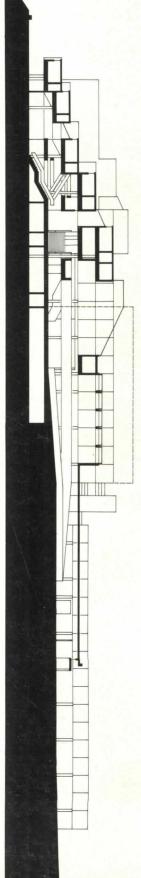
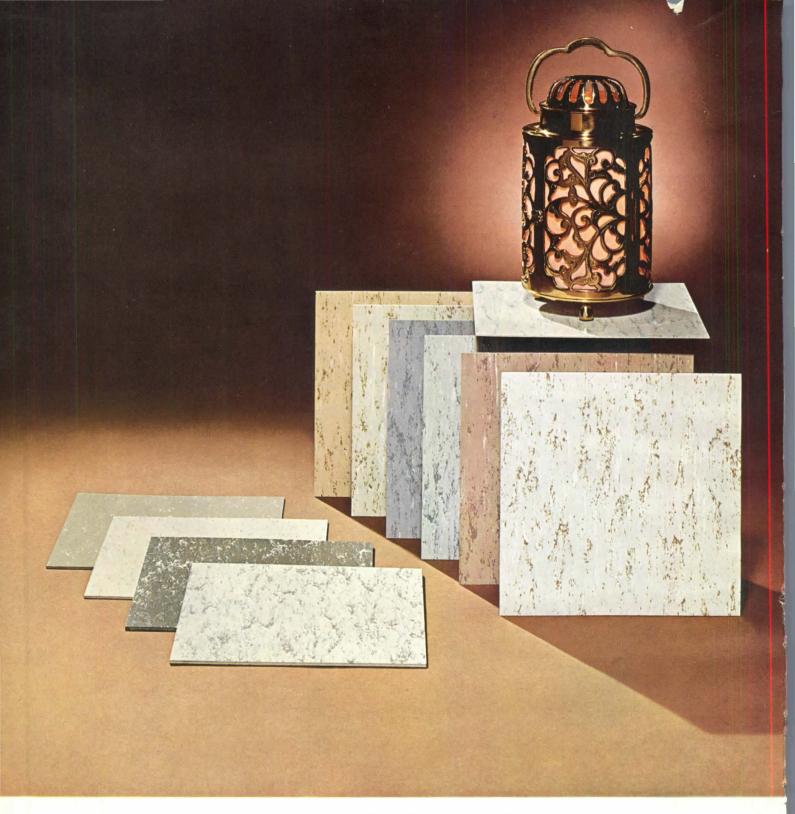
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107 EDITORIAL

P/A's Editor discusses the problem of standards of judgment in evaluating design submissions.

THE FOURTEENTH ANNUAL P/A DESIGN AWARDS PROGRAM

- Introduction: This year's premiated designs are not presented according to building-type category, but are grouped as illustrative of the jury's principal areas of concern in evaluating the submissions.
- 110 First Design Award: Convent of the Holy Name, Spokane, Washington.
- BUILDINGS AS CONNECTIVE TISSUE
 Buildings that quietly join the movement pattern and
 organic structure of existing neighborhoods.
- 118 Award: Student Union, State College of Iowa, Cedar Falls, Iowa.
- 122 Citation: Performing Arts Center, University of Toledo,
 Toledo, Ohio.
- 124 CONFRONTING SOCIAL PROBLEMS

 Four projects that illustrate the architect's growing involvement in the solution of social problems.
- 124 Citation: Residences for the Elderly, Cidra Municipality, Puerto Rico.
- 126 Citation: Housing for the Chinese Community, South Cove Urban Renewal Area, Boston, Massachusetts.
- 128 Citation: University of Tennessee Affiliated Training Center for the Mentally Retarded, Memphis, Tennessee.
- 130 Citation: Youth Recreation Center, New Haven, Connecticut.

134 SUPERSCALE

It was a matter of controversy to the jury whether megastructures can be judged according to the conventional canons of scale and beauty.

- 134 Citation: Hamilton County Sports Stadium, Cincinnati,
- 136 Citation: Multipurpose Stadium, University of California at Los Angeles, UCLA campus at Westwood, California.
- 138 URBAN DESIGN: THE CITY AS CLIENT
 In drawing up plans for public agencies, the problem
 always exists of how much "architecture" should be
 included.
- 138 Citation: Oakland City Center, Oakland, California.

142 DESIGN OF OPEN SPACES

Architects are becoming increasingly conscious of open space as representing not merely the absence of buildings but as composed of volumes that must themselves be carefully designed. 142 Citation: Genesee Crossroads Plaza, Rochester, New York.

144 THE ARCHITECTURE OF ALLUSION

One of the most heatedly discussed matters was the relevance and importance to architecture of incorporating in building design allusions to our cultural framework — both past and present.

- 144 Award: The Frug House, Princeton, New Jersey.
- 148 Citation: Three buildings for a town in Ohio.
- 152 Citation: Princeton Memorial Park, Hightstown, New Jersey.

154 THE GOOD LIFE

Architect-designed residences return to grace as symbols of gracious living, and a resort community indicates future leisure living.

- 154 Award: Summer residence for Mr. and Mrs. Samuel Halsband, Woodstock, New York.
- 158 Citation: J. H. Friedman House, Fort Smith, Arkansas.
- 160 Citation: Residence for Mr. and Mrs. Carlos Smith, Helena, Arkansas.
- 162 Citation: Chauncy Village Town Houses, Cambridge, Massachusetts.
- 164 Citation: Tanho Resort Community, Tangipahoa Parish, Louisiana.

167 ICONOGRAPHY AND THE PROCESS OF ARCHITECTURE

In a far-ranging and provocative discussion, the jury sums up its feelings about the state of the profession and the current direction of design as evidenced in this group of submissions.

35 P/A NEWS REPORT

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172 SPECIFICATIONS CLINIC

Harold J. Rosen concludes his discussion of tests for rubber-like materials and elastomers.

174 IT'S THE LAW

Bernard Tomson and Norman Coplan comment on the final disposition and important implications of a recent Illinois case in which injured construction workers sued the architects.

176 BOOK REVIEWS

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6 VIEWS

Our readers' comments on the architectural scene.

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106 FRONTISPIECE

Jurors review the submissions. Photo: Maude Dorr.

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VIEWS

Concrete Applause

Dear Editor: I want to congratulate you on the fine job you did in the issue devoted to concrete (October 1966 P/A). It was a masterful assemblage of fact and opinion, and I have heard many favorable comments on it to date.

HARRY B. MAHLER Newark, N.J.

Dear Editor: Your October issue contains an extremely interesting report on concrete. The photographs were especially impressive.

It was surprising to find so many differing opinions on the potential of concrete and so many negative reactions reported in all phases of the investigation.

My compliments on a job well done.

H. R. DARBY President, Winner Mfg. Co. West Trenton, N.J.

Dear Editor: Your broad analysis of concrete in the October issue points to a need for more education on the subject.

Concrete has been proven beyond doubt to be a material of potential when used by architects who fully understand its properties.

For those who have looked upon it as a catalogue item, or without proper knowledge, or merely as a "cheaper" material, its use has resulted in many surprises.

It takes a lot to do things right, but first comes the question of objectives. What are we looking for — the quickest, the easiest, the cheapest, the best? When this question is clearly answered, the way to achievement will follow and the end results will usually reflect what we were after in the first place.

To ignore fundamentals at the beginning and complain at the end is not uncommon in today's application of architectural concrete.

The use of slogans and general statements in matters that require specific information is still fashionable, as parts of your issue bring out.

It fits the frame of showmanship, the desire to be recognized as being with it, the lack of real interest to be part of it. There is nothing wrong with concrete; it has a tremendous potential and its technology is known.

But, as with a violin, it takes a professional to show there is music in it. Your issue made this very clear. It is rather unfortunate that many of the questions and doubts raised were not resolved, for the answers to most are readily available.

A. C. GEELHOED Vice-President, Engineering Schokbeton Products Corp. New York, N.Y. Dear Editor: The October issue is magnificent. You covered the field cleverly and thoroughly from every aspect.

It is amazing that you were able to go into such depth simply by talking to people. I don't know if I have changed my mind about anything, but I feel that I know more as a result of reading this issue.

JULES GREGORY

Dear Editor: You have produced the holy writ on concrete — or at least the catechism. It's terrific!

DANFORTH W. TOAN New York, N.Y.

Dear Editor: Having just finished reading the October issue and having practically torn it apart, it seemed only proper to say thank you and congratulations.

GEORGE S. CAMPBEL Chattanooga, Tenn.

Dear Editor: The article by Dr. August Komendant is excellent, and I particularly enjoyed his very pointed comments concerning the use of concrete as a structural material.

There is one area, however, which seems to require further clarification. To anyone unfamiliar with Komendant's work, one might be led to believe from his article that the relationship between structural engineer and architect should be one of detachment, with the engineer furnishing as many solutions to the framing problem as possible, without concerning himself with the final solution, as long as it is structurally sound.

I say "to anyone unfamiliar with Komendant's work" one might be led to this conclusion, because it is obvious from even a brief exposure to Komendant that here is an engineer who does exercise a strong voice in structure, and whose feelings come through in the completed design. This is as it should be.

True, the engineer should evaluate as many systems as possible to solve the structural problem, but, in keeping with what the architect is trying to create, the engineer should assist his client with a strong recommendation as to the structural system he deems best for the job. The consultant who shirks this responsibility serves neither his profession nor his client well.

HARVEY PITTELKO Seattle, Wash.

An Unedited Communiqué

the November/66 issue of P/A.

Dear Editor:

"I don't mean any harm.

I only mean a little harm." Frost.

Dissent vigorously from your confused definition of Fine Art in your editorial in

Why in heaven can't you do some semantic research on definitions?

Hav'nt you ever read J. Maritain's Art & Scholasticism?

Primitives embody fine art. The communication is so powerful and it is a communication of Form as Thomas of Acquin uses it..... the reverse of its present understanding.

Art is skillful making.

Fine art is the rigorous communication of wonder, the interior reality of form (used in the commonly understood sense). It is a communication that appeals to the total person; his intellect, his spirit, his emotions.

Demosthenes uses a triology that is congruent with the above: "Men desire the just, the beautiful, the useful."

Can we evaluate buildings in terms of justice?

What canons would we use?

Most Architectural magazines while contributing some focusing on todays needs more often fuzz the focus and breed confusion. Semantically cavalier they charge this way and that on the steed of high purpose.

Yours often have candor & humility and that is most refreshing..... but carry the onus of the above comments as well.

ECCOLMAH BRAHMACHARYA On the Sound Milford, Conn.

Mormon Tabernacle Roof

Dear Editor: We were very interested to read Carl Condit's article about the Mormon Tabernacle (NOVEMBER 1966 P/A).

Overly supplied the "shiny carapace of aluminum" in 1948. The present roof is actually the third roof on the building. Although our roof system on the building has been under warranty since installation, we have never had a single request from the Society of Latter Day Saints to perform any service whatsoever.

H. W. WEHE, JR.
President, Overly Manufacturing Company
Greensburg, Pa.

More on South American Architecture

Dear Editor: Your article on South American architecture (September 1966 P/A) is interesting, particularly since only one of the countries covered lies completely below the equator.

Save for a slighting reference, it ignores the second largest country by size, population, and national gross product, and one that has some very good architects. It misleads by stating categorically that there were no schools of architecture in South America prior to 20 years ago, though the University of Buenos Aires, to my knowl-

Continued on page 10



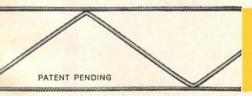


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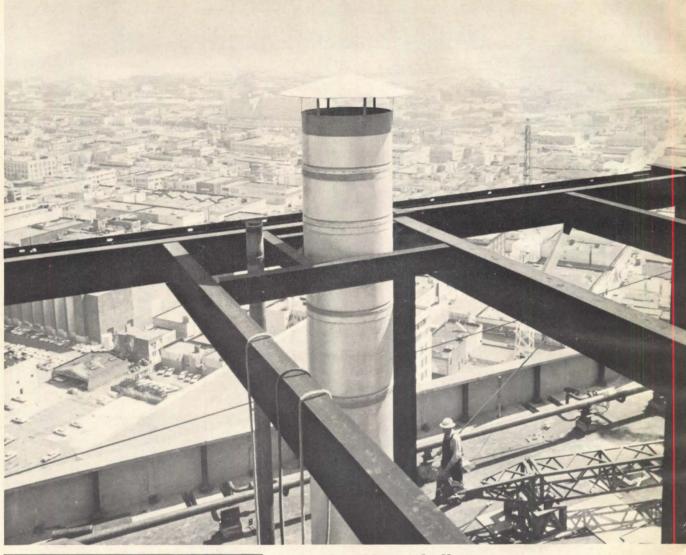
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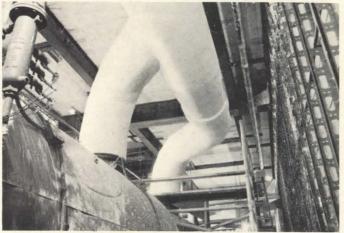
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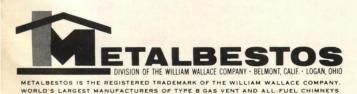
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Continued from page 6 edge, has had a faculty of architecture for twice that time.

We never get much of a press from you Nortéamericanos. We are almost at opposite ends of this double continent and we have some similarities of character, invariably the worst, which do not endear us to each other.

There are some very good architects in Argentina, and I can say this objectively, since I was trained in England and only went back to practice in my own country after I was more than 30 years old; but as

an example I will give you Eduardo Catalano, who now has established himself here very successfully. I do not think it will be necessary to warn you that there are also some very bad ones.

HENRY WESLEY PINEIRO Santa Barbara, Calif.

[In his one-month tour of South America, Associate Editor Smith visited only the five countries discussed; his report, therefore, applies only to those areas. — ED]

Dear Editor: I have just read the article on South American architecture.

Congratulations on its objectivity, and especially its sharpness.

Besides considering architecture itself, the article showed a great deal of understanding of social and political problems of this continent, as well as some peculiar ways of being of us South Americans.

As a sincere São Paulo inhabitant, I was pleased to read that our town is a country town compared to Rio, a truth that 95 per cent of stubborn "money-minded paulistas" refuse to accept.

SERGIO TEPERMAN

Dear Editor: My compliments on your wonderful report on Latin American architecture.

Due to the absence of serious, capable, and active criticism, Brazilian architecture is developing in such a hybrid, disorderly way that sometimes—or most of the time—our public must see, as its rightful specimens, senseless works that cannot carry a building method to its logical consequences.

Therefore, your precise, analytical article should prove most welcome and a great help and stimulus toward the making of a new, inventful architecture.

PAULO CASÉ Rio De Janeiro, Brazil

NOTICES

New Branch Offices

Hall & Goodhue, Architects-City Planners, 100 Bush St., San Francisco, Calif. Hellmuth, Obata & Kassabaum, Inc., Architects, have opened offices at 1 Kearney St., San Francisco, and at 8584 Melrose Ave., Los Angeles, Calif.

ROBERT L. MILLS, Architect, has opened an office on Water St., Blacksburg, Va.

New Addresses

EDWARD LARRABEE BARNES, Architect, 410 E. 62nd St., New York, N.Y 10021 BERTRAM L. BASSUK, Architect, 230 W. 13 St., New York, N.Y. 10011.

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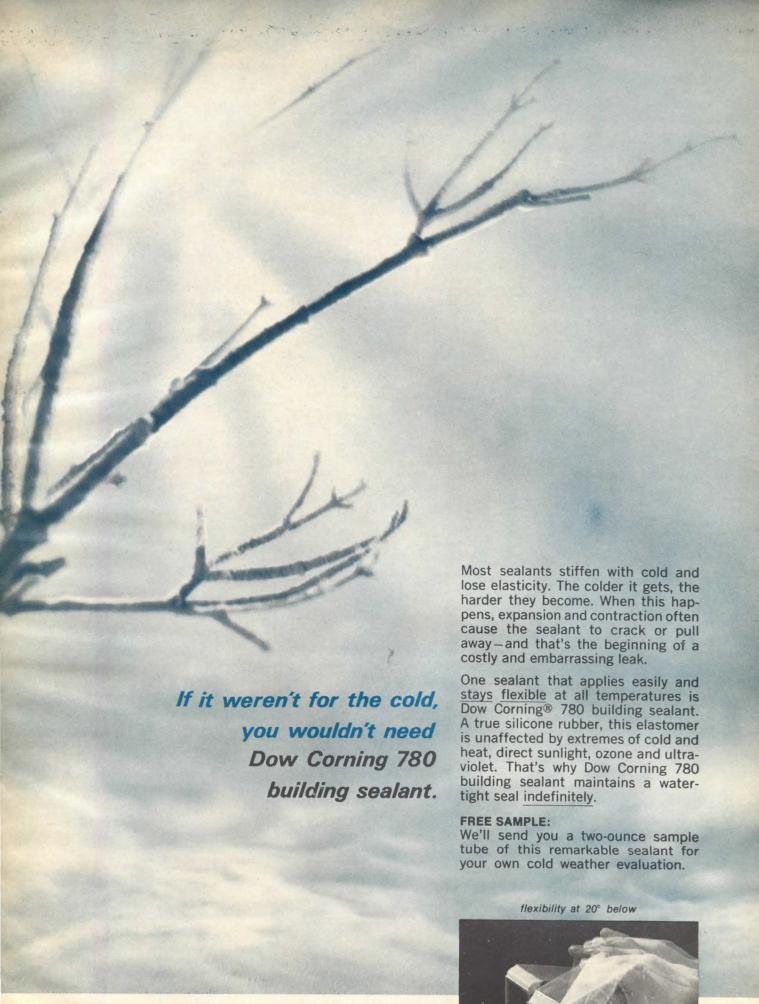
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THOMAS H. CREIGHTON, Architect, 4057-A Black Point Road, Honolulu, Hawaii 96815.

JOHN HEJDUK, Architect, 207 E. 37 St., New York, N.Y. 10016.

MATTHEW C. WELCH, Site Planner, 3272 Peachtree Road, N.E., Atlanta, Ga. 30305.

New Partners, Associates

ARMOND BARTOS & ASSOCIATES, Consulting Engineers, New York, announce that MATTHEW PRZYSTUP and ROY FRIEDBERG have been named partners.

DEETER, RITCHEY, SIPPEL, Architects-Planners-Engineers, Pittsburgh, Pa., have appointed Charles L. Christen an asso-

FRANK GRAD & Sons, Architects-Engineers-Planners, Newark, N.J., have named six new partners: Kenneth D. WHEELER, DAVID R. DIBNER, ARTHUR R. MIELE, PAUL E. RALKENSTEIN, HARRY B. MAHLER, FRANK W. ORLEANS. They have also named five new associates: STANLEY C. BROGREN, MAIME V. MARTINS, DONALD M. SCHLIEMANN, HOWARD N. HORII, and MARCEL E. THOMPSON.

PENDERSON, HUEBER, HARES & GLAVIN, Architects, Landscape Architects, Engineers, Syracuse, N.Y., announce that PAUL J. HUEBER, ANTHONY W. KOTZ, and George P. Newton have become partners in the firm.

PRAEGER-KAVANAGH-WATERBURY, Engineers-Architects, New York, N.Y., have named Felix Candela an associate.

WILEY & WILSON, Consulting Engineers, Lynchburg, Va., have named five new associates: T. J. ETHERTON, JR., H. L. LYTTON, C. H. MITCHELL, JR., W. A. STUART, II, and W. D. WRIGHT.

Elections, Appointments

THE AMERICAN INSTITUTE OF INTERIOR DESIGNERS, New York, N.Y., has elected JAMES MERRICK SMITH national president, and EDWARD J. PERRAULT national chairman of the board.

THE AMERICAN SOCIETY OF CIVIL ENGI-NEERS has elected RICHARD H. TATLOW, III president-elect.

BLISS & LAUGHLIN INDUSTRIES, Oak Brook, Ill., have appointed Joseph W. Rose group vice-president, Material Handling and Furniture Products Divi-

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All drawing pencils are alike...



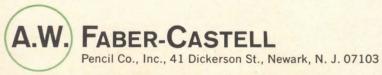
Until you run into degree crashers. Like people-type crashers, some drawing pencil degrees trespass into areas where they have no business.

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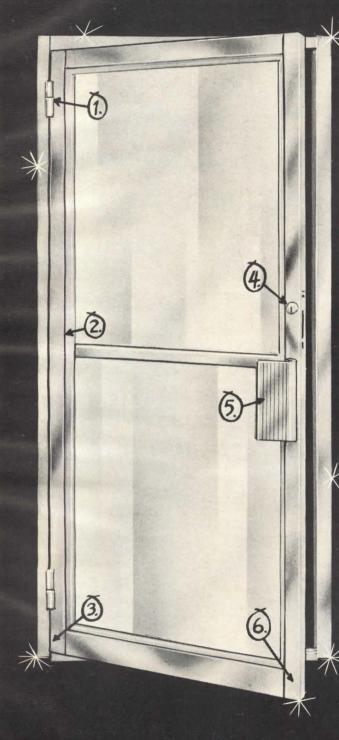




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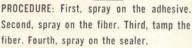














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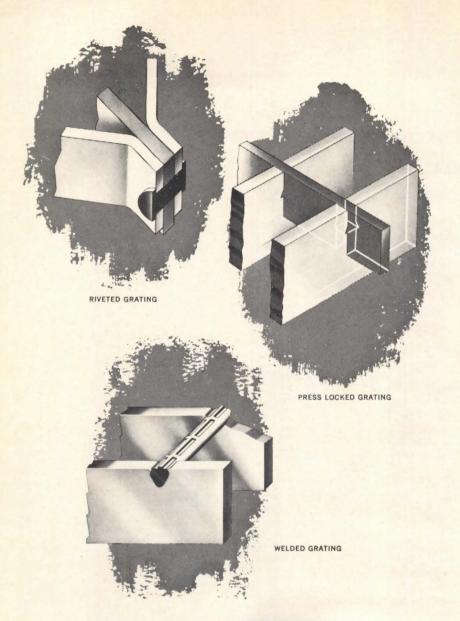
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On Readers' Service Card, Circle No. 419

scape Architects, Los Angeles, Calif., have appointed Sheldon M. Miller office manager.

Daniel, Mann, Johnson & Mendenhall, Architects-Engineers-Planners, Los Angeles, Calif., have appointed Tracy Price commercial projects manager, and Charles L. Carlson secretary-treasurer.

SCHELIN ENGINEERING COMPANY, El Sobrante, Calif., has appointed Donald E. Maguire job captain of the company's architectural department.

EBERLE M. SMITH ASSOCIATES, Architects and Engineers, Detroit, Mich., have appointed Frederick Baessler and Edward Hammarskjold associates.

Name Changes

THOMAS CARCATERRA & ASSOCIATES, Consulting Engineers, Silver Spring, Md.; formerly, SMISLOVA & CARCATERRA.

Carlin, Pozzi & Associates, Architects, New Haven, Conn., upon admission of Paul E. Pozzi; formerly, Earl P. Carlin.

DENYES & FREEMAN ASSOCIATES, INC., Architects, Pontiac, Mich.; formerly, DENYES ASSOCIATES, INC.

KEN FRYAR ASSOCIATES & RONALD GOOD-FELLOW, Architects, Michigan City, Ind., upon the formation of a partnership; formerly, KEN FRYAR ASSOCIATES.

GARDINER, THORNTON, GATHE, DAVIDSON, GARRETT, MASSON & ASSOCIATES, Architects and Planners, Vancouver, British Columbia, upon the formation of a new partnership.

Kelly, Pittelko, Fritz & Forssen, Civil and Structural Engineers, Seattle, Wash., and Anchorage, Alas.; formerly, Kelly & Pittelko.

GRAHAM LATTA & DONALD LYNCH, Architects, Los Angeles, Calif., upon the formation of a partnership.

Schoenwald, Thomas, Harris, Bode & Blayney, Architects-Engineers, Fresno, Calif.: formerly, Walter Wagner & Partners.

Corrections

ARMOND BARTOS & ASSOCIATES, Consulting Engineers, are located at 200 Madison Ave., New York, N.Y., not at 86 Third St., San Francisco, Calif., as was reported in the October 1966 P/A.

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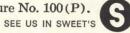
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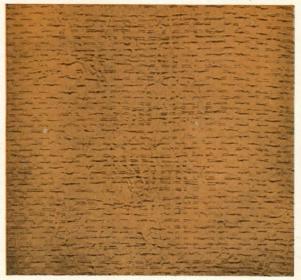
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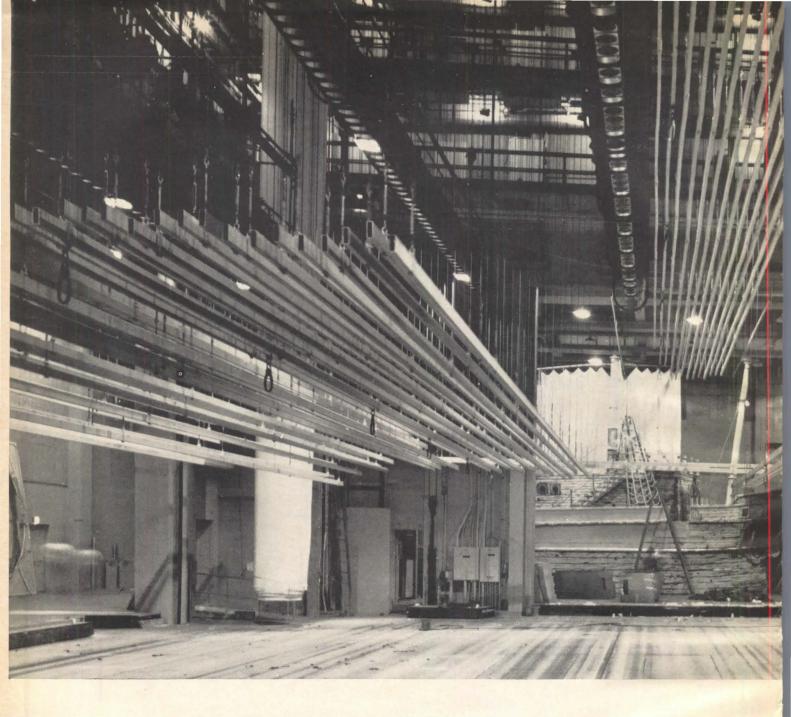
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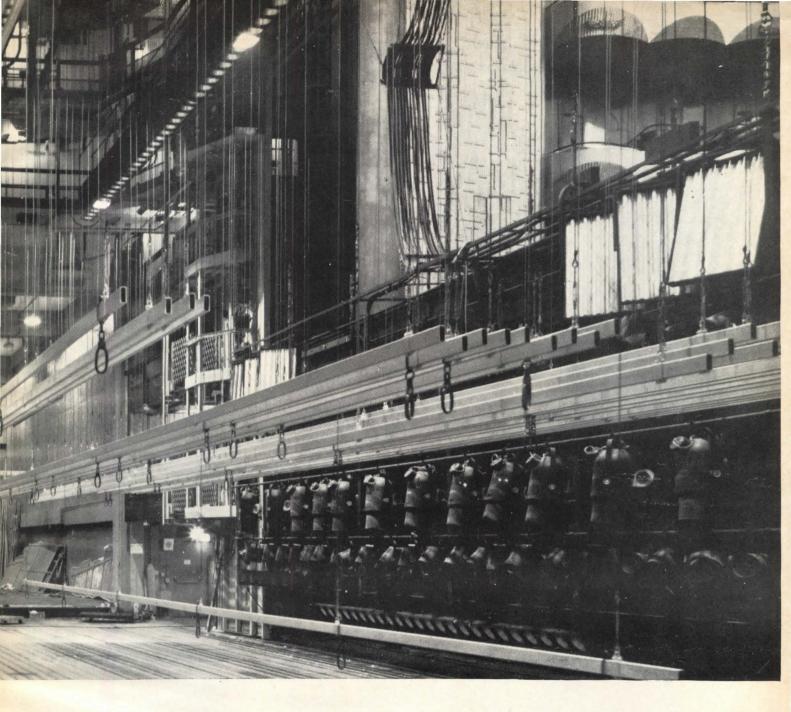




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BN.6

DEVELOPER OF RELOCATABLE BUILDINGS SHOWS SCHOOL BOARDS HOW TO SAVE UP TO ONE-THIRD ON SCHOOL CONSTRUCTION COSTS

One of the big problems school planners face stems from the population explosion itself and is measured by numbers of kids. But size of enrollment is often a simple problem compared to the one of population movement. One family in five moves each year and the resulting enrollment shifts, complicated by consolidation and shifting of school districts for other reasons, have school planners looking more and more seriously at relocatable structures as the most practical answer to the problem.

One leading builder of conventional type schools, the Vinnell Steel Co., of Oakland, Calif. 94623, has developed a modular school concept which successfully combines the mobility of a relocatable unit with the aesthetics, economics and permanence features of a conventional structure built on site.

The modular classroom unit has plan dimensions of 10' x 32' with an 8' overhang at one end and 4' at the other. Each unit is completely prefabricated down to the last finished detail, including tile or carpeting on the floor. Units are interchangeable and are designed to form a complete structure when two or more are joined together.

All adjoining units are self-aligning and, when connected, insure positive alignment of floors, walls and roofs. The modules may be easily separated, hoisted, and transported on state and national highways by stock equipment, or by attachment of a trailer hitch and wheels to the frame, with no unusual permit required.

The main structural support for the units is provided by an all-welded, self-supporting steel frame capable of withstanding all applicable design loads for permanent buildings.

Wall panels are of conventional sandwich-type construction, 2" thick. The exterior surface is 24-gauge galvanized steel, factory finished with 2 coats of baked-on alkyd melamine paint. The interior surface is 20-oz. vinyl sheet with 1/2" fiber or gypsum board backing.

The core and insulation material is self-bonding, self-extinguishing rigid urethane foam, poured in place, with a minimum density of 1.8 pcf, using a foam system supplied by Reichhold Chemicals, Inc., White Plains, N. Y. 10602. Although the



These children will be middle-aged before the 40-year minimum life expectancy of these mobile school buildings expires. A wall core of rigid urethane foam combines structural strength and insulation for long-term economies.

sandwich panels are non-load-bearing, the urethane foam imparts a degree of self-supporting rigidity which makes them true structural components since they form the entire wall enclosure.

From 9 to 12 panels are foamed at one time by means of a special stacking press utilized by the fabricator. Once installed, the panels rest vertically on the floor of the structure, attached at bottom and top to the steel members, and are connected and sealed vertically by extruded aluminum and neoprene mouldings.

Presently, the finished buildings sell for \$12 to \$14 a sq. ft. installed at the site and are completely ready to use with connection to electricity and water supply. They include heating and air conditioning facilities, all lighting and wiring, plumbing, and finished walls, ceilings and floors. A wide choice of fitted window arrangements is offered. The relocatable buildings are also being marketed for a variety of other uses besides schools, such as stores, restaurants, medical offices and dorms.

For further information on this project, please contact:

Builder:

Vinnell Steel Co.
Oakland, Calif. 94623
Reichhold Chemicals, Inc. Foam System Supplier: White Plains, N.Y. 10602

For additional information on the use of urethane foam in other insulation and construction jobs, write on your letterhead to:



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recovering job when just one section of the covering is damaged or worn.

The aluminum support (mirror or satin finish) is just about maintenance free. If you choose wood support (oiled walnut or oiled black), it's laminated wood. Strong either way. And the latex foam cushions are covered with durable nylon/wool (15 color choices), or vinyl, or covering you specify. And the price range is minimum.

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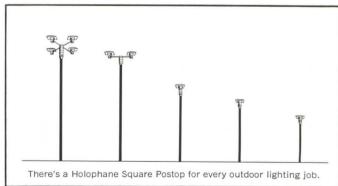
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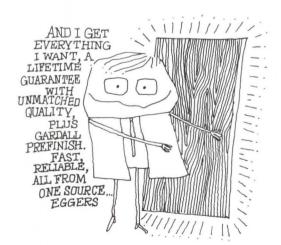












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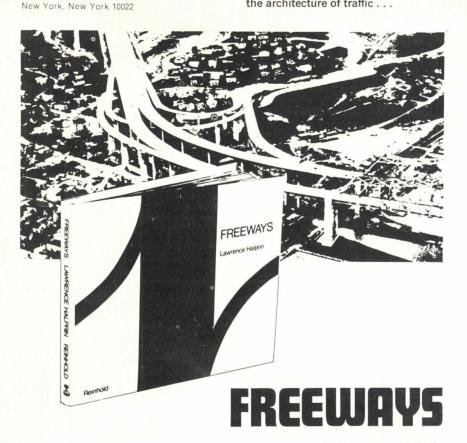




430 Park Avenue

A noted architect thinks through the architecture of traffic . . .

... and the modern environment of man.



by Lawrence Halprin

This is the question implicit in Freeways. Freeways or throughways or highways or interstates — so recent a phenomenon that we haven't yet agreed on a standard name for them — have already changed the face of the land and seriously marred many of our cities. Yet the basic assumptions underlying their design have never been publicly challenged.

In this provocative work, one of our foremost urban designers attacks the problem from several directions, examines the freeways' potential for defining the form of the landscape, and sketches out a new type of traffic architecture that will be of the city rather than apart from it.

Lawrence Halprin has been assigned the creation of entire new cities. He is an architect with a well-articulated feeling for the texture of cities and their settings. In this book he examines the values our cities ought to have; the basic problems of the confrontation "between motion and static mass"; the types of highways that are available to us, and their virtues; what has been done and what has been proposed; and the things we can do in the future.

Some quotations from Freeways by Lawrence Halprin

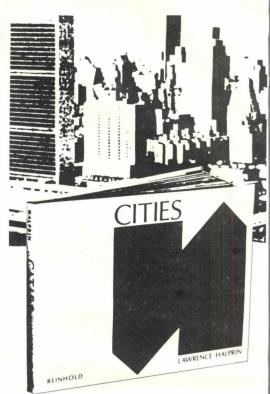
"We tend to slide into cities today as if the encounter was not worthy of great theater."

"This city of the future need not imply any diminution of the amenities of urban living—if only we can recognize its potentials as well as its problems."

ABOUT THE AUTHOR: In recent years Lawrence Halprin and his staff have been involved in projects ranging from the design of freeways and rapid transit to university campus growth . . . several new cities designed from scratch (in California, Hawaii and Arizona) . . . civic redevelopment (Minneapolis, Akron, Kansas City, San Francisco) . . . and land development, urban plazas, parks and housing. A landscape architect who specializes in environmental planning, he was trained at Cornell, the University of Wisconsin, and Harvard, and in the office of Thomas Church. He opened his own office in San Francisco in 1949.

260 pages $10\frac{1}{4}$ " x $8\frac{1}{4}$ " (oblong) about 300 black-and-white illustrations

\$12.50



CITIES

by Lawrence Halprin

How can we make our cities more livable and more exciting? How can we provide for not only air, space and light, but emotional fulfillment as well? Lawrence Halprin examines these questions that are vital to all who live in and help design the components of cities — and comes up with answers that will inspire, enlighten, and even shock.

Cities, said the Washington Star, should be made available to every architect in the country. Architectural Forum called it one of the brightest examples of books about the potentials of urban design. In this wide-ranging book, Halprin discusses streets, street materials, street furniture, light, shopping, waterfronts, the skyline and the views from rooftops, the employment of trees, plantings, sculpture and water - even the "choreography" of movement in a city. He is concerned with the patterns of paving blocks — the sculptural qualities of playground climbers - advertising signs and benches and kiosks that enhance design. Without going into technicalities of zoning or "land use," he explores the ways that cities can be made esthetically more appealing and more fun.

"An eloquent plea not to throw away the potential of U.S. cities."—Interiors

"A masterful abstraction, via the camera, of the excitement a city can afford."—Journal of Housing

"Should be stocked by the dozen in public libraries."—Sunday Star, Washington, D.C.

224 pages 10¹/₄" x 8¹/₄" (oblong) 491 illustrations

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PANEWS REPORT

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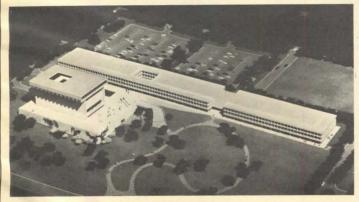


AUSTIN, TEX. The Presidential library is a species of building that has received very spotty architectural treatment in the past. The repositories of the papers and memorabilia of Presidents Franklin Roosevelt, Hoover, Truman, and Eisenhower generally are conglomerations of storage space for vast amounts of poorly indexed material housed in undistinguished buildings. I.M. Pei's design for the John F. Kennedy Library at Harvard has not been revealed, of course, but the program provides for professional treatment of the Kennedy collection and related research materials on politics and states-

Now the University of

low, "background" building to house the university's Texas Collection, its archives, headquarters for the Texas State Historical Association, a Latin American Library and Institute, and the new Lyndon B. Johnson School of Public Service. A third building may be added to the complex.

The design, by Gordon Bunshaft of the New York office of Skidmore, Owings & Merrill (Brooks, Barr, Graeber & White of Austin are associate architects), indicates a monumental library building raised on a podium on the university's East Campus, its side walls monolithic and loadbearing. The library will be crowned by a separately articulated top floor, presum-



Texas has announced the impending construction of the Lyndon Baines Johnson Library, to house the President's papers and other documents and artifacts bearing on his public life, as well as a 1000seat auditorium, a lecture hall, and space for art exhibts and display of rare volumes. Also part of the project is a long,

ably containing office space. The university buildings will be horizontally expressed concrete structures with deep window reveals furnishing sun control. A handsome, natural knoll will form a parklike setting for the library and other structures, and there will be on-grade parking for 500 automobiles at the rear of the site, near an existing expressway.

Associated structural engineers are Paul Weidlinger and W. Clark Craig & Associates; mechanical engineers are Gregson, Gayner & Sirmen, Inc.

BREUER'S VERSION: MORE SLABS FOR FDR



WASHINGTON, D.C. When asked by the members of the Franklin Delano Roosevelt Memorial Commission, who were interviewing him for the job, whether the memorial should be a functional one a school or a hospital, for instance - Marcel Breuer answered with an emphatic no. It should, he told them, be a monument that would make visitors think only of the man. Breuer's design, done in collaboration with Herbert Beckhard, will do just that. When a visitor enters the memorial from a walkway lined with columnar beach trees, he will face a hovering cube of polished black granite, on the west face of which is engraved a portrait of FDR. As the visitor nears the portrait, he will hear the late President's voice, from a loudspeaker, quietly reciting portions of his more memorable speeches. Thus, the architects hope to recreate the presence of the man.

Seen from above, the memorial looks like a giant pinwheel. The approach walk is the handle; the polished black granite cube in the center is



the pin, and the 73'-high granite slabs arranged around the cube form the wheel. From the ground, these wedge-shaped slabs will seem less frivolous.

Comparisons with the original competition-winning design by Pedersen, Tilney, Hoberman, Wasserman & Beer are inevitable, for, like its predecessor, Breuer's design has free-standing slabs. When asked whether he had taken his design direction from the former, Breuer simply said no. And, at this point, comparisons seem academic. Unlike the competition winner, Breuer's version already has the approval of FDR, Jr.

REYNOLDS SETS UP AWARD FOR COMMUNITY DESIGN

WASHINGTON, D.C. The Reynolds Metals Company last month announced the establishment of a new award pro-

gram. In addition to its yearly award for a building design in aluminum, it will now offer, every two years a \$25,000

Look, no structural columns!

Mo-Sai windowalls provide complete structural system.

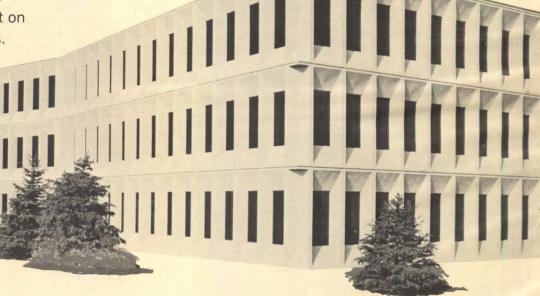
Concrete double "T's" span sixty feet of clear office space between structural Mo-Sai windowalls. There are no columns, juts, or load-bearing partitions to disrupt office planning. Three-story windowalls were custom cast under rigid Mo-Sai factory quality-controlled conditions.

The entire structural Mo-Sai shell and double "T's" were stored at the plant until needed and then erected from truck beds in eight weeks. Double "T's" rest on haunches cast on the back of the Mo-Sai units.

Exposed white quartz aggregates form the exterior surface. The interior was smooth-troweled and painted.

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Edens Executive Center / Wilmette, Illinois Architect: Lattin Smith & Associates General Contractor: Joseph Duffy Photos by: Cabanban Studio





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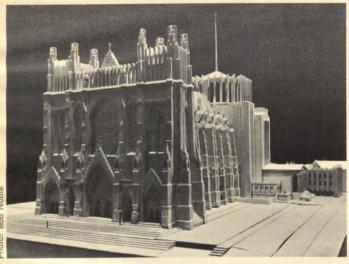
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award for community architecture. The AIA will administer the program, and communities being considered will be judged by an AIA jury, which will work from its own nomination list.

This year's jury includes Morris Ketchum, Jr., John Fisher-Smith of the San Francisco office of Skidmore, Owings & Merrill, and Archibald C. Rogers of Rogers, Taliaferro, Kostritsky, Lamb in Baltimore. The jury has not yet set a date for a final review, but results of the initial program will be announced before the end of 1967.

According to R. S. Reynolds, Jr., chairman of the board of Reynolds Metals, "Our company is sponsoring the new award for community architecture to encourage public recognition of the contribution being made by architects to create an urban environment in which man can live pleasantly and work efficiently." The use of aluminum will have no bearing on the judging. Only communities sufficiently complete "in execution and use to demonstrate clearly the architectural design accomplishment" will be considered.

PLANS FOR ST. JOHN THE DIVINE: NEOECLECTICISM



NEW YORK. N.Y. One day in December 1946, on the eve of his retirement, Bishop Manning, head of the Episcopal Diocese of New York, looked from his office window across the cathedral grounds to the steel scaffolding atop the west front of the still uncompleted Cathedral of St. John the Divine. To him, the scaffolding had become a symbol of the cathedral's incompleteness, the way roadside junkyards symbolize American affluence. There had been other reminders of the work needed to complete the cathedral: During the war, the bishop had donated tons of iron and steel to the war effort, building material left lying on the cathedral ground when construction stopped in 1941.

Last month, New York architects Adams and Woodbridge revealed plans for the cathedral's completion. With the announcement, discussion

in architectural circles turned from whether or not the cathedral would be completed to how it should be completed. The Adams and Woodbridge model (shown here) includes details of the completion of the west front, the transept, and the dome above the crossing. This dome, currently a temporary one of brick and mortar, becomes a concrete and stained-glass lantern, and the architects talk of varying the colors in the glass so that the hue of the light falling on the altar, which will be moved beneath it, will vary according to the time of day. Just what the architectural style of these completing elements is is hard to pinpoint. In that they are to be constructed of contemporary materials with clean straight lines, they are contemporary. But in the transept, they produce a massiveness reminiscent of U.S. office buildings in the 1930's. And it is pos-



sible that, when completed, the sense of massiveness generated by these bulwarks of concrete will overbalance the massiveness of the rest of the church — a massiveness that is at least partially offset by its refined detailing.

The argument that a cathedral should be completed in one style carries little weight with the cathedral's board of directors. They point out that cathedrals built in the past and completed over a period of centuries often became a hodgepodge of architectural styles. And they further point out that the lantern over the transept, instead of being a 500' spire called for by architect Ralph Adams Cram (see p. 67, SEPTEMBER 1966 P/A), who worked on St. John's from 1911 until his death in 1942, will make it possible to gather worshipers around a centralized altar. Bringing people closer to the service has long been a desire of the church, and so sure was a former canon of St. John's that the altar would some day be beneath the crossing he had a foundation for a pulpit built into the cathedral floor there. Architect Woodbridge told P/A that engineers had told him Cram's existing supports for the planned spire would not have supported it. Steel trusses will support the Adams and Woodbridge lantern, and the piers supporting the trusses will house three elevators to carry maintenance men the 15-story distance to the lantern.

Just to the south of the transept is the old Leak and Watts Orphan Home, now used as a gift shop by the cathedral. This building, with its pillared Greek temple façade, will be moved 5' or 6' to the west to line up with the transept. St.

John's may very well become the only Western cathedral to have a Greek temple portico as an entrance. Just to the east of this entrance, the architects plan a square, two-story building housing church offices; an enclosed walkway will connect it with the cathedral. Although in the model this building looks like an afterthought, it actually shows foresight, for it may become the base of a 450' campanile. Architects Adams and Woodbridge believe that the cathedral, despite its mass, needs something to make it a focal point for the neighborhood it serves. When construction of the cathedral got underway in 1892, it was sited on open land, the highest point on Manhattan Island, close to the campus of Columbia University and the homes of the affluent that were being built near it, overlooking the Hudson River. Churchmen chose the spot deliberately - in preference to a site where the Plaza Hotel is now located on 59th Street, off Fifth Avenue. Since then, the city has slowly encroached on the cathedral: Today, it is barely visible, until one comes upon it in the midst of the apartment buildings, shops, and hospital that surround it.

A campanile could also house the smokestack of the power plant (now in the basement of the cathedral), which will have to rise at least 250', the height of the top of the lantern. At present, the exhaust from the six giant boilers that heat St. John's is piped from the church through a tin conduit running up the wall of the south transept. If the tower is built, the heating plant will be moved out beneath it.

How much all this work will cost is not yet known. The church hopes to have esti-

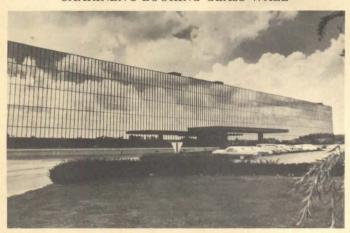
mates available soon and fund raising will begin after that.

Completion will be a mammoth task. Only St. Peter's in Rome is larger in both length and area. St. John's has a floor area greater than Notre Dame and Chartres combined.

Its completion will give

much-belated birth to an anachronism. Under Cram's direction, the cathedral was, at least in part, Gothic — probably the last Gothic cathedral that will ever be built. No one can build Gothic cathedrals anymore. Certainly no one seems able to finish them.

SAARINEN'S LOOKING GLASS WALL



HOLMDEL, N.J. The two-way-mirror curtain wall of Bell Telephone Laboratories' Holmdel laboratory lets only 15% of the sun's light through. The other 85% is reflected, together with 65% of the heat and goodly portions of the images of passing clouds and automobiles.

The structure, which is really four buildings under one roof, opened officially here last month. Originally designed in 1959 by Eero Saarinen, it was under construction in 1961 at the time of his death. The first phase - the two front buildings - were completed in 1962 by the Saarinen firm (see p. 77, Oc-TOBER 1962 P/A), and the rear two were completed in 1966 with the successor to the Saarinen firm, Kevin Roche, John Dinkeloo & Associates, acting as consultants.

Behind the looking-glass façade are 1,200,000 sq ft of space in five stories. In the center of the 700' long structure, a cross-shaped, open skylighted area of garden courts, reception area, and lounge divides the four buildings. All are connected by walkways at each upper floor, and both reception and lounge areas are ringed by upper story balconies (see photo).

The 6-acre reflecting pool directly in front of the structure, besides providing some-



thing for the mirrored façade to reflect, feeds water to the air-conditioning system. This system's air-intake vents are located in the concrete podium on which the building rests.

Any building of this size and complexity produces a mass of intriguing statistics. There are, for example, 6800 glass panes, each measuring 3' x 6'-6", mounted in neoprene gaskets and supported between black and anodized aluminum mullions. Each pane is actually two panels of clear glass with a thin coating of aluminum between. The reinforced concrete structural frame and floors took more than 100,000 yds of poured concrete and 8000 tons of structural steel. And on the interior of the building, the exposed bush-hammered con-



crete becomes a design feature; it is left exposed in the court and corridors. All corridors run around the periphery of the structure, and offices open off connecting crossisles, keeping pedestrian traffic past them to a minimum.

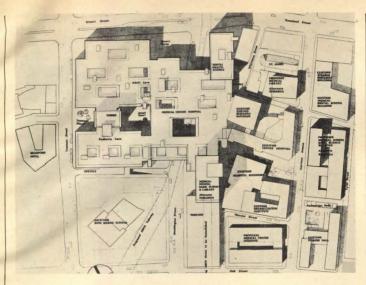
TAC MEDICAL CENTER FOR BOSTON

BOSTON, MASS. During the next 15 years, Tufts-New England Medical Center will spend \$72,500,000 expanding its facilities on a 13-acre site in Boston's South Cove area. Plans announced recently show a tightly knit complex of buildings, fitting the site as carefully as pieces in a threedimensional jig-saw puzzle. The design was worked out by The Architects Collaborative (Herbert K. Gallagher, partner in charge), in cooperation with the Center's own planner, Hermann H. Field, and the Boston Redevelopment Authority. Before TAC was called in in 1964, Field's staff completed a three-year study of hospital design financed by a U.S. Public Health Service Grant.

The site will be dotted with plazas, walks, arcades, and a small park, tying it to the surrounding city; and the planners hope that the Center, instead of becoming an isolated unit, an island in the sprawl of urban buildings surrounding it, will become a bellwether for development of the area. Various parts of the Center will have street-level shops and restaurants, and at least one city street will cut beneath it.

First building to rise in the Center, beginning in 1968, will be a 12-story Dental Health Science Building for Tufts University School of Dental Medicine. Next will come facilities for the Tufts University School of Medicine, including a 20-story basic science building, a library and several research buildings, and, at the same time, a new pediatric hospital. During this phase of the program, part of Washington Street will be bridged by a building housing additional adult care fa-





cilities. In the final phase, additional hospital facilities will be added. Eventually, housing will go up just outside the site, and the Center will continue to lease the Wilbur and Music Hall Theaters across Tremont Street.

MINT NEWLY MINTED



PHILADELPHIA, PA. Making money, like any other commercial enterprise, is timeconsuming and costly. Faced with rising prices and a fantastic increase in the use of coins as the growing population pumps them into vending machines, toll gates, and piggy banks, the U.S. Mint has been forced to expand and automate its production. Ground was broken in September 1965 on a new mint building in Philadelphia, home of the first U.S. Mint, built in 1792; completion is scheduled for January 1968. The original mint, which went up on the site of a demolished distillery, was only a block or so from the site for the new one. It will be located on Independence Mall, between Fourth and Fifth Streets facing Independence Hall.

Designed by Parsons-Jurden Corporation with Vincent G. Kling & Associates as consulting architects, the mint will have a look as contemporary as that of the Kennedy half-dollar. To design a building that is essentially a manufacturing plant, yet which must also be a landmark, a tourist mecca, and a sedate Government building bespeaking solidarity, security, and sensibility, and which must also fit easily into its historic surroundings, presents a formidable challenge. The architects have met it well. Their design shows a three-story structure fronted by a raised entrance plaza and portico. Panels of red-gray granite form the façade, and are intended to blend with the red brick construction of the historic buildings around the Mall. The interior has a threestory high lobby, and, beyond that, an open bay to house the smelting, stamping, and machining equipment. Visitors will be able to peer down on this operation from a thirdstory gallery running the length of the building. Below them, the automatic machinery will turn metal bars into coins in a continuous operation: A machine will, for example, spew forth 10,000 pennies per minute, as compared to the present rate of 560 per minute. Seigniorage—the amount by which face value of the coins exceeds production costs—is expected to be about \$100 million. Security was, of course, a major consideration, and in part this has been solved by keeping the number of doors to a minimum. A practice pistol range for the guards will be in the basement.

PERSONALITIES

Robert Martin Engelbrecht of Princeton, N.J., has been elected to the National Board of Directors of the Building Research Institute . . . New York City's newly appointed Housing and Development Administrator is Jason Ralph Nathan. The department he will head is one of the city's new "super-agencies" . . . J. Philip Murphy of Emeryville, Calif., has been re-elected president of the American Institute of Steel Construction . . . Architect Fred Bassetti has been elected president of the Seattle Chapter, AIA.

BIRMINGHAM COMPETITION NAMES FINALISTS

BIRMINGHAM, ALA. Eight finalists survived the initial judging of 275 entries in the competition to design a \$25 million civic center for Birmingham. They are:

- Marvin Fitch of Fridstein & Fitch, Chicago, Ill.
- James Martin Harris of Harris & Reed, Tacoma, Wash.
- B. J. Hoffman and Hanford Yang of Devon, Pa.
- John Stuart Mill of Beckhart & Mill, Los Angeles, Calif.
- George W. Qualls, of Geddes, Brecher, Qualls, Cunningham, of Philadelphia, Pa.
- Ralph Rapson of Minneapolis, Minn.
- Elvin Riley of Elbasani, Logan, Barakonski & Riley Associates, Los Angeles, Calif.
- Emanuel N. Turano of New York, N.Y.

These eight finalists will submit second entries, which will be judged in April. At that time first-, second-, and thirdprize winners will be announced. The first prize is a commission to build the Civic Center, with a fee estimated at about \$1,350,000. Second prize will be \$15,000; third prize, \$5000.

Comprising the Civic Center will be a 13,000-seat sports coliseum, a 3000-seat concert hall, a 1300-seat theater and exhibition hall, a restaurant, parking facilities, meeting rooms, and offices.

Jurors for the competition are architects Max Abramovitz, Gyo Obata, and John Carl Warnecke, and theater consultants Harold Burris-Meyer and John Fernald.

THE WHYS AND WHY NOTS

Every now and then, press releases come across our desk that bear the unmistakable imprimatur of the luncheon meeting between the P.R. man and his client, be he architect. manufacturer, planner, or publicity minded civic official. These are usually of the "whynot" ilk, conceived as a grand idea to solve the world's woes, and, incidentally, garner a little publicity. You know the kind of thing: Why not roof over San Francisco Bay to make commuting to Tiburon easier? Why not divert the Rappahannock River through southern Utah to make the desert bloom? In other words, the sort of proposal the suggestor can make and then walk away from.

We were reminded of this backwater of the communications industry today when a mimeographed sheet arrived from Lehrman & Glanzber, Inc., who represent Queens (N.Y.) architects Lawrence Werfel, Weissman & Berg. It concerns a speech that Marc Weissman made before the Queens chapter of AIA, in which he proposed heliports in Central Park (Manhattan), Prospect Park (Brooklyn), and Van Cortland Park (Bronx) to ferry people back and forth between these parks and Kennedy, Newark, and La Guardia airports. "Anticipating the objections of people who would oppose turning over valuable parkland for a helicopter site," the release reads, Weissman said that "only a small area would be required, since most of the facilities would be built un-

derground." No word about crowds of people and surface vehicles to feed the choppers, of course, or the intolerable racket of constant landings and take-offs. On a macabre note, Weissman claims he got his inspiration for this visionary suggestion from the dandy job helicopters are doing in the war. "From Vietnam," he says, "we have learned the vast possibilities of pin-point flight from area to area delivering men and materials. Here is an expanded peacetime [sic] use of the helicopter to serve us all." Why stop there? Those big parks would be ideal areas to conduct war games for fledgling soldiers, and the populace could gather round and watch just like in the good old days of Nero's full-scale naval battles. Commissioner Hoving, take note.

Keyes, Lethbridge & Condon for the River Road Unitarian Church (3).

Awards of Merit went to five firms: Chapman & Miller for the Joseph Miller Residence; Eugene A. Delmar for the Metropolitan National Bank office building; Duane & Lawrence for the Greenbelt Regional Park Police Station; Hugh Newell Jacobsen for the Cafritz Residence (4); Keyes, Lethbridge & Condon for the David Condon residence, for the YMCA in Frederick, Md., and for the Tiber Island Apartments.

Jurors were: architects Mario Campioli, J. Roy Carroll, Jr., and Paul L. Gaudreau.



POTOMAC VALLEY CHAPTER AIA AWARDS





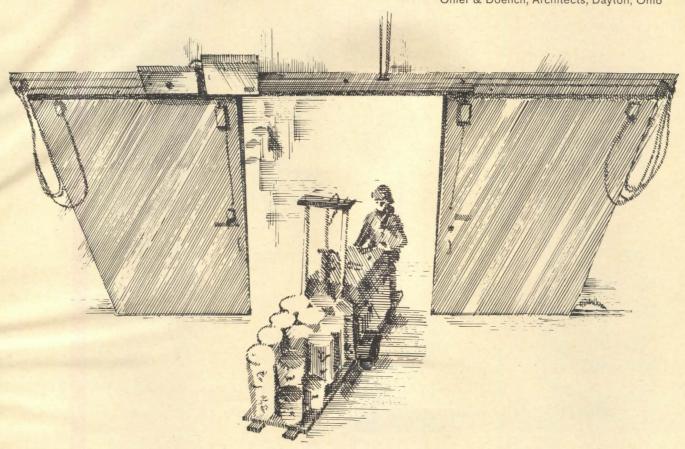


SILVER SPRING, MD. The Potomac Valley Chapter of the AIA announced winners in its 1966 awards program last month. Honored with First

Awards were Eugene A. Delmar for an office building for the Realty Investment Corp. (1); James F. Hilleary for a speculative house (2); and AWARDS

Philadelphia architects Harbeson, Hough, Livingston & Larson received the Gold Medal for Design Excellence awarded by the Philadelphia Chapter, AIA. The award was made for the firm's North Block of Philadelphia's Independence Mall State Park . . . Kennedy International Airport's Tri-Faith Chapel Plaza has received a special award from the Queens Borough (N. Y.) Chamber of Commerce. Edgar A. Tafel designed the Protestant chapel; George J. Sole, Our Lady of the Skies Roman Catholic chapel; and Bloch & Hesse and H. Shalat, International Synagogue . . . Roy E. Thornton, graduate student at Oklahoma State University's School of Architecture and Architectural Engineering, has been granted a pilot fellowship from the U.S. Office of Civil Defense. The School of Architecture will receive \$2800; a stipend of \$2200 will go to Thornton for the 1966-67 academic year to finance study of architectural and engineering aspects of radiation shielding problems in high-rise structures . . . Eighteen steel bridges have been named "most beautiful open to traffic in 1965" by the American Institute of Steel Construction. Prizes were awarded in seven categories, with eleven bridges receiving "awards of merit." The seven prize winners are: Rio Grande Gorge Bridge, Taos County, N. M., designed by the New Mexico State Highway Commission; Eagle Canyon Arch, Emery County, Utah, designed by the Utah

State Department of Highways; Knik River Bridge, north of Anchorage, Alaska, designed by the Alaska Department of Highways; White Canyon Bridge, San Juan County, Utah, by the Utah Department of Highways; Interstate Route 70, Cambridge Bypass, Guernsey County, Ohio; designer, Alden E. Stilson and Associates of Columbus, Ohio; Pennsylvania Railroad Lift Bridge over Chesapeake and Delaware Canal, Mount Pleasant, Newcastle, Del.; Howard, Needles, Tammen & Bergendoff, of New York, designers; Westing-house Transit Expressway, Pittsburgh, Pa., designed by Richardson, Gordon & Associates of Pittsburgh . . . The Architects Division of the Committee for Construction Industry Product Literature made awards last month to three building products manufacturers and one trade association. The awards, for advertising and technical literature aimed at architects, went to American Saint Gobain Corp., the Portland Cement Association, and the United States Gypsum Company . . . Walter Netsch, chief designer for Skidmore, Owings & Merrill (Chicago) received the 1966 Design Award of the U.S. Department of Health, Education and Welfare for the design of Illinois' Chicago Circle College of Architecture and Art Laboratories. The campus was an SOM project . . . Awards of Excellence were presented by the American Institute of Steel Construction to four projects White Villa Groceries Warehouse, Inc., West Carrollton, Ohio Ohler & Doench, Architects, Dayton, Ohio



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completed this year: The Chicago Civic Center, a joint project of C. F. Murphy Associates, SOM, and Loebl, Schlossman, Bennett & Dart; the Equitable Building in Chicago, SOM, the Inland Steel **Products Company's Calumet** Road Plant in Milwaukee, Wis., designed by William P. Wenzler in association with The Engineers Collaborative;

the Birmingham-Bloomfield Bank of Wixom, Mich., architects, Ziegelman & Ziegelman. Eleven Awards of Merit were also made . . . Dr. Paul A. Goettelmann is the recipient of the Catholic University of America Alumni Association Alumni Achievement Award in Architecture. Goettelmann is head of C.U.'s department of architecture.

SOUTHWEST WASHINGTON AIA AWARDS





TACOMA, WASH. The Southwest Washington Chapter of the AIA announced the results of its 1966 Honor Awards Program last month. The three-man jury - Daniel Streissguth, chairman of the department of architecture at the University of Washington; Warren Cummings Heylman of Spokane; and Norman C. Zimmer, of Wolff, Zimmer, Gunsul & Frasca, Portland, Ore. - awarded one Honor Award. It went to Johnson-Austin Associates for their own offices (1).

According to the jury, this building "seems to contain all the basic elements of honor award architecture as it applies to small buildings. Excellent selection and use of materials, sensitive detailing, and



very thorough interior coordination of architecture and furnishings. The interior court and the restricted but not confined introversion of the scheme provide a controlled environment of high quality.'

Merit awards went to



Harris & Reed for the Camelot School (2); to Liddle & Jones for the office of John Hewitt (3); and to Robert Price & Associates for their elderly housing project (4).

EAVESDROPPINGS

"Most of these buildings [Chicago skyscrapers] began to settle soon after they were built, and many of them continued to settle for years af-terwards. Ten years of experience with this type of foundation led to the conclusion that it was inadequate for heavy buildings." Civil Engineering Handbook.

Overheard in a New York City hosiery shop: "Miss, you should just put these stockings in the refrigerator for a few minutes every night. It hardens the chemicals so that the stockings last longer in this New York air. It's the air pollution that does it, you know. When the polluted air hits your legs, it makes the chemicals deteriorate and fall apart. If you lived in the country, you'd hardly ever have to buy stockings."

"A survey of 38 Los Angeles and 10 San Francisco advertising agency owners or managers by Media-Agencies-Clients magazine showed that automobile dealers, in both new and used categories, were thought to have the lowest ethical standards of all businesses and professions. . . . Runners-up to car dealers for the lowest spot were the construction industry, morticians, and liquor dealers." From Automotive News.

"Nobody has yet been able

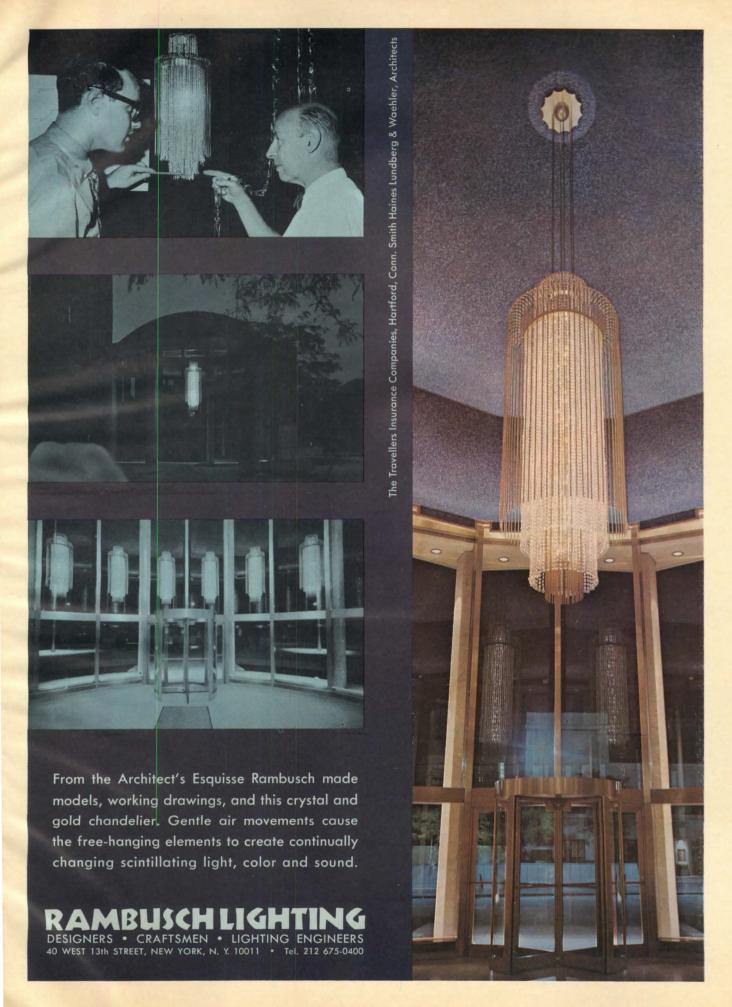
to convince me that many of modern man's phobias are not due to the noise, filth, and ugliness that surround him. We are told that, by the year 2000, half the population will be doctors, nurses, and psychiatrists, all necessary to take care of all the rest of us." Constantinos Doxiadis, quoted in Life.

"Scientists have invented The Pill to control human fertility. They have shown man the way to prevent overpopulation of the globe. But what about a pill for the automobile - a little something slipped into the gasoline tank to keep its proliferation in check?

"Because automobiles lead, like night to day, to concrete. All across this nation, concrete is flowing like water once did before the water tables began to fall and droughts became semiannual.

"The states of Connecticut and New Jersey probably have a life expectancy of 10 years before both disappear under the flow of concrete necessitated by the automobile explosion in the New York metropolitan area.

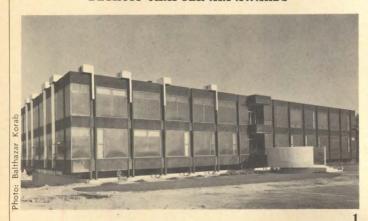
"It will be sad to see two of the original states disappear. However, suitable historical markers will undoubtedly be put up to commemorate their place and part in the nation's past - markers by which traffic will whiz at 80 miles an hour. Who, with a tiger in his



tank, needs history?" Inez Robb, writing in the New York World Journal Tribune.

"But let the site of such places be as they may, how can they be excused that have a delicious seat, a pleasant air, and all that nature can afford, and yet through their own nastiness and sluttishness, immune and sordid manner of life, suffer their air to putrify, and themselves to be choked up?" Robert Burton, The Anatomy of Melancholy.

DETROIT CHAPTER AIA AWARDS



DETROIT, MICH. The Detroit Chapter of the AIA announced eight awards in its 1966 Honor Awards program. There were two First Honor Awards; one went to Meathe, Kessler & Associates for the Loutit Hall of Science at Grand Valley State College (1), and the other to Sol King and Albert Kahn, Associated Architects and Engineers, for the Avon Products Company laboratory and office building

Awards of Merit went to Giffels & Rossetti, Inc., for the Federal Mogul Staff and Divisional Office Complex; to Meathe, Kessler & Associates for the John F. Oberlin Housing Project; and to Smith Hinchman & Grylls for the First Federal Building.

Honorable Mention went to Eberle M. Smith Associates for the Park North of Elmwood Park Redevelopment; to Glen Paulsen & Associates for Our Shepherd Lutheran Church; and to Albert Kahn, Associated Architects and Engineers, for the City of Detroit Air Terminal Building.

Jurors for the competition were all Minneapolis architects: Bruce A. Abrahamson, Thomas Hodne, Valerius L. Michelson, George Rafferty, and Ralph Rapson.



Photo: Sol King and Albert Kahn, Associated Architects and Engineers

SCHOOLS

Washington University has received a grant of \$200,000 from the St. Louis Regional Planning and Construction Foundation, for use in the

Urban Design Program of the University's School of Architecture . . . Five Nuclear Defense Design Summer Institutes will be available for members of engineering, architectural, and city planning faculties in 1967. The programs are sponsored by the Office of Civil Defense, the American Society for Engineering Education, and the Association of Collegiate Schools of Architecture . . . William A. Speer, dean of Auburn University's School of Architecture and the Arts, will retire from that post next fall to assume full-time teaching responsibilities as a full professor of architecture . . . The Elsie de Wolfe Foundation, Inc., has awarded a full tuition scholarship to the Art School at Pratt Institute, Brooklyn, N.Y. The scholarship will go to a student of interior design . . . Also recently established at Pratt is its Center for Middle Eastern and Tropical Architecture. The program of studies at the Center leads to the Master of Science (Tropical Architecture) degree, and is designed for men and women from tropical areas or U.S. architecture students preparing for work in such regions. Further

information may be obtained by writing to Olindo Grossi, Dean, School of Architecture, Pratt Institute, Brooklyn, N.Y.

. . . A relatively new development in the engineering field has been given recognition at Illinois Institute of Technology, with the establishment of a department of environmental engineering. Dr. Fred C. Gurnham will head the department, which will continue to emphasize water supply and air- and water-pollution control ... Professor William Alonso has left the faculty at Harvard to join the department of city and regional planning at the University of California at Berkeley. He will lead the department in formulating its new specialization in planning for regions larger than urban areas . . . R. Buckminster Fuller, whose name also appears in the awards column this month, has accepted a post as visiting professor of design at Iowa State University this year. As visiting professor, he will lecture and reside part-time at the university.

SOUTH ATLANTIC AIA AWARDS



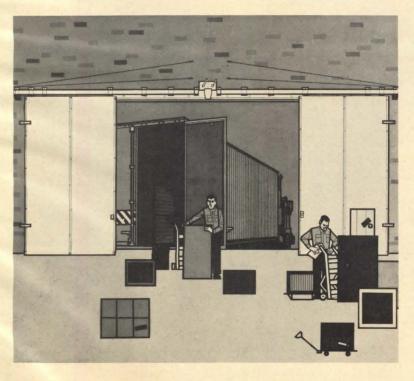


CHARLOTTE, N.C. The South Atlantic Regional Chapter of the AIA presented 13 architectural awards in its 1966 competition. Of these, five were honor awards. They went to Corkern, Wiggins &

Associates for their work for Sea Pines Plantation Co. (1); to Graves & Toy for a prestressed concrete manufacturing plant, Concrete Materials of Georgia, Inc. (2); to Jova/Daniels/Busby for

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the Festival Cinema (3); to Toombs, Amisano & Wells for the John Knox Presbyterian Church (4); and to Harry C. Wolf, III, for a vacation house for Mr. and Mrs. Luther H. Hodges, Jr. (5).

Merit awards went to Martin & Bainbridge for the Lake Lucerne Clubhouse; to Edwards & Portman and Henry D. Norris for low-rent housing of the Atlanta Housing Authority; to J. N. Pease Associates for Albright Hall at Queens College; to Graves & Toy for a gymnasium and student lounge in the Monroe, N.C., city school system; to Wilbur Smith & Associates and Lyles, Bisset, Carlisle & Wolf for the City of Columbia parking facilities; to Wheatley, Whisnant & Associates for the Randolph Medical Center; and to the Freeman-White Associates for Hamlet Hospital Nursing School.

Jurors for the competition were Kevin Roche, Hugh Asher Stubbins, Jr., and Victor Christ-Janer.







COMPETITIONS

The National Institute for Architectural Education has announced a special competition for architectural students under 30 years of age. For details and entry blanks, write to N.I.A.E., 115 E. 40th St., New York, N.Y. 10016 . . . Pittsburgh Plate Glass Industries and the National Institute for Architectural Education announce their joint awards program for 1967, open to architectural students. Theme of the competition will be "A Nursing Home (Ten Minutes from a General Hospital)." Entry forms and relevant information may be obtained from the National In-

stitute for Architectural Education, 115 E. 40th St., New York, N.Y. . . . The S.M. Hexter Company has announced its ninth annual competition for the Interior of the Year. Open to everyone, the competition requires that entries be actual installations, the major parts of which have been done this year. For further information write to: The Interior of the Year Award, c/o The S.M. Hexter Company, 979 Third Avenue, New York, N.Y. 10022 . . . Nominations are open for the eleventh annual R.S. Reynolds Memorial Award for architectural designs using aluminum. Architects may submit nominations until January 31, 1967, by writing to the Reynolds Award, The American Institute of Architects, 1735 New York Avenue, N.W., Washington, D.C. 20006.

BIG BAY CITY BOMB

SAN FRANCISCO, CALIF. The famous old quip of tourists in New York: "I don't mind visiting here, but I sure would hate to live here," can be paraphrased, once more, for the completed Wells Fargo Building on San Francisco's Market Street as, "I don't mind looking out of this building (1), but I sure would hate to look at it (2)." For here is the most pronounced specimen of the - we sincerely hope - old-fashioned 1950's-type office building the city by the bay has yet seen;



it is almost as though the Los Angeles contingent had it sent up out of spite, even though it was designed by the Seattle firm of John Graham & Company. The San Francisco office of SOM has indicated to residents how San Francisco's tall buildings — if they must



be built — should be handled in the Hartford Building (after themselves experimenting in the John Hancock and Crown-Zellerbach buildings). Architects and planners do not suffer lessons gladly, however. And everyone else is left to suffer the consequences.

OBITUARIES

ANDRE BLOC, editor of l'Architecture d'Aujourd'hui, died in November at the age of 70. His death was caused by a 25' fall from the terrace of a building he was photographing in New Delhi, India.

Born in Algiers in 1896, Bloc studied at the School of Arts and Manufacturers in Paris and received his degree in engineering. He was internationally known as editor of the magazine he founded in 1930, and for his avid interest in the plastic arts and architecture. His home in Meudon, near Paris, was a center for artists and architects, some of whose work he exhibited there. He was often the first in the field to publish work of European architects abroad.

In 1951, he became cofounder and president of the group "l'Espace," an organization centered in the south of France whose goal is the integration of art and architecture. The group works in environmental architecture and the design of open spaces.

Bloc was himself an active sculptor and painter, and had exhibited widely in South America and Europe. He did a number of sculptures for the Shah of Iran in 1959; others stand in the garden of his home in Meudon. Bloc not only wrote about architecture, but practiced it himself in the design of free-form houses such as the Gordon House in London and a house in southern Spain. A book illustrating his work, From Architecture to Art, was published last year.

Dead at the age of 86 is New York architect AYMAR EMBURY, 2ND, who designed many of New York's most familiar architectural landmarks. Among the impressive projects he designed or collaborated on are the Whitestone Bridge, Lincoln Tunnel, the Triboro Bridge, and the permanent New York City building at the 1939 World's Fair. He also served on the advisory board for the design of the New York Coliseum.

Embury received a degree in civil engineering and a Master of Science from Princeton in 1900. He was

46 P/A News Report



PRESCON MEMS

THE PRESCON CORP.: 502 CORPUS CHRISTI STATE NATIONAL BUILDING — CORPUS CHRISTI, TEXAS 78401

SCHOOLS

POST-TENSIONING ENCOURAGES DESIGN FLEXIBILITY WITH ECONOMY

School design problems have been solved by many architects and engineers with the Prescon System of post-tensioning for prestressed concrete. Examples near you can be pointed out by a Prescon representative.

The multiple-award winning Estancia High School, Costa Mesa, California, features a "Great Court" surrounded by academic areas all under one roof. The 200,000 square foot roof was a post-tensioned prestressed waffle slab on a 5-foot square module. The waffle slab is 23¾" deep using 8" joist stems and 20" deep pans. Spans varied from 25' to 35.' The roof system was designed for zero deflection under dead load.

Design criteria called for (1) 2,000 student capacity (2) departmentalization (3) flexibility in number, size and organization of departments and teaching stations. All exterior and interior walls are non-bearing demountable throughout the academic areas. Building costs were \$1,586.00 per student.

Architects—William E. Blurock & Associates; Structural Engineers—John A. Martin & Associates; General Contractor—Robert E. McKee.

At Bishop College (Dallas, Texas) where all buildings are permanent type, post-tensioning was widely employed. The Prescon System was used in classroom, dormitory and library structures. It contributed to economy in materials, forms and construction speed. (The men's dormitory was occupied in 8 mos.) The flat plates are 8" thick and cantilever 4' in all levels of several structures. Bays are 24' x 26', with columns 12" x 20" and designed for 50 lbs. live load, plus partitions. The Zale Library on the campus has slabs 9½" thick, with 4½" drop panels at columns. The first and second level slabs are designed for 150 lbs. live load, plus partitions. Cost, including library furniture, less than \$13.50 per sq. ft.



Roy E. Larsen Hall, Harvard University. Architects: Caudill, Rowlett & Scott; General Contractor: Wexler Construction Company.

E. D. Mayes, structural engineer, pointed out that among advantages of postensioning were: (1) elimination of deflection in the slab to reduce partition placement problems; (2) use of thinner slabs for reduced floor-to-floor height resulting in lower material costs. Flat plates allow easier mechanical distribution, and ceiling finish can be applied directly to under side of slab

Architect—Donald B. Kleinschmidt; Consulting Engineers—Mayes & Brockette.

A Ft. Morgan, Colorado, school utilized four structural systems, all post-tensioned: (1) two-way waffle slab; (2) one-way joists and one-way zee-type sections; (3) folded plates; (4) haunched slabs.



Watkins Overton High School Gymnasium with classrooms, Memphis, Tenn. Architect: A. L. Aydelott and Associates: Structural Engineer: S. S. Kenworthy and Associates; Contractor: Sam P. Maury Construction Company.



Estancia High School, Costa Mesa, Calif.

Prescon coated, as well as grouted tendons were used. The library is a 65' x 90' clear span area; the auditorium has 90' maximum spans with the balcony framed of post-tensioned cast-in-place concrete to eliminate the need for columns.

Architect—Wheeler & Lewis; Structural Engineer—Russ Kostroski; Contractor—Hensel Phelps Construction Co.

The Student Union Building, Southwest Missouri State College, Springfield, is a four-level structure with 55' clear spans. The second and third floors, and roof have 4" slabs with 6½" ribs on 3'4" centers. Floor construction depth is 2'7½" and 2'11" for the roof.

Field measurement of camber indicated a variance of ½"—from a minimum of 5%" to a maximum of 7%". In addition to being more economical than the original design, post-tensioning provided the benefit of creep and shrinkage control. Post-tensioning sealed the slabs so well that water standing on the upper portions showed no moisture evidence on the undersides.

Architects—Harold A. Casey & Associates; Engineers—Saul A. Nuccitelli; Contractor—Dondlinger Construction Company.

Today's school design and construction requires ingenuity and creativity to meet the evolving educational concepts, yet remain within budgets. Often post-tensioning will enable you to achieve these demands. Remember the Prescon System — post-tensioning with positive end anchorage.

These are but a few of the hundreds of school structures using the Prescon System. For more complete examples and technical information, write for literature, or contact a Prescon representative.

The PRESCON Corporation

General Offices: 502 Corpus Christi State National Building Telephone: 512-882-6571 Corpus Christi, Texas 78401

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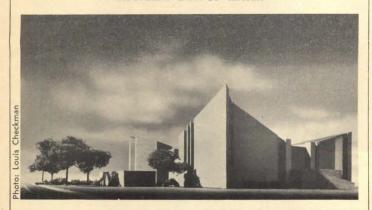
noted for his disagreement with "modernists," who, he felt, tended to omit all ornamentation on the ground that it served no functional purpose. "I suppose," he once said, "some of these architects do not use neckties or buttons when they dress."

Architect GEORGE C. SMITH, a founding partner in the Cleveland firm of Small, Smith, Reed & Draz, died in October at his home in Litchfield, Conn. He had retired from professional life in 1963, and

was 78 at the time of his death.

After receiving his education at Cornell University and l'École des Beaux Arts in Paris, Smith began his career with Warren & Wetmore, designers of New York's Grand Central Station. Throughout his career, he was associated with the design of railroad buildings, among them the Biltmore and Ritz-Carlton hotels in New York, and an office building for the B & O and C & O railroads in Huntington, W. Va.

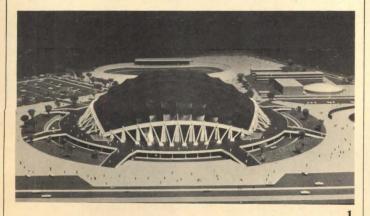
INFORMAL CAMPUS CENTER



GARDEN CITY, N.Y. If we can believe the mass news-media image of the U.S. college student, then informality is the thing. Yet the architecture in which students live, work, and play is mostly formal. In designing a student center for Adelphi University on Long Island, architects Warner, Burns, Toan, Lunde went after an informal look, to contrast with the formality of the rest of the campus. At present

in the working-drawings stage, the building will house a two-story high 7000 sq ft multi-purpose room under a sloping roof, facilities for campus organizations and clubs, six or seven meeting rooms, and, in the basement, a café. There will also be lounges on each of three floors. The building will be arranged around an interior court, and will open onto a ground-level plaza. Walls will be loadbearing brick.

OLYMPIAD IN MEXICO: 1968



MEXICO CITY, MEXICO. Work is underway here on structures for the 1968 summer Olympic

Games. The two facilities shown were designed in an invited national competition



about 475' across and 135' from ground to top, will be constructed of metal supports covered with a wooden frame.

Its design team consists of Felix Candela, Antonio Peyri, and Enrique Castaneda Tam-

borrel.

The Olympic swimming pool (3) and gymnasium, which will get under way next December, is being designed by Manuel Rosen, Antonio Recamier, Javier Valverde, and Edmundo Gutierrez Bringas.

OPEN SECURITY



MILWAUKIE, ORE. Wilmsen, Endicott & Unthank of Portland and Eugene, Ore., have dotted the Northwest with small bank buildings. In an era of bigness, small banks are still very much a part of the American community, and, in this area of the country, those designed by Wilmsen, Endicott & Unthank are among the most distinctive.

to which 13 architectural

teams, with three members

each, submitted plans; each

team received a guaranteed

fee of 20,000 pesos to cover

costs. The winners were al-

lowed to continue with the

general direction of their win-

ning designs under the super-

vision of the Ministry of Pub-

on which construction was

started last October, is to be

a stadium for 24,000 specta-

tors. Its dome, measuring

The Sports Palace (1, 2),

lic Works.

Bids will go out this month on their latest bank, whose officers want "a facility to serve well into the next century"; the design presents a façade that shows both quiet strength and openness. It manages to look both inviting and secure.

Construction will involve two stages. In the first stage, a building will go up right next to the bank's present headquarters. Then, when that unit is finished, the old bank will come down, and a second unit, on the old site, will be joined to the first. Floor space will total 35,400 sq ft. Plans include provision for an eventual third and fourth story to be added in the future.



GOVERNMENT BUYS ELJER FOR NEW KANSAS CITY FEDERAL BUILDING





Architects: Voskamp & Slezak, Radotinsky-Meyn-Deardorff, Everitt & Keleti, Harris Armstrong, F.A.I.A., all of Kansas City, Mo./ Engineers: Massagalia-Neustrom-Middleton, Howard, Needles, Tammen & Bergendoff, both of Kansas City, Mo./ General Contractors: Frank Briscoe Co., Inc., Newark, N. J.; Huber, Hunt & Nichols, Inc., Indianapolis, Ind./ Mechanical Contractors: Limbach Co., Pittsburgh, Pa.; Interstate P & H Co., Kansas City, Mo./ Wholesaler: Missouri-Kansas Supply, Kansas City, Mo.

Eljer's commercial plumbingware scores another big one! It's the \$27.5 million Federal Office Building in downtown Kansas City. Twenty Federal agencies employing 4,500 people will call it home 40 hours a week. That guarantees plenty of wear for washroom fixtures and fittings.

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Eljer's Master Crafted commercial line gives you complete product selection. For more information, call your Eljer representative, or write Eljer Plumbingware Division. Wallace-Murray Corporation, Dept. PA7, P.O. Box 836, Pittsburgh, Pa. 15230.





WASHINGTON/FINANCIAL NEWS

BY E. E. HALMOS, JR.

Understandably enough, the new Department of Housing and Urban Development accentuated the positive in the fanfare accompanying its first anniversary as a full-fledged Cabinet department.

The "positive" turned out to be steps in internal organization, push behind legislative action on Capitol Hill, and continuation of older, inherited programs.

However, HUD's accomplishments in terms of initiating new programs or actual construction projects were minor. The agency made no dramatic breakthroughs in planning or in ladling out money, started no new construction projects that were any different from those that its five component parts had carried out while they existed in semi-independent state (under the old Housing and Home Finance Agency).

Nevertheless, HUD Secretary Robert C. Weaver could be pardoned for some of his "pointing with pride" statements, made in a ceremony in front of HUD's gull-winged headquarters (reminiscent of Washington's new Hilton Hotel) in southwest Washington, which is presently under construction.

What has been done, with somewhat unusual quiet and efficiency, constitutes a major welding together of the huge and unwieldy agency (some 80,000 employees, at least 50 separate programs, five semiindependent agencies) into what approximates a single unit; the integration of many programs and personalities; and the assuming of some semblance of direction. (In the process, there was the inevitable reshuffling of personalities who didn't fit Weaver's plans, such as Urban Renewal Administrator William L. Slayton, who resigned to make room for a Weaver choice, Don Hummel, former Mayor of Tucson.)

To do all this, and still find time to push through pet Presidential legislation successfully (the Demonstration Cities program, for example) is indeed a major accomplishment

Of perhaps greatest impor-

tance to architects and the construction industry, however, is a shift in departmental emphasis—a genuine change of direction that will become more readily apparent this year.

The switch is from mass clean-outs of slum areas — replacing them with glitteringly expensive, new apartments, civic centers and the like — to construction of more low-income housing and more rehabilitation of existing structures

The change in emphasis is already reflected in the figures: two-thirds of the projects approved and half of the new applications received by HUD since July 1 call for rehabilitation of poverty-ridden areas - rehabilitation, not complete reconstruction. Bigcity mayors and other officials have been told, quietly and forcefully, that HUD thinks they've lavished too much attention and money on city centers, that they should spend more on residential areas, but do so without displacing slum dwellers, where possible.

(Municipal officials, incidentally, got a frightening demonstration of Federal ability to bring them to heel, and the willingness of Federal agencies to crack the whip on what they consider recalcitrant local governments. In a wild political mix-up, a "lame duck" county council in suburban Montgomery County, Maryland, did a lot of rezoning that allegedly made a mish-mash of long-term plans for the area. Interior Secretary Udall breathed fire on the "paltry band" of local politicians, threatening reprisals. Dutifully, HUD and other agencies chopped off promised Federal aid of nearly \$10 million within a few days — even before a newly elected County Council could take any action at all.)

National Building Code Proposed — A state-adopted model building code that would require licensing of building inspectors (some of whom would be architects or civil engineers) is among 16 major proposals prepared by the semiofficial Advisory

Commission on Intergovernmental Relations.

The commission, created by Congress to study relationships between national, state, and local governments, includes four governors, six Congressmen, and four mayors among its 26 members. Recommendations this year are included in a mammoth (600 page) booklet, "1967 State Legislative Program," available free from the commission's headquarters in Washington. They include suggested laws and studies relating to taxation, borrowing powers, stream regulation, and much other related information.

Of special interest to architects are provisions of the suggested national building code, which could be adopted by states, then by local governmental units. The code is a "performance" code, quite similar to the long-standing model code of the Building Officials Conference of America.

But it includes a provision for creation of state boards to license building inspectors in five categories: (1) a "professional building inspector," who must be a registered architect or civil engineer, or an engineering or architectural graduate with two years' building inspection experience; (2) a "certified building inspector"; (3) a "certified electrical inspector"; (4) a "certified mechanical inspector"; (5) trainees. All grades which are below that of "professional" would have fewer educational and experience requirements.

Another aspect of the model code would be establishment of state-paid research staffs and architectural and engineering personnel to evaluate new building materials and devices, adopt appropriate standards, and offer advice to local governmental organizations.

National Airport vs. Dulles, Cont. — Few building plans in or near Washington get away without loud comment. The Federal Aviation Agency is no exception, even though a plan for a \$200 million facelift for National Airport isn't due to come from an architect's hands (Vincent Kling of Philadelphia) until next spring.

Word has gotten around

that FAA wants to upgrade the very convenient National field to make better accommodations for jets, better passenger and freight handling, etc. This will entail new or extended runways, new buildings, and quite possibly the razing of some existing structures.

An alternative, proposed in the December issue of Washingtonian magazine, would be to shut down National completely and make it a site for a "new town"; shuttle air passengers to brand new (and woefully little used) Dulles airport in the Virginia countryside via a rail rapid-transit system (either above or below ground) that might cost as much as \$80 million.

A residential area on National's mile-square, riverside site would be attractive, would also make it possible to commute to Washington by boat, as well as by surface transportation.

Financial - New year's predictions of total business for the construction industry poured into print as 1966 ended, and they offered several views of what might happen. One or two private organizations thought there'd be a continuing uptrend in dollar volume - up perhaps 5% over the record total for 1966. ☐ Probably the most authoritative of the predictions, and the one closest to the beliefs of those in the industry itself, was the forecast of the Commerce Department's Business and Defense Services Administration: It anticipated a flat leveling off in dollar volume, and a drop in physical volume for 1967. In detail, BDSA predicted 1967 dollar volume would be about \$76,100,000,-000 - about even with 1966; physical volume would drop "slightly." Factors would include a very modest (4%) increase in commercial building volume; a drop in religious and educational building (8 and 3% respectively); and a 4% decline in public building work.

☐ As if to point out what will happen, Bureau of Public Roads sent an unpublicized telegram to all state highway departments and its own regional offices, calling for a \$700 million cutback in road building authorizations for the remainder of the current

calendar year.

2 suggestions for architects who think ceiling seams are unsightly:





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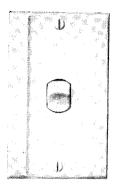
*U.S. Patent D-206,119

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NOW AVAILABLE

REPRINTS FROM PROGRESSIVE **ARCHITECTURE**

A limited number of the editorial sections of the October and December issues of PROGRESSIVE ARCHITECTURE are now available to readers.

The OCTOBER issue explored the subject of concrete in depth in office buildings, houses, hospitals, saloons and state capitols. Comments and critiques were supplied by architects, designers, engineers and builders. To order your copy or copies of the October reprint at \$1.00 each, circle #443 on the Readers' Service Card at the back of this issue.

The DECEMBER issue on "Toward the Third Millennium" examined all aspects of the many disciplines that are now in a state of flux, with special attention given to the coming role of the architect - if that is what he will be called in the altered scheme of things. To order your copy or copies of the December issue reprint at \$1.00 each, circle #444 on the Readers' Service Card at the back of this issue.

To order both the October and December issue reprint, circle #445 on the Readers' Service Card.

PRODUCTS

ACOUSTICS



Sound the horns. High-power sound amplification in large public areas is significantly advanced by new multicell horns, states manufacturer. A number of careful refinements in the design, and precision in the fabrication, account for the improved sound quality; e.g., specifications for highpower drivers call for tolerances as close as .0001". Seven horn sizes are available with 3 to 15 cells; each has a 20° angular dispersion per cell. Units are engineered to fit into an integrated system - from microphones to speakers and baffles. DuKane Corp., Communications Systems Div., St. Charles, Ill. 60174.

Circle 100, Readers' Service Card



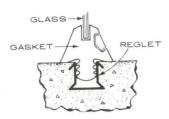
Patterned acoustical tile. Three designs are available for accents or for entire ceilings in special areas. Mineralfiber tiles measure 12" x 12" x ¾", and have butt-kerfed edges. The Celotex Corp., 1500 N. Dale Mabry, Tampa, Fla. 33607.

Circle 101, Readers' Service Card

CONSTRUCTION

Polyurethane sealant. High abrasion-resistance makes this one-part polyurethane rubber

joint sealant especially durable in traffic-bearing areas, says the manufacturer. Sharp objects such as spike heels do not affect it, and it is flexible as well as hard. "Terraseal 100" is suitable for sidewalks, swimming pool decks, highways, etc. Dow Corning Corp., Midland, Mich. 48641. Circle 102, Readers' Service Card



Reglet for concrete. For glazing in concrete panels, metal reglet provides a snug fit for zipper gaskets, thus forming a more positive moisture barrier to prevent weeping. Rollformed reglet is "V"-locked into concrete; manufactured in straight sections or with 6", 9", or 24" radius. Fry Reglet Corp., 4903 San Fernando Rd. West, Los Angeles, Calif. 90039.

Circle 103, Readers' Service Card



Wood paneled partitions. Hardwood paneled or prepainted hardboard partition units are 4' wide, and come in heights of 42", 66", 86", or full ceiling height. Weyerhaeuser Movable Partitions are said to be easily repositioned, and may be installed without mechanical fastenings to floor or walls, except for starter and free-standing endunits. A special tape holds partitions in place; units are fastened at edges by a concealed bolting. Vertical joints take switches and outlets; standard wiring is carried through baseboards and mullions. Fire-rated and fire-and-sound-rated partitioning is available. Weyerhaeuser Co., Wood Products Group, Tacoma, Wash. 98401.

Circle 104, Readers' Service Card

Sky-high panels. Special assembly-line techniques enable manufacturer to fabricate insulated panels up to 11' x 50' and ½" to 18" thick, suitable for building construction and other applications such as railroad cars. Panels, faced with a variety of materials, have void-free polyurethane foam cores. Landreth Industries, Inc., 2100 Greenwood St., Evanston, Ill. 60201.

Circle 105, Readers' Service Card



Decorative tile and nonskid floor brick. Tiles for patterned screen walls are press-molded from fire clays, and high-fired to insure strength, low porosity, and resistance to weathering. Nonskid floor brick (foreground), suitable for shower rooms, is fabricated in the same manner. Tile and brick are available in a variety of colors. Harbison-Walker Refractories Co., 2 Gateway Center, Pittsburgh, Pa. 15222.

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DOORS/WINDOWS

Magnetic fire doors. An electromagnet releases fire doors when a fire alarm or remote switch interrupts current. Standard 4" outlet box accommodates electromagnet on the wall behind a door, and an armature fastens to the door itself. The force exerted by the magnet to hold the door open may be adjusted. Suitable for schools, hospitals, hotels, etc. Honeywell, Inc., Commercial Div., 2727 S.

Fourth Ave., Minneapolis, Minn. 55408.

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FINISHES PROTECTORS



Filler primes concrete block. A heavy-bodied, latex-base vinyl paint fills porous openings in concrete and pumice block. One coat is said to be sufficient as a preparation for the finish paint coat. It dries to the touch in approximately two hours. Fibreboard Corp., Pabco Paint Div., 475 Brannan St., San Francisco, Calif. Circle 108, Readers' Service Card

FLOORING

Unglazed clay. Natural clay floor tile, in three shades of tan, plus red, is 6" x 3" x 3%" thick, back- or face-mounted in 12" squares (patterns: Brick Course, Basket Weave, and Brick Spiral) or loose. The extruded clay tiles are designed primarily for commercial and institutional use — both indoors and out. United States Ceramic Tile Co., 217 Fourth St. NE, Canton, Ohio 44702. Circle 109, Readers' Service Card

FURNISHINGS



Outdoor Furniture. "Cushionaire" steel-framed furniture by Samsonite has cable-strung flexible slats covered by polyurethane foam and upholstered in fade- and weather-resistant vinyl. Steel frames are white or olive. Maintenance is simple: Turn a hose





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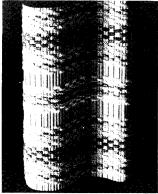
Ask for catalog 2063-B. The Ceco Corporation, general offices: 5601 West 26th Street, Chicago, Illinois 60650. Sales offices and plants in principal cities from coast to coast.



on the furniture and wipe it dry. And, in case of damage, individual slats can be removed and replaced. Included in the collection are rocker, loveseat, side chair, lounge chair, ottoman, folding serving cart, umbrella table, side table, and chaise longue. Regrettably, no solid color upholstery fabrics are available; floral print vinyl comes in blue/green, orange/yellow, or gray/blue. Samsonite Corp., Outdoor Furniture Div., 1050 S. Broadway, Denver, Colo. 80217.

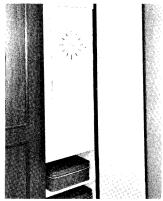
Circle 110, Readers' Service Card





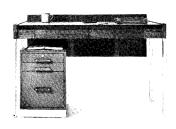
New aluminum blind "Blenweave" consists of aluminum strips closely interwoven with threads of chenille and bouclé. It is available in nine colors, including various wood grains. Identical on both sides, "Blenweave" blinds require no lining or special treatment and come in rolls. Also new to this manufacturer is "The Riviera Blind," a narrow-slat venetian blind connected by slim nylon strings rather than tapes. A lucite "magic-wand," which operates at the turn of the wrist, replaces the customary cords used to open and close blinds and is another step toward invisibility. Levolor Lorentzen, Inc., 720 Monroe St., Hoboken, N.J. 07030.

Circle 111, Readers' Service Card



Fight wrinkles with the "Host Valet," a cabinet unit incorporating a fold-up ironing board and an iron holder; it can masquerade as a clock when the cabinet door is closed. Electrical fixtures will service any type of iron. Front panel comes with or without clock. Door measures 16" x 45½"; cabinet interior, 14" x 44". Unit usually shipped unfinished. Iron-A-Way Co., Inc., 220 W. Jackson St., Morton III

Circle 112, Readers' Service Card



Discontinuous Pedestals. "Departure," designed by Hans Krieks Associates, is a line of table-desks that use mobile cabinets as pedestals. When placed under desks, cabinets occupy less space than two standard built-in pedestals yet provide almost as much storage area because of two drawers in the desk apron. They can be angled in any direction, moved adjacent to the desk for more surface space, or ganged with other units (under one top) to form credenzas. Scheme accommodates many individual work patterns. Table-desks come in six sizes, ranging from 48" x 30" to 78" x 36"; cabinets, in depths of 18", 22", or 28". Drawers in legal or letter size come in various depths to fit files, etc. Available with chrome or black legs, and with tops of walnut wood or Formica, the table-desks have both back and side modesty panels in wood or metal (in blue, red, green, and black). Cabinets come in either all wood, or metal with a wood top. Designcraft Mfg. Corp., Kero Rd., Carlstadt, N.J. 07072. Circle 113, Readers' Service Card



Simon Manges & Son, Inc., distributor of wide range of broadlooms for contract use. also has an exclusive series of area rugs, which are woven in Portugal and Spain to specified sizes in patterns designed for office use by Simon Manges' staff. Shown is "Prado," hand-knotted in Spain to form a watery design with shades of blue ranging from "deep midnight to ocean foam." Variations in design can be executed upon request. Simon Manges & Son Inc., 575 Madison Ave., New York 22, N.Y.

Circle 114, Readers' Service Card

Casement Cloths. Two casement weaves combine advantages of fireproof glass-fiber with the textured look of wool. The Beta glass-fiber yarn, which is washable and requires no ironing, is said never to shrink, stretch, or fade. A vertical novelty weave, "Baghdad," is available in muted shades - oyster, straw, pistachio, parchment, and white. "Cairo," a heavy vertical cable, comes in white, linen, gold, oyster, avocado, and wintergreen. Both fabrics are 45" wide. Thortel Fireproof Fabrics, Inc., 51 Madison Ave., New York, N.Y. 10010.

Circle 115, Readers' Service Card

Creative Weaves. Anton Maix's substantial Quadrangle

III collection contains both upholsteries and casements, all 54" wide, in several textures and colors. The upholsteries, solid and durable, are meant for public space furniture; some have withstood an abrasion test of 5500 cycles. The natural, undyed wool upholsteries look like tweeds of whites and off-whites. The two Danish wool series offer a choice of 17 excellent colors. Casement cloths come in weaves of wool with linen and wool with nylon, in vibrant solids as well as in Maix's distinctive prints. Anton Maix Fabrics, Inc., 330 E. 59 St., New York, N.Y. 10022.

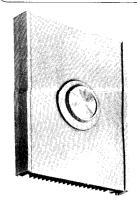
Circle 116, Readers' Service Card



New "Hudee" lavatory basin has a chrome-plated, stainless-steel frame that meets the long-time need for a frame to match chrome-plated bathroom fixtures. Basins come in round and oval shapes. Clamp-down fastenings hold bowl, countertops, and frame together for a rigid watertight, approved sanitary seal. Also available in 24K-gold plating. Walter E. Selck and Company, 7125 W. Gunnison St., Chicago, Ill. 60656.

Circle 117, Readers' Service Card



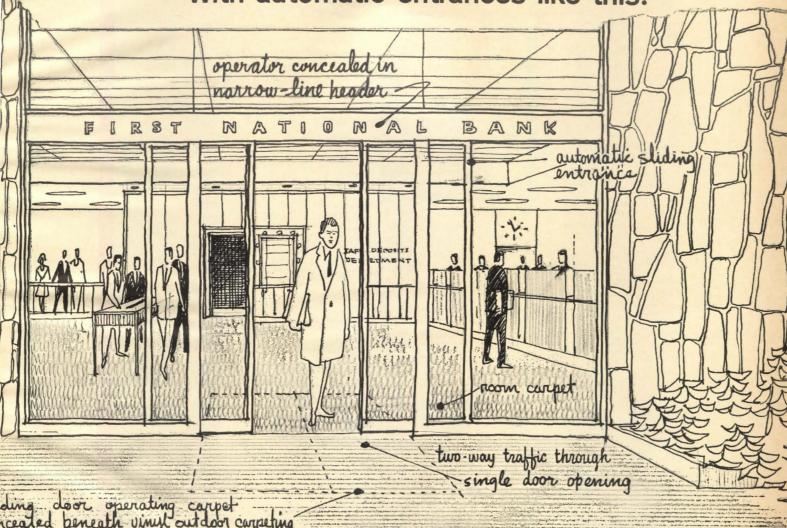


Dim the lights. A 2000-w electronically controlled dimmer for incandescent lighting re-

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Stanley is.

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Help us strike a blow for freedom of design! Get information on Stanley automatic sliding entrances. Write us for Folder No. M67-COM. Look us up in Sweet's. Or check under "Door Operating Devices" in the Yellow Pages for the name of the Stanley distributor nearest you. Stanley offers a complete

line of famous MAGIC-DOOR™® operators (pneumatic, hydraulic, electric), controls and accessories for doors that swing, slide or fold. Stanley Door Operating Equipment, Division of The Stanley Works, New Britain, Connecticut.



MFRS' DATA

ACOUSTICS

Modular panels form acoustic enclosures. Steel-faced "acoustic-fill" panels (standard thickness: 4", in several sizes) combine with manufacturer's special doors and window panels to make structures ranging from a noise-controlling partition to a fully enclosed machinery room with "Moduline" floor supported on vibration isolators. Data sheets give dimensions; transmission loss and sound-absorption tables for components; joiner and connector data; installation details; specifications. Industrial Acoustics Co., Inc., 380 Southern Blvd., Bronx, N.Y. 10454. Circle 200, Readers' Service Card

CONSTRUCTION

Sealant array. One-part polysulfide "Rubber Calk 5000" seals joints subject to structural movement (metal panels, marble, window glazing, etc.). Brochure also gives performance characteristics, suggested applications, colors, and specifications for six other sealants — two-part polysulfides and two-part polyurethanes. 8 pages. Products Research & Chemical Corp., 2919 Empire Ave., Burbank, Calif. 91504. Circle 201, Readers' Service Card



Stainless-steel roofing. Lighter gages, easy soldering, and no stripping of coating metal or surface preparation give stainless steel an advantage in roofing, flashing, and related applications, say industry producers. "Stainless Steel Data Manual" contains information on finishes, suggested minimum thickness for specific applications, and detail drawings of representative roofing seam types and patterns, spandrel flashing, expansion joints, etc. 28 pages. Companion booklet, "Suggested Guide Specifications for Roofing, Flashings and Accessories," is 20 pages. Shown: Kenzo Tange's stainless-steel-roofed cathedral in Tokyo. Committee of Stainless Steel Producers, American Iron and Steel Institute, 150 E. 42 St., New York, N.Y. 10017.

Circle 202, Readers' Service Card



Finishing touches. Moldings are cataloged in a booklet published by three lumber associations. All patterns currently manufactured and distributed are listed by type (crowns, coves, rounds, stops, etc.) with a simple profile and dimensions. 24 pages. Price: 50¢. Western Wood Moulding Producers, Box 25278, Portland, Ore. 97225.

Metal lath and plaster. Nonbearing partitions are described and specified in manual that generously details the use of metal lath and accessories in studless solid, channel stud solid, channel stud hollow, prefabricated steel stud hollow, and sound-insulating double partitions. Sound transmission loss tables, fire ratings, stud spacing, and other construction and technical data. 38 pages. Wheeling Corrugating Co., Wheeling, W. Va.

Circle 203, Readers' Service Card

Plastic skins. Curtain-wall panels, insulated with either polyurethane or polystyrene foam, are faced with Plexiglas - flat or patterned; glossy or matte finish colors. A choice of materials is available for the interior face. Tooling for custom designs can be done for as little as \$500, claims manufacturer. Descriptions, color photos, short specs, installation details, and brief discussion of building codes and fire ratings. 8 pages. Structural Plastics Corp., Osseo, Minn.

Circle 204, Readers' Service Card

Preventing failure of tinted glass. Edge strength is the key to reliable performance of tinted glass. Edge tension stresses created by the heatabsorbing qualities of tinted glass make special problems when there is partial shading, heating-cooling directed against the glass, etc. Edges must be clean cut and left unpolished, and treated with care in handling and installation. Booklet details job-site procedures for cutting and installation, and discusses special situations that require factory fabrication. Charts, photos, graphs, installation details, text. 36 pages. Pittsburgh Plate Glass Co., One Gateway Center, Pittsburgh, Pa. 15222. Circle 205, Readers' Service Card



Steel pipe. Construction and fabrication using steel pipe meeting ASTM A-36 specifications are discussed briefly; technical tables list allowable loads and physical characteristics for beams and columns. 20 pages. Jones & Laughlin Steel Corp., 3 Gateway Center, Pittsburgh, Pa. 15230.

Circle 206, Readers' Service Card

"U.S. Product Standard PS 1-66 for Softwood Plywood." This new voluntary Product Standard covers Douglas fir plywood, Western softwood plywood and Southern pine plywood, and replaces three previous U.S. Commercial Standards. Extensive industry research on performance testing has been used to set quality standards. Produced with the cooperation of the Product Standards Section of the U.S. Department of Commerce, the standard classifies and lays down requirements for different types and grades of plywood, sets forth inspection and testing procedures, and illustrates grade-trademarks. 28 pages. American Plywood Assn., 1119 A St., Tacoma, Wash. 98401. Circle 207, Readers' Service Card



The Fink Dome was designed by Al Fink, and, since 1963, these geometric domes have been manufactured by General Conveyor Inc. Built on top of an earth berm, a product berm, or a retaining wall, they can be covered by metal, wood, concrete, or plastic panels. The structural framing can be steel, laminated wood, etc. Brochure outlines possible industrial and architectural uses. 6 pages. Color. General Conveyor Inc. of Northern California, 1821 Mt. Diablo Blvd., Walnut Creek, Calif.

Circle 208, Readers' Service Card



Tape sealant, "PTI 606," is made up of 100% solids, yet is compressible and sticky, states manufacturer. Suitable for all curtain-wall components, the sealant (black or aluminum gray) can be ap**Pittsburgh Corning**

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This planter is made of FOAMGLAS, the cellular glass roof insulation. It's the only completely water-proof and vaporproof insulation you can get.

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On Readers' Service Card, Circle No. 364

plied under extreme weather conditions. Pamphlet gives test and technical data, installation details, and suggested specs. 4 pages. Protective Treatments, Inc., 4401 W. North Ave., Chicago, Ill. 60639. Circle 209, Readers' Service Card

FLOORING

New floors cover old "Perimiflor" system for laying sheet vinyl over old flooring requires sanding and adhesive only around perimeter and along seams. Sanding strip is 6"-8" wide, and special adhesive is laid in a 4" band. Seams are kept to a minimum by 6'wide rolls, up to 90' long. System uses manufacturer's Montina and Tessera Vinyl Corlon. Can be laid over old floors of sheet vinyl, rubber, asphalt or vinyl tile, linoleum, ceramic or clay tile, terrazzo, marble, or metal. Booklet gives installation instructions, chemical resistance tables, brief specs, and one-page sections with photos on different types of commercial and institutional remodeling. 14 pages. Armstrong Cork Co., Floor Div., Lancaster, Pa.

Circle 210, Readers' Service Card

FURNISHINGS

Decraguard decorative panels are presented in a triptych catalog. Panels, finished on one or both sides, consist of overlay sheets bonded to selected substrates. There are three systems: "Standard Grade" is meant for vertical surfaces; "Deluxe Grade" serves on both vertical and horizontal surfaces; "Supreme Grade" is engineered specifically to meet highabrasion requirements. Surface patterns come in both dark and light shades of most woodgrains. Also available is self-adhering edge banding to match all patterns. Catalog includes separate sheets with specifications and illustrations of patterns. Simson Timber Company, 2000 Washington Building, Seattle, Wash. 98101.

Circle 211, Readers' Service Card

Contract furniture designed for Directional by Kipp Steward includes desks, cabinets, and occasional tables. Brochures in a three-ring binder illustrate pieces individually and in color settings. Four series are shown. Series one and two include executive-area pieces in walnut with ebony trim. Series three displays pieces of cherry wood with ebony inlays; hardware is solid antique brass. Series four has conservative designs in walnut, available in four different finishes and with leather tops. A price list with illustrated specifications chart is included. Directional Contract Furniture Corp., 979 Third Avenue, New York, N. Y. 10022.

Circle 212, Readers' Service Card



Living Wall. Three Royalcote wood-paneling finishes now come slotted to accept brackets and hooks for lively shelving. A development of Poul Cadovius' Danish system, this scheme eliminates unsightly and expensive vertical metal wall strips. Corresponding "Sandtone Gold" metal shelf brackets and picture hooks lock easily into the "Living Wall." Royalcote offers these panels in Teak, Honeytone Cherry, and Sable Walnut, which are compatible with their other woodgrains. Shelves of Satin Walnut come in five sizes, ranging from 8" x 24" to 10" x 48". Masonite Corp., 29 N. Wacker Drive, Chicago, Ill.

Circle 213, Readers' Service Card

No Shock. The Brunswick Corporation has announced that they have successfully and economically eliminated static electricity from carpets. This was accomplished, they report, by the use of "Brunsmet," a blend of wool and stainless-steel filaments. Under test conditions, a blend containing one-third of its weight in stainless-steel filaments achieved a voltage reduction of 75-80% compared



Eight story apartment uses Hi-Stress Deck on masonry bearing walls.

New HI-STRESS DECK is prestressed concrete. It does a better job.

Close up, that HI-STRESS slab looks pretty much like the original Flexicore unit. And it has all its traditional good characteristics: high-speed erection, immediate work deck, high fire-resistance rating, and the other benefits of concrete construction.

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New fire tests give you 2-hour fire resistance rating on untopped decks, 3-hour on decks with 134 inch topping. UL, Inc. labeling service is available.

New underfloor electrical distribution systems give

ultra-high capacity for telephone and power lines. New manufacturing methods and high speed erection result in a superior product and faster construction time.

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combines all conventional features with private telephone intercom

Webster Electric, a pioneer manufacturer of sound and intercom equipment, has developed an entirely new sound system combining all outstanding features of a conventional system with private automatic telephone intercom. This innovation, the Webster PC System, is modular and fully transistorized — so entirely unique — a patent has been allowed.

It works like this. The sound system is multi-channel, permitting normal distribution of recorded, broadcast, or live programs, time and emergency signals to selected rooms, groups and areas. The telephone intercom section features a solid state line circuit switchboard, providing trouble-free communication over any number of dial telephones. In addition, you gain access to the sound system from any phone for paging, announcements or emergency all-calls on a private and/or priority line basis.

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On Readers' Service Card, Circle No. 381

to an all-wool carpet. A complete description of the experiment and its results is available in "The Brunsmet Bulletin." New Products Division, Brunswick Corp., 69 W. Washington St., Chicago, Ill. 60602. Circle 214, Readers' Service Card

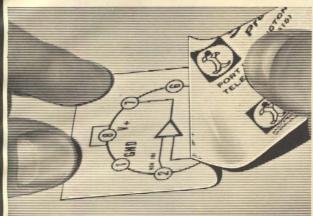
Patterns in Glass. "Cascade" is a decorative glass that can be used as a partition panel because it allows light to pass through, while obscuring images to insure privacy. Entrapped air bubbles provide pinpoints of white within the green-tinted glass. It is available in standard sizes up to 48" x 120". The latest issue of "Creative Ideas in Glass," a four-color catalogue, demonstrates uses of glass both indoors and outdoors. American Saint Gobain Corp., Box 929, Kingsport, Tenn.

Wallboard of gypsum covered with vinyl plastic. Manufacturer claims material is less expensive than building a wall and then covering it with vinyl. Panels come in thicknesses of 3/8" and 1/2". They are 4' wide and 8', 9', and 10' long; lengths up to 14' are provided upon request. A broad selection of colors is available in the various textures (including burlap, travertine, woodgrain, linen). Eight-page brochure includes color and texture charts. It also describes matching covering for interior and exterior corners, and aluminum accessories to form outside corners, and to trim around windows, etc. The National Gypsum Company, Buffalo, N.Y.

Circle 215, Readers' Service Card

Tiles and mosaics by Western States Ceramic Corporation are color-illustrated in a four-page brochure. For wall application, there are glazed ceramic tiles in 20 colors (including crystal, spice, oatmeal, yellow), three designs (one of which is "Plain Specks" — a sprinkle of dots on a plain background), and a variety of sizes. For swimming pools, there are vitreous tiles and marker tiles with black numerals. Mosaic tiles are available for floor application in straight joints and random blocks, glazed and unglazed, in muted colors. if your applique sheet does not give crisp reproduction every time...

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On Readers' Service Card, Circle No. 392

NEW...for Cement, Masonry, Flagstones



Cabot's CEMENT FLOOR STAINS

NOT A DYE ... NOT A PAINT!

When it comes to painting, cement floors are a problem. Cement, porous and moisture-absorbent by nature, will often discolor after painting . . . or even worse, crack, peel, or scale. Cabot's Cement Floor Stains, newly developed to answer these problems, penetrate well into the cement surface. The resulting color is decorative and uniform, lending beauty to the texture of cement and concrete. Unlike integral colors, Cabot's Cement Floor Stains may be relied on to provide accurate colors without fading.

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- Resists abrasion and moisture, will not crack, peel, or blister. Detergents and beverages will not mar the finish; it is alcohol-resistant.
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- Eight colors: Mint Green, Brownstone, Brick Red, Quarry Gray, Evergreen, Cobblestone Gray, Sandstone, Pipestone Red . . . plus White and Black.

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On Readers' Service Card, Circle No. 336

Patterned mosaics are available. Brochure also lists related products for installation of tiles and mosaics. Western States Ceramic Corporation, 7609 Wilbur Way, P.O. Box 7597, Sacramento, Calif. 95828.

Circle 216, Readers' Service Card

Bathroom Fixtures. A choice of nine lavatories, four bathtubs, and two sinks is available from Mansfield Sanitary, in a collection primarily for residential use. The fixtures come in "Lifetime Mirror China" as well as in cast-iron and steel, and in such colors as summer coral, pastel tan, and seafoam green. A fourcolor leaflet describes and illustrates the collection. Catalogue 7396-L, Mansfield Sanitary, Inc., Perrysville, Ohio 44864.

Circle 217, Readers' Service Card

Signature office furniture. This line includes double and single pedestal desks with modular cabinets and drawers (box drawers, file drawers, center drawers). All units are 171/2" deep, and come with locks if requested. Fourteen colors are available ("leaf green", "harvest brown", "desert sage"). Seven-page brochure also describes tables, telephone cabinets, and swivel chairs, with specifications and color reproductions. Bentson Manufacturing Company, Inc., Box 1143, Aurora, Ill. 60507.

Circle 218, Readers' Service Card

Fuzzy vinyl. "Concept," a nylon tricot stabilized with expanded vinyl, looks like a cross between velvet and suede cloth. Nylon tricot is made of DuPont Antron nylon knitted by Burlington Tricot Co. It is backed with Terson-expanded vinyl for stabilization. A sponge, just damp or mildly soapy, will clean Concept. Roll length is 30 yd; 54 in. wide. Swatches of 14 rich colors are glued to a bankbook size brochure; specifications and distributors listed. Athol Manufacturing, Vinyl Fabrics, Butner, N.C. 27509. Circle 219, Readers' Service Card

Doorknobs like diamonds. "Facet" - an addition to Kwikset's "400 line" of door-



... with Stonco BREAKPROOF lighting fixtures. Over 200 different types. All with lifetime Lexan® globes that will not bust, shatter, crack or bubble.

What a terrific idea for maintenance-free lighting in parks, playgrounds, public housing, subways - any area where glass is a tempting target for kids. (Not to mention hazardous locations, like food processing plants, shower rooms, gymnasiums, etc.)

Smashed glass giving you gray hair? Specify Stonco BREAK-PROOF... the most inexpensive "accident" insurance money can buy.

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Detex knows all the ins and outs about total exit protection

Your doors — especially emergency exits — are probably the weakest points in your building security program. Thieves, pilferers, and vandals often use them despite your best efforts.

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On Readers' Service Card, Circle No. 394

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On Readers' Service Card, Circle No. 440



MODEL UC-5-CW

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Hardly...but with outside dimensions of 24" x 24" x 34½" this versatile line of nurses station/pharmacy/laboratory-refrigerators has a large capacity of 5.4 cubic feet. Built to fit flush with adjacent cabinet work, and custom finished to your specifications, a trim uninterrupted line of design and color can be easily achieved.

Other important features include:

- Gleaming stainless steel interiors.
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- Removable front grille through which all fittings and controls can be easily serviced without moving refrigerator.
- Dished interior bottom to protect floors from spilled products.
- Automatic and semi-automatic defrost system with built-in condensate evaporator and accumulator. Eliminates need for floor drain.



MODEL UC-5-BC



MODEL UC-5-CW

(illustrated above)

Cold wall type cooling system with automatic push button defrost. No freezing compartment. Explosion-safe and total explosion-proof construction available on this model only.

MODEL UC-5-BC

Blower type cooling system with automatic off cycle defrosting. No freezing compartment,

MODEL UC-5

Two-tray ice cuber cooling system and semi-automatic defrost.

NOTE: Jewett also makes a line of freezers with the same dimensions and features listed above.



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| 1 | Please send mecopy(ies) of CAMPUS PLANNING by Dober at \$25.00, for 30 days' approval under the following terms: |
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REINHOLD BOOK DIVISION, 430 Park Avenue, New York, N. Y. 10022

knobs that simulates the faceted shape of a diamond. It is a shape conducive to a sure grip and to easy turning. Knobs come in finishes of antique brass, antique bronze, antique nickel, and polished brass. Miniature version of "Facet" is available for cabinet application. Knobs will meet all interior and exterior locking requirements. Fourpage brochure is color-illustrated. Kwikset Sales and Service Company, a subsidiary of Emhart Corporation, Anaheim, Calif.

Circle 220, Readers' Service Card

Knobs and handles. Door and furniture handles come in reproductions of several historical styles; one is a group of porcelain knobs-white, with the attaching screw-head visible in the middle. They bring back the turn-of-the-century's "cottage" and "mission oak" furniture, as well as capitalizing on the art nouveau revival. Also shown in the 8-page catalog is a rope-binding hook for securing hammocks which folds flat when not in

use. Peabody Distributing, Sales Division of Belwith International Ltd., 1119 E. 63rd St., Los Angeles, Calif.

Circle 221, Readers' Service Card

LIGHTING



Lights for all reasons. Available in a variety of shapes, Globe Lighting's ceiling fixtures, in white satin glass, include hand-blown spheres (fastened flush against the ceiling or held by a slim stem). To make plain fixtures elaborate, the glass can be mounted onto an oiled-walnut plaque attached either to ceiling or wall. A simple spring catch arrangement holds glass to ceiling and facilitates cleaning and changing light bulbs. All this and more (including Tiffanesque lamps and polyethelene flower-entwined outdoor chandeliers) are in this new 72-page color-illustrated book. Dept. R-190, Globe Lighting Products, Inc., Valmont Industrial Park, West Hazleton, Pa.

Circle 222, Readers' Service Card

Linear Lighting. A system of incandescent and fluorescent lighting troffers can be run end-to-end, wall-to-wall over counters, offices, circulation areas, and conference rooms: it may be suspended or mounted on ceiling. Several mounting systems are available, among them wall-block support and stem suspension. Lamp enclosures are of extruded anodized aluminum. finished with matte black ends and apertures of satin anodized aluminum. Optional side panels come in black naugahyde, rosewood vinyl, and walnut vinyl. Brochure provides drawings and specifications. Lightolier, Jersey City 5, N.J.

Circle 223, Readers' Service Card

OFFICE EQUIPMENT



Neat file front incorporates index frame with recessed pull and concealed latch. Available in colors or wood-grain panels. Art Metal, Inc., 301 Prince St., Jamestown, N.Y. Circle 224, Readers' Service Card

Drafting-room furniture and related equipment for draftsmen is illustrated in a 36page catalog with complete specifications. Shown are au-

PERMANENT/Eliminates Concrete Forming! Fastens to Face of Dock!







Now, every dock can operate with the speed, safety and capacity that only Permanent Dockboards provide . . . And do it at a price comparable to portable plates. Check these features! Full 11" projection. Full 6' width. Full 15,000 lb. capacity. No springs, rollers, cams, hinges

or adjustments. Low purchase price includes bumpers. ■ You can see the new Kelley LTL Dockboard in action in your own office. Call collect, wire or write for private showing of Kelley LTL "Test" movie.



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55-260

tomatically adjustable drafting-table/desk combinations and other drafting tables (four-post and wood-pedestal types). Reference desks, work tables, utility cabinets, and bookshelves are also described. Especially attractive is a multistudent drawing unit, constructed of heavy gage steel; it has a lockable supply cabinet flanked by one or two drawing boards, which are available with or without legs. Stacor's vertical filing systems for blueprints are detailed in a separate brochure. Price list included. Stacor Corporation, 285 Emmet Street, Newark, N.J. 07114. Circle 225, Readers' Service Card

SPECIAL EQUIPMENT

Waste disposal. Pulpers suitable for under-counter, floorlevel or chute feeding are available in a number of models designed to process kitchen, hospital, or office wastes. Leaflet shows simple piping schematics, drawings, and specs. 4 pages. Wascon Systems Inc., 210 Bonair Ave., Hatboro, Pa. 19040. Circle 226, Readers' Service Card

Rear-projection screen. For viewing in fully lighted rooms, screen is coated with a film of microscopic cells or lenses capable of spreading or diverging projected light rays. Glass, Plexiglas, or vinyl-type

plastic "Lenscreens" are available in wide-angle for general use, and a "high grain, directional beam developed for low intensity projection." Literature in manufacturer's kit includes information and diagrams for the designer planning a rear-projection room, and data on selecting the size and type of screen. Polacoat Inc., 9750 Conklin Rd., Blue Ash, Ohio 45242.

Circle 227, Readers' Service Card

SURFACING

It takes grit. To keep pedestrians off the skids, "Fut-Sure" aluminum oxide, abrasive grains applied to, or mixed with, traffic toppings prevent people slipping and cars skidding. The material, available in grit mixtures of varying coarseness, can be applied to the finished surfaces of stairs, ramps, floors, and highways, or it may be mixed with concrete, terrazzo - or molten metal for casting stair treads. "Carbonite" silicon carbide antislip grains are primarily for sidewalk application. Folder describes uses and application. 4 pages. General Abrasive Co., Inc., 2000 College Ave., Niagara Falls, N.Y.

Circle 228, Readers' Service Card

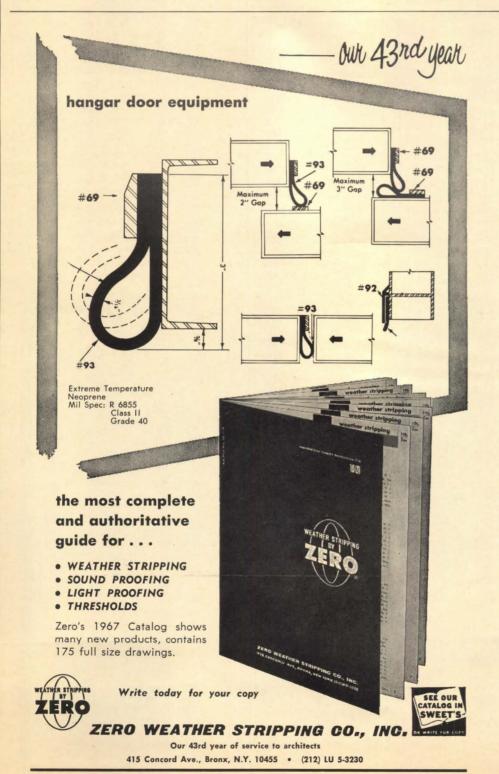
Textolite melamine laminated plastics are illustrated on 8page, information-filled sheet. Four grades of Textolite are distinguished in terms of ruggedness and intended installation. Paper reproductions of 18 wood-grain patterns, 3 tortoise patterns, 2 marbles, and 24 plain colors are shown, as well as 8 different amoeba- and star-flecked patterns in various hues. Charts list specifications, general characteristics, and regional offices. General Electric, Laminated Products Department, Section SW, Coshocton, Ohio 43812.

Circle 229, Readers' Service Card

PROGRESSIVE ARCHITECTURE NEWS REPORT

REINHOLD PUBLISHING CORPORATION A subsidiary of Chapman-Reinhold, Inc. 430 Park Avenue, New York, N.Y. 10022

Jan C. Rowan Associate EditorE. K. CarpenterP. H. Hubbard, Jr. Publisher Business Mgr.David N. Whitcombe Production Mgr.Joseph M. Scanlon



NEXT MONTH IN P/A



When is a college building not a college building? When it becomes a major focal point of the cityscape, as in the case of Yale's Kline Science Center, by Philip Johnson and Richard Foster. Kline will be documented and critiqued by P/A and by prominent people on the scene, such as Charles Moore, Vincent Scully, Earl Carlin. Pete Millard, and William Mileto. When it teaches the lessons of contemporary design to a traditional campus, as in the case of Paul Rudolph's Charles A. Dana Creative Arts Center at Colgate University. Some people up in Hamilton, N. Y., were apprehensive when Rudolph's design for this project was announced. Since then, most of the conservatives have been won over by the new campus sweetheart. Oncampus discussions with students and faculty will supplement P/A's presentation.

The Little Car With the Big Image
Volkswagen is renowned not only for its superior
product, but also for the adult way it treats its
actual and potential clientele in its advertising.
This practice extends to its selection of architecture, as shown by VW Distribution HQ for N.Y.,
N.J., and Conn., by Katz, Waisman, Weber,
Straus — a handsome structure that does its job.

Living Up To the Past
Being faced with the problem of housing the artifacts of so glittering an anthropological history as Mexico's might daunt even the bravest heart. Fortunately, it did not intimidate Vasques, Mijares, and Campuzano of Mexico, and they produced a formidable design to house the National Museum of Anthropology in Chapultepec Park. One of the most important museums of our time.

Plus

An "On the Job" article concerning fireproof wood detailing; Materials & Methods articles on industrial building, a brick turbine structure, and Harvard's structures workshop; P/A Observer's opinions and investigations on architecture and related realms; and P/A News Report's pithy digest of what you need to know that's current and coming.

Tear Out, Fill Out, Send In
The subscription card (see Contents Page for location) if you want to get in on the excitement of the February P/A and 11 more. We'll be happy to have you join the world's largest, best-informed architectural circulation. You'll be happy, too.

G-E Silicone Traffic Topping permanently hides unsightly surfaces, permanently protects new ones.





Waterproof. Traffic Topping prevents water penetration and moisture retention damage in concrete and other flooring construction materials. Protects against freezethaw cycles. Repairs previous damage. Ideal for outdoor ramps, platforms, walks, and traffic bearing roofs.



Permanently flexible. Made of silicone rubber, Traffic Topping keeps its resilience indefinitely. Won't harden, soften or become brittle, even at -65°F or 300°F. Provides a cushioned walking surface as it protects.



Wear resistant. Traffic Topping withstands wear and abrasion of shoes and vehicles. It's a superior surfacing medium for parking areas, garages, promenade decks, and light duty industrial floorings.



Quick, easy application. Traffic Topping adheres securely to most clean flooring construction materials, old or new. Needs no costly equipment. Cures to a tough, weatherproof surface. Looks great too. Six colors available.



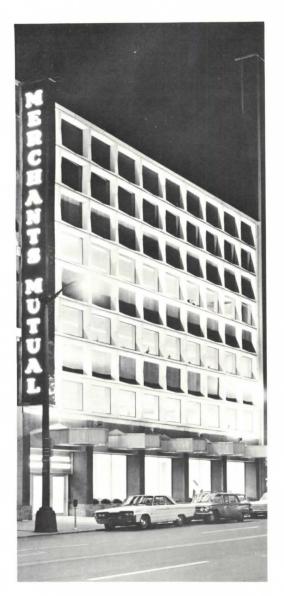
Skidproof, too. Even when wet, Traffic Topping's textured surface assures safe, sure traction where it's needed most: pool copings, laundry rooms, public walking areas, tennis courts. And it even makes non-skid stair treads.



Fights chemicals. Because Traffic Topping resists many chemicals, organic acids, alkalis, salts and oils, it is an ideal surfacing medium for food processing and similar plants, where such materials present a problem.

For complete information and your distributor's name, write Section Q1248, Silicone Products Dept., General Electric Company, Waterford, N. Y. 12188





Northeast Office Building Installs Electric Heat Recovery System To Provide Design Flexibility, Efficiency and Economical Owning And Operating Costs

BUFFALO, NEW YORK—When the year 2,000 rolls around, the new headquarters for the Merchants Mutual Insurance Company here will still be a modern, efficient office building. First, because it was planned that way and, second, because it utilizes the efficient new electric heat recovery concept for year-round environmental control.

Early in the design stage, architects James & Meadows & Howard, and consulting engineers St. John Associates, were asked to "review all methods for constructing a building and conditioning its spaces from the standpoint of flexibility, efficiency, economy and modernity." After months of study, they recommended an electric heat recovery system for the building because: it would best meet all of the insurance company's requirements; would save approximately \$20,000 on first cost and an estimated 12% a year on owning and operating costs over other systems; would provide

a high level of illumination; would permit individual room control and would help make the building a good long-term investment.

The five-story, 112,000 square foot building. completed in July 1965, utilizes an electric heat recovery system for heating and a central electric air conditioner for cooling. Heat given off by the lights, occupants, and machinery, is recovered through the light fixtures, transferred to induction units in the area above the ceiling, and distributed through ducts to all parts of the structure. Conditioned air supply to the interior spaces is through slots in the light fixtures, and to the perimeter offices through baseboard outlets. Electric heaters installed in the ducts provide supplemental heat as required and heat the building during unoccupied periods. Infrared electric heaters along the front of the building keep the sidewalk free of snow and ice.

- CATEGORY OF STRUCTURE: Commercial—Office Building
- **2** GENERAL DESCRIPTION: Area: 112,000 sq ft Volume: 1,010,000 cu ft Number of floors: five Number of occupants: 1,100 Types of rooms: offices
- Glass: single
 Exterior walls: 8" block and brick, 1" rigid insulation (R/4). U-factor: .21

Roof or ceilings: built-up tar and gravel roof, 1" rigid insulation (R/4) on metal deck. U-factor: .19 Floors: metal deck, cellular steel floor raceway Gross exposed wall area: 23,257, sq ft Glass area: 3,763 sq ft

4 ENVIRONMENTAL DESIGN CONDITIONS: Heating:

Heat loss Btuh: 1,350,000 Normal degree days: 6,838 Ventilation requirements: 16,500 cfm

Design conditions: —5F outdoors; 76F indoors

Cooling:
Heat gain Btuh: 2,350,000
Ventilation requirements: 16,500 cfm

Design conditions: 95F dbt, 73F wbt outdoors; 81F, 50% rh indoors

5 LIGHTING: Levels in footcandles: 80—100 Levels in watts/sq ft: 3 Type: fluorescent

6 HEATING AND COOLING SYSTEM:
During occupied periods, heat given off by lights, occupants and machinery heats the building.

During occupied periods, neat given off by lights, occupants and machinery heats the building. (Details on page one). Electric heaters in the ducts provide supplemental heat as required and also heat the building during unoccupied periods. Cooling is provided by a central electric air conditioner. Electric infrared units melt snow and ice on sidewalks.

Type: underground

Voltage: 265/460v, 3 phase, 4 wire, wye

Metering: secondary

- 8 CONNECTED LOADS:
 Heating & Cooling (250 tons)
 Ventilation
 Lighting
 Water Heating
 Cooking
 Other
 TOTAL

 CONNECTED LOADS:
 525 kw
 100 kw
 100 kw
 100 kw
 100 kw
 100 kw
 1045 kw
- **INSTALLED COST:*** \$1,305,640 General Work \$11.65/sq ft Plumbing .52/sq ft 58,000 1.93/sq ft 216,250 Electrical Mechanical 313,500 2.80/sq ft TOTAL \$1,893,390 \$16.90/sq ft *Building was completed July 1965

HOURS AND METHODS OF OPERATION: 9 a.m. to 5 p.m., five days a week

11 OPERATING COST:
Period: July 1965 to July 1966
Actual degree days: 6,936
Actual kwh: 3,409,500*
Actual cost: \$32,022.64*
Avg. cost per kwh: .94 cents*
*For total electrical usage

| Month | Demand | kwh | Amount |
|-------|--------|-----------|-------------|
| 8/65 | 562 | 211,356 | \$ 2,172.83 |
| 9/65 | 562 | 223,592 | 2,221.77 |
| 10/65 | 659 | 260,301 | 2,473.22 |
| 11/65 | 713 | 265,863 | 2,763.23 |
| 12/65 | 734 | 318,146 | 2,855.96 |
| 1/66 | 767 | 365,979 | 3,168.89 |
| 2/66 | 785 | 390,450 | 3,304.36 |
| 3/66 | 778 | 355,968 | 3,093.69 |
| 4/66 | 745 | 322,596 | 2,950.88 |
| 5/66 | 626 | 225,817 | 2,130.48 |
| 6/66 | 680 | 204,681 | 2,305.67 |
| 7/66 | 626 | 264,751 | 2,581.66 |
| TOTAL | | 3,409,500 | \$32,022.64 |

- 12 UNUSUAL FEATURES:
 Sensing elements located in the return air ducts of the lighting fixtures can sense and correct room temperature variations 15 times faster than standard wall-mounted thermostats. Individual room control is provided by thermostats located next to light switches. Modular office layouts are possible with the heat recovery system and if additional interior partitioning is required, sufficient lighting, heating, cooling and temperature control for the new area is assured.
- REASONS FOR INSTALLING ELECTRIC HEAT:
 An electric heat recovery system was chosen for its economy, efficiency, design flexibility and modernity. The insurance company saved \$20,000 on first cost and will save an estimated 12% each year on owning and operating costs over other systems.
- PERSONNEL:
 Owner: Merchants Mutual Insurance Company
 Architects: James & Meadows & Howard
 Consulting Engineers:
 Mechanical & Electrical: St. John Associates
 Structural: Duchscherer & Oberst
 General Contractor: Siegfried Construction Co.
 Electrical Contractor: Ferguson Electric Construction Co.
 Utility: Niagara Mohawk Power Corporation
- 15 PREPARED BY:
 Ralph L. Richmond, Commercial Sales Supervisor, Buffalo District, Niagara Mohawk Power Corporation.

R. Maxwell James, AIA

The Consulting Engineers Council USA, has confirmed the above categories of information as being adequate to provide a comprehensive evaluation of the building project reviewed.

NOTICE: This is one of a series of case histories of buildings in all structural categories. If you are an architect or consulting engineer; an architectural or engineering student; an educator; a government employee in the struc-

tural field; a builder or owner, you may receive the complete series free by filling out the strip coupon at the left and mailing it to EHA. If you are not in one of the above categories, you may receive the series at nominal cost.

Elegant, Yes...

but with worthwhile differences!

The sleek, crisp, thin-line styling of this desk is striking—but it is rugged and functional, too!

While its narrow pedestal framing avoids bulkiness, it provides work space equal to any office job. Its built-in features aid greatly in increasing office efficiency.

Use the Cosco "77" Series as a standard and you can handle many functions with a minimum of models. Easily installed side units and inserts convert clerical desks to business machine units. Drawers can be arranged to suit each individual's needs.

Designers, architects and other office specifiers who would like assistance in utilizing Cosco Office Furniture—which includes complete lines of desks, chairs, tables, credenzas and lounge furniture, all moderately priced—need only to request it from Cosco Office Design Dept.

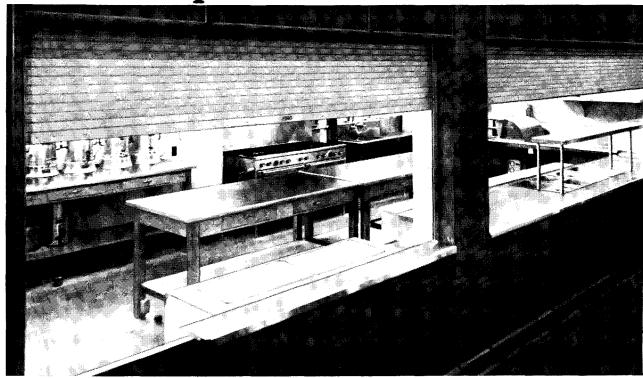


Ask for the "Architects Package" when you write to

COSCO.

lamilton Cosco, Inc.—Dept. PA-1 Office Furniture Division, Gallatin, Tennessee

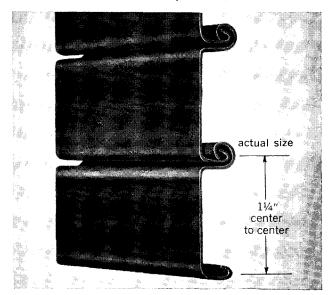
Now...an answer to one of your difficult closure problems...



The New COOKSON FD10 Series U. L. Labeled Counter Fire Doors

Service-counter closures offering maximum fire protection used to look massive, heavy and cold. Now they need not.

We have a solution to the problem, no matter how



critical your taste. It's the new Cookson FD10 Series U.L. Labeled Counter Fire Doors, styled in slim lines to complement modern decor.

Available in either push-up or crank operated design, FD10 Series Doors are being specified and used extensively in schools, cafeterias, offices, stores, ticket windows, hospitals . . . wherever fire safety and security must be provided without sacrifice of appearance.

See our catalog in Sweet's; or write for your own copy.

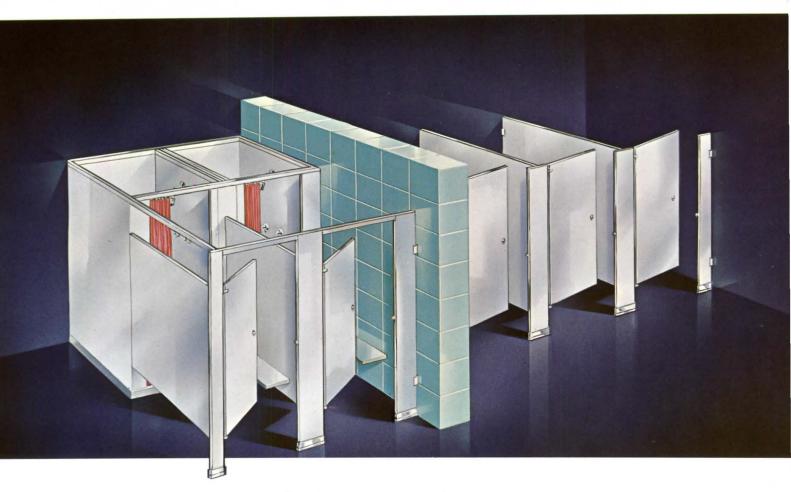
Key To Slim-Line Styling Of The FD10 Series

The curtains of the Cookson FD10 Series Doors are fabricated from the miniaturized #10 slat, in either galvanized or stainless steel. With a center-to-center dimension of only $1\frac{1}{4}$ ", this slat has permitted substantial reduction of head and side room requirements.



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Sanymetals ... crafted in stainless steel...

GLEAM FOR LIFETIMES WITH MINIMUM MAINTENANCE!

CORROSION RESISTANT, STRONG, SMOOTH AND BEAUTIFUL.

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COMPARTMENTS



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AREAS. AVAILABLE IN A HOST

OF PORCELAIN AND BAKED ACRYLIC COLORS, TOO.

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JUST WRITE FOR FULL STORY THE Sanymetal PRODUCTS COMPANY, INC.

SOUND CONTROL





Crystal Plaza #5 . . . Builder: Charles E. Smith Construction Co., Wash., D.C. • Architects: Weihe, Black & Kerr • Acoustical Engineers: Polysonics • Glass and Glazing: Washington Plate Glass Co., Inc.

PROBLEM: Noise control from jet traffic at Washington National Airport and a nearby railroad for Crystal Plaza #5, an office building with 864 large windows.

SOLUTION: Polarpane Sound Control hermetically sealed windows with tinted glass and an acoustically designed separator.

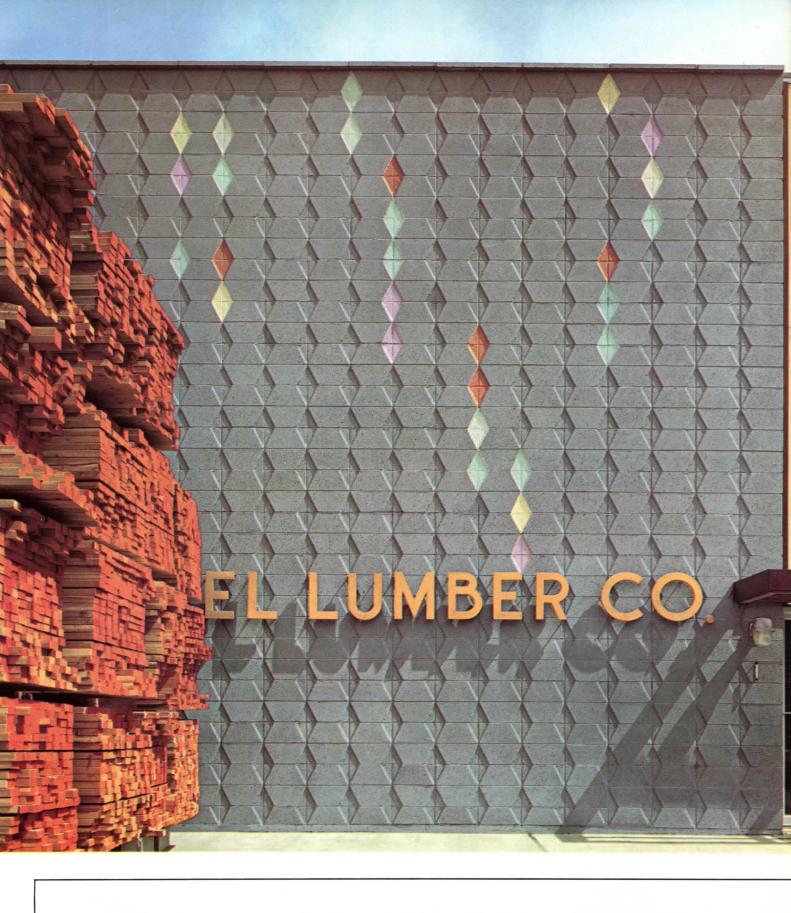
COST FACTOR: Because of the high thermal insulating qualities of Polarpane construction and the shading factor of the tinted glass, the low cost of the acoustical windows can be recovered within five to seven years.

RESULT: Complete satisfaction with the quietness inside the office building.

APPLICATION: Polarpane has a complete range of high acoustical performance windows from 38 to 42 STC.

consultation: Write or call us about your sound control problems.

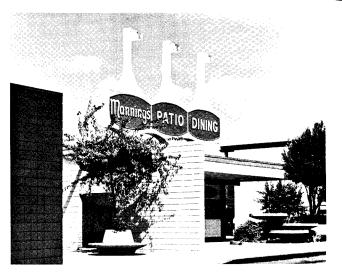




The only thing in concrete block that can catch fire is its design versatility...

Concrete Block gives your new commercial buildings

a kind of complete fire-safety



that sparkles!

Building professionals never had it so good. The variety of construction materials grows every day, giving the ways and means to more creative architectural flair and versatility.

Concrete block, for example, has suddenly made the building industry sit up and take notice.

There are now more shapes and sizes of concrete block than ever before, more wall pattern possibilities than ever before.

But style doesn't count much without security: complete fire-safety. *Block simply cannot burn*. The excellent stability of concrete masonry proves consistent in fire tests by recognized laboratories.

The tests consist of exposing one side of a wall to fire of controlled intensity for a time equal to or greater than its rated fire-resistance time. Immediately, the hot face of the wall is subject to a fire-hose stream. Bearing walls also carry a load equal to 80 psi based on gross wall area. The wall must withstand the fire test without passage of flame or gases. Heat transmission must be limited to less than 250° F gain in temperature.

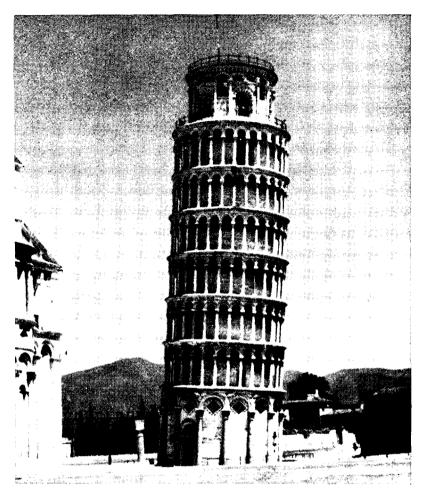
Little wonder concrete block is used so frequently in modern commercial buildings—as well as schools, medical buildings, theaters and wherever large crowds of people congregate.

(You'll even see the many faces of concrete block in local fire stations. What better testimonial is there for block's complete fire-safety?)

Make sure you have complete fire-safety in the next building or home you design.

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|--------------------------------------------------------------------------|---------------------------------------------------------------|------------------------------------------------------------|-------------------|--------------------|
| Please send me, without charge or o cal information on concrete block fi | bligation, techni- ire-safety. Also send m tion on conc | ne general and technical info crete block construction. | rma- | |
| NAME | | ··· | | arlan . |
| COMPANY | | | | |
| STREET | | | | TORRETE MASONA 158 |
| CITY | STATE | ZIP | | |

What can happen when your client takes the lowest bid on air conditioning equipment?



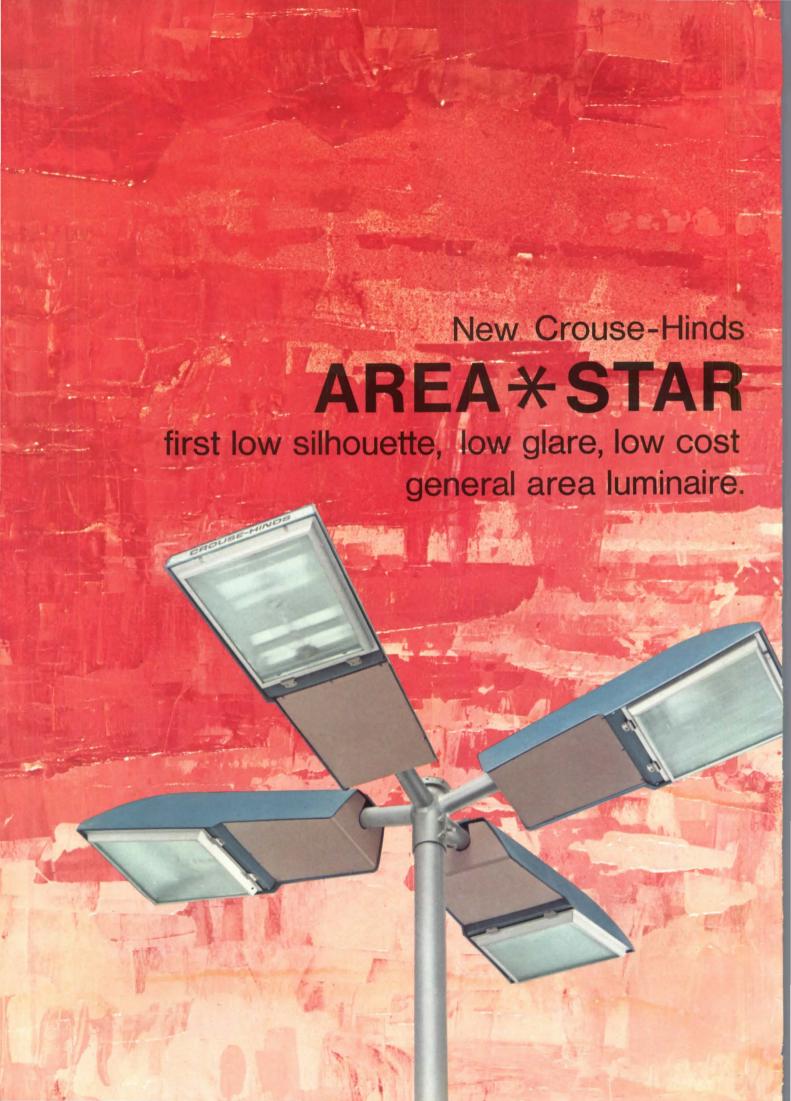
He could get a sinking feeling later. When you specify Carrier, however, he's on solid ground. Carrier never cuts quality in order to cut price. Ours may cost a little more...but in spite of this, more people put their confidence in Carrier than in any other make.



On Readers' Service Card, Circle No. 359

Carrier Air Conditioning Company

For complete product information, call or write your nearest Carrier representative. He is in the Yellow Pages.





Beautiful from any angle.



Side glare of typical streetlight luminaire.



Beautiful low glare AREA*STAR.



Profile light®

Beautiful to see

Here's new design with looks that outshine streetlight luminaires. Slim, clean, contemporary. New AREA*STAR is perfectly beautiful. Singly or in clusters. Beautifully perfect. For parking areas, access roadways, driveins—wherever inexpensive but low glare lighting is desirable.

Beautiful to see by

Here's area lighting that's directed onto the ground and not in everybody's eyes. New AREA*STAR eliminates the uncomfortable side glare of ordinary streetlight luminaires. Has a recessed lamp-mercury or metallic additive. A flat, patterned lens. There's no protruding glass refractor to create halo and glare effects.

Motorists, customers, neighbors—all will find AREA*STAR lighting bright and inviting. Comfortable to see past. Easy to see under.

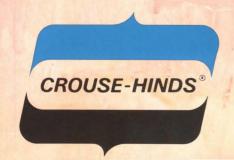
Beautiful by cost comparison

Here's the luminaire that wins out not only in styling and lighting, but in cost. For example, you can save up to \$70.00 on a four-fixture cluster on a 30' steel pole. That's over a typical streetlight luminaire used for off-street purposes.

Beautiful companion to Profile light®

AREA*STAR was developed as a functional complement and appearance companion to Profile light—our highly successful "revolution in good light and good looks." Either fixture—or a combination of both—makes your installation look attractive, day or night.

Get all the facts and figures on the new and beautiful AREA*STAR. Call your local Crouse-Hinds lighting distributor, or our local lighting specialist. Or write for Bulletin No. 2810. Crouse-Hinds Company, Outdoor Lighting Dept., Syracuse, N. Y. 13201.





Door security and efficiency by the mile is aptly illustrated in the Bronx Market at High Point, of which this picture shows only one of several similar bays of Kinnear Rolling Doors.

Installations of this magnitude - from miles of piers in Mobile Harbor to giant gantry cranes on the St. Lawrence - have proved for the past 70 years why it pays to demand Kinnear quality.

And the security provided by Kinnear design and quality is more important today than ever. Designed on the interlocking slat curtain principle, and of rugged all-steel construction Kinnear Rolling Doors give real protection against "breaking and entering" and vandalism, as well as the ravages of hard usage, fire, and the elements over the years. They're truly tough to penetrate!

Coiling compactly over the lintel, out-of-the-way Kinnear Rolling Doors save usable floor, wall and ceiling space. For modern, timesaving door automation they are readily adapted to smooth power operation with various electronic controls. And for maximum lifeextension the details of each Kinnear door installation are registered and secured in fireproof vaults - an extra maintenance service that is paying off today for Kinnear owners of installations many decades old.

Whatever type of building you're planning, be sure to get details on Kinnear Rolling Doors. Call your nearest Kinnear representative or send for current catalog.

Also Manufacturers of Power Operators, Automatic Rolling Fire Doors and Shutters, Rolling Grilles, Rolling Counter Shutters and Rol-Top (overhead type) Wood or Metal Doors.







Saving Ways in Doorways Since 1895

The KINNEAR Manufacturing Company and Subsidiaries

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FACTORIES: Columbus, Ohio 43216
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It begins with an environment for learning.

To set a mood of deep tranquility, Weldwood® architectural teak paneling was custom-matched to the blueprints of architect Minoru Yamasaki. Woodrow Wilson Hall, Princeton University, Princeton, N.J. Installed by Haggerty Millwork Co., White Plains, N.Y.

Where does a school begin?

Precedent can't supply all the answers.

Each design demands its own solution. And its own fitting of materials to form and function.

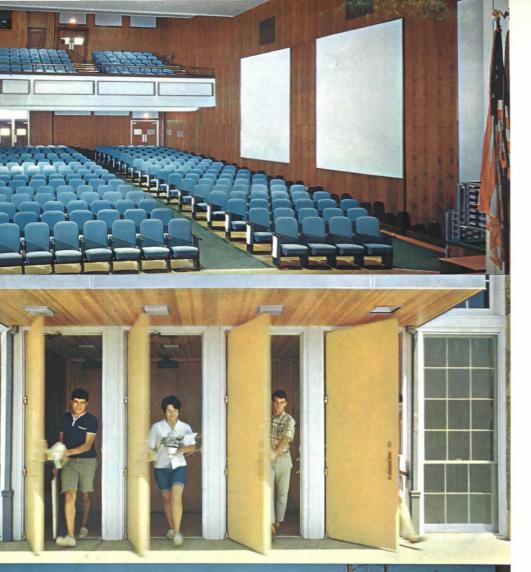
For this reason, U.S. Plywood is more than just a source for architectural materials. We also help you find fresh solutions to new problems.

Our Architects' Service people can offer solutions to design and specification problems. They will work with

you in developing new materials and new methods for using them. And in combining them into new systems to meet your special requirements.

So that we can be partners in your planning. Before you begin.





It begins with a building code.

Flat cut walnut Flexwood® applied directly to existing plaster walls in this auditorium meets Class I flame spread requirements for an interior wall covering. Because it is ½5" thin, Flexwood permitted the entire 24'-high wall to be covered without a visible seam. Linden (N.J.) High School. Arch: Merchant, Siedel & Hickey, New Brunswick, N.J. Inst: Fay Associates, Union, N.J.

It begins with a maintenance consideration.

For the dining hall on the Ambler (Pa.) Campus of Temple University, rugged Weldwood Stay-Strate® doors were used. Doors were delivered pre-sized to the opening, premachined for the hardware, and prefinished with tough, stain-proof Vigilar® film. Arch: Nolen Swinburne & Assoc. Inst: Wintz Bros. Inc., Phila.



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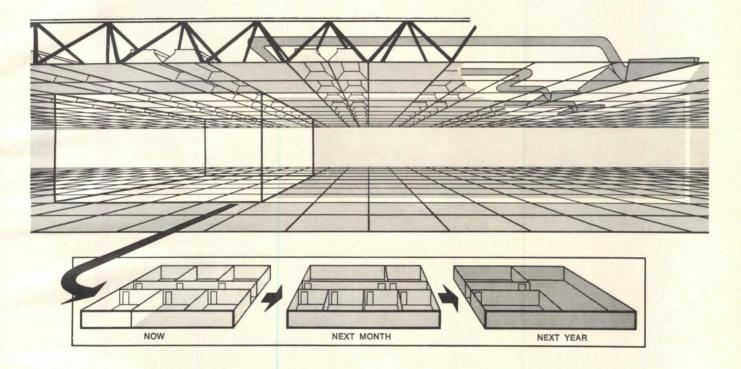


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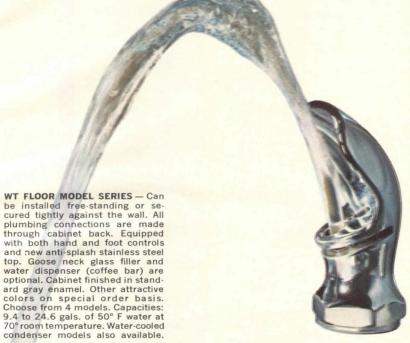
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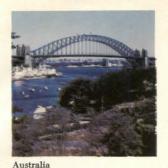
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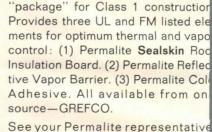
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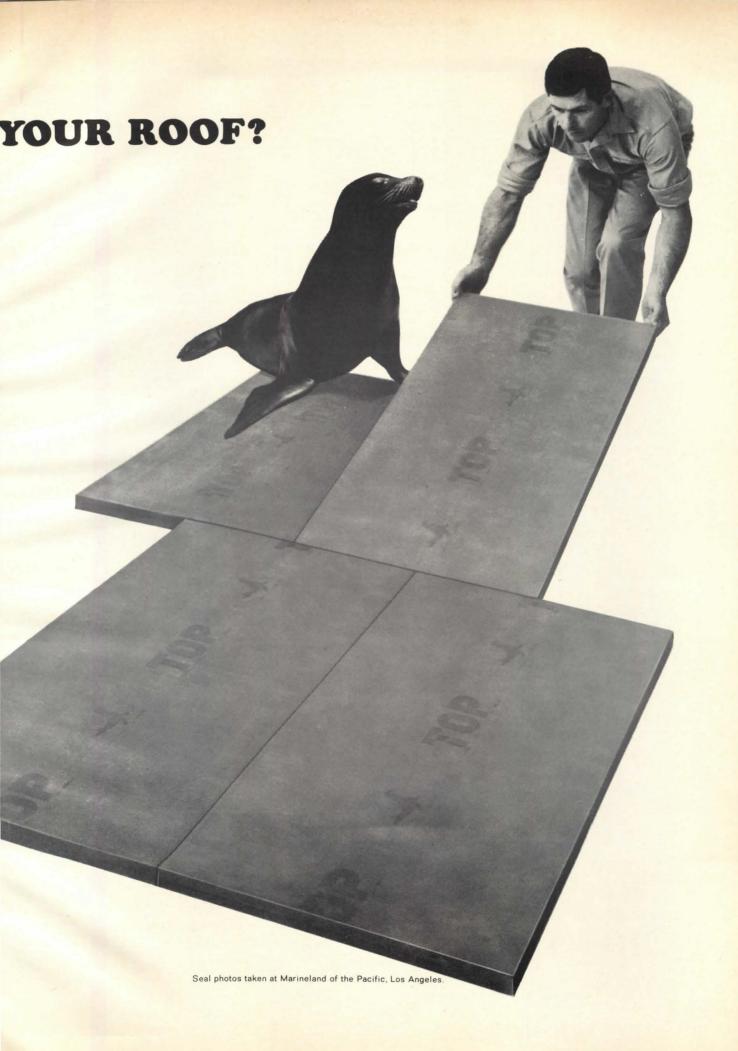
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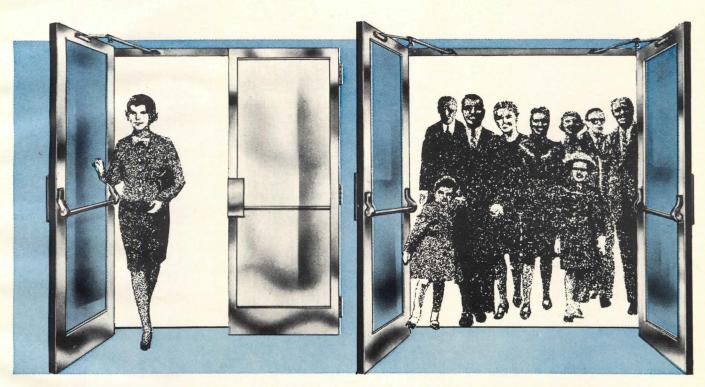
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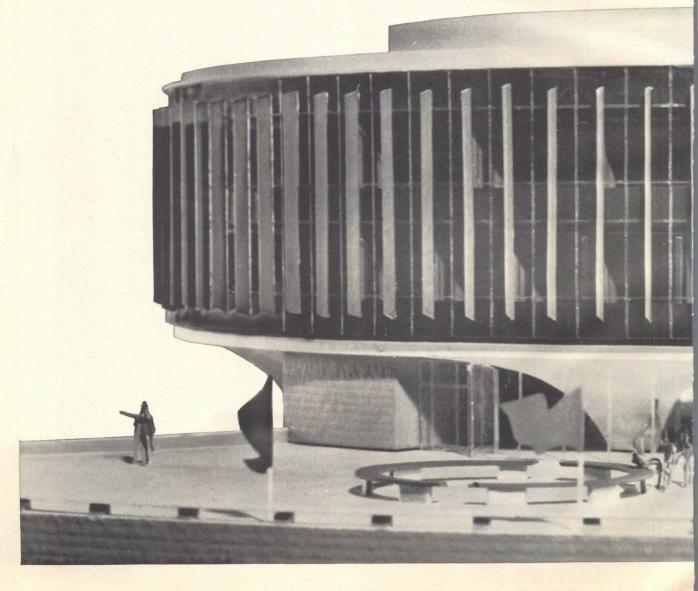
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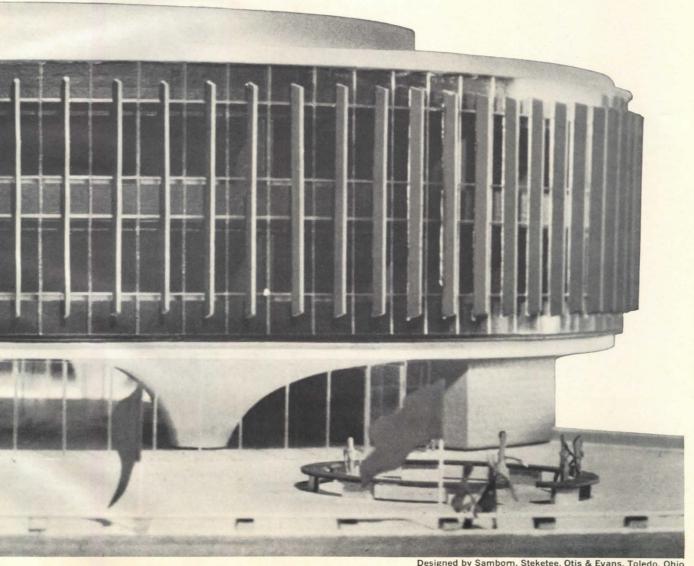
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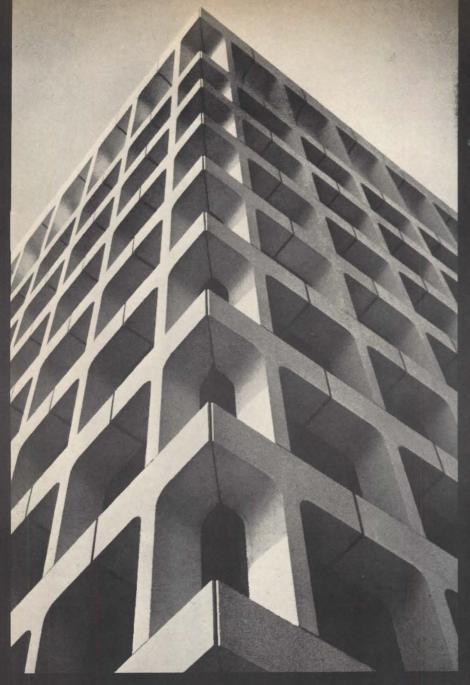
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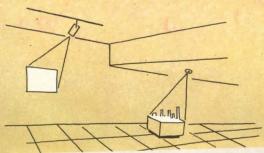
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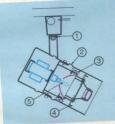
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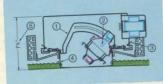
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1. Projector support provides 0°-45° angular adjustment and rotates through 358° horizontal arc with positive stop and lock. 2. 75W-28V lodine Quartz Lamp; 2000 hour lamp life. 3. Spring loaded latches permit removal of housing for acloaded latches permit removal of housing for access to splice and/or top relamping. 4. Reversible (Duo-Cast) trim. 5. Can be installed in 8" joist construction.









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January 1967 PROGRESSIVE ARCHITECTURE

"We are getting away from the architecture of exclusion to which we've been exposed for most of this century to an architecture of inclusion."

JUROR COMMENT, FOURTEENTH ANNUAL P/A DESIGN AWARDS PROGRAM



What is good design? There are as many answers to this question as there are definitions of beauty, morality, freedom, and all the other abstract ideas. People for ages have argued the merits of their particular concepts, have written dissertations, books, plays, and poems about them, have sometimes even fought and died for an abstract value in whose rightness they firmly believed.

Yet many concepts — and goodness is one of them — are not only subjective and relative, but also changing. What was good yesterday is not necessarily good today, although it might become good again tomorrow. These constant shifts, so often discernible in contemporary design, are interpreted by some as mere fads or fashions, but by others as logical reflections of the fast-moving, fluid, experimental, constantly changing world of today.

Assuming that changing values are a reality of contemporary life, jurors entrusted with the task of premiating projects for design excellence have a difficult, and somewhat paradoxical, problem: They are burdened by their own current idiosyncrasies and yet have no neutralizing guidelines of the common ideal of an epoch—of a generally accepted set of values that could be called group idiosyncrasy.

Faced with this delemma, some jurors attempt to create a set of criteria for making their selection — a sort of codification of "good design" principles. Members of the P/A Design Awards jury in 1960 attempted to formulate such principles. This year's jury, on the other hand, declared that "architecture has multiple measures of excellence" and that therefore no common standard applicable to all projects can exist.

It seems a wise decision when one considers the extremes of contemporary work. In scope, it ranges from commissions for ministructures, such as vacation cabins, to huge megastructures that are, in effect, urban-like organisms. In intent, from singular objects that allow for inclusion of highly individual expressionism to mass-object design aimed at an industrialized solution to the building process. In motivation, from ego-crushing anonymity of non-building buildings — those "connective tissues" discussed on subsequent pages — to sculpturesque iconolatry of what some call the silly-putty buildings. And in social purpose, from the provision of basic necessities of life to no-budget-restriction flights of affluent fancy.

That these extremes do happen is inevitable. In a pluralistic society, we have pluralistic architecture. Consequently, it would seem, we must employ pluralistic value judgments. This the jurors not only recognized but also accepted as something natural and, therefore, not necessarily evil at all.

If one wants to search for some common denominator that links together all the premiated projects, there is one that does exist: Whatever the scope, intent, purpose, or motivation of a design might be, an attempt at design excellence involves invariably a grinding super-effort. This struggle, both with the self and with the external influences, one can sense when leafing through the pages of this issue.

It is an ancient strife and one that never ends. As our old friend Vitruvius has said: "I have not studied with the view of making money by my profession; rather have I held that a slight fortune with good repute is to be pursued more than abounding wealth accompanied by disgrace." As long as there are enough people in a profession who feel this way, outstanding work will be done.

Jan C Rowan



FOURTEENTH ANNUAL DESIGN **AWARDS PROGRAM**

DART

"I think the focus on quality makes quality," commented Vincent Scully during the judging of the Thirteenth Annual P/A Design Awards Program. In this spirit, five brave professionals have once again run the gauntlet of project submissions of all building types and all degrees of competence from every part of the United

Arriving bright and eager at P/A's offices on Park Avenue last September 19, they spent the next two days arguing, joking, philosophizing, becoming excited over a design discovery, being let down by a submission that failed to come off, and generally living their way through current American architecture as it was represented by the contents of a 25-ft-long conference table — 652 hopefuls whose designers knew that theirs was the top contender. Late on September 20, a thoroughly exhausted group of jurors, having winnowed the entries down to 19 winners, accepted the thanks of the P/A editors and vanished into the night, probably wondering what the devil they were doing in such a maddening, exhilarating, rewarding game as architecture.

The heroic five were Joseph Passonneau, Dean of the School of Architecture, Washington University, St. Louis, elected Jury Chairman; David Crane, Chairman, Civic Design Program, Graduate School of Fine Arts, University of Pennsylvania and a practicing architect and planner; Edward D. Dart, partner in Loebl, Schlossman, Bennett & Dart, Chicago; Charles Moore, Chairman of the Department of Architecture, Yale University, and partner in the firm of Moore, Lyndon, Turnbull & Whitaker; and Sepp Firnkäs, Structural Engineer, Cambridge, Mass., and Associate Professor of Civil Engi-



CRANE PASSONNEAU MOORE

neering, Northeastern University, Boston.

One thing that soon became apparent during the jury meeting was that the old technique of dividing projects into categories - health, recreation, education, urban design, etc. - seemed more and more arbitrary, so that a tiny clinic might be vying with a huge general hospital, an elementary school with an entire new campus, a main street prettification plan with a serious large-scale program for a downtown redevelopment. Thus, although the jury examined all the submissions according to the conventional categories, it became evident that (1) the contemplation of the isolated building unattached to its surroundings and to the social, commercial, and political circumstances that gave it birth is of less and less interest to responsible architects, and (2) the qualities or elements that two superficially unrelated projects might share — use of space, social responsibility, relation to environment, to name a few — could quite possibly be more indicative of worth than their individual qualities as separate acts of design. Consequently, this Design Awards issue of P/A for the first time breaks the old mold of building-type categorization and, in a series of articles, treats the winning projects as illustrative of the interests, enthusiasms, and antagonisms of the jury that were sparked into flame by the 652 submissions.

The design problems that the 19 winners successfully broached range through most aspects of architecture today: the design of open spaces, buildings as connective topography, the allusive quality of design, city planning for agencies vs. the developer client, handling super-scale, solving social problems, and designing for the good life.

First Design Mward

The top winner, Walker & McGough's Convent of the Holy Names in Spokane, Wash., does not fit neatly into any of the subsequent articles. Its unique nature makes it legitimately a separate thing, an isolated work of architecture. At the same time, it is in essence a tiny religious community designed into an integrated building complex, with the consequent problems of relating a number of varying functions and activities: living, worship, study, maintenance, recreation, dining, guest accommodations, etc. The circulation that ties all these areas together caught the enthusiasm of the jury. "You circulate vertically from these layers down into various functions: library, dining rooms, and the like. The thing that appeals to me most about this is the circulatory system from which the building takes its form. Too many architects do things like this that go on forever in miles of corridor space without relating to the thing being housed."

Relation of the building to the site occasioned these comments: "It has a certain order of its own, which is also derived from the site. The site plan relates wonderfully well to the topography both from the standpoint of use and getting light into the building."

One juror noted that "The plan suggests that you have elements — neighborhoods, in effect — of housing units within a large complex whereby these particular living complexes achieve a degree of identity. I believe that the other, more general functions of this convent have been very well worked out, with a minimum degree of tricks."

The simplicity of the scheme won total jury approval: "There's not a zap in it," one said. "Yeah, no zip. It deserves an award," responded another. "Not one zip or zap or zoop," said a third. "And it's a magnificent section, besides," summed up a fourth juror.

"The approach of the placing of the elements on the topography works with the concept of circulation and with the concept of natural lighting."

"I think that the chapel, which is the nucleus of the whole thing, the raison d'être of the plan, is appropriately located; that the guest areas are very well worked out with a center lounge-fireplace complex with guest rooms surrounding. I think it's an extremely well-organized plan."

"I agree. It's simultaneously very orderly and very rich, and it's got variety and all kinds of Piranesi excitement in those great spaces out of very simple, formal means." WALKER & McGOUGH,
ARCHITECTS
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GARY H. LARSON,
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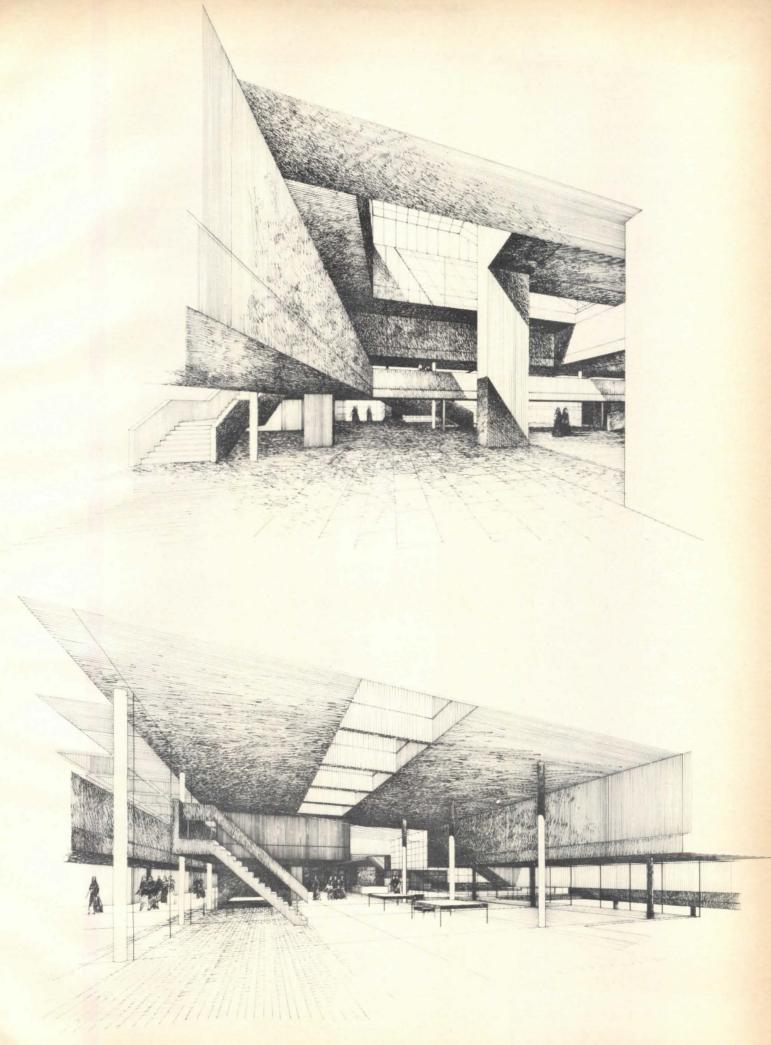
PROJECT: Convent of the Holy Names.

LOCATION: Spokane, Washington. CLIENT: Washington Province of the Sisters of the Holy Names. SITE: Located on a former military reservation a little more than three miles to the northeast of downtown Spokane, the site is separated from the encroaching city limits by a horseshoe bend of the Spokane River. The convent is further isolated by an embankment on the city side, which rises 80 ft above the site center. A primary, hard-surfaced country road forms the north boundary and will provide access at the north and northeast. The 76.6 acres of major and minor slopes are covered with a growth of Ponderosa pine. Two other institutions share the grounds. A little more than a mile further to the west is Fort Wright College, and between it and the novitiate lies Spokane Community College. DESIGN SOLUTION: The architects felt that the convent, as a unique community, called for an atmosphere of vitality and light and a serene environment strongly expressive of the religious calling.

Analysis of the life within the convent yielded the relationships that gave direction to the design of the building. Communal living with a singularity of purpose (a religious community) dictated a single, yet articulated structure rather than a structure or structures composed of fragmented parts. The expression of the major elements and the massing of the buildings seek to emphasize their utility.

The function of the convent communities is organized around a circulation gallery that forms a common spine not unlike city streets. All major functions are directly related to the two levels of this spine. It is bent in the form of an "L," creating a grand gallery at the intersection of the opposing arms. As the center of community life, the chapel is located at this primary significant intersection.

The convent, which has public access as well as its cloistered aspects, is located well back on the site to insure privacy, and on a crest of ground affording the best







views from the private side, looking downhill through the trees to the Spokane River. Living units are arranged so that each has an unobstructed view from the building, which follows the slope of the terrain.

The convent will be the mother house for the State of Washingington, and, in addition to facilities related to the community, will include a provincialate, a retirement and infirmary section, and a juniorate and a novitiate.

List of facilities includes: provincialate; visiting, active, retired, and infirm sisters; juniorate; novitiate; kitchen-dining; chapel; chaplain's residence; laundry; garage; boiler room; and recreation structure.

The Provincialate: Offices for the administrative and business operations of the province, in addition to these administrative spaces, bedrooms, and auxiliary facilities for the board, will be housed within this area.

Visiting Public Entry and Lobby Space: A telephone center controls the entry. Parlors for public visiting and two parlors equipped with sleeping facilities for overnight guests.

Retired and Infirm Sisters: Includes housing, work area, library, community, recreation areas and auxiliary facilities for active, retired, and infirm sisters. In addition, office space for the administration and business of the convent will be provided.

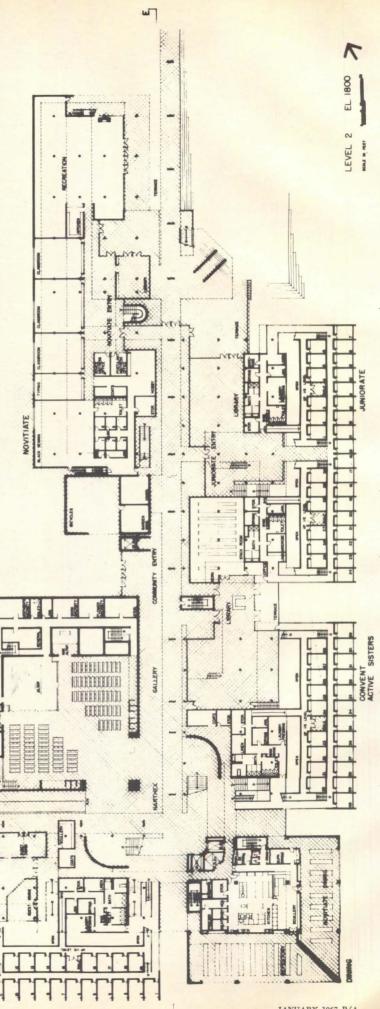
Juniorate: Housing, classrooms, library, study facilities, work areas, recreation areas, and auxiliary facilities for 80 junior sisters. In addition, office space will be provided for the juniorate mistress.

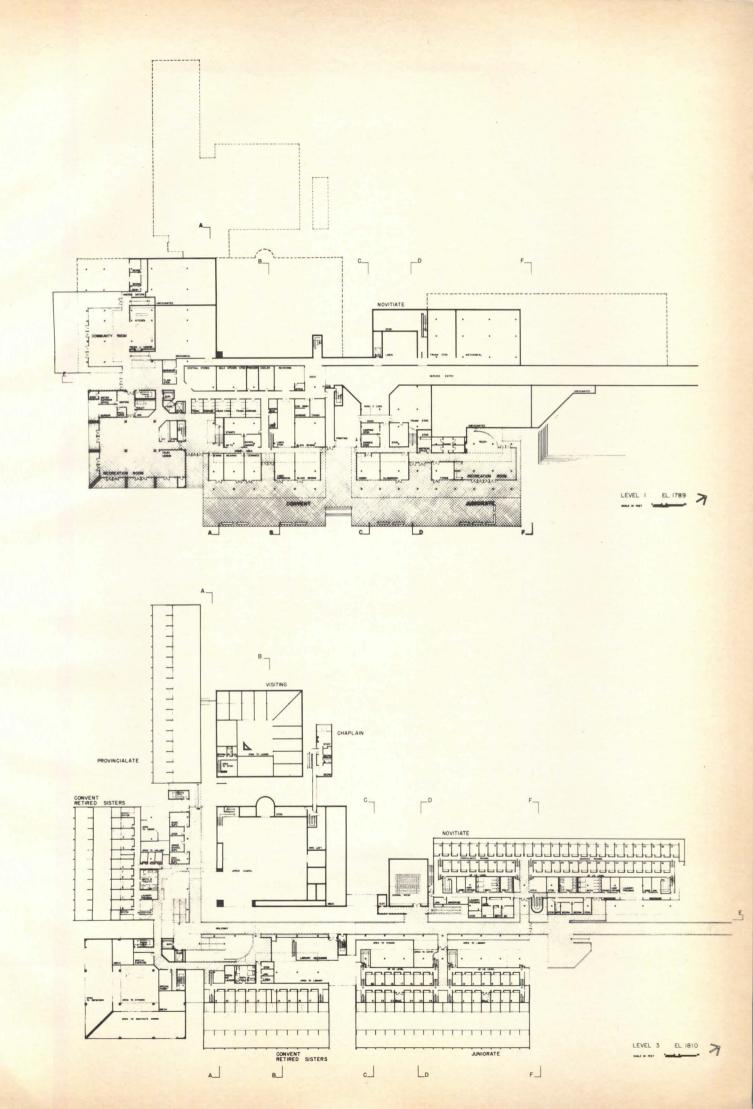
Novitiate: Housing, classrooms, library, study facilities, work areas, recreation areas, and auxiliary facilities for 30 postulants and 60 novices. The facility is separated from the other parts of the community and will require certain of the facilities provided for the professed sisters. In addition, bedrooms and office space will be provided for the postulant and novice directresses.

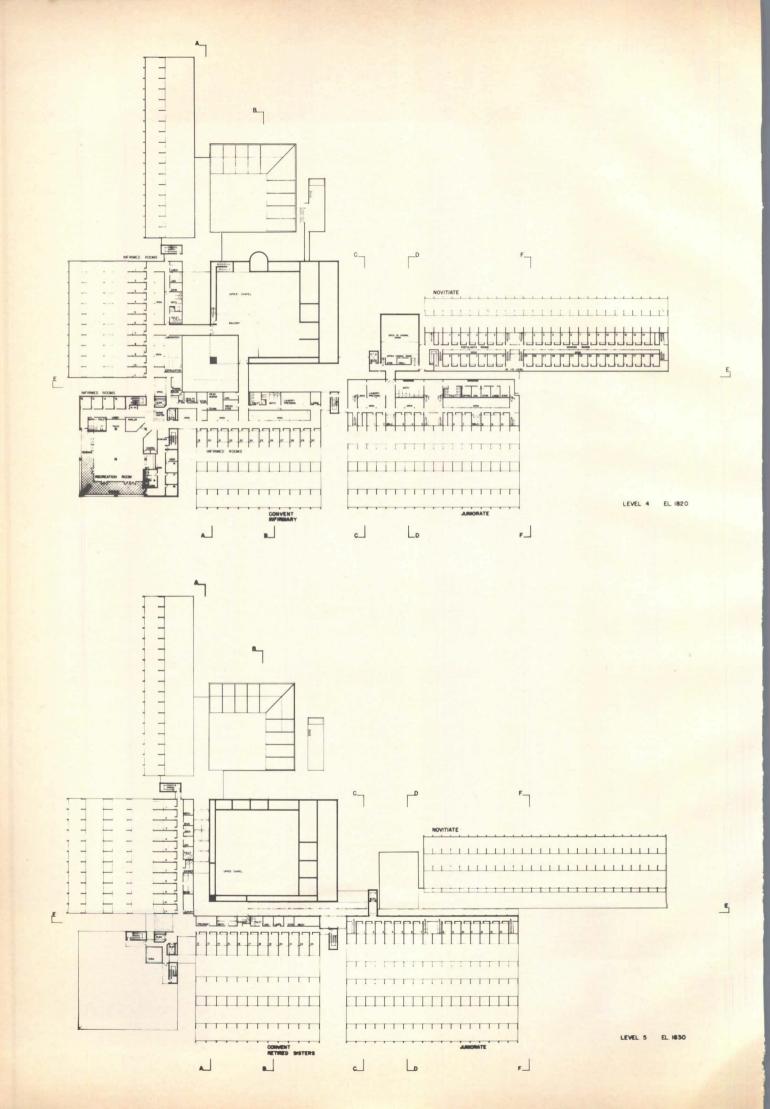
Kitchen-Dining: A central kitchen facility preparing 9000 meals per day for the entire convent, including a special dietpreparation area handling 45 trays per meal.

Chapel: Centrally located due to its communal importance. Seating for 340 normally, with pews of sufficient length to accommodate 500 on special occasions. In

PROVINCIALATE







addition, a balcony will be provided for 10 infirm sisters in wheelchairs and 40 sisters in freestanding chairs. The arrangement of the nave will provide for seating near the altar and appropriate ceremonial space.

Chaplain's Residence: Will be a separate building providing housing for the priest assigned to the convent. It will be oriented away from the convent, with its own separate entry having a bridge connection to the chapel.

Laundry: A separate building to process the entire convent laundry on a weekly basis.

Garage: Shelter for the convent vehicles. One bus, four passenger cars, one truck, one tractor.

Recreation Structure: An openair, covered recreation space to be completed in the future. It will be designed to allow flooding, thus permitting ice-skating in the winter. Toilet facilities and storage for athletic equipment will be provided.

STRUCTURAL SYSTEM: Reinforced concrete. Roof: Standing seam metal over reinforced concrete. Interior: Bearing partitions, reinforced concrete with architectural finish where not furred for painted drywall. Nonbearing partitions, hollow masonry units or metal studs and sheetrock. Ceilings: Exposed concrete with suspended ceilings in some areas. Windows: Metal sash, horizontal sliding or projected sash units, double glazed.

JURY COMMENT: —I think it's extremely exciting in an obviously La Tourette-derived way. It's got a lot of rooms along the edges and then enormous spaces which sort of stack up.

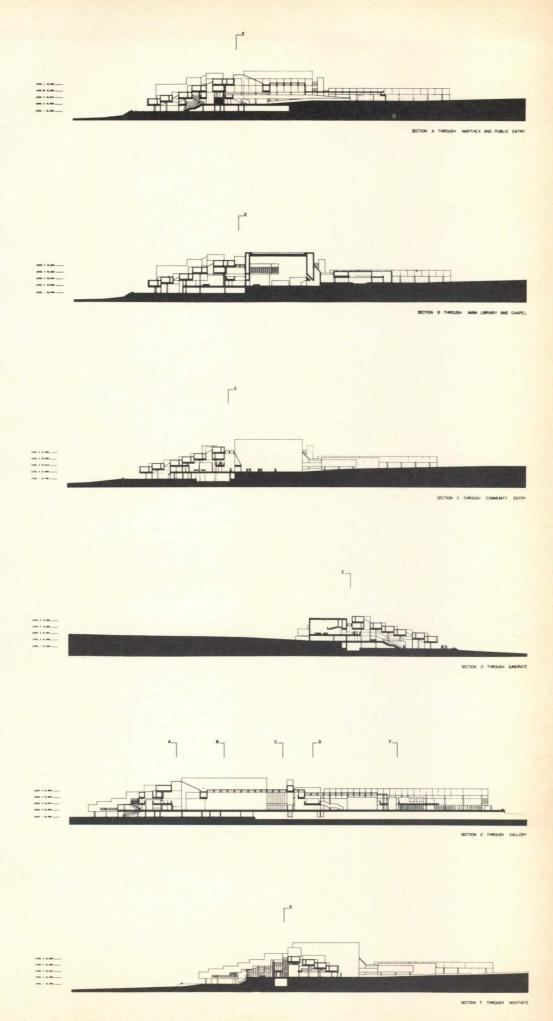
The sections are magnificent.
 The whole plan comes off beautifully.

— I think it is an important thing.

— It seems to me an enormously complex big building that is at once orderly and full of really rich and evocative great space. It's extraordinarily skillful.

— I like the way it sits on what we take to be a single piece of ground in the bend of the river.

— We are delighted to find a plan without a single zop and only a slight zap (in section). But it is just crammed with group form and has more than a pinch of megastructure. I think it is very much overblown for a convent which, after all, is not exactly a monumental operation.





BUILDINGS AS CONNECTIVE TISSUE

A feature of some of the Design Awards entries that attracted all the jurors was the willingness of some architects to insert their buildings into existing complexes in an almost anonymous way - to make them part of the movement pattern and of a whole with the surrounding neighborhood. This trend (hopefully, at least, a trend) runs counter to what a juror described as "the standard early 20th-Century thing to do, which would have been to plunk down some other building that would use up the space and call attention to itself and not the things around it." The Rice student union and the Hardy performing arts center won the praise of the jury because "they both are enormously strong by virtue of coming into the middle of a complex set of buildings, going either underground or into forms without much outside shape that connect places in a pedestrian-use sense as well as performing their own functions." "It's nonbuilding," said a jury member, only to be contradicted by another who pointed out that such "nonbuilding" was really a significant new design approach. One juror affirmed that "the mood of this jury about what's important in integrating building and spaces is better expressed in these two than in any of the bigger scale urban design projects that are supposed to be knitting together a bunch of disparate elements." Such projects show, in the opinion of another jury member, "that a building can be approached from the standpoint of its position in a circulation system and in relationship with other established things in such a way that it does not have to become an object in itself." "Really, they are nonmonuments," added a colleague; "they don't have that propensity of much of 20th-Century architecture to be sort of sculpture-like, sitting as an object to be admired from all sides. They are the best examples we have of urban design background architecture, demonstrating that background architecture isn't simply something with plain, straight curtain walls.'

JOHN STEPHENS RICE, ARCHITECT

CARL J. HUNTER,
PARTNER IN CHARGE OF DESIGN
JOHN S. RICE,

MARK C. ENGELBRECHT, PARTNERS

WILLIAM BOSSENBERGER, STRUCTURAL ENGINEER BROOKS-BORG,

MECHANICAL ENGINEER

PROJECT: Student Union, State College of Iowa.

LOCATION: Cedar Falls, Iowa.
CLIENT: State College of Iowa.

SITE: Now known as the "back circle" of the campus, the site is surrounded by academic buildings: to the west is the library; to the east are older buildings that will eventually be razed; to the northwest and southwest are the dormitory complexes. Master-plan studies indicate that the "back circle" area will continue to function as the academic core of the

campus.

PROGRAM: A facility designed to supplement academic life by meeting the requirements of informal union, as opposed to purely social or recreational needs of the 6000-student college. Immediate needs were for 60,000 sq ft; expansion to from 90,000 to 200,000 sq ft was to be allowed for. However, it was impossible to make any definite commitment regarding function or eventual size. The spirit of the program and the college indicates that expansion would probably be to the low end of the area and would include additional support facilities.

DESIGN SOLUTION: A minimum mass above grade allows the "back circle" to remain open and continue to function as a student pedestrian way. Basically an underground building, the twostory solution reinstates the existing pedestrian traffic routes both outside - that is, above the structure - and inside. It also enriches the experience by forming spaces that encourage and implement the interaction between students and faculty. The plan organizes both levels around a central function with a working ambulatory maintaining activity, visual connection, and opportunity of choice of "ex-



RICE



HUNTER



ENGELBRECHT

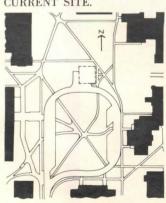
periences" in the architecture. The central structure housing the main commons area is defined by four monitors, which are the primary sources of daylight for the interior and of night-lighting for the plaza. Three of the monitors mark stairs that allow light to enter the lower level. Expansion underground is possible to the north and east; a major expansion could be accommodated by building upon the extended plaza to the east.

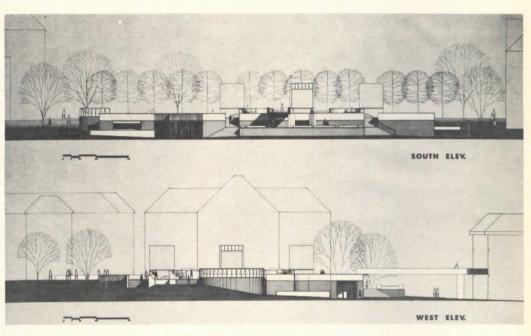
CONSTRUCTION AND MATERIALS: The basic structure consists of waffle slabs in independent bays (29'-9" square); the spaces between are used for lateral distribution of mechanical services for the upper level. The columns beneath the monitors support pairs of cantilever beams that "dome" the commons. Materials are exposed concrete and brick; the plaza surfacing is brick, which matches existing walks and roads on the campus, and concrete dividing strips.

JURY COMMENT:

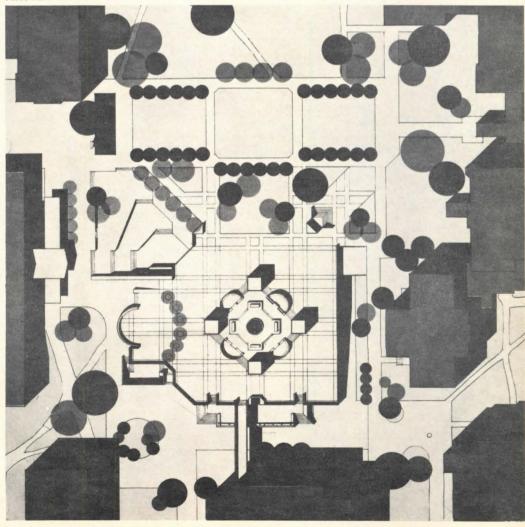
- The nice thing about this one is that he stuck it pretty much underground.
- He's looked at it as part of the whole site, which I admire very much.
- I think it's a hell of a nice siteplan idea.
- -He still has a campus space surrounded by buildings in which his project site is part of the whole.
- His building is a street.
- The top of his building is a street anyhow, and the insides, too, are a street.

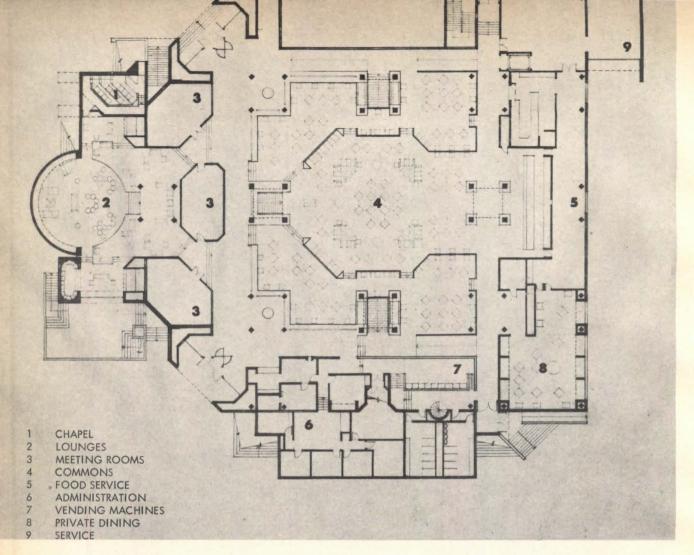
CURRENT SITE.

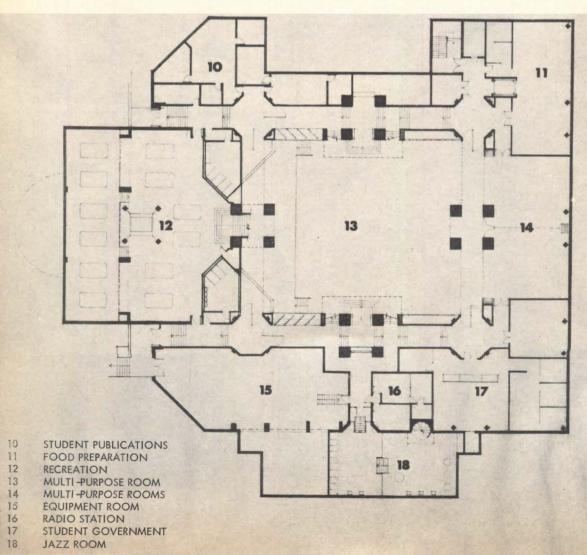


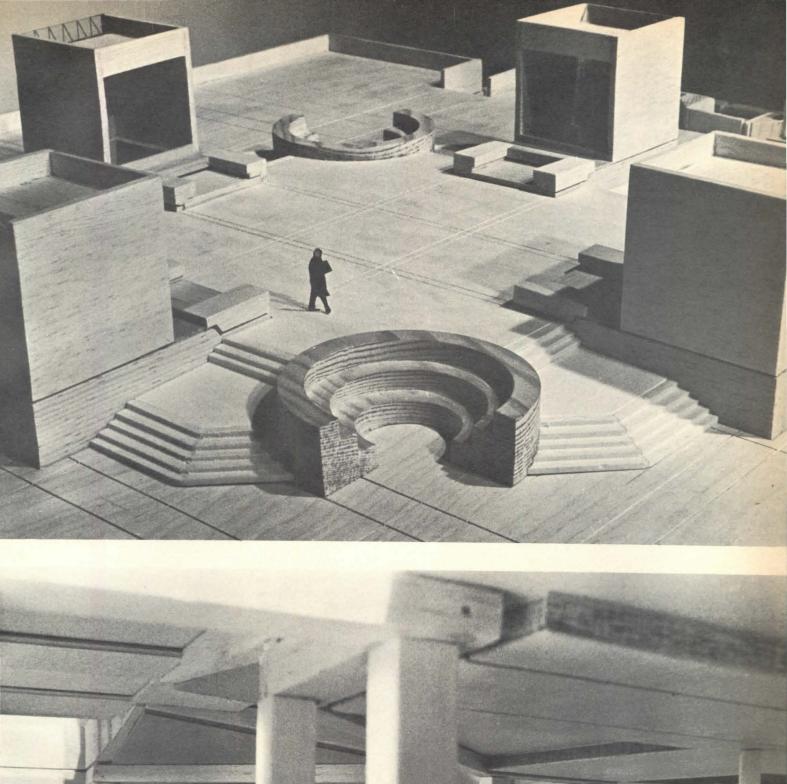


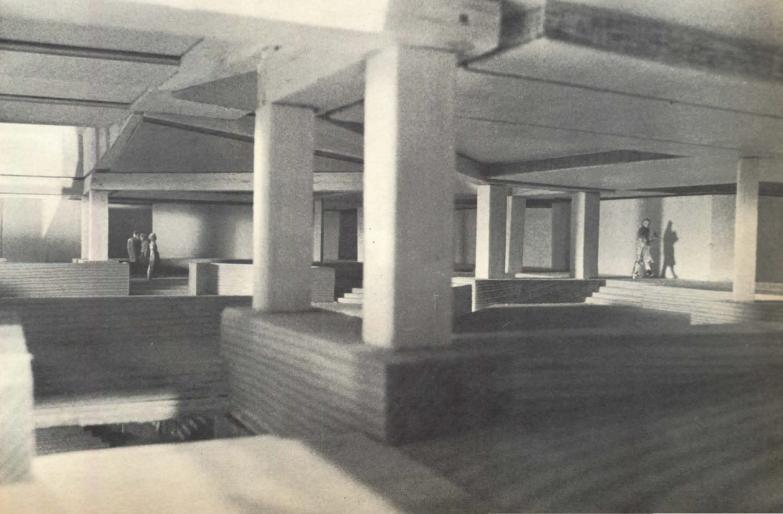
MASTER PLAN.













HUGH HARDY & ASSOCIATES AND HAHN & HAYES, ASSOCIATED ARCHITECTS MALCOLM HOLZMAN, NORMAN PFEIFFER, ASSOCIATES RAYMOND C. REESE ASSOCIATES. STRUCTURAL ENGINEERS EDGINGTON, BLACKNER ASSOCIATES. MECHANICAL ENGINEERS LYNN W. FREY, STATE ARCHITECT OF OHIO ROBERT HANSEN, M. J. KODARAS, ACOUSTICAL CONSULTANTS



HARDY



HOLZMAN



PFEIFFER

PROJECT: Performing Arts Center, University of Toledo.

LOCATION: Toledo, Ohio.

CLIENT: University of Toledo.

SITE: A centrally located campus parking lot that has the strong tower of University Hall to the north and the anonymities of the Student Union to the south.

PROGRAM: A campus center to bring the performing arts into focus as a vital part of liberal education. There, students are to be encouraged to mingle as a matter of course; the public audiences attracted by performances are to find their attention concentrated on the campus. To be built in two stages due to limited funds, the complex is to act, while in its incomplete first stage, as a symbol for future growth. It is, nevertheless, to be a working whole in both phases of the program. The first phase is to include construction of a theater, concert hall, lobby, and music studios; the remaining facilities - an experimental theater, costume and scenery shops, lecture and practice rooms, administrative offices, and a listening library - are to be added in four quadrants. Since no funds are available for the nostalgia of walks and malls, this project must become the central landscape of the campus. As such, it must admit the short-cut passer-by as well as those having a destination in the building; the exterior and interior must be walked over and through.

DESIGN SOLUTION: To prevent the building from becoming a dividing wall between east and west. paths short-cut through exterior open spaces and into six entrances at three interior levels. Doublelevel entries, ramps, and bridges also are techniques used to beguile the pedestrian and encourage a common involvement in the center. To avoid making another free-standing object on the campus, these walkways and sloping roofs are employed to subordinate the large volume to the surrounding buildings.

A 500-seat theater auditorium is fragmented into eight seating sections that thrust forward to define the action; fragmentation allows intimate use at less than full

capacity for readings and lecture demonstrations. A 500-seat chamber-music hall is shaped by inward stepping rings of boxes that surround a wedge of fixed seats. A bandshell is of polished plate glass, acoustic ceiling diffusers of automobile windshields. Two kinds of seating and acoustic treatment of boxes allow optimal aural quality at half capacity. The lobby that connects these two facilities is a "maze" of 34 different door openings on three basic levels that are interpenetrated vertically by holes, two-level mirrors, and neon graphic identification. Not a 19th-Century container, the lobby is, rather, a continuing experience that invites motion and evokes curiosity.

CONSTRUCTION AND MATERIALS: Seating sections of the two auditoria are formed of reinforced concrete. These are enclosed by steel framing that supports an angular skin of metal roofs and unit masonry walls. All structural and mechanical work is exposed on the interior, Concrete and Lanon stone, which provides surface continuity with existing buildings, are used for finished surfaces; block and brick identify temporary walls. Openings in all walls are arranged to form complete patterns on the exterior regardless of additions to follow. The structure thereby speaks conclusively, yet authoritatively stands unfinished.

JURY COMMENT:

- Instead of making his new unit a contender for fame and fortune, he makes it a kind of connection among these buildings so that it doesn't have any shape in itself but is a part of the circulation.
- —It makes admirable use of site and level changes to provide involvement with the building, even for those who don't have a particular goal there.
- This demonstrates one important approach to an urbanistic problem.
- One that has received too little attention.
- —I have reservations for the simple reason that the space is not that intimately connected with the structure.
- -Yes, there is no interest in an

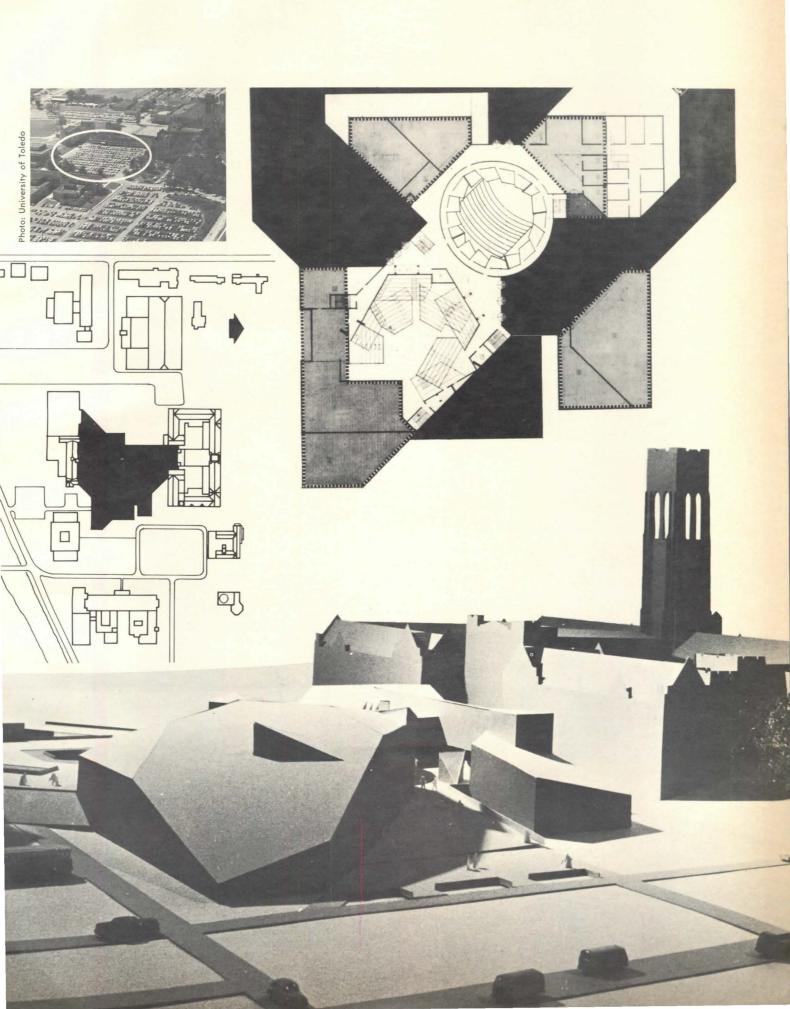
- exposed structural system. He's entirely interested in the spaces and light.
- It's no more difficult to make a simple, elegant structure than it is to make an awkward structure.

 The structure is not awkward here; what is complex is the ge-

ometry.

- It's just awkward. In the switching over from the different buildings, he has here two entirely different materials, and from a structural point of view an entirely different approach. Structurally, there is no continuity in any
- one of these buildings.

 Why is structural continuity among all of them a virtue?
- —It is not a virtue; it's a convenience. Today we are in the time of industrialization, and finally it even gets into the building industry.
- He's tried to build up the mood of the interior and the capacity to have it change with the lighting so that the stage and the people are all part of the same thing. He's dramatized the people to the point, certainly, of some inefficiency in the intimacy of it all. Yet the people are part of the drama, too.





CONFRONTING SOCIAL PROBLEMS

Four projects that won Citations are notable because they illustrate the architect's growing involvement in the solution of social problems of various kinds. The Elderly Municipality in Puerto Rico is a good example of sympathetic housing for one of our constantly-growing population groups — old people. The Boston housing project, premiated mainly on the basis of a wellplanned, economic structure, is designated for a minority group — the Chinese community of that city. Whether planning for specific minority groups in this manner intensifies problems rather than offering solutions is a matter the jury did not discuss. The University of Tennessee Training Center for the Mentally Retarded is another notable milestone in the recent laudable trend of rehabilitation and progressive care of the mentally afflicted rather than the waste - economically and in human terms - of quasipermanent institutionalization.

As admirable as the social aims and probably results of these three projects are, however, they represent commissions in which the architect was handed a problem and asked to be a major factor in solving it. The New Haven Neighborhood Youth Recreation Center is another matter. Here, four students of Peter Millard at the Yale Department of Architecture selected as their own school problem the creation of a recreation place for nonprivileged juveniles in a New Haven slum area. They not only programmed and designed the facility, but will follow through and see it built. One juror said, "I think an anthropologist working in this area would probably tell you that this is exactly the kind of space that'll turn those kids on and disarm them enough so that they'll listen to the expert who has been sent around to rehabilitate them — because the space is not some middleclass kind of thing. I don't say it's a great work of architecture, but to me it's a small symptom of what ought to be happening an awful lot more - architects getting socially involved with really important issues - the Yale kids who have done this are grappling with those issues." "This is what these designers think will turn these kids on," said another juror. "It may not, but whether it does or doesn't, the architects are trying; at least they are trying, and I think they are doing it in ways that are kind of ancient architectural ways. They take architectural materials and architectural functions and spatial ideas and mix them together, because the vernacular is what you respond to and it's exactly the vernacular that these guys are interested in here."

JORGE DEL RIO, ARCHITECT EDUARDO LOPEZ, JOB CAPTAIN



DEL RIO

PROJECT: Residences for the Elderly.

LOCATION: Cidra Municipality, Puerto Rico.

CLIENT: Sociedad Agricola de Agronomos and The Farmer Home Administration.

SITE: Landscaped hillside overlooking the village of Cidra. Approximately 10-acre plot.

PROCRAM: To provide residences for elderly people who, in the architect's words, "can afford some work as a mental aid to their antiquity."

DESIGN SOLUTION: Sixteen units

grouped around varyingly sized plazas to provide for formal and informal gatherings. The social hall faces the large courtyard located on the central axis of the combined unit and plaza grouping to emphasize its importance as a community center. Vehicular traffic has been segregated to reserve inner-court circulation for pedestrians. A series of 500 garden plots, 100 sq ft each, have been located on the surrounding slopes near the units for convenient access from the residences.

MATERIALS: Cast-in-place reinforced concrete with vertically scored forms. Wood slabs stained dark walnut. Exposed aggregate concrete tile paving.

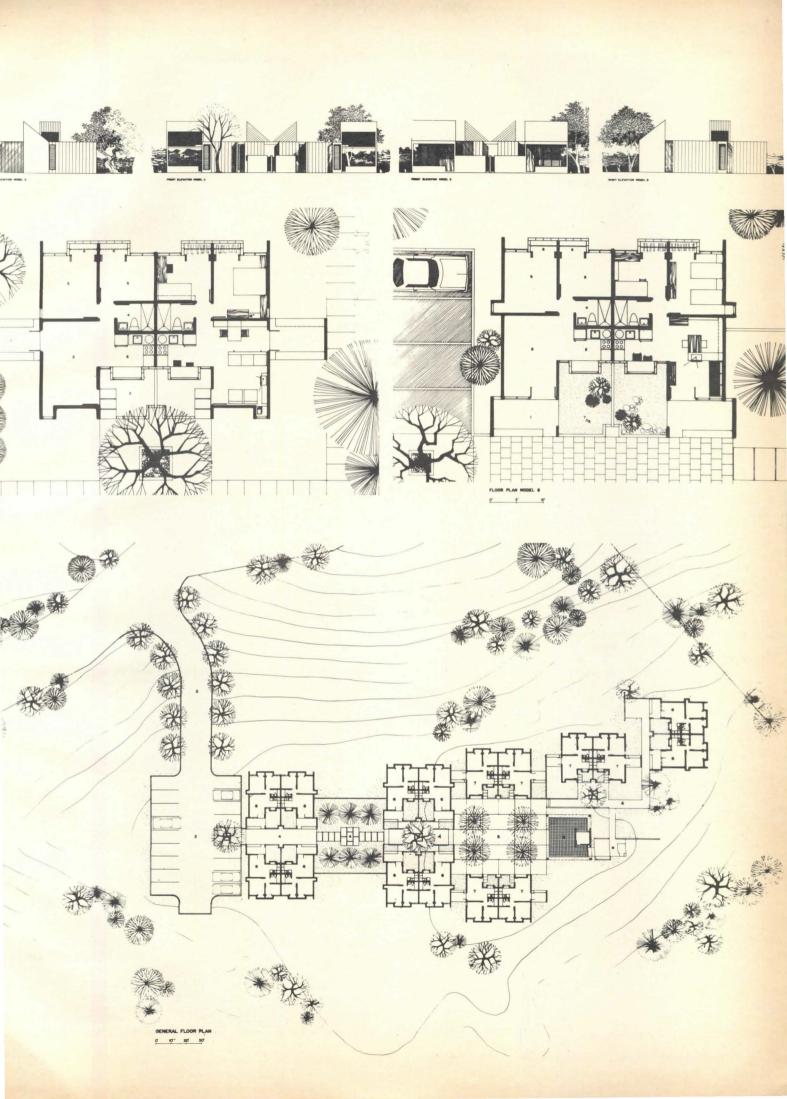
JURY COMMENT:

— A set of low-cost houses that operate off a rather coherent central space that has some changes as one goes down it. It features parking way up in one end and people are a long way from the parking in the other, but, in Puerto Rico, leisurely walks in the sun are part of the day's work.

— It's well organized in a way and this helps to structure it. It's a very interesting solution.









FREDERICK A. STAHL & ASSOCIATES, INC., ARCHITECTS FREDERICK A. STAHL, PRINCIPAL IN CHARGE HARRY P. PORTNOY, PROJECT ARCHITECT CARL KOCH & ASSOCIATES. CONSULTING ARCHITECTS SEPP FIRNKÄS. STRUCTURAL ENGINEER (Mr. Firnkas disqualified himself from voting on this project.) VERNE NORMAN, ELECTRICAL ENGINEER ROBERT BARSTOW, MECHANICAL ENGINEER



STAHL



PORTNOY

PROJECT: Housing for the Chinese community.

LOCATION: South Cove Urban Renewal Area, Boston, Massachusetts.

CLIENT: Chinese Urban Renewal Committee.

PROGRAM: The complex required the combination of multilevel housing at high density with neighborhood shopping facilities, combined social and recreational areas, and parking for all tenants. DESIGN SOLUTION: The solution provides a five-building complex of varying heights, ranging from a three-story building through a 22-story tower above a pedestrian plaza. The 22-story building acts as the core of the complex and contains the elevators, with the other multistory buildings linked to this structure by means of glazed exterior bridges at corridor floors. The first three floors of each building contain walk-up apartments. The skip-floor access allows for predominately throughfloor apartments for the larger units, while the bridges provide orientation enclosure and continuity throughout the project and permit exterior balconies for more than 40 per cent of the apartments.

The site is developed for parking one-half level below street grade and is decked over for private and public pedestrian activities; landscaping is on both levels. The commercial facilities are located in four of the buildings, with access from the plaza and street levels.

CONSTRUCTION AND MATERIALS: Structural elements are precast and post-tensioned concrete bearing walls combined with prestressed floor plank covered with resilient tile. Exterior nonbearing walls are textured concrete masonry with wood window units. Interior partitions are of metal stud and drywall construction; party walls are of precast concrete for sound isolation between apartments.

JURY COMMENT:

- This is a precast, prefabricated building system . . .
- That's not enough!
- -... for putting together very low-cost units but retaining a very

high degree of planning flexibility for the purposes of accommodating all kinds of dwelling unit combinations.

- It's a D-3 project in which there is an arbitrary percentage established by the Boston Redevelopment Authority that 10 to 20 per cent of tenants will be public housing tenants. The construction cost of the whole thing is under the early prototype comparable to conventional construction.
- One of the things I like about it architecturally is that it has a relationship between this fairly constant search you see around the country for a human scale that grows out of the structural system itself.
- The thing that disturbs me most is what you call human scale. I think that, if anything, the scale brutalizes it more than humanizes it.
- It's not the greatest site plan in the world in relation to circulation, but I've never seen any other practical low-cost housing

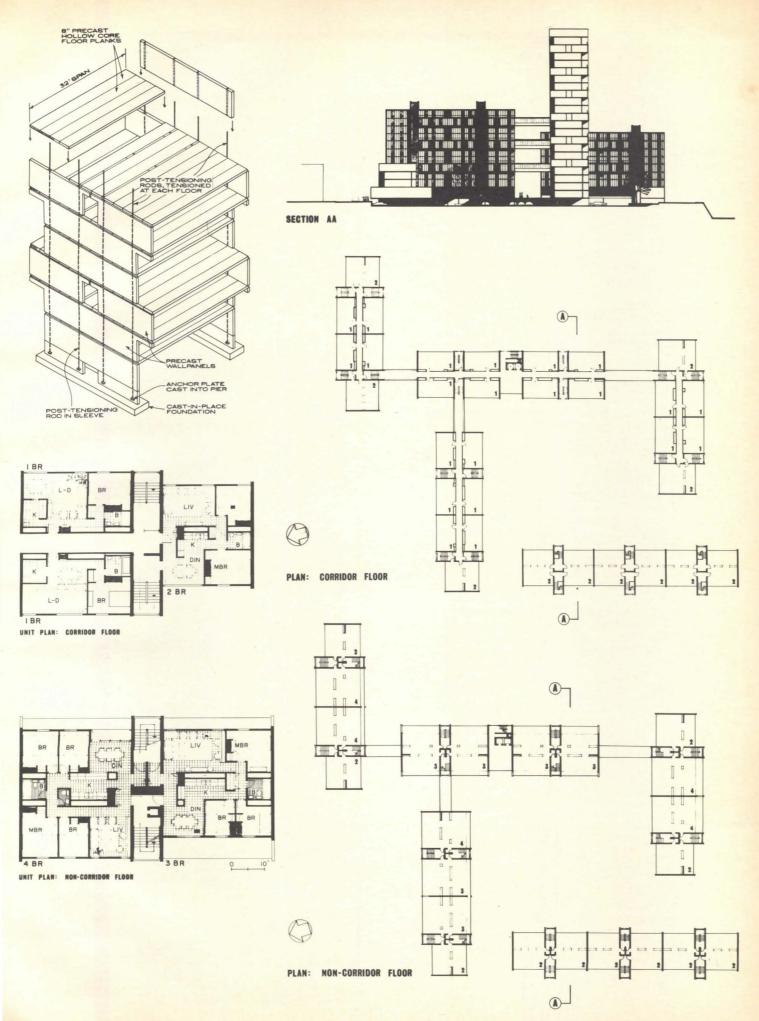
that had a sense of what kind of edge to make with big roads. But there is some virtue in the site planning in that they've got all the parking at a very high ratio under this thing.

- I think it's very heavy-handed.

 That may be true, but this is one of the few projects that had this search in which the search has some technological sense.
- That's where your argument is: The search should be given up, I think.
- Soul-searching is more important than the technology.
- In the category of low-cost housing, it's a good achievement.

 I'd put it differently. It does have limitations architecturally, or let's say formally, but there are other values in architecture.
- The cost per square foot is \$10 or less.
- I'd like to say that, as far as I'm concerned, the Citation is given for the system and for some of the floor planning rather than the architecture.





Citation

ROY P. HARROVER & ASSOCIATES, ARCHITECTS ROBERT B. CHURCH III CHIEF DESIGNER S. S. KENWORTHY & ASSOCIATES, STRUCTURAL ENGINEERS ALLEN & HOSHALL, MECHANICAL AND ELECTRICAL ENGINEERS



HARROVER



CHURCH

PROJECT: University of Tennessee Affiliated Training Center for the Mentally Retarded.

LOCATION: Memphis, Tennessee. CLIENT: Dr. Homer F. Marsh, vice-president and chancellor of the Medical Units, University of Tennessee.

SITE: Half-block parcel located in an urban-renewal area on the downtown fringe of a major urban medical center. Nearby buildings of the center are multistory brick, concrete, and limestone. The center ultimately will be surrounded by new medical buildings. The site slopes 20 ft from the main street in front to the secondary street at the rear.

PROGRAM: To design a universityaffiliated U.S. Public Health Service prototype building for medical education in the field of mental retardation. The facility to provide training for students of several universities in social work, education, nursing, dietetics, and related medical fields. The buildings must house a complex series of loosely related functions, including an independently supported day-care center for children with cerebral palsy, which must be incorporated yet retain its separate identity and function. DESIGN SOLUTION: Bring logical order to the complex variety of program functions and to provide vertical, open spatial punctuations for light, view, and controlled outdoor recreation and teaching on a limited urban site.

In plan, the project has been divided into three elements: the main tower block, housing clinic and teaching functions, which is centered on the site; the two-story administrative unit; and an entry wing at the front.

The administrative and daycare elements, together with the clinical evaluation suites on the sides and the library at the rear, form the low mass surrounding the main tower block. These low elements screen the site from heavy traffic.

CONSTRUCTION AND MATERIALS: Structural piers and beams are exposed concrete, rough white aggregate finish, interior and exterior. Wall panels of slate and graytinted glass; interior and exterior tower elements are brick. JURY COMMENT:

— The positive thing to start with is that there is a very orderly creation of a complete realm of spaces on a very restricted site. The outdoor spaces are very skillfully arranged, so that they seem a very pleasant part of the whole thing.

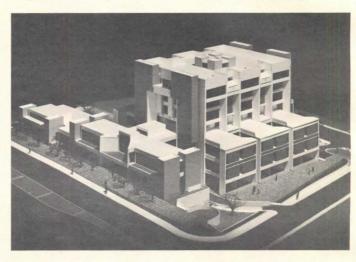
— I don't have enormous enthusiasm for this but I voted for it because I thought it was an extremely orderly, clear, well-done handling of a realm of spaces. — The plan needs to get light into these places but also provides that these edges are to be fairly brutal.

— Structurally, it's very well coordinated with the architecture. The use of those slanted walls at the same time for wind-bracing is excellent.

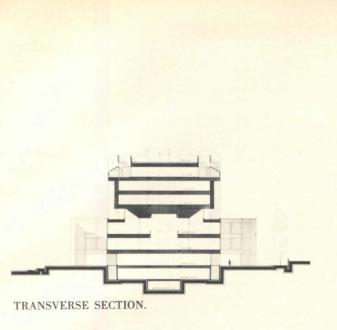
— . . . there are marvelous girlwatching zaps.

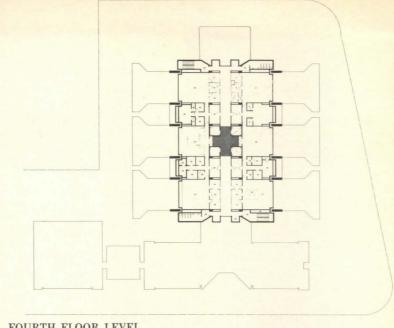
— Is it a zap when it's symmetrical?

- It's a symmetrical zap!

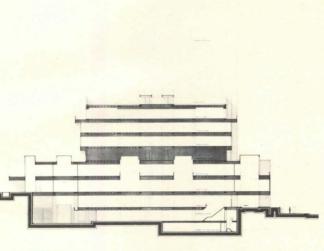




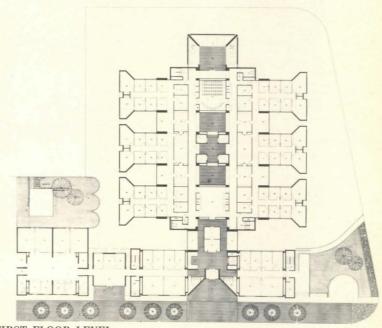




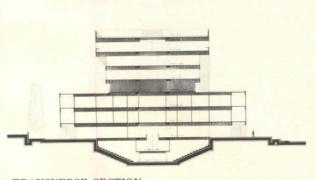
FOURTH FLOOR LEVEL.



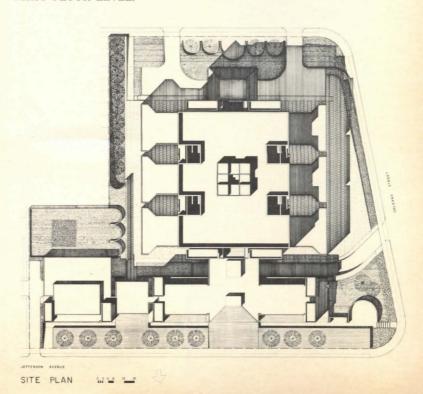
LONGITUDINAL SECTION.



FIRST FLOOR LEVEL.



TRANSVERSE SECTION.



Citation

ARTHUR GOLDING,
GERARD IVES,
LOUIS MACKALL,
DOUGLAS MICHELS,
DAVID RYAN,
DESIGNERS
SPIEGEL & ZAMECNIK,
STRUCTURAL ENGINEERS
SYLVAN R. SHEMITZ,
LIGHTING CONSULTANT



GOLDING



IVES



MACKALL



MICHELS



RYAN

PROJECT: A Youth Recreation Center. Last year, five third-year students in Peter Millard's design class at Yale's School of Architecture decided to find an actual project in the community to take on as a class assignment. They agreed with C.P.I. (Community Progress, Inc.), the local antipoverty agency, to develop the program, design, prepare contract documents, and supervise the construction of a new neighborhood youth recreation center.

LOCATION: New Haven, Connecticut.

SITE: Interior section of a block in the downtown warehousing district; to one side is the C.P.I. Skill Center in a converted factory; to another, quonset huts used as warehouses; at the entrance, a parking lot.

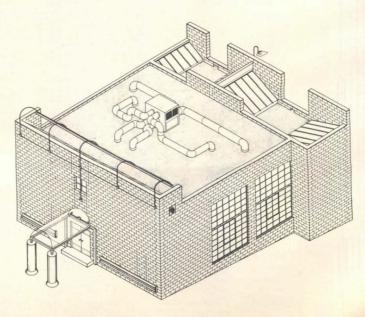
PROGRAM: C.P.I. wanted a recreation facility for the young people (aged 16–22) taking part in the job training and remedial education programs at the Skill Center. The recreation center, however, is to be as independent of the Skill Center as possible, with the hope that the young people would develop a "sense of community"

by participating in maintaining and governing the recreation center themselves. The building is to accommodate about 80 boys and girls normally, and will hold about 200 for dances. The C.P.I. staff, in meeting with the young people to formulate a program, found the boys were primarily interested in playing pool and having a music practice room. The girls wanted a kitchen. There would probably be dancing every day to recorded music, so a sound system was needed. Locker space, a shower room for the boys, vending machines, and a public telephone were required, as well as provisions for a dance band and possibly stage performances. Building cost is to be about \$15-18 per sq ft. It was decided that the building's exterior should be in the neighborhood vernacular and of vandal-proof design, yet the interior should be a very special place, the kids' own world, a place to show off, and, more importantly, just a hang-out.

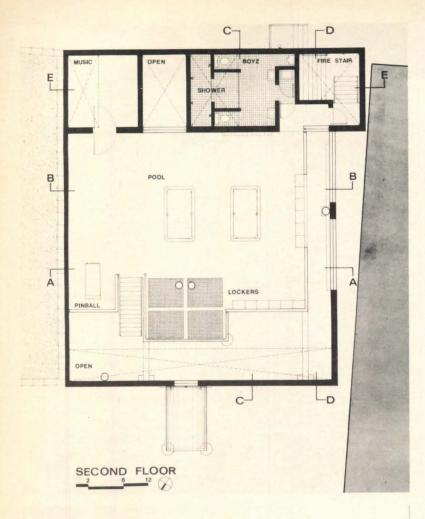
DESIGN SOLUTION: The recreation center has two main levels; the first contains a large area for dancing and tables, with smaller lounge, kitchen, and powder room facilities at the rear; the second level, primarily the boys' area, consists of pool tables, pinball machines, a music room, and boys'

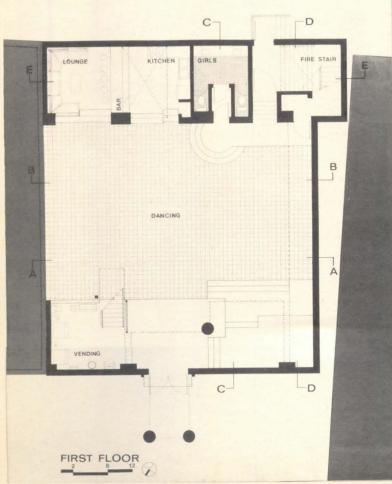
shower room. In keeping with their respective uses, the two levels differ in their treatment of color and lighting; on the first level, paint is applied to some walls, quarry tile paves the floors; the colors are warm and saturated, the light, incandescent and dimmer-controlled. On the second level, colors are cooler and come from the building materials themselves, except where aluminum lines the wall behind the lockers; illumination is fluorescent and brighter. From the exterior, the building is fortress-like; only one window is visible, high above the entrance, car bumpers are attached to the lower part of the front wall for protection (there are also two large windows on the southwest side, facing the quonset











huts, plus skylights at the front and rear).

Outside, an aluminum and plastic canopy marks the entrance. On the interior, a round-about passageway for "swaggering about" leads to a platform overlooking the dance floor; a good spot to pause, take stock of the situation, and make a stance. The platform can also serve as a stage. The girls make their "entrance" from the girls' room onto a landing where they can see and be seen, then grandly descend a small flight of circular stairs. From the main entrance, the second floor, which hangs like a mezzanine over the passageway, is immediately visible and accessible by way of a flight of stairs on the left. The entrance space, strongly vertical, is further enhanced by illumination from the skylight directly overhead. (At night, the skylight is flood-lit from the exterior.)

MECHANICAL SYSTEM: Forced-air heating and air-conditioning system is located on roof. Ducts are left exposed on interior and wrapped in aluminum.

CONSTRUCTION AND MATERIALS: Concrete block bearing walls and piers. Cast-in-place concrete beams and second floor slab. Precast double-tee roof. Plastic skylights, and plastic and aluminum entrance canopy supported by concrete columns with flared protective bases. Aluminum pipe and sheet for railings, aluminum grating, stairs, and exposed ducts.

JURY COMMENT:

— This is surely an important manifestation of our century. However, since I [Charles Moore] am connected with Yale, I won't say anything more about it.

-I think it's great; now we'll have to figure out why.

— I have a resounding nay here, and I want to go on record as saying so. To me this is a manifestation of the depths to which the art world has fallen. It's cute and it's tricky and it's fun....



GIRLS' ENTRANCE.

- It's a fun center, isn't it?

—But it has a childlike quality, not on the plus side, but a puerile quality that disturbs the hell out of me. The exposed pipes and ridiculous hood exemplify this. If it's fun, it's not fun in a clean way, with those pipes wrapped in silver insulation and all sorts of contrived dirty things. . . You kind of want to smoke marijuana in the joint.

-That's exactly the point, though.

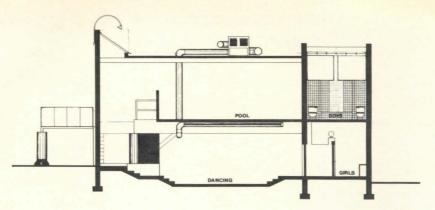
— An anthropologist working in this slum area would probably tell you that this is the kind of space that'll turn kids on.

—I fail to see why you have to distress a design on purpose in order to create a socially involved image, and why these kids would enjoy this building more because of the exposed pipes.

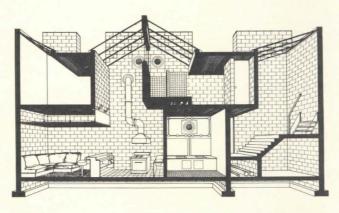
— Are you trying to make an issue of the pipes?

— The pipes are symptomatic of the whole sickness here, which is reflected throughout.

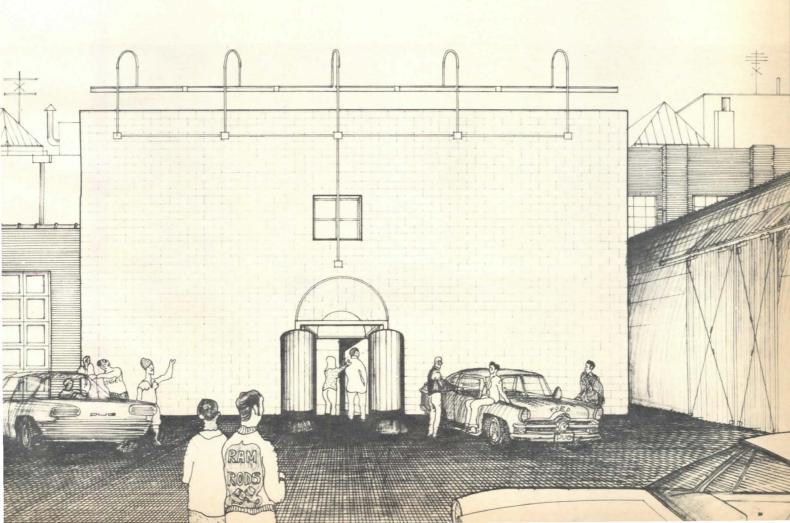
—I don't accept it as sick. However, this building is what the architects think will turn these kids on; it may not really do it.



SECTION CC



SECTION EE



SUPERSCALE

"When you're dealing with this scale of architecture, you can no longer judge it in terms of whether it's human or not," said a juror of the Cincinnati stadium. "You judge it in terms of a great thing that is tied to a bunch of highways and, which, being on the edge of a downtown area, has to have some link to the local road system as well as a way to get in and out of it from the major highways.... It must have giant dimensions for crowd handling and a gigantic amount of parking space. I don't think that one should expect this to be a pretty thing; this is a big, big thing for handling a function, which is really more important than how it looks."

Thus was repeated in different words the opinion of some architects that super-monumental structures have no scale; they go beyond it and are just there. "I think the point ought to be made that when we start to make big megastructures, it's time to stop fooling around with things like beauty and human scale and all that jazz," the same juror commented.

The point at which a structure goes past human scale has not been definitely established. It is interesting, however, to note the comparison between the superscale of the Cincinnati stadium, which will hold 55,000 spectators for football, and the UCLA stadium, which will accommodate a more modest 12,000. Through imaginative land use and depressing the playing field, the architects of the California project brought the stadium more in line with human scale. "Perhaps because of the nature of the solution," remarked one juror, "the scale of this building is really remarkably maintained. It has a very nice scale to it."

"There are few modern buildings in which the structure can be a source of extraordinary architectural elegance," commented one juror. "But a stadium can be one of them," replied a colleague. "A stadium can be extraordinarily beautiful."



HEERY



FINCH

HEERY & HEERY AND FINCH. ALEXANDER, BARNES, ROTHSCHILD & PASCHAL, ARCHITECTS

GEORGE T. HEERY, J. H. FINCH,

PARTNERS IN CHARGE

WILTON L. FERGUSON AND HENRY H. TEAGUE,

PROJECT DESIGNERS

EDWARD DAUGHERTY, LANDSCAPE ARCHITECT

PRYBYLOWSKI & GRAVINO,

STRUCTURAL ENGINEERS LAZENBY & BORUM,

MECHANICAL ENGINEERS BLAKELY-DANIELS &

ASSOCIATES.

ELECTRICAL ENGINEERS TRAFFIC PLANNING

ASSOCIATES.

TRAFFIC CONSULTANTS PRAEGER-KAVANAGH-

WATERBURY, CONSULTANTS FOR

MOVING GRANDSTANDS

PROJECT: Hamilton County Sports Stadium for City of Cincinnati.

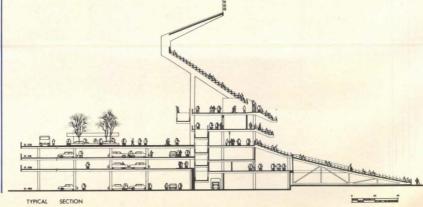
SITE: Downtown Cincinnati between an expressway and the Ohio River.

CLIENT: City of Cincinnati and

Hamilton County.

PROGRAM: A stadium to seat 48,-000 spectators at baseball games and 55,000 at football games. Easy access to be provided between parking areas or structures and the stadium. These parking facilities will also serve as auxiliary parking for downtown, and are to be connected with it by footbridges spanning the expressway. Traffic must leave, enter, and also cross the expressway.

DESIGN SOLUTION: A circular sta-



dium surrounded by a polygonal base containing three parking levels and topped by a plaza. The base structure accommodates 2730 cars, and on-grade lots provide space for another 1825.

The Cincinnati Reds baseball team requested home plate in the northwest quadrant of the field instead of the traditional southwest quadrant, because the popular seats would be closer to the pedestrian overpass from downtown. This location is still being studied. Moving grandstands in the lower parts of the stadium will convert the seating accommodations between football and baseball seasons. Space for 50 wheelchairs will be made at the rear of the lower deck, behind home plate. Special toilet facilities will be constructed for these specta-

All structures below the main plaza level will be cast-in-place concrete. Above that level, the stands will be framed with structural steel that supports precast concrete seating units. Seats will be standard stadium seats with an average 20-in. width.

JURY COMMENT:

- Structurally, it is very simple, straightforward, and clean.
- It's a sensible structure with a sensible section.
- A sensible circulation and approach.
- One should not expect this to be a pretty thing; this is just a big, big deal for handling a function, and this is much more important than how it looks.
- It's handsome because it solves the problem.
- I don't think it is handsome. It's just a stadium, nothing more.



Citation



DWORSKY

DANIEL L. DWORSKY,
ARCHITECT
JON JERDE,
DESIGN ASSISTANT
FRUMHOFF & COHEN,
ELECTRICAL ENGINEERS
RICHARD BRADSHAW,
STRUCTURAL ENGINEER
AYRES & HAYAKAWA,
MECHANICAL ENGINEERS
WELTON BECKET &
ASSOCIATES,

CONSULTING ARCHITECTS TO UCLA PROJECT: Multipurpose Stadium for the University of California at Los Angeles.

LOCATION: UCLA campus at Westwood, California.

CLIENT: Regents of the University of California, Los Angeles.

PROGRAM: A 44,000-seat stadium for football, track, and field events that will be used as a teaching lab by the Department of Physical Education, and occasionally by the Department of Military Science.

DESIGN SOLUTION: To preserve the natural beauty of the campus site, the stadium playing field is located as low as mechanically practical. This takes advantage of the site topography to support the seating platforms and maintains the view across the project from

other buildings. The location requires a road to be realigned.

Seats will be wooden benches with back rests; 38,000 on grade and on superstructures at the sides of the field, and 6000 at the ends. In the future, another 8000 seats could be built at the ends. A 210-ft-long, two-level press-box above one of the stands will accommodate news media and important visitors. The entire superstructure will be concrete.

JURY COMMENT:

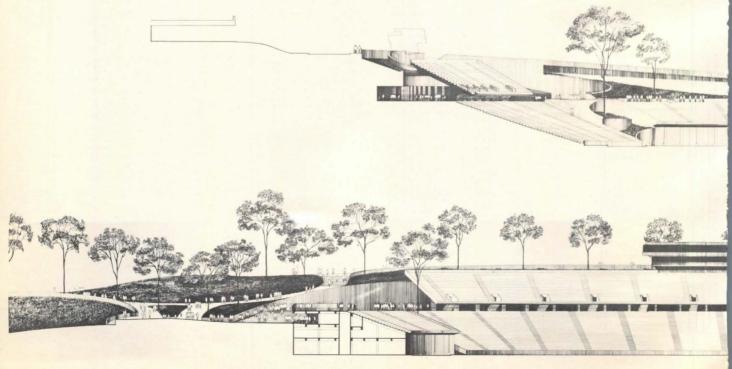
— This is definitely not the way an engineer would approach this problem.

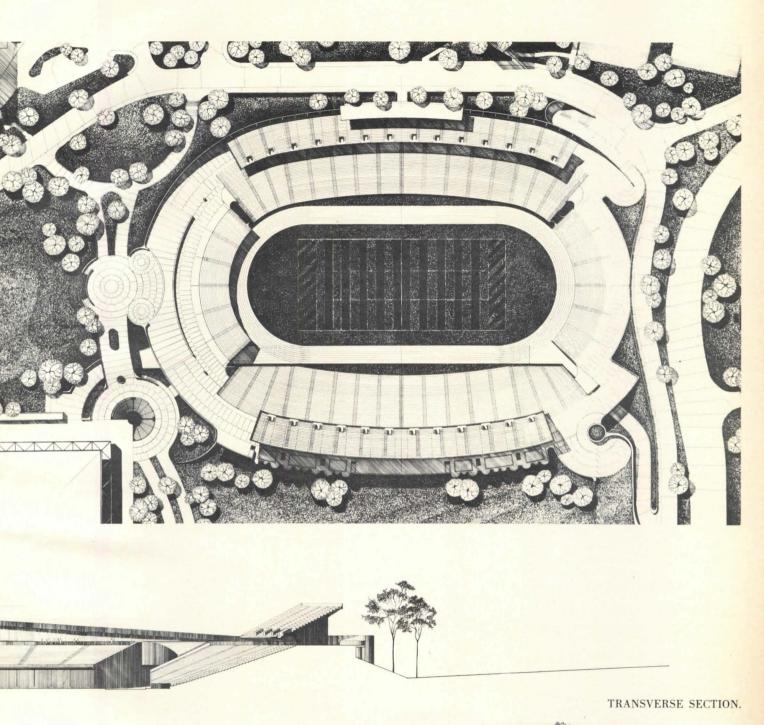
— There isn't a great point made of structure; the structure almost disappears into the ground. What I particularly appreciate is that the whole thing fits beautifully into the site and makes itself part of the ground.

— A great virtue is the way the circulation relates to the stadium, and also the way it relates to the

— The circulation problems are not as serious as with urban stadiums, and therefore can begin to have more humanistic determinants and considerations.

— The movement of people here is really worked out.







LONGITUDINAL SECTION.



URBAN DESIGN: THE CITY AS CLIENT

The jury viewed the problem of creating plans for cities as a particular distinction between what is real and what is "visionary" in a given urban design project. David Crane emphasized the difference between planning for a public agency and designing specific buildings for private developers. The former, into which most urban renewal plans fall, is characterized by Okamoto's plan for downtown Oakland. According to Crane, "It is an architectural study from which requirements are then stated to developers." Said another juror, "All this is is a diagram. It doesn't have any force in terms of specific architectural design, since others are going to build the buildings. It's a very special problem, to be recognized separately.'

The problem of how much "architecture" to put into plans made for public agencies was discussed. "I think it's very hard in urban-design programs or proposals to know just what the proposal is," said the jury chairman, "because there is not a special graphic language, so it is not clear what the precise proposal is. This is a problem not only for juries such as ours; it is one that may carry over into reality and obscure the effectiveness of the proposal."

Crane added, "You can predict that there'll be some young architect working for the redevelopment agency who will get into a huge fight with the actual developer over preconceptions about details which are unimportant to the basic plan itself."

"As an urban designer," he continued, "I feel very strongly that when we speak about spaces in buildings in the city it's very important to recognize that there are various forces that make different systems of space in buildings: location, land value, community symbolism, and various other things. Various determinants are variously important in different locations and in different systems of spaces. To the extent that I am not just a diagram maker but want to build some things, I am going to try to build the repetitive systems of spaces, the things that make structure in a city, because very few architects today are interested in that. They're not very interested in the big dimensions: they're not very interested in the housing systems, which are big in a certain sense but little in another sense. The big-little problem of architecture is one that interests me. But I will not go into the field of the city hall or symbolic single building, but will defer to that type of architect, because there other values apply. I may make the location because I have a certain sense of what the order of values in the community is, and I may set a certain position, but I will not dictate the form, because that is a thing in which structural values may have absolutely no importance and in which the symbolism of the thing 'wanting' to be a city hall - damn the cost - is most important."

RAI Y. OKAMOTO, OF OKAMOTO/LISKAMM, PLANNER AND ARCHITECT WILLIAM H. LISKAMM, PARTNER

FRANK E. WILLIAMS, RODERICK T. FREEBAIRN-SMITH,

ASSOCIATES

ROBERTSON-MONTGOMERY, GRAPHIC DESIGN CONSULTANTS DEVELOPMENT RESEARCH ASSOCIATES.

MARKET RESEARCH



ОКАМОТО



LISKAMM

PROJECT: To provide a concept for a six-block area (190 acres) of the Oakland City Center. The concept was prepared for the Redevelopment Agency of the City of Oakland, to be followed in carrying out the City's central district planning goals.

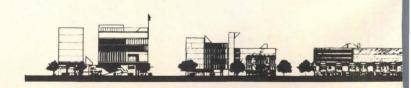
LOCATION: Oakland, California.

CLIENT: Oakland Redevelopment Agency.

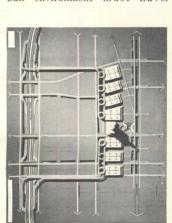
SITE: The heart of Oakland's central business district, a six-block area encompassed by this project, is directly adjacent to the Oakland Corridor Redevelopment Area. The City Hall, with its plaza, the major existing retailing area, the financial district, and Oakland's main regional rapidtransit station, which is an interchange point for the entire system, all touch the project area. Although not within the site, the county government buildings, the new Oakland Art Museum, Chinatown, the Jack London Square restaurant and entertainment center on the waterfront, new high-density housing, and major freeways from other parts of the Bay Region and the state are only a short distance from it. The site, because of its location near the Bay, near a downtown lake, and not far from a backdrop of low hills, had great aesthetic potential, and it is of course important socially and economically. This potential has been seriously degraded by blight, inefficient circulation, loss of community interest, and general urban obsolescence.

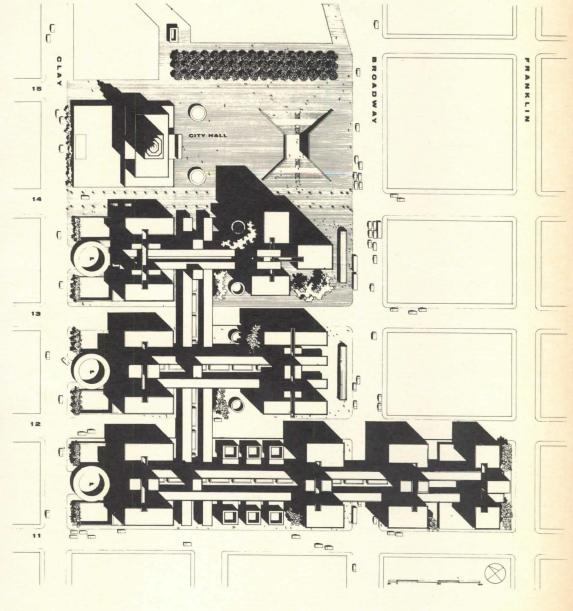
PROCRAM: City Center is proposed as a concept of what the form of a metropolitan center might be. Stipulated by the Redevelopment Agency of the City of Oakland were a 55 story office-hotel, convention facilities, a repertory theater and new cinemas, a concert hall, high-rise office buildings, and retailing facilities, as well as restaurants, specialty shops, cafés, and many service establishments for central city employees and visitors.

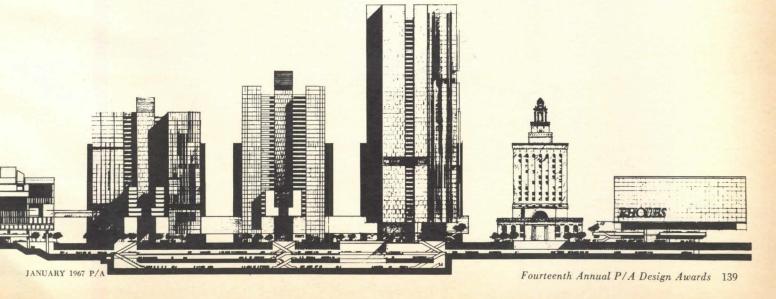
DESIGN SOLUTION: Since the design is only a guide, a concept of what form the City Center should take—it is to be a vital, effective, pleasing area in which to work, play, and live—the design fo-



cused on three main items: circulation, both within and to and from the area; parking and service systems; and differentiation between permanent sub-systems, such as utilities, circulation, services and mechanical elements, and relatively impermanent sub-systems, such as activity groupings and building envelopes. Major movement systems are expressed, horizontally and vertically, for vehicles and pedestrians. The enclosures for these systems, where they are required (elevator towers, mechanical shafts, parking structures, etc.), become major visual elements, helping to orient a user by clearly defining paths of possible movement. But there is maximum provision for flexibility and change. These paths will be modified by the activity clusters they serve, and the modification will produce both the visual variety and the spatial change an urban environment must have.







Given this plan, the City Center will be able to respond to social and economic changes without disrupting the city visually or socially. The design concept provides a strong identity for an urban area that presently lacks one, visually and functionally.

JURY COMMENT:

-At least one particular place in this has access to the main vehicular drag but links through to this internal movement system for pedestrians. It's sensitively handled in terms of certain detailing, like this business of getting underneath to the lower level to the parking. The parking is buried, and presumably this arrangement would not only be required, but also there would be a public contribution to make sure that it would happen. In a lot of urban renewal today, the garage gets position on the street, which has the same kind of importance that pedestrian buildings have, which I think is entirely wrong.

— This, in effect, is a program development that might be issued as criteria for an urban-renewal bidding procedure, so we can't criticize the Red Square aspect in this plaza, which would be dreadful. Nor can we criticize the buildings, because we don't even know their function.

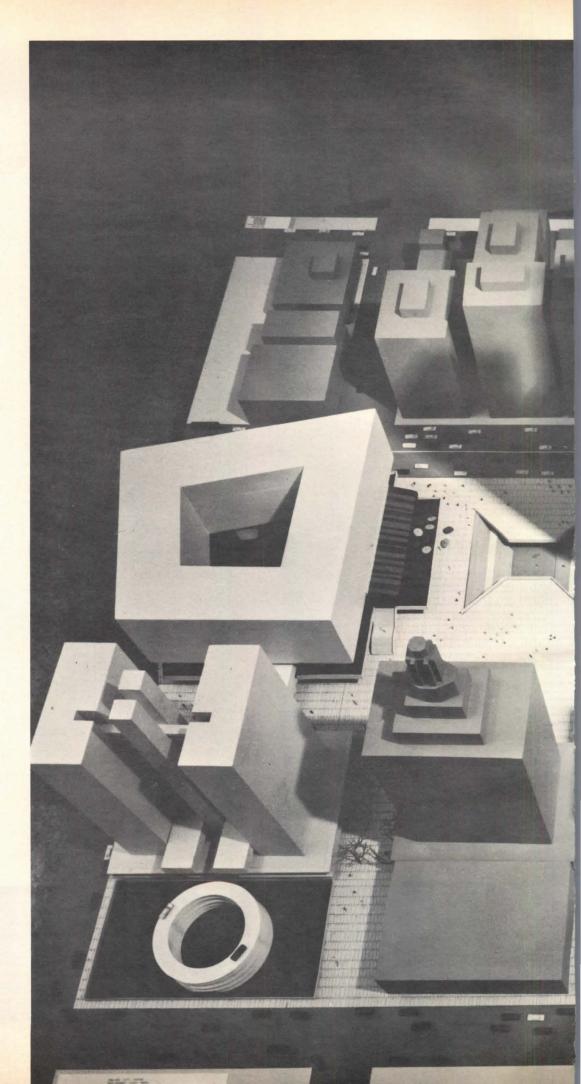
— What we do have is a statement that the lower buildings are relating to a scale that way — and the higher buildings relating to a bigger scale, this way.

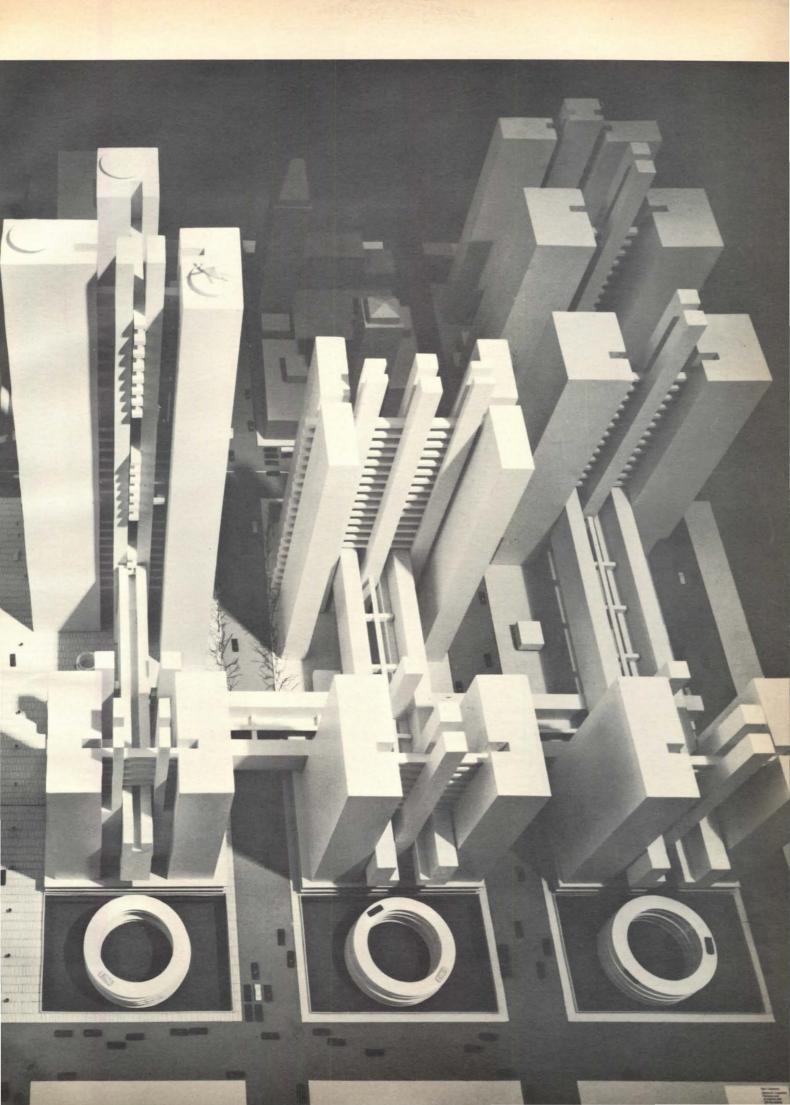
— What I like about this is that the point of the whole thing is stated with much greater clarity than is common in this kind of work, and it's stated with such clarity that the people who do the next stage may be able to get with it.

— The circulation and the parking are treated very much as they should be, as a servant of the rest of it and not the things to be featured.

— All this is is a diagram. It doesn't have any force in terms of the architecturally detailed things that somebody else is going to build, and it's a very special problem to be recognized separately. Within that world of these special but very important problems, it seems to me that this is an excellent, honorable solution.

—I wish there were some way of stating more explicitly what the public interests are here and what the private architecture is.







DESIGN OF OPEN SPACES

It has come more and more into the architectural ken in recent years that open space is not just what happens where there are no buildings, but is composed of volumes that must themselves be designed as carefully as an auditorium or an art museum or a courthouse. The flagstone and oversized glass-fiber planter are still very much with us as placebos in this area, sad to say, but increasingly there are architects who deal with land and land coverings (natural and man-made) and the living and inanimate horizontal and vertical elements that can make a meaningful open space or one that is just there. like an asphalt playground. Landscape architecture itself has enjoyed a renaissance in the past few years, with some landscape architects getting to be, more and more, "environmentalists."

Frank Schlesinger's riverside park and bridge for Rochester, New York, is an admirable illustration of the creative approach to open-space design. Schlesinger had been asked by Rochester for suggestions on what to do with its downtown, and this park is one of the first visible results. As one of the jurors said, "There is a reason for having people start from the entrance to this park and wind up here on the pedestrian bridge: There is something happening." Attention to details was important. "It's a very nice, stony kind of park where wear and tear is accounted for in the strong construction. The details of the siting work well and they're sensitively handled, but I think the organization of several different but essentially similar linear spaces paralleling the river doesn't make the distinction between an active movement area and a passive spectating space."

Other winners in this Design Awards Program came in for comment on the design of their open spaces. Of Rai Okamoto's plan for downtown Oakland (p. 138), one juror said, "It shows intelligent thought of how to make an interior [inside the downtown core] and take care of the active space, which has one nature, as against another space that is along the main drag." And the major aspect of Venturi's Princeton Memorial Park (p. 152), its open land, was the most praised element of that design: "I think it is really quite lovely, calm, and dignified." "Yes, it is a very sensitive piece of land sculpture and landscape architecture." This was in contrast to the reaction to some of the more blatant design elements in the project, such as the advertising sign. Even such a structural solution as a stadium came in for comment on the handling of open spaces. One juror thought that the space around the Cincinnati stadium (p. 134) will be too vast, but he was convinced by another juror that "a great stadium, especially when it is releasing people and almost as much when people are coming in, has got to have huge open plazas."

FRANK SCHLESINGER, ARCHITECT ROBERT WEIMER. JOB CAPTAIN JEANNE SCHLESINGER, LANDSCAPE ARCHITECT DeLEUW, CATHER & ASSOCIATES, STRUCTURAL ENGINEERS BARNARD & MAYBECK, MECHANICAL ENGINEERS VINOKUR-PACE, MECHANICAL CONSULTANT RICHARD DeCEW. FOUNTAIN CONSULTANT WILLIAM B. LAM, LIGHTING CONSULTANT T. J. KAUFFELD, ENGINEER FOR UNDERGROUND

GARAGE



SCHLESINGER

PROJECT: Genesee Crossroads Plaza, first stage of the reclamation of the Genesee River Waterfront. It is a step toward opening up the riverbanks to pedestrian use, making the river the physical, public spine of the city.

LOCATION: Rochester, New York.
CLIENT: Department of Urban
Renewal and Economic Development, City of Rochester.

SITE: Three acres within the Genesee Crossroads Urban Renewal Project, a project which comprises thirty-three acres straddling the Genesee River in the heart of Rochester's downtown business district. The initial three acres slated for development lie in a long, narrow strip along the Genesee River, an area now clustered with railroad and industrial facilities. Land adjoining the site will eventually hold a Federal courthouse, a motor hotel, and an office building. Land across the river is designated for residential

and commercial use.

PROGRAM: To create a waterfront park and municipal garage. A primary objective was to reconcile the scale demanded by the potential grandeur of the urban riverfront site with human use. It was thought imperative to establish this scale without resorting to fussy human scale landscape devices, which would merely destroy the objective.

DESIGN SOLUTION: To facilitate a gradual stepping down of plaza levels to the river, the garage is designed as a staggered floor ramp system.

Because of the half-story difference in parking deck levels, fullsized trees can be planted above each level and at the river's edge, where the face of the garage is held back from the flood wall. Focus of the plaza is a fountain in the river and a Y-shaped pedestrian bridge that encloses the fountain. The bridge is thought of as an over-the-water extension of the plaza, and provides viewing platforms on several levels. The fountain will throw water from 15 jets 40 ft into the air. One end of the plaza will have a reflecting pool in a low ampitheater. All lighting will come from concealed sources.

CONSTRUCTION AND MATERIALS: The underground garage will be cast-in-place concrete. All non-planted areas of the plaza will be granite. Vertical surfaces will be faced with granite. The pedestrian bridge will be cast-in-place concrete with granite paving; it will have three equal spans, consisting of cast-in-place, post-tensioned, structural tees.

JURY COMMENT:

— There are so many redundant linear spaces on the edge of the river that they will end up being of the same quality, with no distinction of mood, and so on. I think another defect is the way in which the crossing of the river is made.

— Though I understand the virtue of being able to see the fountain from all sides, the bridge seems to hem it in, to lose the qualities of the open water that make it a desirable place to have a park in the first place.

— I don't think there is any virtue in looking at the fountain from all sides.

— I would defend the bridge. One of the purposes of the bridge is to provide a means of walking out over the water. Instead of having a straight direction, it provides a place to stop on a sort of island, a romantic thing to suggest. I think that's the merit of this cross-bar arrangement. Looking down on those thousands of gallons of water gushing up would be swell. I don't think this is

strictly a functional bridge; it is part of urban recreation activity.

— You looked at the bridge in the plan view only. If you look at it from this view, the bridge becomes awkward, with this heavy leg plugging down into the water. This is just a structural effect. It doesn't look very elegant.

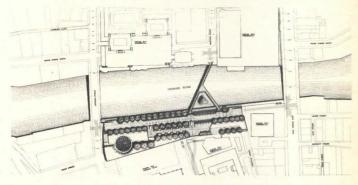
- The spaces are redundant.

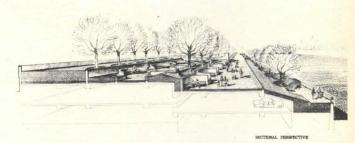
— The detail is marvelous.

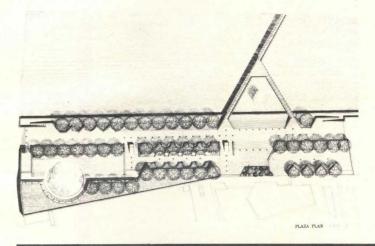
— It's a real idea for a fountain, an honest-to-God 20th-Century type idea.

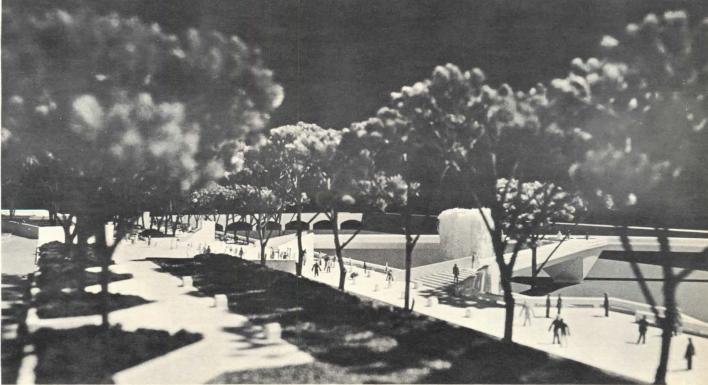
A mushroom-cloud type idea.











THE ARCHITECTURE OF ALLUSION

The most intense jury discussion involved four projects by Venturi & Rauch, three of which were ultimately premiated. Aside from the skill of the presentations, which even a dissenting juror acknowledged, the comments centered on what is perhaps a main turning point in architecture today. "We are getting away," said one juror, "from the architecture of exclusion to which we've been exposed for most of this century to an architecture of inclusion. The architecture of exclusion sought to be orderly by trying to make an abstract order, usually out of structure and nothing else, so that the things that would have made it a part of life, both of an intellectual sort and of the popular sort of the streets, have been missing. The attempt in this Venturi & Rauch work that seems to me of enormous importance is to include a set of allusions to our intellectual heritage à la T.S. Eliot and allusions to the pop life that would hopefully bring a set of architectual forms into a much deeper meaning for the people who are using them. This is not to say that each of these things is completely successful in doing that. The little ones, like Frug House, probably go further in this direction than ones like the YMCA, which are bigger and more complicated. But I think the importance of this kind of design should be noted." Another juror asked, "When you talk about inclusive and exclusive, what do you mean by inclusive?"

"Well," the first juror replied, "T.S. Eliot is a useful and interesting poet because the things that he wrote depended on the whole literary and cultural heritage of which he was the end product, and so his words have, for those who read them, an enormous richness that wouldn't come if he had simply put together words in an abstract pattern. Architects have occupied themselves with putting their forms together in abstract patterns - which most architects do in order to put roofs over people's heads. But there is also - and I hesitate to make the parallel because it isn't quite the same thing the possibility of putting roofs over people's heads in a way that makes them a part in all sorts of direct and indirect ways of their culture.'

The juror least beguiled by Venturi's work said, "McKim, Mead & White did the same thing, so this is nothing new. They reflected the art and the fashion of their time."

"I'm not talking for the machine," said the chairman, "but when you talk about allusion you're saying that some of the rules that are used are quite classical; that's one thing. Secondly, some of the forms come from a folk culture, let's say out of folk objects in the strictest sense of the word. I think this work is very interesting on that basis, but if you're arguing that more people will be included in the appreciation of architecture, then I don't agree with you.

I think it is a very private architecture." "I think that is so for right now," was the reply. "T.S. Eliot is still not a widely popular poet."

Referring to the memorial park project, a juror commented, "It lacks meaning [large lettering and some of the forms]. Art used to have meaning for human beings. Today it's nothing but a big joke and perhaps if you evoke a giggle out of people in an esoteric museum you've created something great. But this park continues the thread consistent with our painting and sculpturing confreres that there is nothing dignified anymore, that there's no great value you could perhaps get out of architecture, there's no stirring thing to see here such as in similar things in Sweden that maintain the dignity and serenity of death."

This same juror urged a citation for the Venturi & Rauch firehouse in Columbus, Indiana.



because it did not possess many of the allusive qualities of the three premiated projects. "It's a building that's on a particular street, that is just as much part of the environment as any of the other buildings we've been talking about, but without the arbitrary zips and zaps, little curves and doodads. I would like to have it shown as a counterpoint to some of the other things I have been against in this firm's work."

The jury agreed, but one member continued the dialogue concerning cultural allusion by saying, "If we were really interested in Pop architecture for a fire station, we'd make a great thing out of the part of the building where the fire trucks race out and in, which would express the fact that we love automobiles more than we love the people who have to walk by on the sidewalk."



VENTURI & RAUCH (ROBERT VENTURI, JOHN RAUCH), ARCHITECTS

VINOKUR-PACE ENGINEERING SERVICES, MECHANICAL ENGINEERS





PROJECT: The Frug House. LOCATION: Princeton, New Jersey. CLIENT: Mr. and Mrs. Bradford

SITE: Sloping hill and flat lawn near a swimming pool and stream on a small estate.

PROGRAM: The foremost requirement was to provide a place for children's parties, winter or summer, away from the main house. Also to be included were guest facilities, dressing rooms for nearby swimming pool, and a fall-out shelter.

DESIGN SOLUTION: Two designs were done for this award-winning project by the architects; the first was abandoned because of cost.

The first solution, a wood frame balloon structure supported by concrete bearing walls, is wedged into the crest of the hill, and attention is focused on the stream below by means of expansive windows in front. The angle of view from the living room is guided by extending the glass below floor level, and the downward direction is reinforced by a sloping roof, exaggeratedly low in front, high in back. A fireplace with an oversized hood in the center of the living room parallels the line of the roof and increases the sense of enclosure in the twostory space. Entrance to the house is at the rear, a half-level above the living-room floor. At the entrance, a walled ramp connects to the swimming pool area, a short flight of stairs to the left leads up to the dressing room and shower area, a ramp to the right leads downward into the living room. The kitchen is to the rear left of the living room, a bedroom and bath below, with the fall-out shelter at bottom level, accessible only by way of an exterior entrance on the downward slope.

The second scheme, a semicircular masonry structure located on the flat lawn, is a small building with a large-scale pseudofaçade. Entrance through the various facades creates a sense of multiple enclosure, reinforced by the oversized hood of the fireplace at the core of the 16-ft-high living area. Kitchen, bathroom, and sleeping areas are located in half-level niches at the periphery

of the semicircular structure. Since the bunk-bed area extrudes between outer and inner facades. the architects have placed a door in the sliding panel wall so that the bunk area will be accessible when the panel is slid back in warm weather. The dressing room for the pool is contained in a half-level space over the bathroom and is reached by a rear outside stairway.

JURY COMMENT:

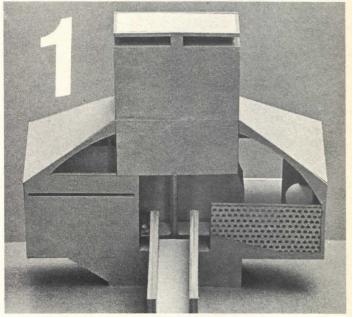
- I think it's a joke - even the

name implies it. You'd have to frug all night to keep it going.

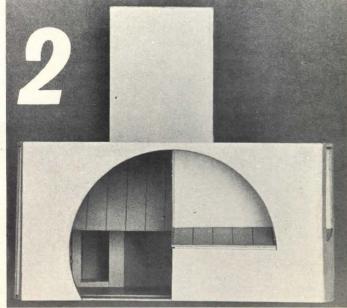
- But it's skillfully done.

- Except here his skill overcomes his concept, what he's trying to say. Skillfulness and adroitness is fine, but that can't win the award alone.

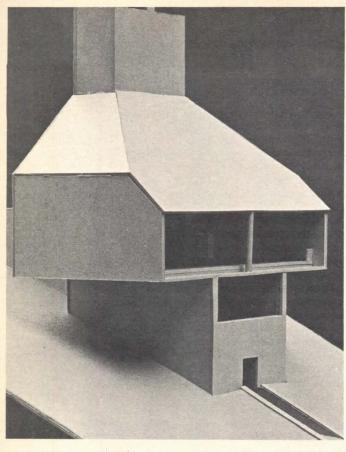
-We ought to recognize that when we talk about custom-made houses, all the harder standards of architecture fall away, because it's a personal relationship between the architect and the inhabitant. If the clients are happy,

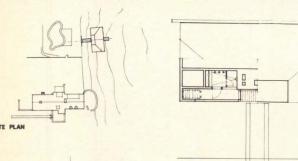


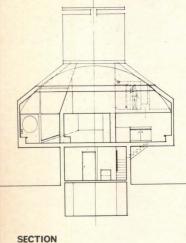
PRELIMINARY DESIGN.



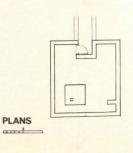
FINAL DESIGN.











then we should be.

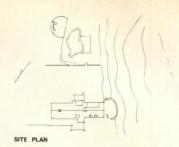
Referring back to the first statement, it should be pointed out that the Frug House is not meant to be a place to inculcate children with moral virtues or anything else. It's something by the side of a swimming pool where you can do all sorts of peculiar things—if it's going to be any fun at all.

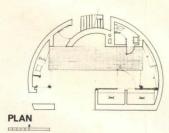
— Is its main merit that it's a fun house?

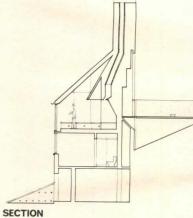
-I don't care whether the Frug House people love it or not. What bothers me is that this magazine is going to be coming out in January and every young kid is going to be turning the pages and saying "Wow, this is it this year!" You'll see half-moons swinging all over the place. We're honoring here certain qualities that are frightening. I've never understood why Venturi enjoys a sort of quasi-moon-gate as a formal interpretation. American architecture today seems to have a grave concern for pushing in and squeezing out, the preoccupations with forms and shapes, with zips and zaps - there's a sort of insanity in this.

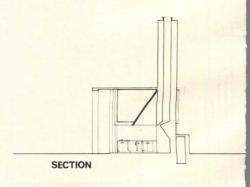
-There are many questions raised by its concept.

— Concept is the wrong word; detail is more important.







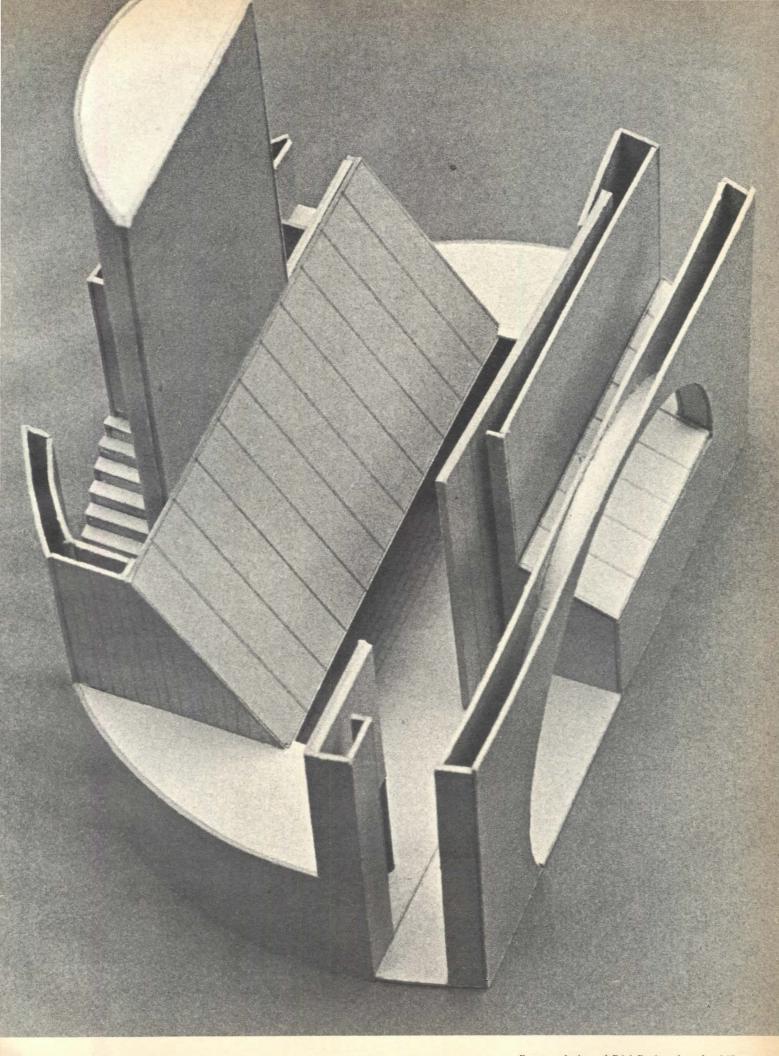


FINAL DESIGN.



PRELIMINARY

DESIGN.



VENTURI & RAUCH (ROBERT VENTURI, JOHN RAUCH) ARCHITECTS

CLARKE & RAPUANO, INC., LANDSCAPE ARCHITECTS

AND CONSULTING ENGINEERS THE KEAST & HOOD

COMPANY. STRUCTURAL ENGINEERS

VINOKUR-PACE ENGINEERING SERVICES,

MECHANICAL ENGINEERS

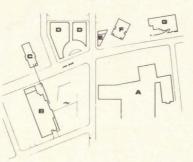
PROJECT: Three buildings for a town in Ohio.

SITE: Center of a small Midwestern town laid out on typical grid.

PROGRAM: To design a town hall, Y.M.C.A., and library addition to relate to each other and to the center of town of which they are a part. This project represents the beginning stage of a scheme to revitalize the deteriorated downtown area, resulting from commerce moving to the town's periphery.

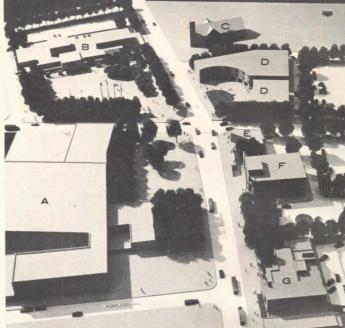
DESIGN SOLUTION: The Town Hall: This building is relatively small, and, in order to give it importance, make it stand out on the street and not be overwhelmed by a factory opposite, the architects gave the small structure a large-scale pseudo-facade. The device, explained the architects, is a familiar one in American and ancient architecture: Louis Sullivan used the large arch on façades to give them monumental unity, builders in the West put false fronts on their stores to make them look larger than actual size and relate them to the street; Roman architects gave direction to their temples with disengaged façades - the pediment, columns, and base of the temple porch.

For the town hall, however, the contradiction in scale between the front and back is not only due to the relation of the building to the street, but to different interior functions. The program called for a single container (the mayor wanted a simple, inexpensive structure) with two kinds of interior space. The first space is monumental, ceremonial, and includes the council chamber and mayor's office. These are relatively static and unchanging spaces, and



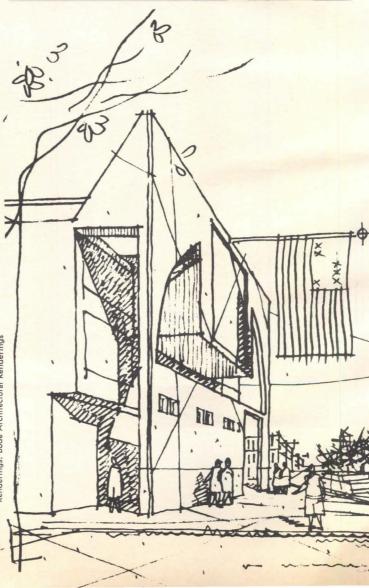
SITE PLAN

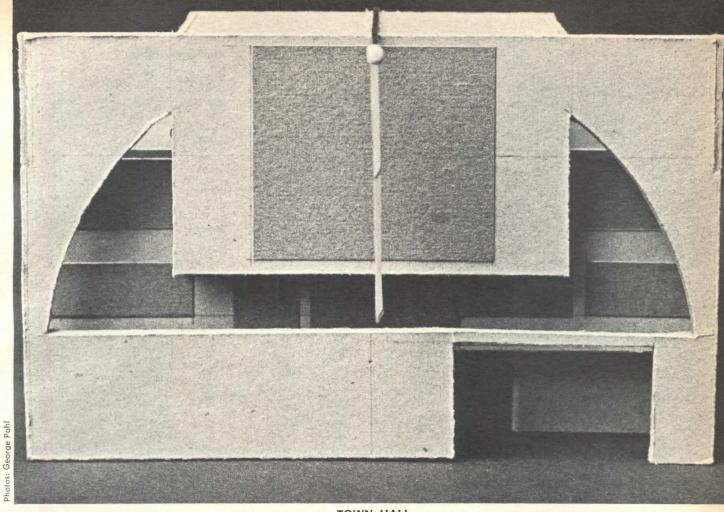
- Existing Factory
 YMCA
- Existing Church
- Commercial Block Existing Bank Town Hall Library



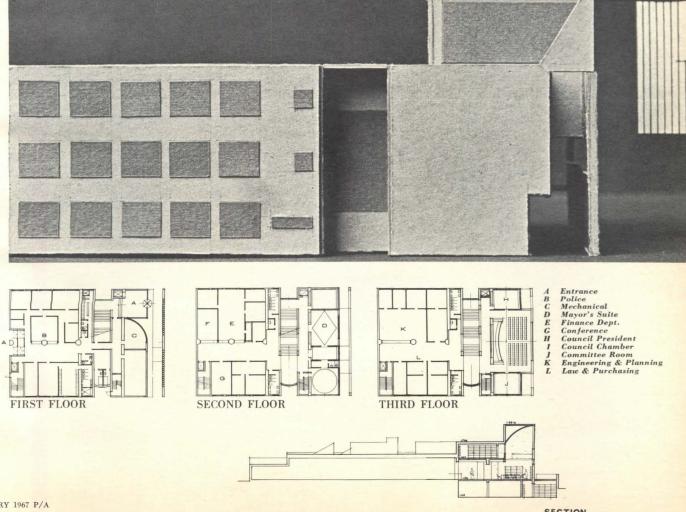
they are placed at the front of the building. The second type is small-scale office space. This is placed at the rear of the building, where it can expand and respond to a growing bureaucracy. Between the two is a common zone for vertical circulation and services. The first floor contains police facilities in the back, mechanical equipment and entrance in the front. The bill-paying and information areas are not located on the ground floor - in part to segregate these functions from police activities, and also because it is anticipated that the public will increasingly do its bill-paying and information-gathering by mail and phone.

From the side of the building, the two areas are clearly defined by the small windows at the rear and the tall buttressed wall in front. From the street, the large window of the council chamber matches the big scale of the arch, becomes part of the false-front and contrasts with the smaller windows behind. Instead of flying the American flag from a vertical or 45° pole (as is usual), Venturi has dropped it from a horizontal standard like a commercial sign on the street.

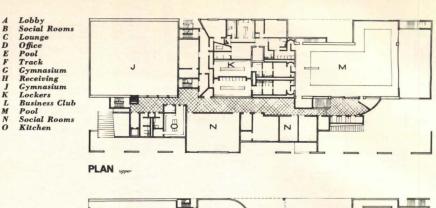


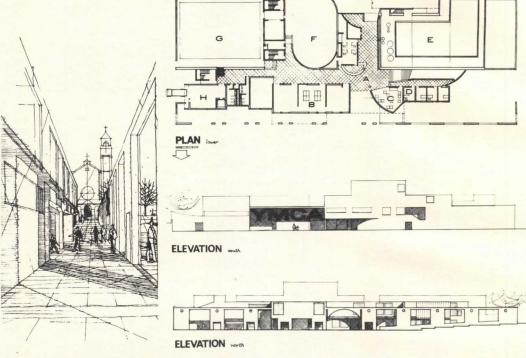


TOWN HALL

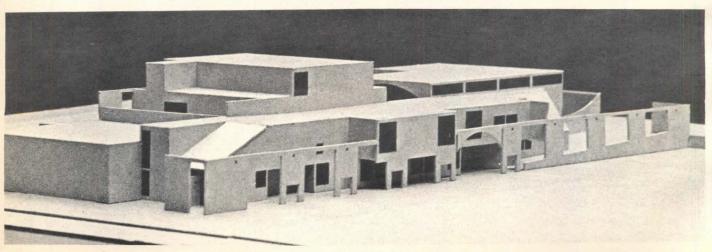


The YMCA: The position of the building along the side of the plaza and opposite the existing, dominating factory had the greatest effect on its exterior expression. It had to be big in scale to complement but not be overpowered by the factory. Again, a false façade is used, contradictory to the interior space, but here the façade is pierced with openings that are large and few in number to increase the scale. These apertures, the dominant elements of the façade, are spaced apart in a relatively constant rhythm without central focus or emphasis at the terminations. In such a manner, the over-all composition can compete with the factory opposite, which is larger as a whole but smaller in its individual parts. A ramp between the false façade and the building proper lines up with the axis of an existing church on Main Street. The building also contains a buffer zone between building and plaza for winter skaters, and an outdoor niche with fireplace, where it becomes a retaining wall. The actual, or second, façade is relatively chaotic, the openings are smaller and arranged in irregular rhythm to reflect interior circumstantial complexities. They form an interesting juxtaposition with the grid of the false façade. The interior of this two-story building follows closely the usual explicit but complex recommendations for the program of a large Y.M.C.A. Variations occur in placing the athletic spaces in the rear, social spaces up front, raising the locker rooms above basement level.









Library Addition: The program for the interior was almost entirely conventional; but the architects' approach to the problem was to wrap the new space around the existing building rather than add an ordinary extension. For the sake of economy, too, the old building is covered over but modified as little as possible. The new structure, then, surrounds the back and north side of the older buff-colored building, and a freestanding wall in front transforms the residual open space into a court. The wrap-around wall, with its big scale and dark brick, increases the unity of Main Street, but the older structure is respected and can be seen through the large openings. Close-up, the new is juxtaposed with the old; further away, the unity of the street prevails.

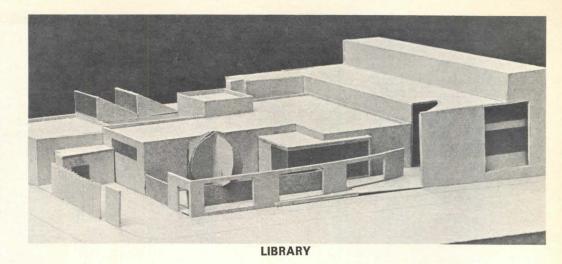
CONSTRUCTION AND MATERIALS: The Town Hall: Concrete bearing walls, dark brick surfacing (similar to the large factory across the street). First façade faced with thin white marble slabs to re-emphasize contrast between front

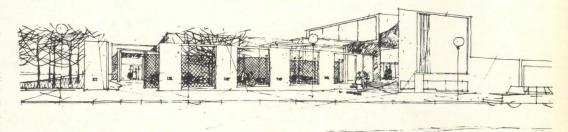
The YMCA: Concrete bearing wall, dark brick facing.

Library Addition: Solid brick wrap-around wall.

JURY COMMENT:

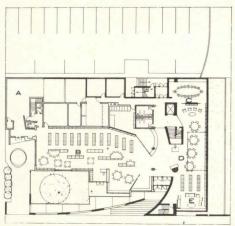
- -I don't think the interiors of the buildings are what Venturi would like them to be - at least, they are not what I'd like them to be.
- We talked about Venturi's architecture being an architecture of "inclusion," that he made use of certain classical rules, and certain forms deriving from folk culture. His architecture, on this basis, is interesting, but it doesn't necessarily include more people in its appreciation; actually, it's a very private architecture.
- Maybe just for now.
- Nevertheless, it is a private language - and that is what a city hall should not be.
- From one viewpoint, his project is very public and impersonal: All three buildings are to have a community significance, are to read as having a certain place in the community, each and all together. Whether or not you agree with his particular design, there's an effort toward urban design represented in the form each takes, its position, its relation to the other buildings. There's architectural conviction that the library should be inviting, that the Town Hall is more bureaucratic,





Art Gallery Children's Area Board Room Reading Room Lounge Art Classes

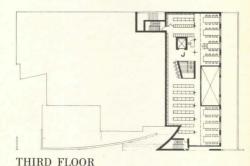
Art Gusses Workroom Meeting Rooms Closed Stacks Research & Reference



FIRST FLOOR

is just on the street, and that the Y.M.C.A. should relate to an outdoor recreational space; yet all three have their position on the street. In recent years, we have tended to argue that the important thing is how you get the light in and the guts of the building to work. Now at least we're beginning to recognize that the building gets some of its form from the external forces. However, some of his designs do tend to get too personal and contrived, and I heartily disagree with this in public buildings.

-I think we can agree to commend the public spaces, the site plan and the relationship of the buildings to the street, but would express some doubts about the Venturi idiom and the arrangement of interior space.



XSECOND FLOOR



VENTURI & RAUCH (ROBERT VENTURI, JOHN RAUCH). ARCHITECTS RICHARD J. CRIPPS, LANDSCAPE ARCHITECT AND SITE PLANNER THE KEAST & HOOD COMPANY, STRUCTURAL ENGINEERS VINOKUR-PACE ENGINEERING SERVICES. MECHANICAL ENGINEERS WENDEL R. INHOFFER, SITE ENGINEER WERNER SCHMID, SOIL CONSULTANT



CRIPPS

PROJECT: Princeton Memorial Park.

LOCATION: Hightstown, New Jersey.

CLIENT: Hightstown Development Corp.

SITE: Essentially flat land along the west side of the New Jersey Turnpike near Hightstown. Sixteen acres are to be developed as the first increment; the master plan anticipates a total of 70.

PROCRAM: The first stage is to include burial plots, landscaping, and three architectural elements: an entrance building, mausolea and columbaria, and a tower.

DESIGN SOLUTION: The plots, marked only by bronze plaques flush with the ground, are arranged in a gridiron plan; the equivalent of major and minor streets consist of wide and narrow ghosted walks, with grass growing between the paving stones. This main space is open field, comparable to the open agricultural fields now typical of the neighborhood. Along the edges of the site are to be orchard-like areas that also accommodate the grid of plots.

Against the grid is superimposed a gradually curving vehicular service road that makes an undulating ring around the site.

The Entrance Building is at once a wall, a sign, and an administration building. The façade wall is faced with white marble in order to make it stand out as it is approached from the road. The enormous letters, which are expanded on the left and condensed on the right side of the center opening, are incised. The building behind is glazed brick.

The mausolea are set into a berm along the turnpike, which acts as a buffer to the noise and view of the highway. Continuous with the slope of the berm is a concrete roof that contains an insignia identifying the park from the turnpike. In the center of the white, marble-faced concrete structure is an opening containing two family crypts. The side retaining walls along the sides contain columbaria.

The tower is an element designed to identify the park for both the neighborhood and the turnpike. It therefore has two scales: a small scale for close up, and a big scale that reads from a distance. It is set back on the site

to avoid topographical obstructions, so that it can be seen from a greater distance and for a longer time as it is approached in a fastmoving car. It also has two basically different silhouettes. From the front and sides, it relates to the view from the highway: a simple, abstract, concrete cylinder (like the campanili around Ravenna) with one big-scale opening. But its appearance changes as it is approached: Through the opening, the diagonal, less abstract and more structural form of the integral buttress within the cylinder gradually appears, partly exposing its richly contrasting stripes of black-and-white marble veneer (like a Tuscan Gothic tower). The ladder rungs facilitate maintenance of a reservoir above and also produce a human scale. The back relates to the view from the immediate park: Its waterfall-fountain is a surprise hinted at by its sound as approached from the front. An appropriate psalm incised on the back of the sloping, concrete buttress is glimpsed through the water and is clearly visible when the fountain is not playing.

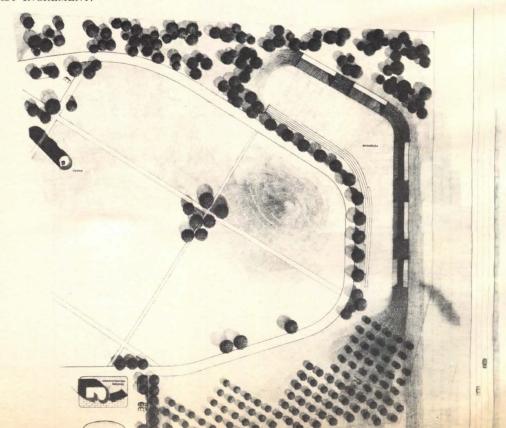
At night only, the interior of the cylinder is lit to give an ambiguous appearance to its form, one different from that in daytime.

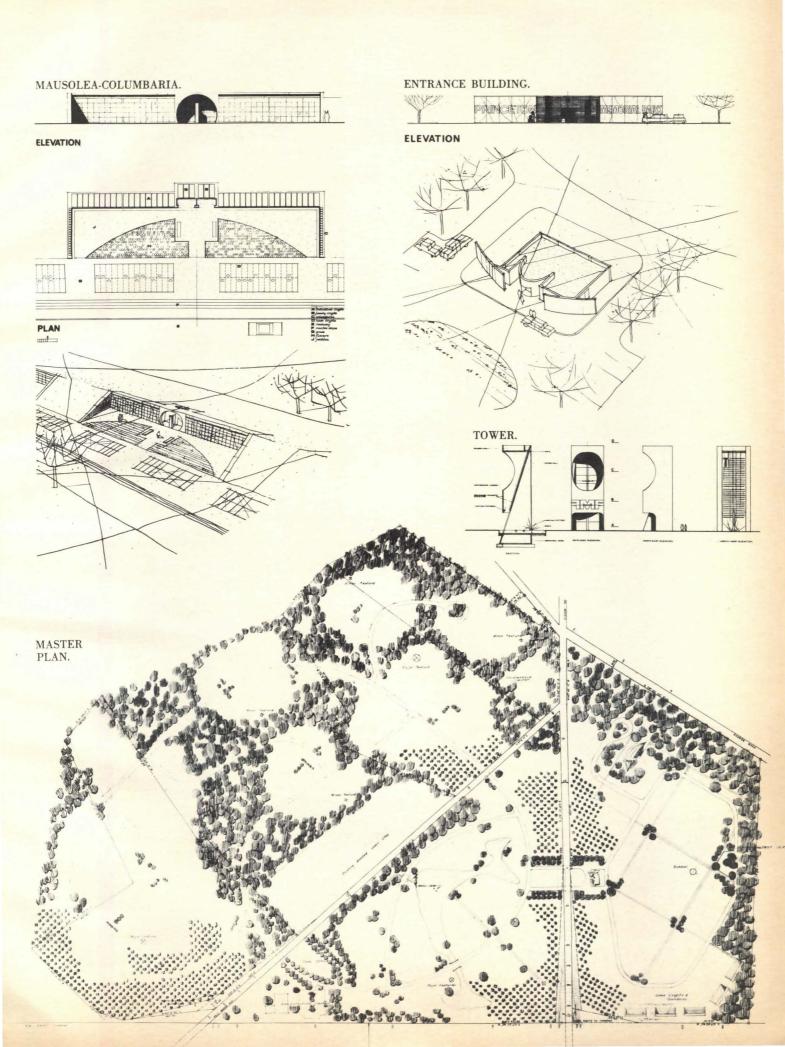
JURY COMMENT:

- —I think if you took that lettering off and looked at the site plan and the detail and the place as a piece of sculpture, it's quite sensitive and elegant.
- The thing that bugs me about this project is that I think Venturi has great sport making fun of a lot of things ... that some human beings feel a bit serious about. One happens to be death.
- I don't see why it's so funny. I don't like the big letters there either. They're wrong.
- You shouldn't confuse the lettering with the site plan, which is quite lovely, calm and dignified.

 I wouldn't vote for it as a commercial project because it's not a good representation of commercial buildings.
- If you listen to the advertisements in Los Angeles and Washington, you know damn well that dying is commercial.
- This is a memorial park, That's what Venturi calls it.
- You mean that's where you park.
- Well, that's what the industry would like it to be called.

FIRST INCREMENT.







THE GOOD LIFE

After the intense discussions in the past two annual jury sessions as to whether the individual house is a legitimate architectural form (after which several of the jurors went back to their offices and designed private houses), the current jury had no question about giving awards and citations to three houses, a private "frug" house, a group of townhouses, and a recreational community of houseboats and woodland huts. All of the projects reflect the "good life," for they are not in the lower-cost brackets by any means (except for individual units in the marine project). The reactions of the jurors to these personal designs were quite personal themselves. One juror thought the Frug House (p. 144) a symbol of architectural sickness, but it was carried to an Award by the excitement of his colleagues. The control of new allusion and iconography gained the Arthur May house its award; one juror said it "gives the impression of enormous vitality and angularity and zap without ever, you will notice, actually zapping." The subdued luxury of the Fay Jones house and the large, cohesive form of the Robert Church house "turned some people on" in the words of one juror, more than the more exploratory forms of the May and Venturi designs. Commenting on the Jones design, perhaps the most "classic" in the whole group of winners, one juror said, "Symmetry isn't vile, and the fact that it was used in this particular place perhaps gives the house an elegance and a quality that very few of these other houses have."

The Chauncy Village townhouses were admired for contributing a little elegance and distinct form to urban living. The distinctions between sides, entrances, pedestrian ways was complimented, as was "a strong disciplined urban rhythm."

"I'm for it as an expression of a way of life that's coming," said a juror of Colbert's marine recreation project. Given a site plan that the jurors universally thought was terrible, the architect, they thought, captured the feeling "that housing is no longer just so many cubic feet of lodging and maybe a school or two, but that everybody's going to have a boat and that we're going to enjoy ourselves while living in cities. When we're all working five hours a week and playing together, this will be the new wave of the future." Mainly, as one juror summed up, the jury is glad "someone is beginning to interest themselves in such a programmatic idea of a general concept of living in suburban conditions in a leisure society."

ARTHUR MAY,



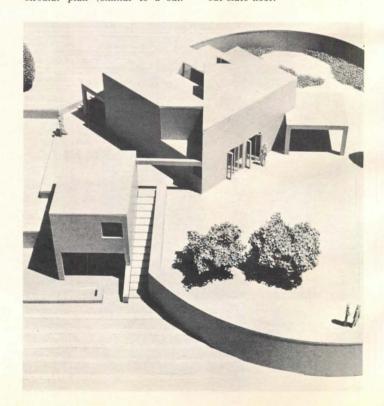
MAY

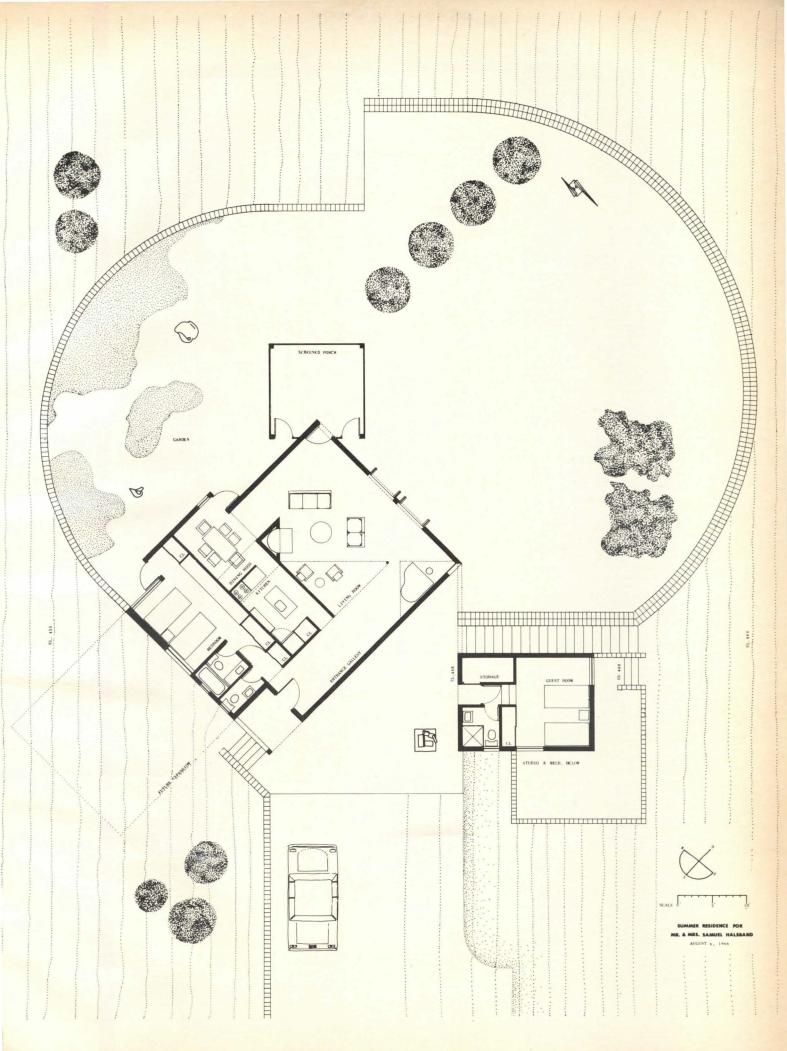
PROJECT: A summer residence for Mr. and Mrs. Samuel Halsband. LOCATION: Woodstock, New York. SITE: A circular plateau cut in a hill; at the edge of woods, with view of mountains to the north. PROGRAM: A one-level summer house for a couple with married children. They needed areas for entertaining groups of various sizes, a studio, and guest room. DESIGN SOLUTION: The architect's aim was to create a house that is a small city, providing a variety of places for private and public life, inside, outside, day and evening activity. His solution was a circular plan (similar to a sun

dial) with outdoor and indoor spaces revolving around a pivot, following the path of the sun. In the northeast quadrant is the "day" lawn, broad, wide, sunlit. It is aggressive in nature, faces the mountains, and adjoins the living room. Around the other side, to the southwest, is a smaller "evening" garden; protected and quiet, it lies close to the dining room, and the private bedroom area. Between the two sections is a porch, poised between the different worlds of interior and exterior, public and private, day and evening; it can be used at all times. At the core of the circular plan of rooms, and easily accessible to them all, is the kitchen. Guest rooms and studio are contained in a separate two-story structure to the east. The guest room shares the main entry space from the parking lot to the main house; the studio has its own private entrance and garden around the other side.

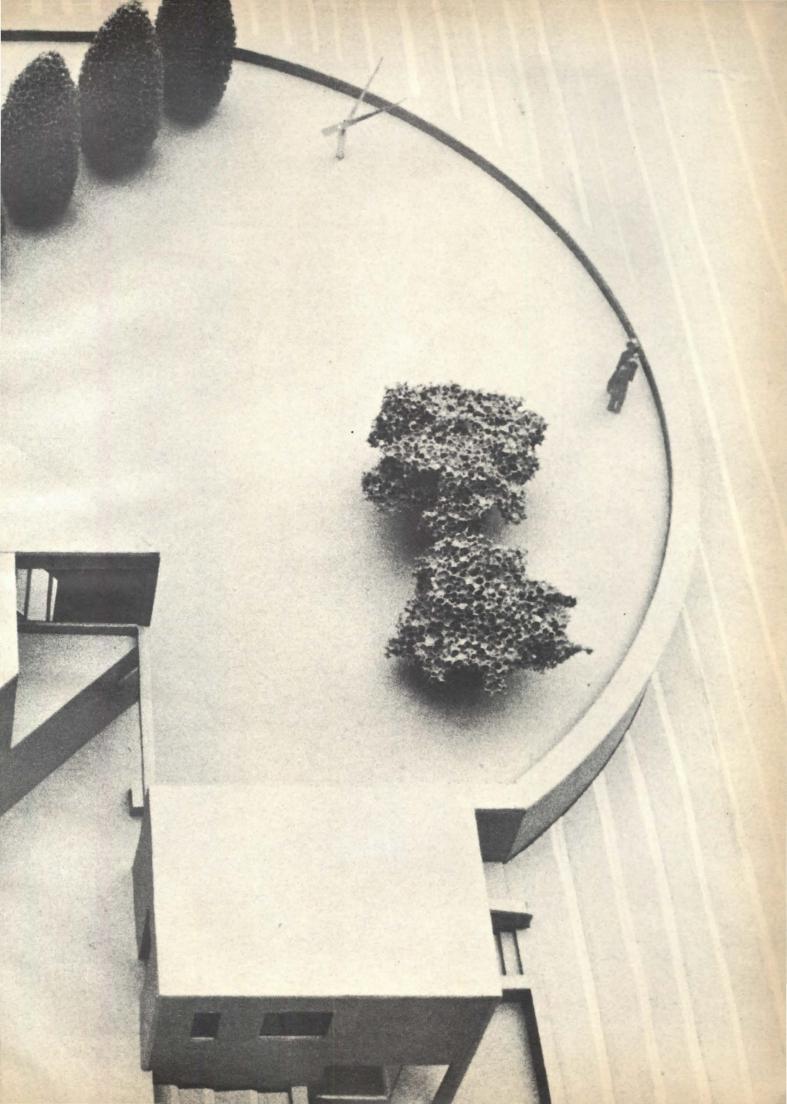
MECHANICAL SYSTEM: Preliminary design was based on electric convector units supplemented by radiant panels in high spaces.

CONSTRUCTION AND MATERIALS: Wood frame, concrete block walls, cut slate floor.









EUINE FAY JONES

ARCHITECT



PROJECT: J. H. Friedman House. LOCATION: Berry Hill, Fort Smith, Arkansas.

SITE: A wooded hillside lot at the end of a cul-de-sac street in an exclusive neighborhood.

PROGRAM: Design a house, furnishings, and landscape for a couple with teen-age children. The clients requested a functional dwelling that would be "a strong architectural statement without venturing into the realm of novelty or in any way destroying the repose of the residential area."

DESIGN SOLUTION: A stately, symmetrical scheme with central axis running from the street through entry, foyer, living room, swimming area. Bedrooms and adjoining terraces are placed on one side of the axis, the kitchen and family living areas, with their terraces, on the other. Recreation room is one level below, on plane with the swimming pool.

CONSTRUCTION AND MATERIALS: Wood frame; brick exterior walls, concrete floors overlaid with brick, terrazzo, or carpet; plaster ceilings.

MECHANICAL SYSTEM:

Forced-air system, conventional ductwork, below floors on each level.

JURY COMMENT:

- I don't understand this sort of monumentality in such a modest program. If you draw a line down the center, you've got functions that are absolutely opposite to and different from the functions on the other side; yet the geometry is exactly the same. I can't imagine anything coming out that way without all sorts of compromises.

- Admittedly, this design is derivative of Wright.

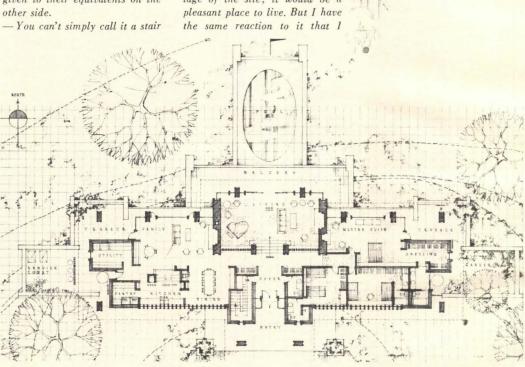
- This house has some fine qualities: in terms of site, the way it is positioned on the edge of the slope so that the terraces in the back are on the down-hill side, the view from within is expansive, and the side facing front, from which you approach the house, is private, Then, the internal circulation is orderly and logical. The only reason for concern about symmetry is that names that are given to certain rooms on one side are different from names given to their equivalents on the

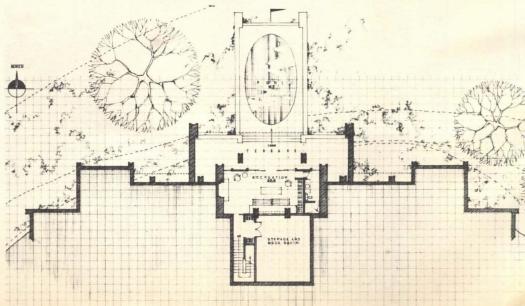
on one side and a toilet on the other. But I give up, because I think the rooms are pleasant, relate nicely to the site, and the internal organization is sensible. However, these are modest architectural virtues. It is not hard to

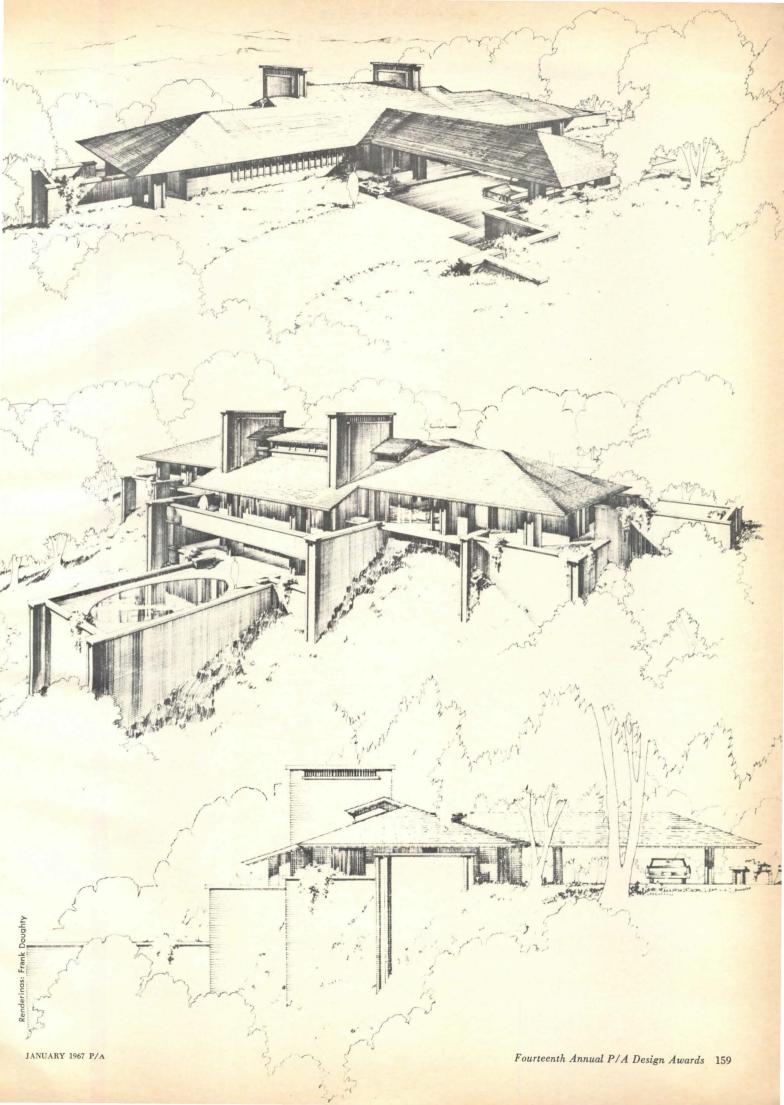
-I'm voting for this partly because I want to put the brakes on the zips and zaps.

- There are a lot of zips and zaps in this; they just go a different way.

- As an object, I think it is a very nice house. It takes advantage of the site; it would be a would have had 15 years ago to a 20th-Century Georgian; it is an historic object and I can't get turned on by it. It isn't a part of my "cultchah."









ROBERT B. CHURCH, III,
ARCHITECT
HALL OAKLEYELLERS & REAVES,
ENGINEERS



CHURCH

PROJECT: Residence for Mr. and Mrs. Carlos Smith.

LOCATION: Helena, Arkansas.

SITE: Heavily wooded land projects, like a peninsula, into a small town's community golf course; sits 40 ft higher than the course. A putting green immediately to the west is visible from the house. The level of the building is such that one can look out from three sides into the treetops - huge river oaks, maples, poplars, and delicate pink and white dogwoods. PROGRAM: House for a closely knit, seriously religious, and community-spirited family of five that believes in entertaining its friends as a part of its everyday life. Since it is not uncommon to find 25 to 30 young people and adults in for dinner or to paint scenery for a community play, decorate ornaments for a parade float, or take part in a masquerade party, the house was to open itself to these needs; in addition, it was to give each child and the parents a private place. It was also to be possible to arrange the rooms so that parents could entertain in the formal spaces while the young people amused themselves in more informal areas.

DESIGN SOLUTION: A great galleryentertainment room is established as the backbone, from which all other rooms project, almost as private suites, separated from it by service spaces such as bathrooms, laundry room, and storage. Roof slopes are simple and direct,

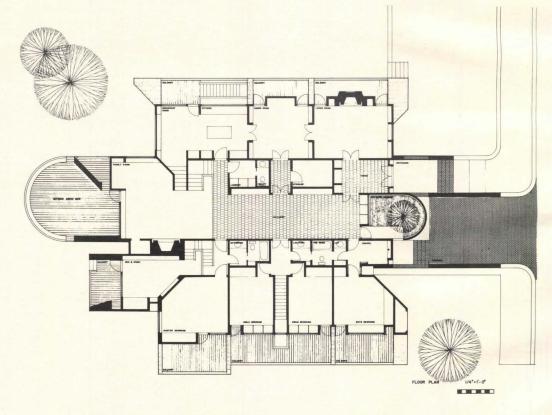
always in the direction of the sloping site, so that the house will present an air of quiet distinction and repose atop its hill, although various elements entice natural light into interior spaces. The balconies projecting from each room have side walls that are continuous planes from the roof slopes so as to diminish the visual dimension of the exterior elevations. Interior vistas over various floor levels reinforce the site contour. CONSTRUCTION AND MATERIALS: Frame construction will be completely enclosed in a skin of cedar shingle. Interior walls will be of wallboard, painted different shades of off-white; floors of natural oak flooring strips. A mechanical system of forced warm and cool air will be supplemented with fin-tube radiation under large glass areas.

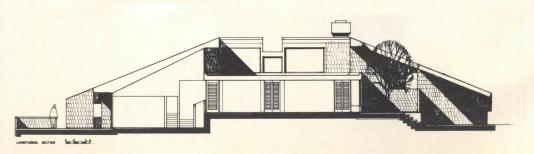
JURY COMMENT:

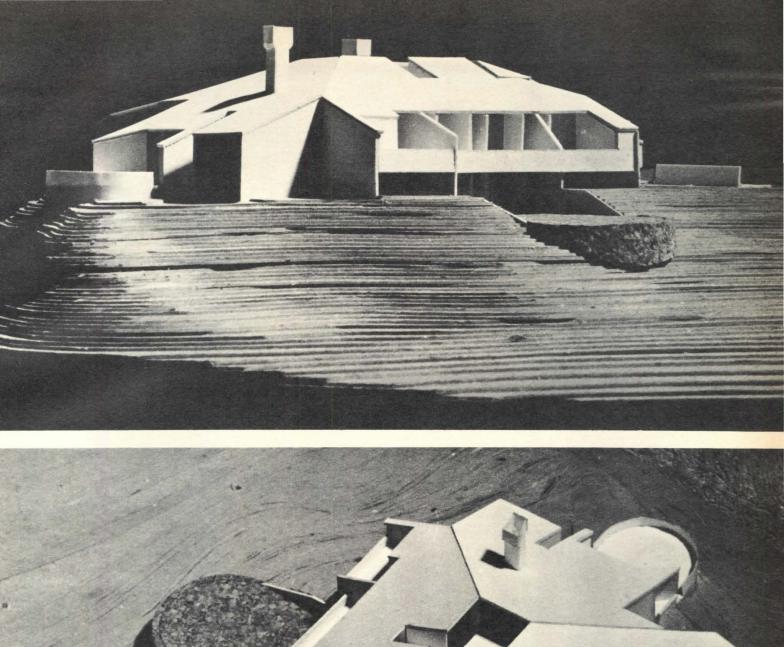
— It's a big and complicated house that manages to be totally within a difficult geometry; so smoothly solved that everything seems to work well and easily. And yet it has the strength that comes with the solid geometry.

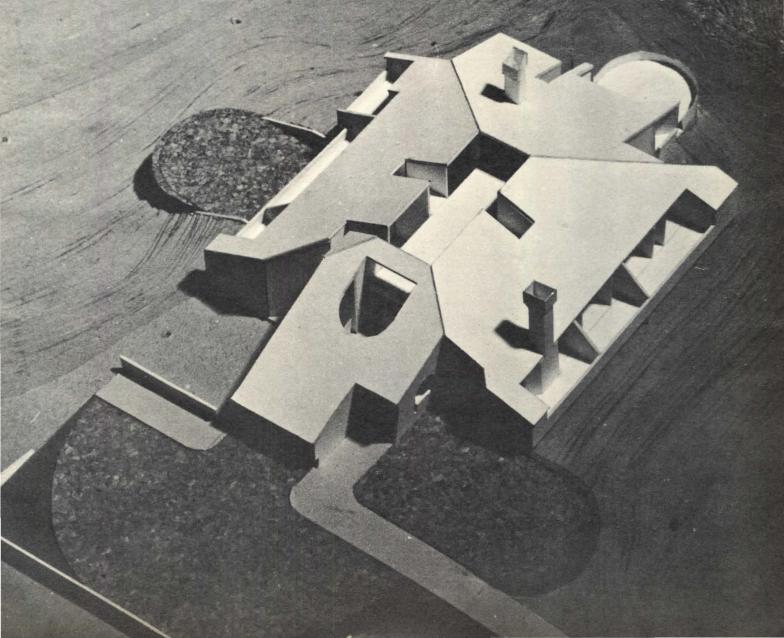
— It's a very skillful piece of work in an idiom that I, for one, turn on to.













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STATI



BENNETT

PROJECT: Chauncy Village Town Houses.

LOCATION: Chauncy Street, near Harvard Square, Cambridge, Massachusetts.

CLIENT: Chauncy Village Corp. PROGRAM: Luxury town-house units to be constructed on an urban site approximately 29,000 sq ft in area, grouped for maximum density. Houses will be sold individually, with property lines clearly delineated. Individual house requirements: living room, separate dining room, kitchen, three bedrooms, two-and-one-half bathrooms, playroom/garage, laundry room, and boiler room. Maximum garden area to be provided within dimensional site limitations.

DESIGN SOLUTION: Twenty, threestory houses in four rows of five, with each house occupying approximately 700 sq ft of land area. Total floor area per house, 2151 sq ft. Materials selected to harmonize with Chauncy Street environment.

CONSTRUCTION AND MATERIALS: Exterior finish of brick, stained wood sash, with slate roof. Driveways between houses paved with brick on concrete slab. Construction: brick bearing walls, wood joists spanning approximately 20 ft to party wall centers. Interior partitions plaster on studs, with

plaster ceilings and exposed brick on one party wall. Interior finish: hardwood floors throughout living and bedroom areas; entries are paved with brick on concrete slab with natural Welsh quarry tiles.

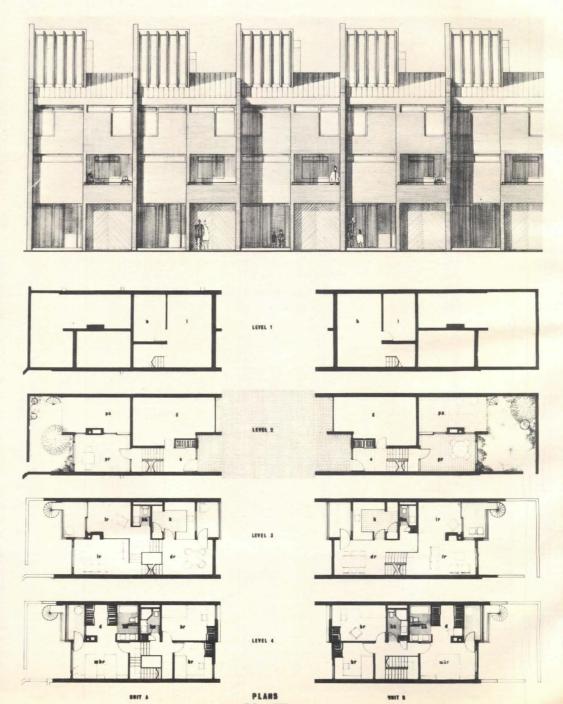
JURY COMMENT:

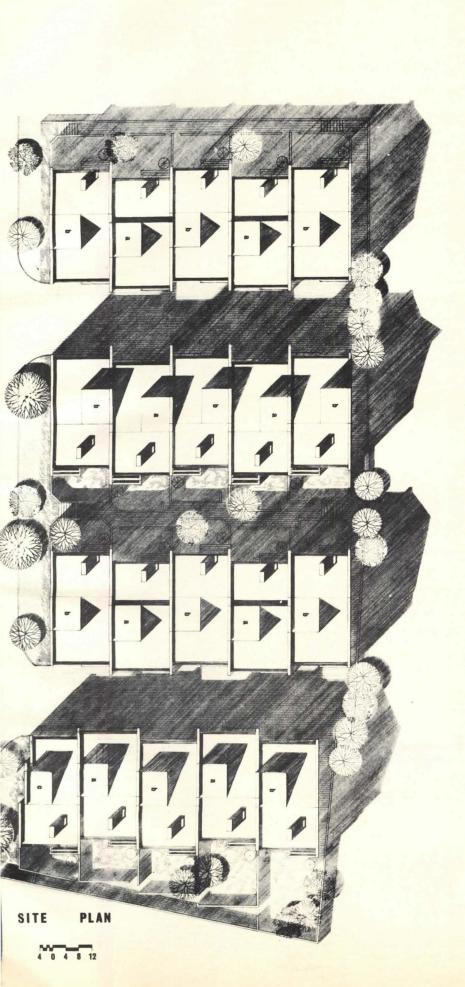
— I very much like the distinction that's made between the two sides. On the site plan, you can see that all these houses relate very sympathetically to the main access street.

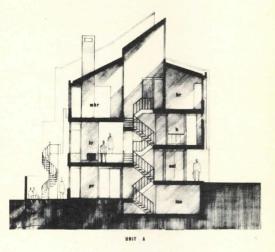
You drive in, put the car under the house, and walk up. The pedestrian entrance side has all this different quality of getting light in, and a little balcony, and so on.

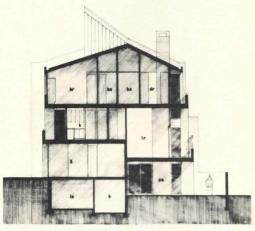
I can't judge whether these spaces are adequate or not; they might be a bit small.

—I think there is a lot of life in the individual units, with a strong, disciplined urban rhythm here.











CHARLES COLBERT, ARCHITECT-PLANNER JOHN B. HEPTING and ROBERT G. PRICE, ASSOCIATES

(A graduate class [1966-67] at Rice and a fifth-term class at Tulane assisted in the general formulation of the project.)



COLBERT

PROJECT: Tanho Resort Community.

LOCATION: Tangipahoa Parish, Louisiana

CLIENTS: Gordon Nordgren and Paul Dastuque.

SITE: Located approximately 45 miles (one hour) from the heart of New Orleans, on a site having a history of periodic flooding. Designed of necessity within the framework of an originally unsuccessful development whose rigid grid of streets had produced few sales but had blighted the land.

PROGRAM: Barge community, bootstrap operation, with practically no "front money." Absolute economy of materials. The ultimate plat plan anticipates sequenced developments.

DESIGN SOLUTION: All cabins and lodges to be constructed will be required to rest on pilings, poles, or piers raising them at least 6 ft above the existing ground level. Boats are to be secured in the

immediate yard area of waterproof lots but are grouped in marinas for inland sites.

Houseboat and barge sites are in communities in the lowest land areas. Cut and fill will raise docking and storage facilities above swamp level and allow the development of navigable waterways. Houseboats are launched and serviced from marine railways in the marinas and driven to sites that contain water and power connections and small storage shed. Pedestrian pathways and piers are made of wood with bridges spanning channels and low areas.

All cabins have staggered front yards so that "railroad" perspective from the trail is eliminated. The Community Center (originally a sales area) is based upon maximum economy, consisting of canvas or plastic tents with offcenter pyramidal tent pole supports. These will be removed offseason, leaving only the brick walls and paved floors.

As a year-round center, the large central building is a "walkin fireplace." The central vent is repeated as a "shape" for signs, guideposts, and as a trade symbol. This central building is to be partially erected, then "set-fire and burned-out in a controlled fashion." The charred beams, deck, and masonry are designed to contrast with pointed brick and bright canvas colors. Roofing is wood shakes and the central vent is gold leaf, or equal.

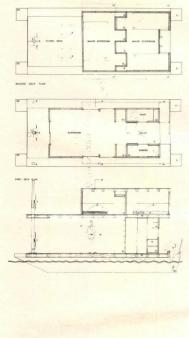
The earth around the abstractly placed and shaped tents is graded into mounds that are similar to local Indian burial mounds. The raising of areas would enhance drainage, flood protection, view, and activities such as little theater.

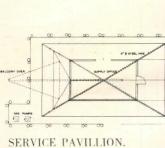
Houseboat: Designed to sleep a couple with two children. Standard materials and fixtures should allow it to retail for \$3500 to \$4000, exclusive of rented motor.

It houses separated sleeping compartments, two-level steering station, ladder access to sleeping on upper deck, water storage, and oil drums. Pontoons are plywoodfilled with foam plastic and ventilation canopies for during-theweek security and a casting platform have been provided. It has been designed for a great variety of additive play gear and zestful rearrangement with minor alterations.

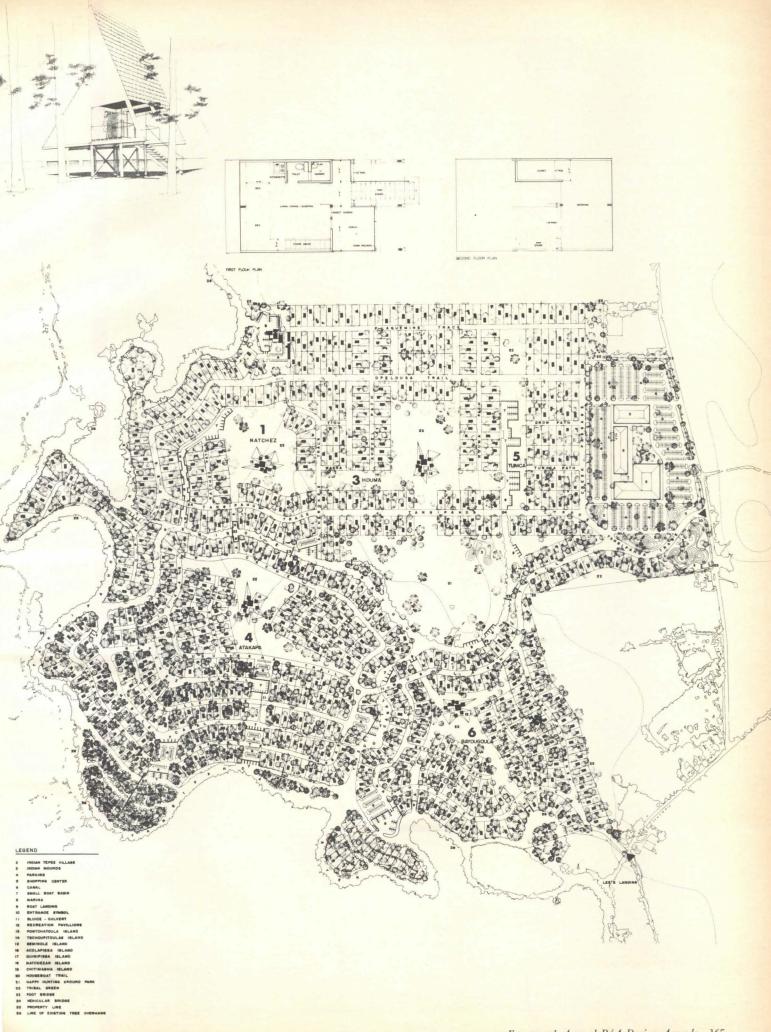
Marina, boat storage yard, restaurant and central tower: The tower is framed in round steel pipe and designed for weather flags and a point of outlook. The shape is openly romantic, as are the small apartments in conjunction with the surrounding boat houses. Boat railways and boat landings will assure continual ac-







SERVICE PAVILLION.

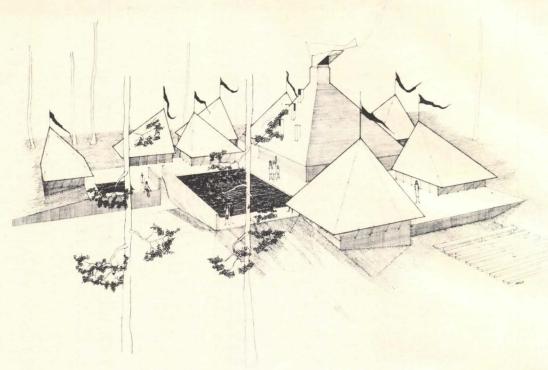


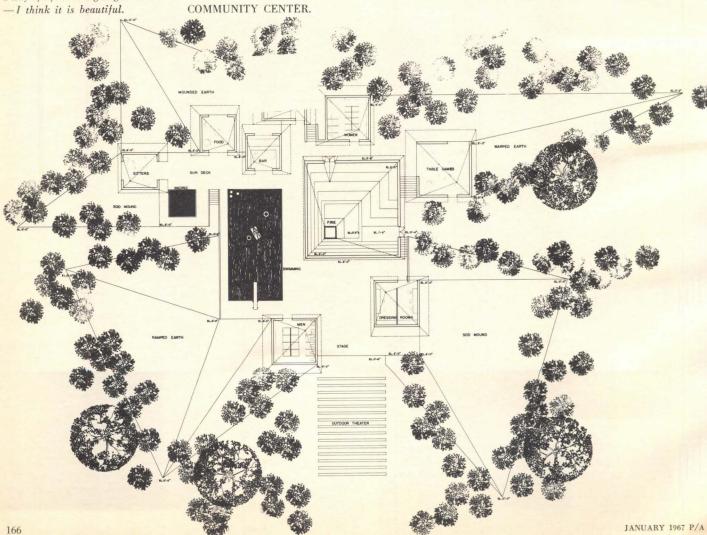
tivity and a central point of as-

Lean-to cabins: These are of a "do-it-yourself" type. The perspective shows the raised sleeping loft and retractable stairways with chair handrails, and skylight outlook into the tree foliage. The cabin can sleep two couples in reasonable privacy, or a family of four to six persons. All would have shingle or shake roofs and vertical siding or plywood.

JURY COMMENT:

- —I think it's great for a houseboat. I'd like to be on one of those — big wheel!
- —It's a highly spirited little enterprise.
- I like this project. I'm not sure I understand it yet.
- That's the new wave of the future.
- -In that case, I'm against it.
- I'll go along with the program, but this thing here is terrible . . . the site plan.
- I'm against this one. There are some quite neat tricks in it but they are not tricks that people are interested in today. Ten years ago it would have gotten an award.
- I'm for it, as an expression of a way of life that is going to come.





ICONOGRAPHY AND THE PROCESS OF ARCHITECTURE: THE JURY'S CONCLUSIONS

PASSONNEAU: Architecture is many things. A lot of people try to cast it in a unitary role. I think it is not that simple. That's one of the wonderful things about it. The interests of someone like Venturi can exist almost independently of the interests of people who do prefabricated housing. Sure, they may have a connection, but their measures of excellence are so different. The notion that architecture has multiple measures of excellence is a very ancient and honorable one; it goes back at least 2000 years. You can bring it up to date both through symbolic logic and through quite standard applied mathematics, by demonstrating that, at least in those activities you can describe numerically, you can never optimize more than one dependent function. (Unless you set up a welfare function which is begging the issue.) I kind of like this. I don't know if it proves anything; but in nothing that you can describe with precision can you make two or more independent variables optimal at the same time except by sheer coincidence.

CRANE: I criticized work like Venturi's, who is a friend of mind, because I wasn't sure he was very serious about important problems — problems of the environment. I'm interested in the fact that in the next 20 years we're going to build as many cities as we've already built. Someone like Venturi is not interested in that; he's interested in individual, particular, special things. But I agree with you that architecture really is bigger than either my architecture or Venturi's architecture; it's a more inclusive thing — big enough to embrace all of us.

WHAT HAPPENS IN A DESIGN JUDGING?

MOORE: We have been looking for two days for a set of shapes that can be reproduced in two dimensions, which demonstrate for us certain things we are in favor of. We are also looking for a set of shapes that turn us on, one by one. In the course of looking for these, we no doubt have discarded a number of beautiful thoughts and skillful technological and formal exercises, but we have pulled out of it some things that show what state architecture is in, and what pieces of it we ourselves happen to react favorably to. I take some heart from the process because, as Joe Passonneau has pointed out, there are a great many things going on at the same time in architecture that are not mutually exclusive, some of which we've seen. Also, there are indications that people are looking at more than their own little separate buildings as ends in themselves - things like Rice's student union and Hardy's theater, which indicate that the guy was looking at more than the one thing he was commissioned to do. I hope that is a positive message coming out of what we were looking at here. I'm glad there were so many things here I liked the looks of; it cheered

PASSONNEAU: The process we have been go-

ing through for the past two days has to do with the three-dimensional qualities of a building, but also it's partly graphics that we see here. When we look at something, we are partly judging the graphics, the things that turn us on. That is unfair to some people; but that is just the nature of this kind of a jury. There is a deeper meaning to iconography, however, because besides the graphic iconography there is an iconography of built form. The strongest reactions you got out of this jury concerned iconography — Ed Dart's violent reaction to some of the projects and very positive reaction to others; my violent, very negative reactions to some things was because I didn't like the iconography; it was not significant to me formally.

ICONOGRAPHY LEADS TO PROCESS

CRANE: I was talking about process. This has something to do with the program of the client and the conditions he sets and the conditions of a city. It also has to do with the problemsolving process the architect has gone through, including his analysis of the needs of the building, his relationship of the various determinants of the form, including the structural, to his basic architectural idea. It seems to me that what we are mostly judging here is what we can see in pictures of desired end results. And we have no way of knowing whether it is well related to the needs of the activity, no way of understanding how difficult it was or how easy it was to get along with the client, and what the influence of FHA and PHA and other Governmentaided programs and building codes were. It seems to me these are all-important.

PASSONNEAU: To the extent that problems are much more complex — and they certainly are — and to the extent that they are unfamiliar, and, to the extent they have ambiguous boundary conditions, they are difficult to solve. For this reason, the accurate and lucid statement of the problem becomes both more difficult and more important.

CRANE: The ritual we have been going through for two days is one that is unable to get completely to the depths of the process that makes each of these projects. But more than that, I think we agree that architects too often don't understand the process in which they work, don't know how to define it, aren't really interested in the problems of influencing outside forces, don't know how to influence them, have returned in effect to a somewhat more narrow idea of what it is that they can control. As a result, FHA designs our housing, traffic engineers design our urban renewal projects, and so on. . . . But I don't want to leave the impression that all architects have got to become equally concerned with "external or process" determinants of architecture, because, if we argued that way, we'd go back 20 years to the point when everything had to fit a certain romanticism about the industrial age.

FIRNKÄS: I agree with you. I do not think every architect has to know everything in terms of structure. But again, he has to accept and define certain boundary conditions and up to these boundary conditions he has to be firm, and only then will he be able to direct, to assemble, the whole package. One thing I would like to stress very much is the question of materials. You know that, if you select the wrong material, you just build a new slum. That should be within the boundary conditions of architecture.

DART: We have seen a great deal of skill exercised here in all the projects. The adroitness of these projects is wonderful — all of the winning projects. There are certain aspects of these problems that do not recognize a certain appropriateness to the specific problem. At times, the rhetoric used is rather strident and boisterous. Really, I see too great an effort in many of these projects to try to superarticulate, instead of allowing a building to just come off or happen. It seems to be a forced sort of thing, and that is what concerns me.

PLANNING AND PROCESS

CRANE: I am very disappointed that we had so few submissions representative of what the architect can contribute to large-scale design of urban environments. We had very, very few planning entries and among them were none I would call superb. And this is important to me, partly because I don't believe there is such a thing as a city planning profession. What has been called the city planning profession is really an industry for dealing with urban problems, and within that industry there are many different professions that must become involved. And the architectural profession is the one that must assume the role as the designer on a much bolder scale. Not just bigger projects, but also this big-little architecture I spoke about, or the little-big. Some of the examples we've seen, such as a proposal to beautify downtown Lexington by the local AIA committee, are sort of symptomatic of what this AIA push to get into urban design has been based



on. It's highly cosmetic; it tackles what is a serious problem of urban growth and change without recognizing that that's what's really involved, and goes after the superficial treatment of some trees, and street furniture, and nice

pedestrian things. It's a sort of a coffee shop school of urban design, which interests itself mainly in the loved places where art galleries might be or coffee shops might be, and which doesn't really deal with the serious generic problems of the junkyards and the stadiums and the highways. I don't think that urban design as such is confined to large things. The other thing that's been missed here very often is a sense of the position of the building physically in relation to other things that gives us a sense of entrance and circulatory relationships, which in turn describes how its form comes out of land values, out of location, out of shortage of land, and various other things. Also position in the spectrum of values I spoke about; there isn't this recognition of "what position do I occupy in an urban community," which then leads to some ideas about the architecture itself. We talked a lot about process and much has been said about iconography, and what I would like to say about that is that the method by which we judge these things, and the way in which most architects go about their work is what I would call artificial rather than something that has a sense of process, of what makes a thing. We start with names for certain problems house, shopping center, apartment building, etc. These names have already designed it before we start. Because we are thinking about the objects as fixed, static things rather than human institutions taking different forms at different times, having different degrees of connectivity depending on an urban situation, and which are affected by outside forces on those things, as well as by the internal forces of the community of human activities that go on in a building. Corbu's Unité d'Habitation for me is a very good illustration of this, in that it is an attempt to say that neighborhood does not need to be something all spread out, with a school in the middle and a ring around the outside to separate the traffic from the kids and so on; but it can be wrapped up in a building. It has stores and schools and various kinds of houses in that building. As a neighborhood statement, it failed, in my opinion, because it became too restrictive in relation to the values the people in that neighborhood had about where they'd like to shop or where they'd like to send their kids to school. But Corbu nevertheless recognized what few other architects have - which is that the form a human institution can take in space has few limits, whereas we give names to things and this designs them. This is what I mean by the artifactual preoccupation we ought to get rid of.



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MECHANICAL ENGINEERING CRITIQUE

IMPROVING AN ELEVATOR CODE

BY WM. J. McGUINNESS

A rewritten city code promises greater efficiency and economy of design for elevators. McGuinness is a practicing engineer in New York City.

New York City's proposed Building Code contains a wellwritten section on elevators and conveyors that will contribute greatly to the efficiency and economy of designing and constructing elevators and other mechanisms for moving people and material.

The new section, Article M-2, Elevators and Conveyors, introduces a new format for the old, much-amended section that became somewhat vague due to many piecemeal changes. (Item No. 1 of the article includes elevators, dumbwaiters, escalators, moving walks, industrial lifts, loading ramps, automatic lifts, mechanized parking garage equipment, console or stage lifts, power-operated scaffolds, and special hoisting and conveying equip-

ment.) The code, which has to go before the City Council for approval, incorporates many requirements of the national code. But some overly stringent regulations in the national code have been eased to permit more economic construction, safer operating standards have been added, and some inspection procedures have been changed.

Why It Was Changed

New York City's policy of "home rule" has been the reason that, up to now, the city has had its own elevator code, despite the fact that many U.S. cities have adopted the national code prepared and constantly reviewed by the American Standards Association.

Omissions in the present New York City code have caused officials to make on-the-spot decisions, which, though usually effective, have varied, thus making for confusion in design and installation. This situation led to Buildings Department examiners and inspectors giving a variety of opinions and interpretations of current requirements rendered obscure by many changes.

National Standards Adopted

Although New York City has its special conditions, the American Standard Association's Safety Code for Elevators, Dumbwaiters, Escalators, and Moving Walks (A 17.1-1965) could be adopted almost in its entirety. A committee of more than 70 city and state administrative and safety officers, insurance company engineers and representatives of the elevator manufacturing companies frequently up-dated this code.

The technical societies have had a strong influence on the code, which was first published in 1921 by a committee of the American Society of Mechanical Engineers.

The code covers not only design, construction, and in-

stallation, but also operation, inspection, testing, maintenance, alterations and repairs.

Specific Improvements

The new elevator article includes items previously missing from the New York City code, and a few now under consideration for the national code. One of these covers power scaffolds. This generic term classifies window-washing platforms that are lowered from the roof of sealed, glass-façade skyscrapers.

For example, the Chase Manhattan Bank Building scaffold is slung from a cantilever-car on a rooftop railroad. The enclosed scaffold rides up and down the mullions on an opposed-wheel arrangement that holds the scaffold in a fixed position with respect to the plane of the façade, and prevents it from swaying in the wind. This installation is an example of good outdoor elevatoring that could have been potentially dangerous if not so well designed.

It is startling to learn that, on other buildings, one inferior scaffold actually fell, and that several are not anchored to the mullions.

A regulation that applies to conventional passenger cars eliminates the folding metal gate. The present code has this requirement, but the new rules will prevent landlord "hardship" exceptions that have been granted.

On nonautomatic cars, the speed of a closing door is reduced to prevent the operator from causing injuries.

The new code will outlaw "man-lifts" (a continuously moving cable with platforms at intervals) and future installation of sidewalk elevators.

A new policy of inspections will be established. Currently, passenger elevators must be inspected four times yearly and freight elevators twice. In the future, half of these inspections — two for passenger cars and one for freight installations may be made by insurance company inspectors.

A recommendation not in the national code will be that a telephone or other communications signal connect each car with a telephone company operator or a 24-hour monitoring service.

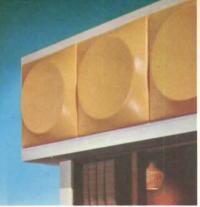
Retroactive Requirements

At present, certain mandatory safety requirements do not apply to installations made before January 1, 1938. Some of these courtesies will be withdrawn. One of the important demands will be that *every* elevator car have door interlocks that make it necessary to close the doors before the car can move.

An Efficient Team

Brooklyn Polytechnic Institute directed and guided the new code; Meyer, Strong & Jones, mechanical and electrical engineers, rewrote the elevator and conveyor article. In order to minimize changes and later conflicts, the writers consulted freely with the people who will be involved with administration of elevator requirements, and companies that manufacture the equipment. Costs should be less when manufacturers can avoid the previous special demands of New York City, and supply instead their standard equipment. The better manufacturers welcome the new code, which promises to eliminate the shoddy practices of some companies.







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SPECIFICATIONS CLINIC

RUBBERS AND ELASTOMERS: PART 2

BY HAROLD J. ROSEN

The last of two articles on tests for rubber-like materials and elastomers. Rosen is Chief Specifications Writer for Skidmore, Owings & Merrill, New York City.

As we noted last month, the increased use of rubber-like materials for joint sealants and gaskets in building construction requires the architect and specifier to become familiar with terms and tests associated with these products. This column continues the discussion with definitions pertinent to a better understanding of the subject.

Hardness: The relative resistance of a rubber material to penetration or indentation (without puncture) by an instrument of specified dimensions under a specified load.

Hardness for rubber-like materials can be measured by several ASTM test procedures. The method best adapted to joint sealants and gaskets is by means of a durometer instrument described in ASTM Spec D 2240.

Two types of durometers, A and D, are used for determining the indentation hardness, which ranges from 0 (soft) to 100 (hard). ASTM D 2240

recommends that measurements be made with the Type D durometer when values above 90 are obtained with the Type A durometer, and that measurements be made with the Type A durometer when values less than 20 are obtained with the Type D durometer.

For sealants and gaskets, most measurements are obtained with a Type A durometer and the values are given in -A durometer points.

Since hardness is only an approximate measure, tolerances should be specified no closer than + or -5 durometer points.

Hardness tested by the durometer method is not a measure of puncture- or tear-resistance of a rubber material.

Permanent Set: The amount by which an elastomer fails to return to its original form after a deformation or distortion of specified duration, regardless of whether the load was in tension, compression, or shear. Permanent set is dependent on the type of rubber, degree and type of filler loading, state of vulcanization, and amount of deformation.

Tension set where elongation occurs is the difference between the length shortly after retraction and the original length, expressed as a percentage of the original length. ASTM D 412 is used as a test procedure for measuring permanent set in tension.

Compression set is the residual decrease in thickness of a rubber that has been subjected to loading or compressive forces. The difference between the original and final thicknesses of the specimen is expressed as a percentage of the original thickness. ASTM D 395 uses two test procedures for determining compression set. Method A measures compression set under constant load; Method B uses constant deflection.

Neither ASA Spec A 116.1 nor Fed Spec TT-S-227b for joint sealants contain requirements for permanent set or deformation. Yet sealants in joints are continually stretched and compressed due to variations in temperature. In addition, heat aging can affect the chemical properties of a sealant, so that initial elongations and compression tests may not necessarily indicate what the permanent set may be after the rubber has been subjected to further deterioration.

Permanent set and compression set values are useful in establishing long-term recovery characteristics and sealing efficiency of a rubber product. During hot weather, building materials expand, and joints close compressing sealants. The sealants may remain in this condition for months. In cold weather, the opposite occurs, with materials contracting, joints opening wider, and sealants stretched for months. Rubber materials having low set should be selected for these applications.

Tear Strength: The maximum load required to tear apart a rubber material, with the load acting parallel to the major axis of the test specimen.

ASTM test procedure D 624 uses three different methods for measuring tear resistance. However, the tests can only be regarded as a measure of the resistance under the conditions of the particular test, and not necessarily as having any relation to service value. When compared to a standard of known performance, the measurements can be of some value in determining a product's general level of durability.

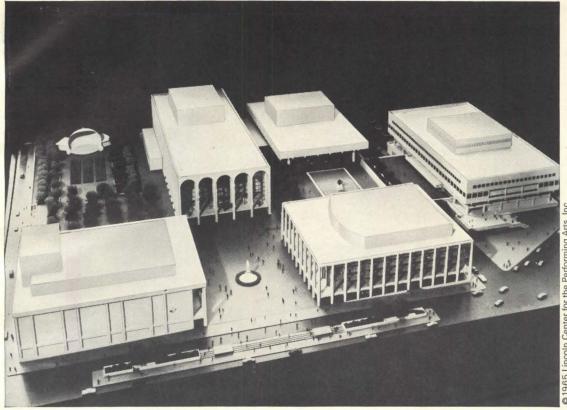
Tensile Strength: The maximum tensile stress applied while stretching a specimen to rupture. It is the force per unit of the original cross-sectional area, which is applied at the time of rupture of a specimen, and is also known as the breaking load, breaking stress or ultimate tensile stress.

Tensile stress is the force per unit of original cross-sectional area of a specimen and is sometimes referred to as the modulus. It is a ratio of stress to strain. If a tensile stress of 1000 psi produces an elongation of 600 per cent, the rubber is said to have a 600 per cent modulus of 1000 psi. With rubber, unlike steel, stress and strain in tension are not directly proportional, and therefore the term modulus has different meanings when applied to the two materials. With steel, modulus of elasticity is a constant: stress divided by strain. With rubber, modulus means stress required to produce a certain strain; it is neither a constant nor a meaningful ratio, but merely the coordinates of a point on the stress-strain curve.

Elongation is the degree of stretchability. It is the extension of a uniform section of a specimen produced by a tensile force, expressed as a percentage of the original length of the section.

If a sealant has a low elongation, it may fail in adhesion or cohesion when the width of a joint opens wider than the sealant can stretch. If a sealant has a high modulus, a bond failure may occur because of the tremendous force required to stretch the sealant.

ASTM Spec D 412 establishes test procedures for tension testing of rubber products. Tensile strength, tensile stress, and elongation can all be determined by these testing methods. ASA Spec A 116.1 and Fed Spec TT-S-227b establish no requirements for these tests for joint sealants.



CREDITS . It is customary in Sloan advertisements featuring famous buildings to credit the architect, mechanical contractor, general con-tractor and other key suppliers. But in the case of Lincoln Center, so many outstanding firms contributed to this historic development that it is impossible to list them all. So in this rare exception, we must, of necessity, simply offer our congratulations to the many who made this great achievement possible.

A view of Lincoln Center for the Performing Arts, located between 62nd and 66th Streets on Broadway in New York City. Buildings (clockwise from far right) are: the Juilliard School—to open in 1968, Philharmonic Hall, New York State Theater, Metropolitan Opera House, and Vivian Beaumont Theater and Library & Museum of the Performing Arts. All buildings in Lincoln Center are equipped with Sloan Flush Valves.

Lincoln Center for the Performing Arts

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THE ARCHITECT'S LIABILITY AND THE CONTRACTOR: PART 4

BY BERNARD TOMSON AND NORMAN COPLAN In the last of four articles, P/A's legal team discusses the final disposition and important implications of a recent Illinois case in which injured construction workers sued the architects.

We have been discussing a decision of the Supreme Court of Illinois, in the case of Miller v. DeWitt (see IT'S THE LAW, OCTOBER, NOVEMBER, and DE-CEMBER 1966 P/A), which held that an architect may be charged with liability for injuries sustained by employees of a contractor that were occasioned by the collapse of an inadequately shored roof. The rationale of the Supreme Court of Illinois was that, if the contractor performed his work in such manner that he created a hazardous or dangerous condition, which the architect knew or should have known of in the exercise of due care, a jury would be justified in assessing liability against the architect based upon his failure to stop the work. The Court stated:

"Here it appears that the shoring and removal of part of the old gymnasium roof was a major part of the entire remodeling operation and one that involved obvious hazards. We think that the shoring operation was of such importance that the jury could find from the evidence that the architects were guilty of negligence in failing to inspect and watch over the shoring operation."

The Court, in reaching its conclusion, stated it agreed with the premise that architects have no duty to specify the methods a contractor shall utilize in constructing a project, but that, on the other hand, an architect does have the duty of insisting upon a safe and adequate use of that method. As we have pointed out, this is a significant departure from the general rule that the duty to "supervise the work" merely creates an obligation to see that the building, when constructed, meets the plans and specifications contracted for. Prior to the Illinois decision, it has generally been held that "non-feasance" (failing to act) on the part of the architect during supervision will not afford a basis of liability against him to third persons with whom he has no contractual relationship. If the Illinois rule is adopted by the courts of other states, the area of architectural responsibility will be greatly extended and will involve serious questions concerning the competency of the architect to deal in those areas and the adequacy of his fee with respect to the extended responsibilities.

The Illinois Supreme Court was also called upon to consider the propriety of the dismissal by the trial court of the architects' third party complaint against the contractor. The contractor was not directly sued by the employees who were injured by his failure to adequately shore the roof, since such a suit is barred by the Workmen's Compensation Law of Illinois. However, the archi-

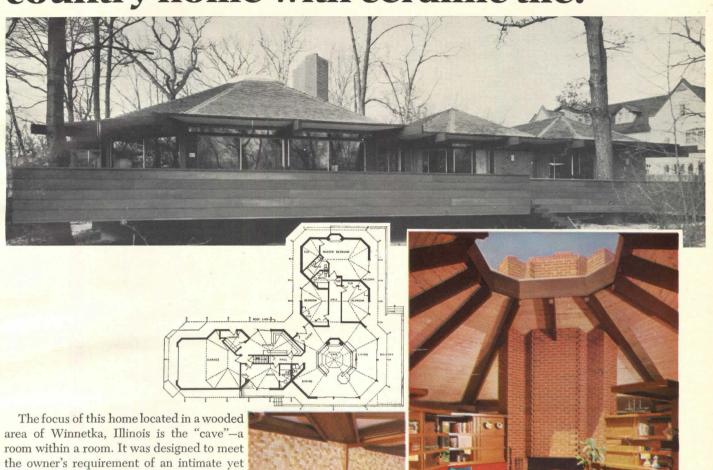
tect impleaded the contractor, alleging that since he was the primary and active wrongdoer, the contractor should be required to indemnify the architect for any liability charged against him. The dismissal of this cross-complaint by the trial court was based upon the conclusion that the complaint of the injured employees charged the architect with active wrongdoing, and, if such fact were established, the architect would not be entitled to indemnification from another wrongdoer. Further, the trial court concluded that to permit a cross-complaint against the contractor would be to accomplish by indirection that which was barred directly under the Workmen's Compensation Law. The Illinois Supreme Court, however, reversed this determination, stating:

"The contractor also insists that the original complaint and the third-party complaint contain similar allegations of negligence, and that therefore there can be no indemnity over between two active wrongdoers. We do not agree with this conclusion. While the original complaint contained allegations of active wrongdoing, this does not constitute the sole basis for liability on the part of the architects. As we have suggested before, the jury could have based their verdict on the failure of the architects to stop work or prevent the contractor from performing its duties in an obviously unsafe manner. We believe that the evidence does not show that the architects were negligent in their primary duties, but could only show that they failed to sufficiently police the contractor's performance. When a jury could properly find that an injury was directly caused by improper construction methods

and techniques used by a contractor, and that the architect was liable only by reason of a failure to stop work on the job, we think that the jury could find that the contractor was an active tort feasor while the architect's fault was merely passive. We conclude that this is a proper case for a third-party complaint."

In addition to its reversal in connection with the third-party complaint of the architect against the contractor, the Illinois Supreme Court concluded that a new trial should be granted in connection with the basic finding of liability against the architect for the reason that the grounds upon which the jury could reach such a verdict were too broadly stated by the trial court. As a consequence, the plaintiff filed a petition for rehearing. At the time of the writing of this column, no decision has been made on such petition. Even if it is denied, however, and the Court's decision that a new trial is required stands, there will be little comfort to the architectural profession from this result. The basic ruling of the Illinois court - that an architect is chargeable with the responsibility of stopping the contractor's work if the contractor is performing in such a manner as to create a hazardous condition - will still stand. It is imperative, therefore, that the profession consider what steps may be taken to soften the impact of such decision.

Erickson and Stevens enhance a modern day "cave" in a sophisticated country home with ceramic tile.



not isolated conversation area. The cave, as well as the surrounding entry, dining and living areas have ceramic tile floors.

The philosophy behind the design of this home is the use of a prismatic plan offering maximum opportunity to capitalize on spectacular views in all directions. At the same time, privacy is accommodated by the adaptation of individual, adjoining living "cells," each with its own roof.

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A PECULIAR PANSOPHISM

BY PETER COLLINS

TWENTIETH CENTURY ARCHITECTURE: THE MIDDLE YEARS 1940–65. By John Jacobus. Frederick A. Praeger Publishing Co., 111 Fourth Ave., New York, N.Y., 1966. 215 pp., illus., \$18.50. The reviewer is Professor of Architecture at McGill University, Montreal, Canada.

Any history of world architecture built during the last quarter-century, especially when prefaced (as in this volume) by a study of its architectural antecedents from 1920 to 1940, must be both encyclopedic and pansophic if it is to be complete. Yet the number of buildings constructed during that period would make a really complete compilation prohibitively large, whilst the multiplicity of building types, personalities, and sites would make an accurate analysis correspondingly forbidding. Hence the accepted art-historical compromise is to compile a selection of buildings (known academically as "significant monuments"), which are analyzed and classified morphologically to indicate the sequence of ideas they represent (known academically as "significant trends").

Dr. Jacobus has accomplished both maneuvers with considerable dexterity, and his book is particularly effective in its organization of "significant trends." He explains with unusual clarity the qualities characteristic of world architecture from 1920 to 1940, from 1940 to 1950, and from 1950 to the present day. His analysis of the tendencies that produced a resurgence of romanticism during World War II constitutes an invaluable appendix to our knowledge of the influence of ruins on architectural design. Indeed, the only blemish on this aspect of his book is his tendency to underrate the extent to which the war disrupted the building industry from 1940 to 1950.

Nevertheless, the main historical differences between pre-1940 and post-1950 architecture were more quantitative than qualitative, and this fact is unwittingly disclosed in his attitude toward "significant monuments." Dr. Jacobus confidently asserts that the Villa Savoye at Poissy and the German Pavilion at Barcelona "represent the aims of the entire epoch." But he is understandably nonplussed by the amount of reinforced concrete and steel architecture built within the last 15 years, and so asserts that "today, no individual building can completely represent the stylistic aspirations of our unsettled age." However, this sensible statement does not prevent him from asserting a hundred pages previously that the interiors of the Chandigarh Assembly building are "the most sublime created in our day," since "its original spatial effects are as close as the architecture of our own day will ever come to such vanished Asiatic splendors as the Achaemenian Empire of southern Persia."

As this quotation demonstrates, the text has a tendency to degenerate into a pseudolyricism, which (to use one of Dr. Jacobus's own neologisms) is at times disquietingly "parodistic" of his former teacher at Yale. Though it is a relief to find Kafka substituted for Melville, it is still tiresome to have to read yet another dythyrambic evocation of the Villa Savoye as the reincarnation of Mycenaean citadels, neolithic Swiss lacustrine dwellings, and the Villa Capra, all rolled into one. Perhaps it will again "breathe a latent and secret Hellenism" when it has been patched up to look like the photographic illustrations in Dr. Jacobus's book. But the only breath of latent Hellenism I found there when I visited it last year was provided by a beautiful graduate of Smith College and Yale, whom I surprised musing on the roof (or do I mean the "hanging garden"?).

Moreover, many of his breathtaking epithets are really quite meaningless in their context, such as the word "ineffable" - a favorite that on one occasion he even translates into French, in parentheses. That he should apply this adjective to buildings he has never seen, such as the Barcelona Pavilion, is understandable; but why use it in his lengthy verbalization of the church at Ronchamp, which would be the envy of any travelogue scriptwriter?

These, however, are trivial lapses, though there are many more. Most serious is the fact that this book contains defects that may well militate against its avowed intention of helping architecture to progress. The first is Dr. Jacobus's emphasis on the merits of "pure form" — a Kantian doctrine he enunciates explicitly when asserting that "the programmatic utilitarianism of the Unité in no way interfered with the creation of one of modern archi-

tecture's most powerful statements of pure form," a remark that almost paraphrases paragraph 16 of the Kritik der Urteilskraft. The second is his insistence on the primacy of personal expression in architectural design, as when, for example, he deprecates a building by Markelius because "it is so bland and so lacking in any sort of personal touch" or dismisses the U.S. Embassy in Athens because "there is nothing in the design to indicate a personal imprint, or to suggest that this building results from a long and important career in modern architecture." Finally, there is his frequent use of inept pictorial comparisons. He asserts that Mies van der Rohe's I.I.T. plan was "in all probability derived from the plates in J.N.L. Durand's Précis des Leçons d'Architecture (1802-5)." Not only is this derivation clearly devoid of any probability, but it is a question of fact verifiable from the architect himself.

Wright's Marin County Civic Center is compared photographically with the Pont du Gard at Nimes - a juxtaposition that proves so overwhelming that it leads Dr. Jacobus to claim that the latter is the former's "ultimate progenitor." Yet when he comes to discuss Philip Johnson's New York State Theater, he not merely gives no comparative plans of other theatres that might have been its "ultimate progenitor," he does not even give a plan of the theater itself. In other words, this History of Architecture by the Comparative Method constitutes a degeneration of a method that was questionable and questioned even in Banister Fletcher's youth, and if this is an example of the way architectural history is taught to future architects and their potential patrons, our profession can rejoice that Dr. Jacobus has now turned his attention to Henri Matisse.

Continued on page 180



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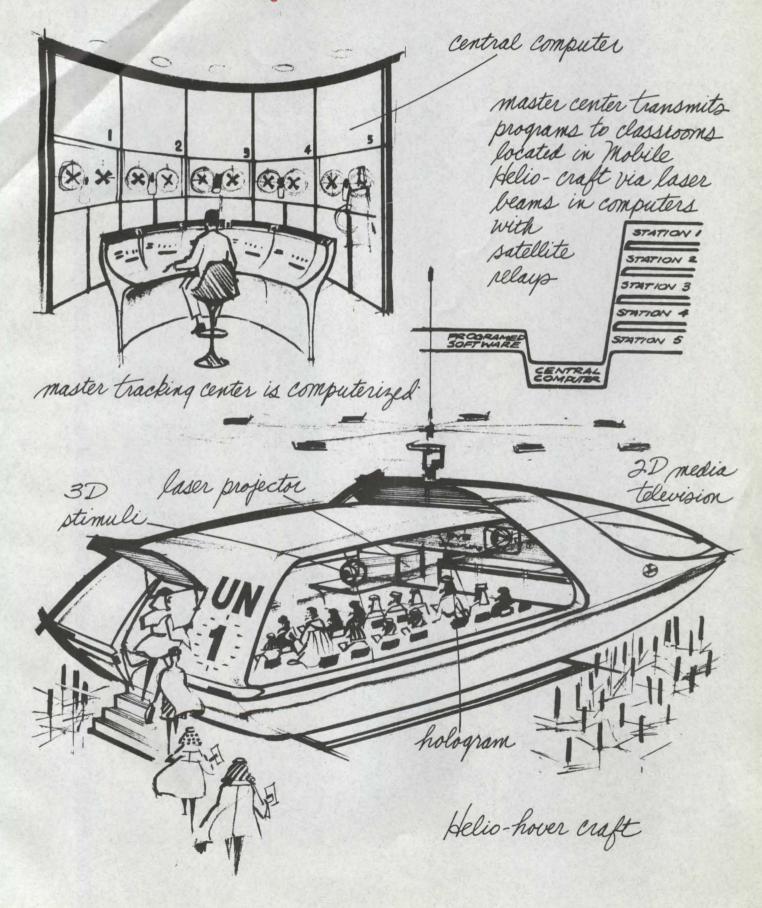
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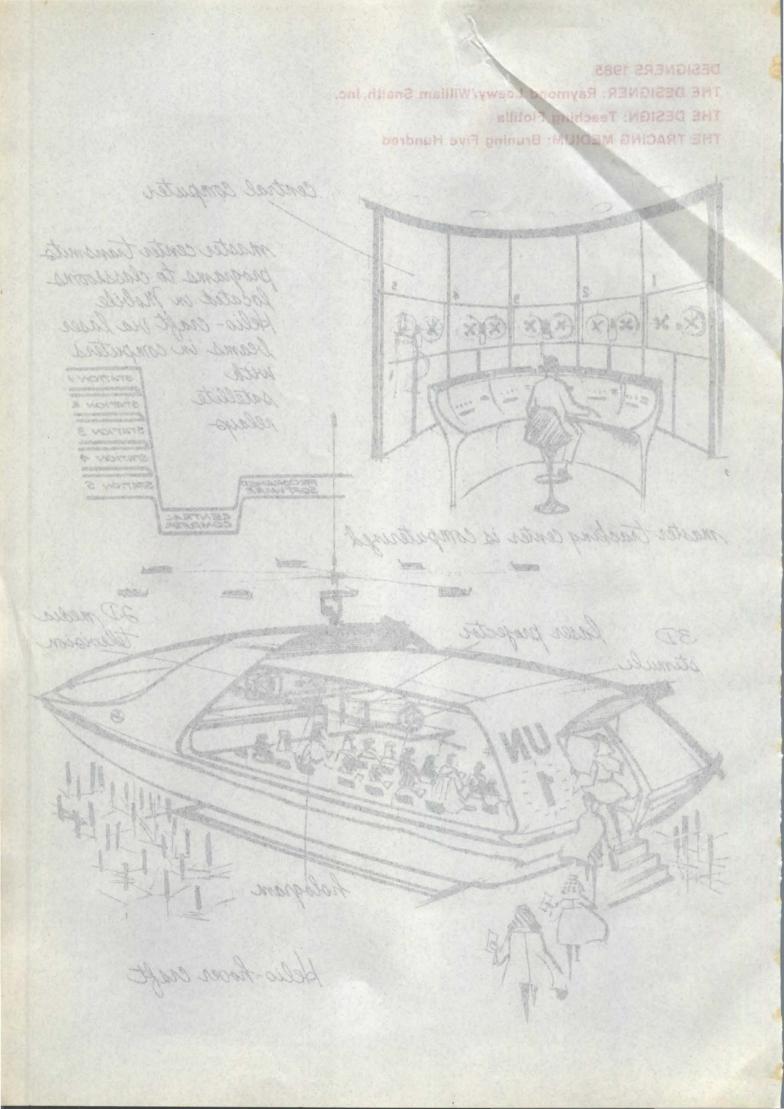
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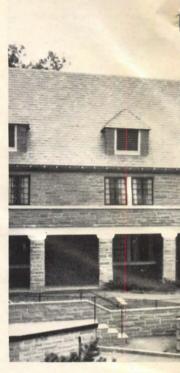
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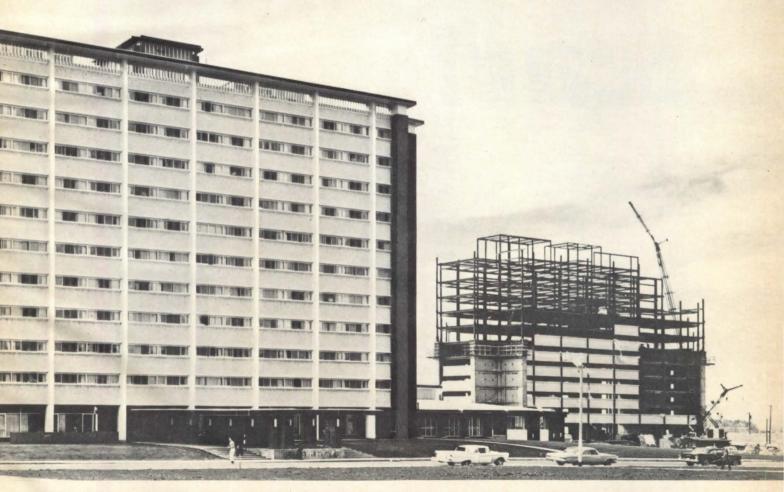


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Charles Evans Hughes Residence Hall, for students in Cornell's law school, points up the adaptability of steel framing to traditional architecture, as well as to sloping terrain. Architects: Eggers and Higgins





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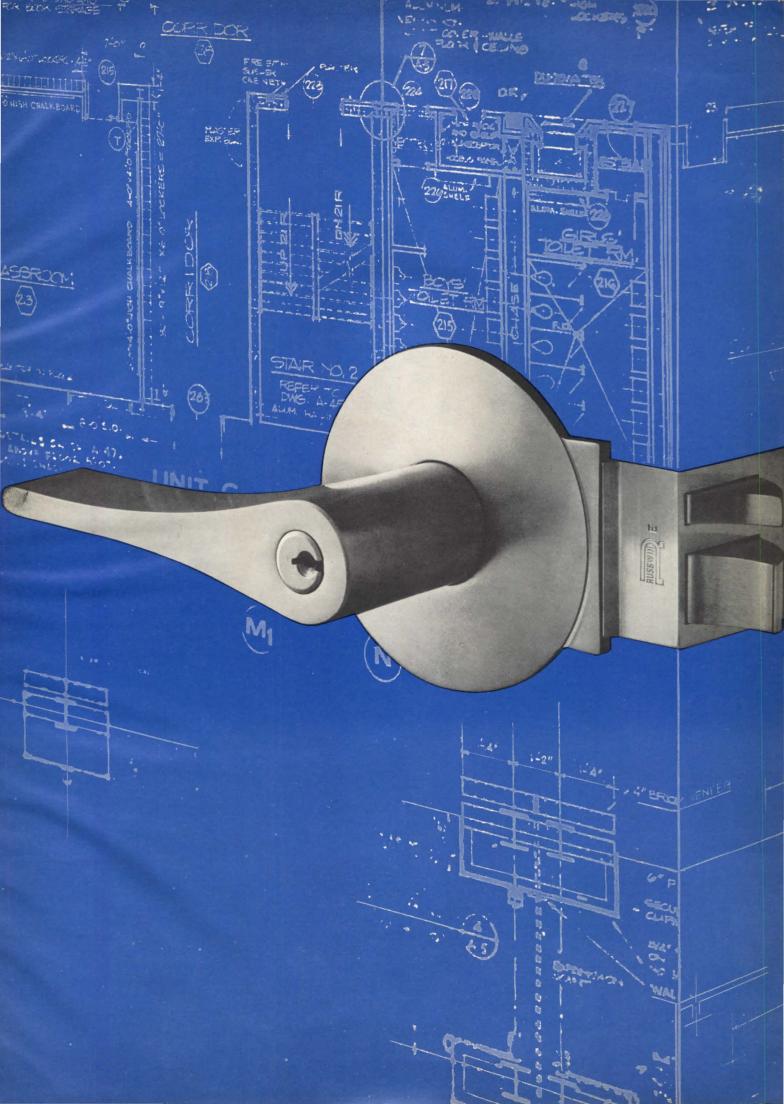


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scribe human needs, both physical and cultural, and to describe cultural differences in housing needs, advocating more research in these fields. Finally, it deals generally with adequate standards of apartment layout, air, light, space, etc., and the necessity for the proper planning of the city as a whole as a necessary part of adequate housing.

The examples are well presented, with excellent photographs, plans, and site plans. A specific description of the relationship of the projects to the city as a whole would have been useful. The organization of information, the uniformity of approach, and the presentation of examples are all excellent and consistent with the intentions of the book as described in the preface.

To conclude, then, the problems of cities, though difficult, are not impossible. Nor is the architect responsible for the whole solution of them. But there is one part of these problems for which the architect and the planner are fully responsible. As Edmund Bacon teaches, it is within the training, ability, and responsibility of the architect and the planner to present to government and to the public the visual image of what the city can be. The processes of democracy start at that point. This city is potentially our most meaningful art form. Every consideration given to any work of art belongs also to the city as a contemporary living Acropolis, not as shelters for statues of gods, but as the framework of our own consciousness, of our entire experience.

A Classic in Paperback

BY FORREST WILSON

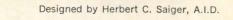
The Architecture of the Italian Renaissance. By Peter J. Murray. Schocken Books, Inc., 67 Park Avenue, New York, N.Y. 10016. 1966 Paperback edition. 296 pp., illus., \$2.95. The reviewer is an Associate Editor of P/A.

The best thing we can do with prejudices is to get rid of them. Peter Murray, in his book *The Architecture of the Italian Renaissance*, disposes of many prejudices about this period of architecture, thus making particularly welcome the publication of this classic in paperback.

Many of us had our interest in this period of architecture killed by the saccharine enthusiasm of old-maid school teachers. We were thus readied for Ruskin's eloquent, empty vehemence, which ripened in the 30's to a total negation of building embellishment. It became easy to discard Renaissance harmony and orna-

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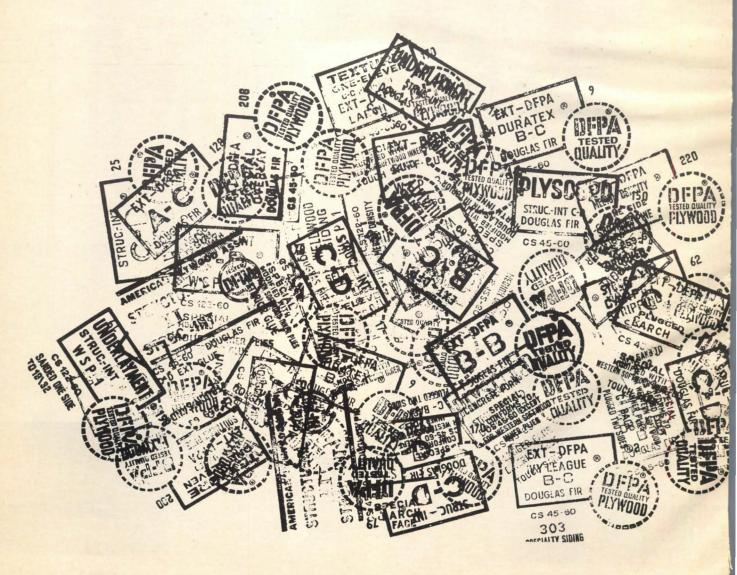






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Continued from page 204

ment along with Renaissance decoration in our new-found sterility.

The Renaissance has been largely overlooked by the partisans of structure, who deplored the transformation of the architect to artist, as against his former position as master mason, thus leading to the substitution of taste for construction.

This reviewer must admit his guilt in sharing the general simplification of opinion in relation to the Renaissance, but he was in good company. Fletcher's statement of the "break in the orderly evolution of architecture" (referring to the emergence of the Renaissance), and Pevsner's chapter in his History of European Architecture, compounded the misconception.

As Murray writes about Brunelleschi and the construction of the dome of the cathedral of Florence, the bridge between Gothic building and the Renaissance becomes apparent. The reader is reminded that this was much more than a period of style.

The author's decision to discuss design, style, and construction gives a vitality to his book usually lacking in the vocabulary of the art historian. The fact that he is a facile and interesting writer and adequately documents his contentions with plans and photographs does the book no harm.

However, one minor point must be questioned: The reason for the construction of the dome of the cathedral at Florence is said to be the difficulty of shoring for centering. This would not seem to be the entire story. Although it was undoubtedly a major consideration, Brunelleschi's decision was equally due to the need to minimize horizontal thrusts. And it might well have been that his design was repeated by later architects as much for its structural virtues as for its stylistic influence.

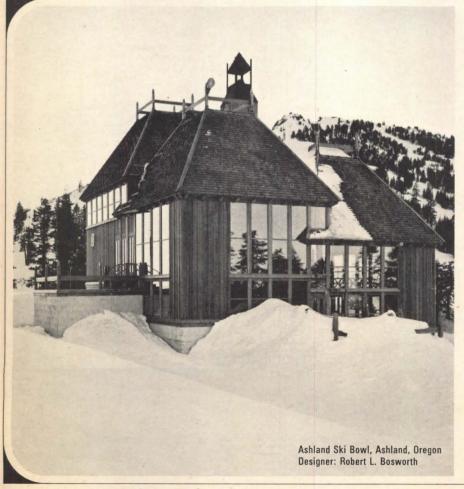
Murray's book has earned its place as a companion piece to that excellent work by R. Wittkower, *Architectural Principles in the Age of Humanism*, with Pevsner serving as an introduction and Sir Banister Fletcher as a glossary.

Frustrating But Worthwhile BY FREDERICK HERMAN

A HISTORY OF CLASSICAL ARCHITECTURE. By Bruce Allsopp. Pitman Publishing Corp., 20 E. 46 St., New York, N.Y., 1966. 414 pp., \$10.95. The reviewer is an architect with Spigel, Carter, Zinkl, Herman in Norfolk, Va.

This book is a study in frustrating contradictions. Perhaps Bruce Allsopp, who is chairman of the Society of Architectural Historians of Great Britain, has attempted the next-to-impossible by trying to combine the findings of archaeology and architecture with those of history, and evaluating the resultant brew from a contemporary viewpoint. Adding to the confusion is that the author seems never quite able to decide what kind of an audience he is writing for. He ranges from the preposterously simple to the complex with equal enthusiasm. To give the reader a last jolt of frustration, there are the photographs. These are numerous and of satisfactory quality (although some are on the fuzzy side) but one can only wonder at their subjects. There must be something better than a painting by Alma Tadema to illustrate "A Palatial Roman Interior." In addition, there are a number of pictures that do not really relate fully to the text.

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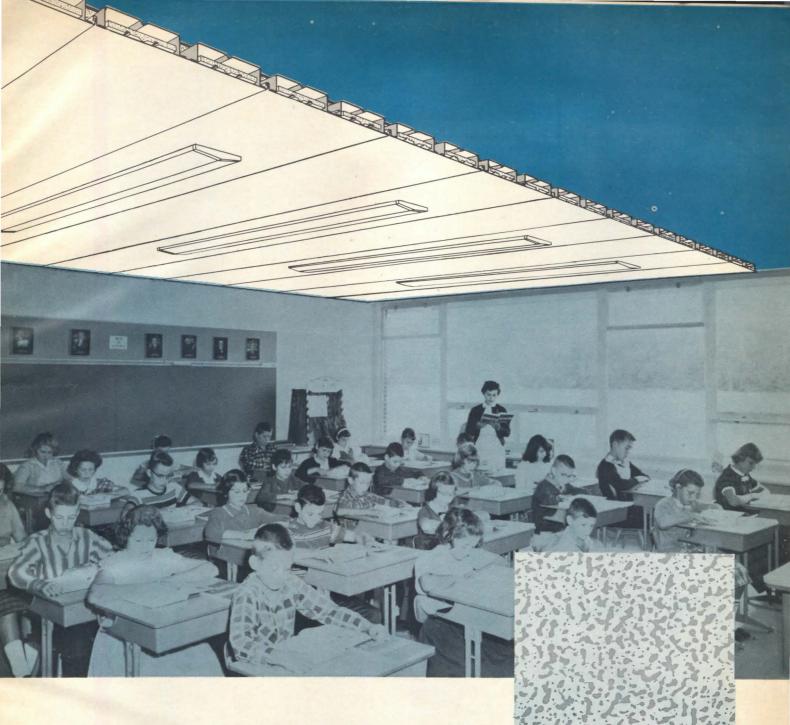
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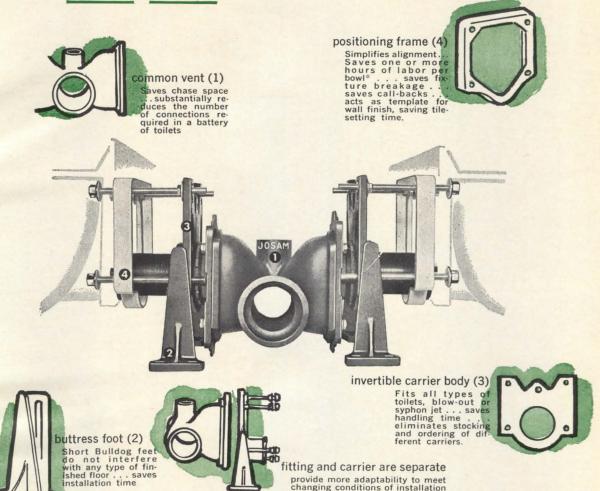


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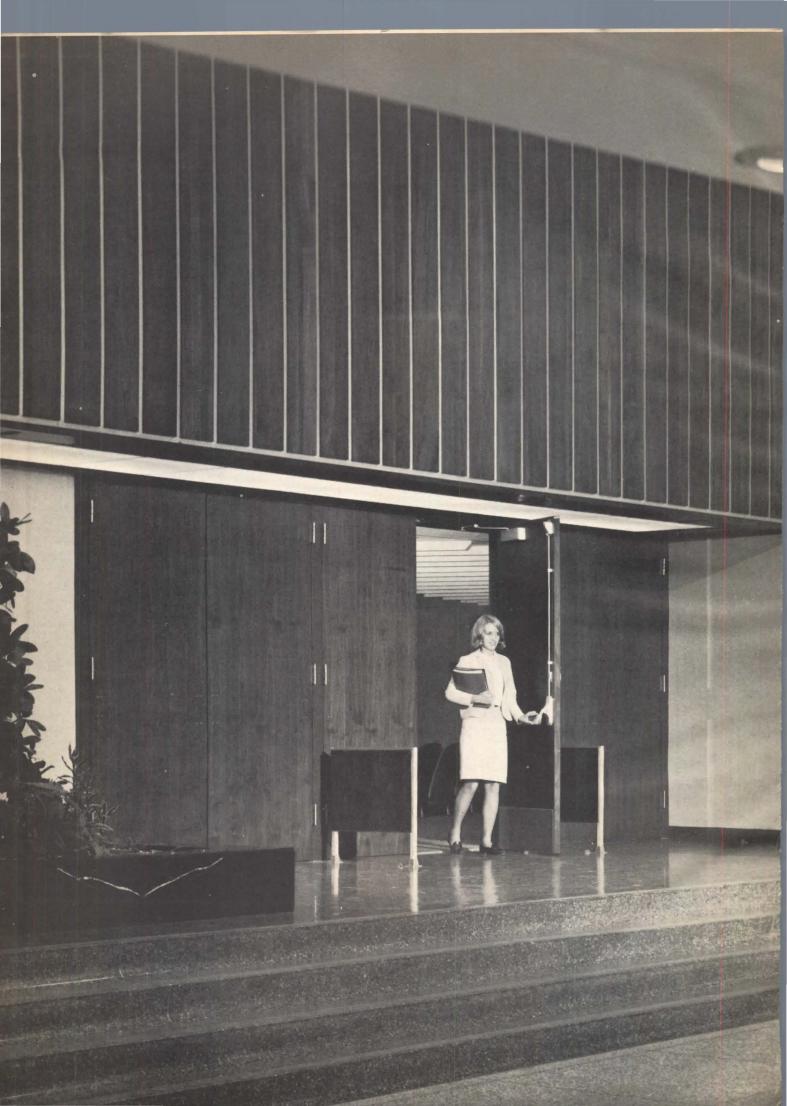
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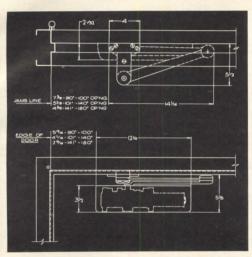
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This, however, is compensated for by the text, which often makes comparisons between buildings or building details for which there are no illustrations. One last complaint is that Allsopp is a slow starter but a fast finisher. It takes him some 45 pages to explore the background of classical architecture, but only 6 pages to dispose of late Roman architecture in the West and another 6 to dispose of the development of "Hellenesque architecture" and the influence of Greek architecture on Romanesque and Moorish architecture.

In view of the above, one may well ask whether one should save the \$10.95 — the cost of the book. The answer to this is "no." Despite the frustrations one encounters, the book contains a great deal that is of value and one can glean quite a few nuggets from it.

The attempt to link architecture to social patterns is a highly worthwhile effort. One at least escapes the dreary chronology that reduces most books on classical architecture to the level of catalogues. One gets a whiff of some living, breathing beings in this book, instead of the odor of musty ruins. One may raise an eyebrow at the linking of columns to phallic symbols or the arguments that Minoan columns have a reverse taper because they are derived from cypress tree forms, but at least it relates them to the human element

The author points to one important fact we usually overlook in our preoccupation with antiquity: namely, that time has been a highly selective process with only major works tending to survive. We have a tendency to read into what remains any number of motives that the original builders may not have had. Similarly, we see and experience these buildings as they exist today, in semiruined states, such as the Parthenon, or transformed states, like the Pantheon. Chances are excellent that "many people who love classical architecture would be horribly startled if they could go back to about the year 400 B.C. and see the Parthenon when it was new, shining in its abstract almost irrelevant purity, with the capitals probably painted in strong color, polished with wax; inside, a statue of gold and ivory with great gold helmet, carrying the divine insignia, and eyes flashing with crystal . . ."

These kinds of observations constitute the book's value. Allsopp tries to give some sort of perspective to classical architecture and the fact that it was made for and by humans. That he does not completely succeed is unfortunate, but he is on the right track. Architecture is not

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an abstract art, but springs from a sociopolitical environment. Its achievements
should not be blindly worshipped or
copied, but understood. Allsopp heads in
this direction; his book serves to drive
home a few obvious points and also tends
to make us aware that the present is the
result of a process of evolution, and that
one needs to understand the past in order
to comprehend the here and now.

A Popular and Instructive Volume BY JEFFREY ELLIS ARONIN

ORIENTAL ARCHITECTURE IN COLOR. By Werner Speiser. Viking Press, Inc., 625 Madison Ave., New York, N.Y., 1965. 504 pp., illus., \$22.50. The reviewer, an architect practicing in New York City, also has his own radio program, entitled "Architecture in the Space Age," on station WNYC.

The architecture of Islam, India, and the Far East expresses an outlook that is little recognized today in the Western world, let alone comprehended. This book is a colorful introduction to such architecture, and it may shed some light on the great traditions and philosophy of the Orient. For, as architecture depicts civilizations, so may the study of it lead to a better understanding not only of art and structure, but of the political forces now at work in that part of the world. One can sense in its pages the steadfastness, the patience, the tradition of the society - its continuance sometimes against great odds, the resolve and dedication of the people.

The book is divided into three parts. The first concerns Islamic architecture, the second Indian architecture, and the third the architecture of the Far East. One theme runs through nearly all the examples: They are buildings devoted to the past, not to the future, although the architects obviously had a desire for their buildings to live into the future. Secondly, building views are generally restricted to exterior shots, for no explained reason, except perhaps because of space limitation or technical difficulties in photographing interiors badly illuminated or restricted by religious authorities. This is curious, because in the Orient great stress is placed on the importance of space, both inside and outside a building, and if there is any failing in the book it can be said to rest here.

Two sets of discussions are traced in the book — one of general historical development, and the other of specific examples (in which the text is placed alongside the illustration, although not necessarily facing the same way). Little new information is brought to light: The major works in this field, even encyclopedia articles, are more thorough in their review. But the photographs are breath-taking and make excellent browsing or source material for further study.

The Katsura Imperial Summer Palace, Chu-Shoin, Kyoto, Japan, is of extraordinary interest in that it dates from 1590 and yet looks modern, due to the brilliant planning of Prince Toshihito. It follows the traditional Japanese concept, where every part is carefully measured, every proportion checked, no joint nailed. The posts are 6 ft apart, standard for Japanese homes; the shoji screens are hidden by brown wooden shutters or "give way to dark rectangles of shadows that are open rooms . . . the variations depend upon the season and time of day." True architecture is good at any age.

Although the book is not politically oriented, being more of a gift-type art book, architects have an acute ability to perceive things as they are, and can draw great inspiration from these pages. For example, the Great Wall of China perhaps tells us something about Chinese nationalism even today: Every detail is practical, yet it certainly symbolized the might of the Empire in its length of 2500 miles and its width sufficient to permit six horses to gallop abreast along the top. The Chinese section is also particularly interesting for its reference to house building standardization, which is claimed to have been more effective 1000 years ago than it is today in the West.

With the Orient playing an ever-increasing part in the life of the Western world, this book is most timely. It is heartily recommended. Put a book-plate in the front if you do not want to lose it. Judging from the many who wanted to borrow my copy, this is a very popular and instructive volume.

BOOK NOTES

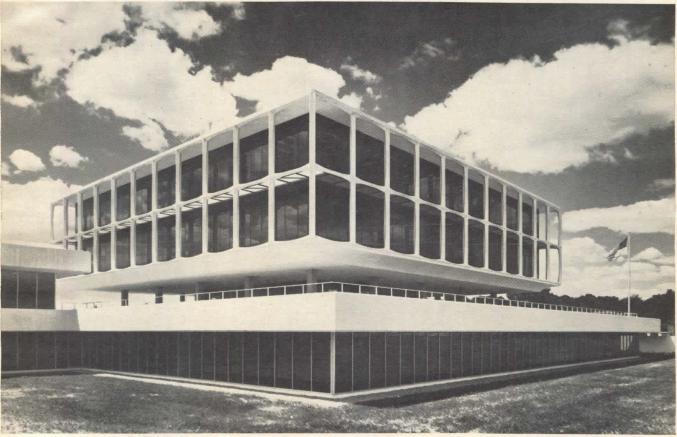
The Column Research Council Guide to Design Criteria for Metal Compression Members. Second Edition. Edited by Bruce G. Johnston. John Wiley & Sons, Inc., 605 Third Ave., New York, N.Y., 1966. 217 pp., \$10.

La Tourette, The Le Corbusier Monastery. Anton Henze. Photographs by Bernhard Moosbrugger. Wittenborn and Co., 1018 Madison Ave., New York, N.Y., 1966. 71 pp., illus., \$4.50.

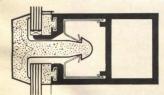
A short text describes the building and some of the architect's thinking while the excellent and beautifully reproduced photographs do a much better job than all the words.

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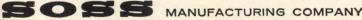
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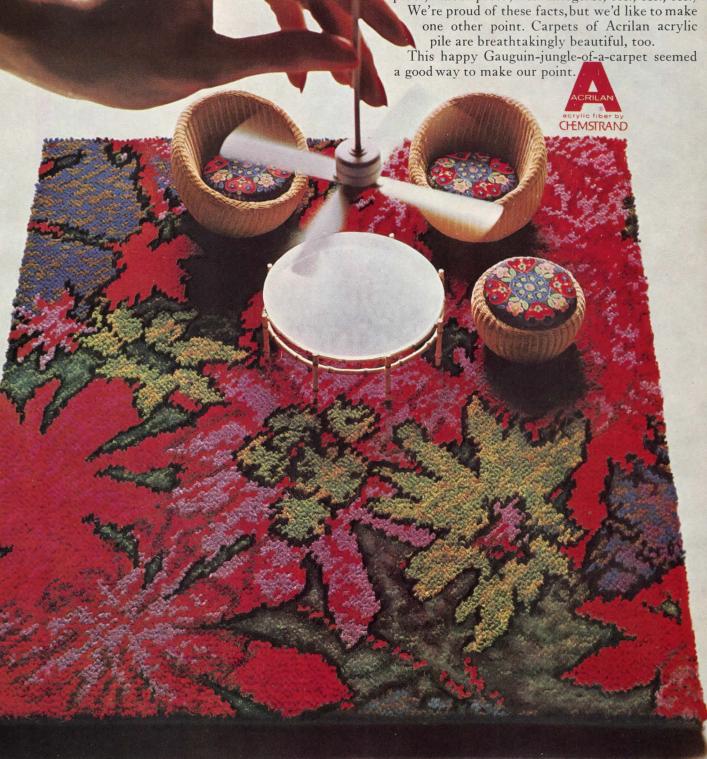
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