernist restrictions opens all of art and history once more. The challenge, and the possibilities, are awesome. But they must rediscover the truth that all great architecture engages the heart and mind and senses through those forms and sequences achieved by direct structural and spatial expression, not through hidden meanings or decorative flourishes. Facing that truth was one of the most radical and courageous acts of modernism. When we have learned that lesson and the Miesian giants no longer threaten us, we may even discover that less is really more.

Ada Louise Huxtable

ARCHITECTURAL RECORD October 1981
EXUBERANT CONCRETE VAULTS AND QUIET LANDSCAPED COURTS ARE CONTRASTING FEATURES OF EUROC'S NEW HEADQUARTERS
In southern Sweden, just outside the coastal city of Malmö, architect Sten Samuelson has given particularly sensuous and expressive form to a new headquarters for the Euroc Group, a Swedish conglomerate that manufactures through subsidiary companies a variety of products, many of them for the building industry. In its formal properties—its arcades, columns and barrel vaults—the design is loosely based on recollections of a Romanesque monastery that Euroc's chief executive Sten Lindh had visited at Arles in the south of France. Like the monastery, Euroc's is a closed plan that anticipates no significant expansion since it houses only executives from the parent corporation. Within its cloistered forms and inward looking atriums, a hundred or so of Euroc's top executives are offered unusually relaxed work and recreation spaces.

The entrance elements at Euroc do just exactly what good entrance elements should do. The bridge and sculptured canopy not only provide controlled, protected access, they also hold out the promise of interesting spaces within, and hint at the humanistic design values that
1. Service
2. Kitchen
3. Guest dining
4. Dining
5. Auditorium
6. Coats
7. Euroc hall
8. Lobby
9. Meeting
10. Exercise
11. Pool
12. Sauna

Vaulted ceilings throughout the Euroc complex are created using either suspended orod strips, as over the pool, or suspended using a combination of conventional and conventional hardware.

shape those spaces. The four landscaped atriums, the plan's principal organizing elements, break down the structure's scale, provide contained views, and reiterate the theme, felt throughout, of nature gentled by the hand of man.

The new headquarters also serves as a showcase for products manufactured by Euroc's subsidiaries. One such product is structural concrete. "One reason for using the arch as a major design motif," says Samuelson, "was the opportunity it offered to display the versatility and attractiveness of concrete as a building material. I think we have demonstrated that concrete can be a flexible and exciting medium, that a concrete arch can capture much of the effect that was achieved with natural stone in older structures." Other products are also exhibited, none more effectively than gypsum board in its interior application as a ceiling finish where it has been molded to conform to the underside of the barrel vaults (see photos on the following two pages). In addition to office space, the program also calls for a large boardroom, a lecture hall/theater, a canteen, a special visitors' dining room, and a recreation section that includes two sauna-
Swedish custom diminishes distinctions between executive levels in the workspace. The offices at Euroc do not therefore betray any particular hierarchy, and the level of amenity is high throughout. The provision of pool, saunas, and other recreational facilities—together with separate smoking rooms, are also typical of Swedish tradition.

Located at about the same latitude as Copenhagen, Glasgow or Labrador, Malmö is by no means a city of half-year nights, but in response to the short days of winter, Samuelson has paid special attention to artificial lighting in his design. This concern is evident both inside and out, but nowhere is it developed more dramatically than at the entrance, where the large concrete canopy is treated almost as a lighting fixture in itself.

Samuelson’s design spreads itself comfortably on a site that is verdant and flat except for the presence close by of the large limestone quarry that was the company’s first holding. But if there is tranquility in the design, there is also strength and delicacy of detail. And if there are occasional moments of flamboyance, there is also a commitment to quality—and it is keenly felt throughout.

"It seems to me that there are many situations in life in which the organization is too brutal: It is the task of the architect to give life a gentler structure." — Alvar Aalto.

It is architect Laurence Booth of Booth/Hansen & Associates who cites Aalto’s words as the text that guided the firm in shaping the wholly gentle structure with which this inquiry into the making of industrial buildings begins. But a like spirit informs the collection as a whole. Modest in size, in cost, and in architectural intent, the buildings are firstly and rightly efficient containers for the diverse manufacturing, warehousing, and processing operations they house. Each, however, employs the familiar idiom of the genre—function rendered without gloss or embellishment—with a light (even lighthearted) touch. And if the resulting statements are both simple and brief, they are telling as well: architectural *bon mots* that gentle the too-often brutal language of utility by speaking to their users and their surroundings with a high degree of civility—and not a little wit. — Margaret F. Gaskie
A workplace that celebrates the worker

As playfully precise as origami and as cheerful as a sunbeam, the embracing yellow wall fronting this laboratory equipment assembly facility aptly prefigures both the quality of the space within and the principles underlying the master plan whose first phase it completes.

The client charged architects Booth/Hansen & Associates with two tasks. The first was to augment and interconnect existing assembly, warehouse, and office space, which was contained in two unexceptionable but bland structures: one completed, one under construction, both outgrown. The second and concurrent task was to establish coherent guidelines for future expansion.

In both cases, the program derived not only from functional requirements but from a management philosophy that places a high premium on institutional adaptiveness—and on employee participation in the process.

Thus a key organizing principle was to integrate usually discrete functions in such a way that people and processes housed in the facility freely interact. (The prominent expression of the single entrance for all employees and visitors is not merely symbolic.) A further principle was open-endedness to allow for growth of the building envelope as well as for change within. And finally, the facility was to be human in scale, foster a sense of identity as well as community, and, says architect Laurence Booth, "express a certain joy."

Functionally the scheme recognizes two kinds of space (see conceptual plan below): high-ceilinged spaces with 40-foot column bays (the module of the existing elements) for manufacturing and storage areas, and two-level spaces with 20-foot column bays for offices, laboratories, and recreation areas.

Circulation is similarly differentiated into a meandering "path" for pedestrian traffic and a "road" for materials handling.

The heart of the concept, however, resides in the components introduced with the addition of the infill building shown here: welcoming "front doors" to readily identifiable reception areas, break areas that provide employees space for relaxing during the workday, and the commons by which the architects have answered the client's request for "celebration space."

The connective link that completes this division headquarters complex, says architect Booth, "anticipates the future," introducing the concepts and attitudes that inform the overall development plan. In contrast to the uniformly high-ceilinged 40-foot bays of the flanking buildings, its 20-foot module and disposition of space on two levels lend the more intimate scale appropriate to offices and conference areas. Though embryonic, the dual circulation pattern is clear: at the rear of the building a direct "road" for materials traffic and, weaving throughout, a "people path" sketched by readily rearranged interior systems components. The building also introduces the concept of spatial organization around the entry area and a commons that pierces the mezzanine to create a skylit space at once vital and serene.
Both for economy and because the architects and client felt the esthetic to be appropriate, the building employs a no-nonsense industrial vocabulary with structural steel framing, corrugated metal decking, and mechanical elements exposed throughout. In contrast, however, to the frequent practice of color-accenting such elements, they are here softened with white to provide a calico monochrome base for the muted palette of interior fittings.

Particular attention was given to the fenestration, which is designed to maximize natural light and ventila tate and afford employees frequent view to the outside while minimizing solar gain. This combination of aims accounts for the seemingly arbitrary vagaries of the pleated facade whose vertical windows are angled to wash walls with soft diffused light but bar direct sun, an effect heightened by north-facing skylights.

The architects describe the cladding as "the perfect skin"—a sandwich of porcelain-enamed steel panels, insulation, and interior drywall that is durable, requires minimal maintenance, and provides an efficient thermal barrier. Because the wall is nonloadbearing, the facade can undulate freely in a lively play of solids and voids that is reinforced by the vivid but gentle color of the facing panels, which modulate from white at the base to bands of light and medium yellow.
A photo lab as backdrop for its product

To the visitor traveling for the first time its freeway network, Detroit's outskirts seem preeminently a place of objects viewed at a distance and at speed. Which may explain the propensity of architect Kenneth Neumann, a transplanted Chicagoan, for designing buildings with multiple "fronts."

This specialized photo processing plant has three: one facing the adjacent freeway, one fronting the minor entry road, and one abutting the parking lot from which the building is finally entered. Each elevation is treated in accord with the perspective of the viewer. But each also reinforces the design motif that lifts this otherwise utilitarian, low-budget plant well above the daily: the prominent display of the client's photographic wares.

Programmatically, the central problem was to order a bewildering variety of spaces with highly specialized technical, functional, and in many cases mechanical requirements in such a way as to retain flexibility and anticipate future growth. The organizational solution is essentially circular (see plan), with a corridor loop linking related but internally independent processing areas.

Because required administrative spaces were small relative to the total area, the obvious big-box, little-box massing scheme was rejected in favor of a single-height envelope with a flat-roofed steel frame and exterior bearing walls of gray-beige concrete block. However, as these same areas, with the employee lunchroom, are among the few demanding (or permitting) windows, both were placed along the two road-facing elevations. The "excess" wall height above the vision glass encases over-size backlit transparencies that on the highway side (above) become an eye-catching elaboration on the company logo. On the road side (right) this parade of images entices the approaching visitor past the doubly curved facade to the entry niched behind its angled terminus.

This play of vivid image against neutral backdrop is carried through to the interior, where the stark white walls of corridors, offices, and conference spaces are lavishly hung with photos. The theme finds fullest expression in the customer lobby (below right), where photomurals are mounted on a ceiling-hung grid to form a dramatic canopy of rich pattern and color.

Diagonally placed in the space and suspended 10 feet above the floor, the lobby photo grid displays foam-backed color prints invisibly mounted on panel frames tilted 45 degrees and spaced to read from eye level as an undulant surface of light and pattern. Each unit incorporates a horizontal element that houses downlights for general space illumination and a vertical frame that supports continuous fluorescents to light the adjacent mural.
A factory enlivened by line and color

In a nimble variation on the Detroit motif of automobile architecture, Kenneth Neumann has treated this large (90,000 square feet) but otherwise unremarkable factory and office complex as a huge highway billboard.

The firm was originally commissioned to study the feasibility of remodeling a 50-year-old facility in which previous expansions had added masonry bearing walls that limited operational flexibility and could be eliminated only at excessive cost. A further drawback was a site distant from any freeway, which rendered the building, by local standards, all but invisible.

Remodeling proving impractical, the owner elected instead to construct a new facility in an industrial park hard by a major freeway, instructing the architects to emphasize the highway exposure as an opportunity for establishing a distinct corporate image. He also requested, as well as maximum flexibility at minimum cost, development of the half of the property that lies in a 100-year flood zone as an employee recreation area.

The company produces from very light foam materials a diverse line of finished goods—from curlers to novelty toys—whose manufacture imposed no unusual demands beyond the need for large open areas that could be readily modified to meet changing production needs.

Both the functional and cost criteria could therefore be met by employing a preengineered structure that was left basically in its off-the-shelf state save for such fine tuning as disguising the awkward shallow roof slope with a parapet wall and carrying the insulated metal siding over to the adjoining small custom office unit (photos below right).

As the resulting complex was esthetically distinguished mainly by its unrelieved bulk, Neumann chose to articulate the buildings not as volumes, but as a series of right-angled planes in contrasting colors: tangerine on walls perpendicular to the freeway, bronze on the intersecting walls. The effect is kaleidoscopic, the solid orange billboard seen by an approaching motorist shifting gradually to solid bronze as the vehicle draws even with the building. In combination with bold signage, the bold color has been notably successful as a corporate image booster—a public relations campaign executed in paint.

An understated solar system for a warehouse

Architect Larry Yaw describes this office and warehouse complex for a leading manufacturer of skiwear as "plain vanilla." But it is plain vanilla generously sauced with amenities derived in large part from the relaxed and surehanded application of solar and thermal design features.

Concerned by high construction and energy costs, the owner asked for a simple, efficient building, and received with enthusiasm the architects' suggestions for energy-conserving measures, including solar heating.

The largest building in a light industrial area on the outskirts of Aspen, the complex is deliberately understated in design and conventionally massed with a low office element, deeply overhung on the west, stepping up and back to the greater bulk of the warehouse. The wood-framed office wing is clad with exposed aggregate panels on surfaces vulnerable to weather and with redwood siding on more protected surfaces. For the warehouse, a standard precast concrete structural system was combined with a masonry envelope to create thermal mass.

The entire complex is depressed some three feet below grade in a deep ploy that at once stabilizes interior temperatures, lowers the building's profile relative to structures nearby, and provides shelter for a series of landscaped sunken courts and a solar-heated lap pool along the south facade.

The architects' unselfconsciously ingenious approach to energy efficiency is best exemplified, however, by the warehouse solar heating system, which supplies more than 40 percent of annual heating demand. Rejecting active systems for reasons of cost and conventional passive systems for reasons of reach (the warehouse is 120 feet deep), the firm developed with its consultants a hybrid—the mechanically assisted trombe wall detailed overleaf.

Simple, efficient, easy and inexpensive to build and maintain, and readily integrated into the building fabric, this passive collector evidences a maturing attitude toward energy conservation that treats solar devices, among others, not as statements bordering on the ideological but as tools, and buildings not as their underpinnings but as their occasion.

The huge (120 by 18 feet) "semi­active" solar collector on the south wall of the Obermeyer warehouse not only provides highly cost effective solar heating, it also lends interest to the long street facade, smoothing the transition from the almost domes­tic scale and treatment of the office wing to the greater bulk of the ware­house. The modified trombe wall (de­tail left) is composed of a filled cinder block mass wall, an air space for heat transfer, a dark blue stainless steel selective surface absorber plate, and low-iron-content diffusing glass on the exterior. It is hybrid in that con­vected gain from the wall is mechani­cally drawn upward across both sur­faces of the absorber plate by in-duct fans at the inside top of the wall, where a network of collecting ducts captures the solar heat and distrib­utes it throughout the building.
A featureless computer "box" made inviting

The design problem posed by this major data processing center for a large private electric utility could hardly have been functionally more straightforward—or formally more restrictive. To ensure the security of the highly sophisticated computer operation the facility houses, the client demanded no less than an impregnable vault: a 150-foot-square reinforced concrete box with foot-thick walls, a 4-inch-deep roof, and a single entry.

Yet in deference to its neighbors in a presently nondescript but upwardly mobile section of downtown Canton, Ohio, the utility also asked that its fortress be visually unforbidding and unboxlike. The client was also concerned that the building present an open and inviting aspect both to the public and to employees, especially the 65 percent of the workforce who are on night shifts.

The design of the building exterior thus devolved almost to a studio exercise in composition using a minimum number of prescribed elements. The first necessity to be made a virtue was the requirement that the building be raised 31/2 feet to clear a flood plain. Given this opportunity to dramatize the entrance at the building's northeast corner, the architects treated the entry as a separate portal, approached by stair and revealing in the reception area beyond its double glass doors the depth and texture of a clear glass block wall on a gold-hued ground. To its left a required ramp was elaborated to pure sculpture, encased within a virtual vitrine of buttressed glass and set off against a background of gleaming cerulean.

Here as elsewhere materials and details were chosen to reflect in the building the qualities of the computers it houses: a sleek, sophisticated, and intricately made machine. To visually lighten its requisite mass, the concrete box was faced with a silvery aluminum skin, and to preserve the clean horizontal lines of the structure, the cooling tower and mechanical equipment housing were removed from their accustomed rooftop perch and treated as a separate design element. Sumptuously clad in black granite, this small utilitarian box contrasts strikingly—and whimsically—with the cool metallic skin of the main building in a counterpoint played up by the fire-engine red duct connecting the two.

Though 90 percent of its space is secured behind a formidable mass of concrete, the building presents, particularly in its nighttime aspect, a welcoming public face that belies its fortress-like character and rigidly predetermined form. The 150-foot-square, 15-foot-high box is faced with natural aluminum panels that were specified for economy in the maximum dimension of 5 by 15 feet and laid horizontally with concealed coping. The resulting strong horizontal grid lightens the facades and reflects the interior's 30-foot structural module.
BATH FIXTURES / Three new "Blended Hues"—Lavender Haze, Morning Rose and Blue Mist—are offered in the Eljer Gallery Collection line of china and cast iron bathroom fixtures and fittings. A brochure illustrates the two-tone colors, and lists compatible tiles, wallcovering, carpeting and laminates from several manufacturers. • Eljer Plumbingware, Pittsburgh.  

FLOWABLE CONCRETE / Product data folder on high slump concrete explains the "Synergized Performance System," a flowable, high-quality concrete that combines admixtures and local materials without sacrificing other important performance characteristics. • Master Builders, Cleveland.  

FURNITURE CARE / Written for specifiers and end users of wood office furniture, "The Care and Preservation of Helikon Classics" covers the major elements of furniture maintenance. The four-page brochure covers dusting; cleaning of wood finishes; stainless steel and aluminum; and lists Don'ts of wood care. • Helikon Furniture Co., Inc., Taftsville, Conn.  

AIR HANDLING / Brochure on indirect evaporative cooling reviews air handling energy savings systems designed especially for commercial use, and outlines the Z-duct Principle. Air-to-air heat exchanger and packaged heat recovery systems are included; typical applications and available options are illustrated. • Des Champs Laboratories, East Hanover, N.J.  

WINDOW SYSTEMS / Written for the architect and design professional, as well as for the manufacturer, Window Energy Systems magazine covers all types of interior and exterior, thermally efficient window treatments. It is published by the Industrial Fabrics Assn. International, a trade association of more than 1,400 firms. Subscriptions are $25 per year. • IFAI, St. Paul, Minn.  

FLOOR OUTLET / A color brochure describes how the 2-in. "Poke-Thru" electrical floor outlet requires a smaller hole while about doubling communications carrying capacity of existing fittings. The outlet is fire rated for high- and low-tension, including 100 pair telephone plus power. • Raceway Components, Inc., Linden, N.J.  

CEILING FAN / A "limited edition," the "St. Moritz" ceiling fan described in a color brochure features a chrome motor housing and clear cast acrylic blades. The fan will not interfere with TV or radio reception while operating. • Leslie-Locke, Akron, Ohio.  

STEEL SINKS / A 12-page Republic catalog lists over 100 one-, two- and three-sink configurations in 18-, 20- and 22-gauge stainless steel. Dimensional drawings, package units, new installation features and one-year warranty details are included. • UNR Home Products, Paris, Ill.  

ELECTRICAL RETROFIT / A 20-page bulletin contains color photographs and descriptions of the various Square D electrical products for renovation and remodeling projects. Product categories include medium voltage power systems; low voltage service equipment; entrance and distribution equipment; and people protectors such as smoke and fire detectors. • Square D Co., Middletown, Ohio.  

COATED STEEL PIPE / An anti-corrosive product line for above/below ground and underwater, Totalcoat coated lightweight steel pipe, coupling and fittings are described in a new brochure. Suggested applications for Totalcoat pipe include waste a potable water, industrial plants, cooling towers, and solar heating. • Berger Industries International Corp., Potomac, Washington, D.C.  

MATERIAL HANDLING / The "Hyster-Care" program described in a bulletin is a collection of services designed for the material handling equipment user: parts and service support, operator training, lift truck renting, leasing and...financing, etc. • Hyster Co., Portland, Ore.  

CONSTRUCTION PRODUCTS / An introductory brochure highlights construction and maintenance products in five groups: electrical; structural safety and security; decorative; and maintenance/remodeling. Postcards are included to obtain information about specific products. • 3M St. Paul, Minn.  

SIGNAGE / More than 220 identification products are offered in a 64-page catalog. New items include the "Ro-Code" valve marking system and another hazardous materials marking system. Signs range from self-adhesive decals to cast bronze and aluminum plaques. • Seton Name Plate Corp., New Haven, Conn.
Innovative products information retrieval system for architects and interior designers

Xetron, a Chicago-based communications firm, has designed a systematized approach to retrieving information from over 400 contract manufacturers' catalogs by using one microfiche unit. Called CFDRS, Contract Furniture Data Retrieval System, it allows architects, interior designers, specifiers and contract furniture dealers to have the most up-to-date information on fast-changing product information.

Each of the manufacturers' product lines is photographed on microfilm and assembled in a CFDRS storage compartment measuring only 6- by 12- by 5-in., and each page includes prices, specifications and photographs (shown is an example of pages from the Koch & Lowy catalog). Products are grouped by manufacturer and/or product classification for easy reference. Every month a subscriber receives an updated set of fiches to keep the file current. In addition to the microfiche viewer, an optional reader/printer can produce sharp pictures of the desired page. The basic price of the system—which includes fiche reader, file, and one year subscription to materials—is $695. Since retrieval time is almost instant, Xetron claims to reduce specification writing time by up to 50 per cent. • Xetron, Chicago. circle 300 on inquiry card

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ARCHITECTURAL RECORD  October 1981 137
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MINESCENT FLOOR TREAD / Glo-Grit non-slip treads glow in the dark, and provide an extra measure of safety during power failures or in dark hallways. Available in rolls or pre-cut treads, Glo-Grit is made with a high-strength plastic carrier film to be flexible and long-wearing. • MACtac Industrial Products Div., Stow, Ohio.

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PEN-PLAN PANELS / These Clad-Wall panels offer a choice of either acoustic or tackable construction, both identical in appearance with unded edges and corners with a recessed double slit. Panels of equal or different heights may be joined by means of interlocking moldings. • The Switzer Corp., Old Saybrook, Conn.

circle 303 on inquiry card

SUSPENDED LIGHTING / The Tubular Lighting system combines incandescent track lighting and fluorescent fixtures within tubes of uniform cross section. It is designed so that a track section can be coupled directly with a fluorescent section of the same diameter and appearance for the construction of two- and three-dimensional suspended fixtures. Standard finishes are bronze, matte aluminum and white. • Staff Lighting, Highland, N.Y.

circle 304 on inquiry card

BATH ACCESSORIES / Molded of ABS and acrylic plastics, Australian-made "Bath Mates" and "Prisma" accessories come in a range of bright colors. The collections include towel rails, rings and hooks, bath and shower shelves, soap holders, mirrors, cabinets and stools. • International Inc., Los Angeles, Calif.

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Circle 51 on inquiry card

The most highly insulated light transmitting material. Saving energy for 25 years.

KALWALL CORPORATION
1111 Candia Road, Manchester, NH 03103, 603-627-3861
See Sweet's 8.14/Ka, 7.8/KaL, 13.11a/Ka, 13.2c/Stu.

Circle 51 on inquiry card

ARCHITECTURAL RECORD October 1981 139
If there were a better way to build an industrial door, we would be doing it.

Twenty years of constant research and development have resulted in the final process to produce the strongest, most durable, lightweight industrial door on the market today.

In striving for the perfect door, the process which evolved just happened to also produce a thermally efficient door. Logically, a polyurethane core, besides adding lightweight strength, is also an excellent insulator.

But, while simply placing foam between metal sheets may produce an "insulated" door, it does not produce a door which utilizes the other qualities of polyurethane. Only THERMACORE'S™ unique lamination process takes full advantage of the combined qualities of Galvalume and polyurethane.

THE PROCESS IS THE KEY.

The THERMACORE™ process begins with two sheets of embossed Galvalume steel which are fed through deadening dyes to completely flatten them before roll forming. The roll forming produces the skins of THERMACORE™ doors. During this phase, two one-inch-wide steel reinforcement strips are incorporated onto the inside skin using a hot melt process. These metal strips serve as the bases for hardware attachments.

From the roll former, the steel moves into a temperature-controlled oven set between 104°F and 108°F. Two heat sensors provide a continuous temperature readout in the control room. As the inside skin rolls through, a chemical spreader applies the polyurethane foam. This phase, as is the entire process, is monitored by television cameras to ensure even application with no air pockets and to check for any dirt or excess lubricants left from the roll former which would prevent uniform adhesion between foam and metal.

Strict quality control is an integral part of THERMACORE'S™ process. Since the foam expands and becomes adhesive for only a matter of seconds, it must be in contact with the metal at this critical time before it hardens. Before each run of the line, the foam is mixed and lab-tested right in our own plant to ensure a density of 3.24 lb/ft³.

After the foam is applied, the inner and outer skins enter a 90'-long double band conveyor. This phase is set at a constant 104°F so that the foam expands to a uniform density between the metal skins. Four heat sensors measure the temperature of the conveyor plates during this critical phase. If the thermostat rises above 104°F, air conditioning units immediately bring the temperature back to the correct level.

THERMACORE's™ unique process can be monitored by one man at the control panel while six inspectors also perform manual checks along the production line. The production is run by computer, programmed for each individual customer order.

This process has been shown to be the only method to produce door panels with uniform density and adhesion. Every panel can be visually checked to determine quality without destroying the metal sheathing. That's why we're so proud of our door and the process which produces it!

THE DOOR OF THE FUTURE IS NOW!

THERMACORE

Manufactured by Insoport Industries, Inc. For more information, call our toll-free number: 1-800-233-8992.

To contact your nearest distributor, call Sweet's Buyline toll-free at 1-800-447-1981.

Circle #3 on inquiry card.
ONZE-TINTED MIRRORS / Now available for decorative applications in residential interiors, onze-toned mirrors from Carolina Mirror are own in this dining room as a wall covering, dow box lighting unit, on pedestal table bases the mirrored table. Mirrors are made of float ss in all shapes, sizes, colors and textures with h optical quality. Carolina Mirror Corp., North lkesboro, N.C.
circle 306 on inquiry card

JUNTER TOPS / Recent additions to the Panel ncepts line of open-office acoustical panel sys­ ns, straight and curved counter tops are set on socket channels and screw in easily. The standard height counter is rectangular, with radius ed edges, ered in three-, four-, and five-f t lengths, all ins. deep. Panel Concepts, Inc., Santa Ana, lif.
circle 307 on inquiry card

INTERNALIZED SKYLIGHT / Designed to minimize condensation occurring on the inside of the skylight me, Naturalite’s residential skylights are made m acrylic and aluminum with a polyurethane neral break. Both l-frame and insulated curb its meet code requirements for U value compu­ ion exemption with up to 10 per cent of the roof a in the skylights. Naturalite Inc., Garland, xas.
circle 308 on inquiry card

How paying more for a roof insulation can cost you less!

There’s more to roof insulation than an R Value and price! The physical properties can add or subtract from the performance and longevity of the roof system itself. When the roof deck averages only 2% of the total cost of a building yet is responsible for more architectural firm law suits than any other portion of the building, isn’t it prudent to consider a roof system with a proven track record of successful performance? Regardless of the membrane brand used, systems utilizing All-weather Crete insulation have such a record. AWC costs slightly more than other insulations. This is due to its unique properties and installation. In addition to supplying superb insulation, it aids in retarding roof deterioration and leakage. There are fewer or no leak repairs or re-roofs. Roofs generally last years longer and pay for themselves over and over - therefore, actually cost less. Ask the satisfied building owner who has an AWC insulated roof . . . or write for a free booklet with the facts!

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All-weather Crete

A monolithic insulation, to any desired thickness. Vapor transmission - requires no venting. Sloped to drains for positive water runoff.

Tested and approved by UL, FM and BRL for various constructions

Circle 53 on inquiry card

RESIDENTIAL CARPETING / Geometric patterns are carved in white Scotchguard-treated nylon carpeting to create the “Blanc de Blanc” residential flooring line. Designs include chevrons, dominoes, lattice, palms, diamonds, diagonals, and the octagon shown here. Horizon Industries, Calhoun, Ga.
circle 310 on inquiry card

more products on page 143

DISHWASHER / The Sure-Temp water heating sys­ tem in KitchenAid’s “Energy Saver V” dishwashers makes provision for a variety of “real world” installation problems: reduced water heater set­ tings, long plumbing runs, outside wall positioning, and other variables. Hobart Corp., KitchenAid Div., Troy, Ohio
circle 309 on inquiry card
Subtle facets achieved by positioning legs at a 45° angle to maximize the strength of the solid oak frame. The Diamond Collection. Multi-purpose seating by Leif Blodee, for Kimball.
THE SPRINKLER YOU CAN LOOK UP TO

Most fire protection sprinklers aren't built with architects in mind, so they don't add much beauty to a ceiling.

That's why we've engineered our Decor® sprinkler line to be visually subtle, yet offer an attractive alternative to bulky solder-link or costly concealed sprinklers.

Decor® sprinklers are miniaturized and cleanly styled in satin or polished chrome, natural or polished brass. The glass bulbs are color coded for six temperature ratings.

Our new 2-piece adjustable recessed escutcheon allows Decor® sprinklers to be fitted prior to ceiling installation. This helps keep construction on schedule and provides for lower installed costs than with competitive flush or concealed sprinklers.

Send for more detailed information on Decor® sprinklers and discover how easy they make it to look at a ceiling.

ACRYLIC TABLE / Made of extra-thick Acrylite sheet material, the "U-Six Table" measures 48- by 24- by 16-ins, and has inverted U-scroll supports. Acrylite acrylic is said to be free of blemishes and tolerance distortion, with clear, un-yellowed edges. * Plexiframes, Inc., San Francisco, Calif.

circle 311 on inquiry card

AMPLIFIER / The "TU-A Series" of telephone paging/utility public address amplifiers feature built-in telephone line input transformers, and can operate from 48 vdc, positive or negative ground, or 120 vac. Units are screwdriver installed and set, and have a peak-reading LED to indicate when the amplifier is driven into clipping. Microphone wires connect directly to the screw-terminal strip. Amplifiers are available in ratings of 100, 60 or 35 watts. * Bogen Div. of Lear Siegler, Inc., Paramus, N.J.

circle 312 on inquiry card

MAGAZINE RACK / A two-tiered construction to hold magazines and books, Paul Mayen's 22-in.-high rack is constructed of three 4-in-thick interlocking aluminum plates mirror polished on all surfaces. * Architectural Supplements, Inc., New York City.

circle 313 on inquiry card

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ARCHITECTURAL RECORD October 1981 143
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Circle 57 on inquiry card
New 70-degree steep stair you can descend face-forward

When you need to save space and weight, the LAPEYRE STAIR is the answer. At a 70 degree space saving angle, innovative engineering makes the LAPEYRE STAIR as easy to ascend and descend as a stair with twice the floor space. High, close-in hand rails offer body support. Built of lightweight, high grade aluminum to your height specifications, the stair is delivered in its bright natural finish. The LAPEYRE STAIR complies with OSHA requirements. Get design details and prices from:

LAPEYRE STAIR, INC.

Circle 58 on inquiry card
Laminated architectural glass. How it spruced up this old library is a case for the books.

The restoration of Chicago's 1880's-vintage library has earned the architectural firm of Holabird & Root a coveted 1979 AIA Design Honor Award for the extended use of a building.

The design challenge was to revitalize the structure to meet modern functional standards while preserving its historic appearance. For this project, the glazing specified was laminated architectural glass, reinforced with a Saflex® interlayer of polyvinyl butyral by Monsanto. It was selected for many convincing reasons.

Safety is enhanced because tough, resilient Saflex absorbs and dissipates an impact. The strong adhesion of the interlayer to glass prevents injuries from flying or falling fragments.

Laminated architectural glass with tinted Saflex was used to reduce glare and to control solar heat gain. And it was easily fabricated into special insulated units to provide temperature and humidity control for an area containing valuable rare books.

It was important that the glazing chosen could be cut to fit on site or in the shop because the library's antique iron window frames were irregular in size and shape. Laminated architectural glass is easily cut to size with simple tools, impractical or impossible with other glazings.

An added benefit is sound attenuation. Laminated glass reduced the din of traffic from nearby Michigan Avenue. And there are no maintenance problems. Laminated glass can be cleaned as easily as ordinary glass without scratching.

If your challenge is renovating one of America's great old landmarks—or building a new one—there are a lot of convincing reasons to use laminated glass. Let us tell you about them. For more information and a list of the leading manufacturers of laminated architectural glass, featuring the Saflex interlayer, write: Monsanto Plastics and Resins Company, Dept. 804, 800 North Lindbergh Blvd., St. Louis, MO 63166.

Saflex is a registered trademark of Monsanto Co.
SEARS ROEBUCK DISTRIBUTION CENTER, CHICAGO, ILLINOIS

Construction Manager: Schal & Associates, Chicago, Illinois

Because the Sears Roebuck Company insists that only the best available construction products be specified for their own building—they chose Raynor S-24 Steel Doors for their new Chicago Distribution Center.

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Sargent 60 Series Exit Devices are offered in a full line of choices...rim (main photo), vertical rod and mortise. Sargent, New Haven, Connecticut 06511 Sargent (Canada) Ltd.

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