

seventh annual design awards program



Typical Cadet Room, U. S. Air Force Academy, Colorado Springs. Skidmore, Owings and Merrill, Architects



WITH CONFIDENCE

because . . .

- It's an honest product skillfully made by men dedicated to quality.
- ▲ It's a vinyl flooring reinforced with asbestos fiber stable, durable and attractive.
- It's available throughout the United States through responsible outlets.
- ▲ It's made by a company earnestly trying to serve the architect with constantly improved products that solve architectural floor problems.
- ▲ Finally, Vina-Lux performance is guaranteed by its maker.

AZROCK FLOOR PRODUCTS DIVISION UVALDE ROCK ASPHALT CO. * 5264 FROST BANK BLDG. • SAN ANTONIO, TEXAS



MAKERS OF VINA-LUX

AZROCK AZPHLEX

DURACO

PROGRESSIVE ARCHITECTURE

David Bradford Wilkin Publisher Thomas H. Creighton, FAIA Editor H. Victor Drumm Advertising Sales Manager

> Charles Magruder, AIA Managing Editor Burton H. Holmes, AIA Technical Editor Jan C. Rowan, AIA Feature Editor Ilse Meissner Reese, AIA Associate Feature Editor James T. Burns, Jr. News Editor Barbara J. Melnick Interior Design Editor

> > Joan Hurley Art Director Elmer A. Bennett Chief Draftsman Nicholas Loscalzo Draftsman Ann Douglass Editorial Production

William R. Evans Ass't Advertising Sales Manager Sam H. Patterson, Jr. Research & Promotion Manager

> John N. Carlin Circulation Director David N. Whitcombe Assistant Circulation Director Joseph M. Scanlon Production Manager

Norman Coplan Ada Louise Huxtable William J. McGuinness Harold J. Rosen Judge Bernard Tomson Contributing Editors

Margaret B. Squire, Feature Ellen Perry, Technical Assistant Editors June Wetherell Frame Janice M. Helmer Dora Sue Melton Norma S. Mendle Editorial Assistants

Published monthly by REINHOLD PUBLISHING CORPORATION, 430 Park Avenue, New York 22, N. Y. Second-class mail privilege authorized at New York, N. Y. Professional subscription—\$5. (For full data, see page 31.) Volume XLI, No. 1 7 It's The Law by Bernard Tomson and Norman Coplan
9 Need for Architectural Research by Ezra D. Ehrenkrantz

- 13 Mechanical Engineering Critique by William J. McGuinness
- 15 Spcifications Clinic by Harold J. Rosen

31 Views

practice of architecture

P/A NEWS REPORT

design awards program

- 45 Saarinen Designs Two New Colleges for Yale
- 47 Buildings Ready for Winter Olympics
- 48 Cultural Center Design Shown
- 49 Americans Design Hospital for West Berlin
- 50 Curvaceous Cafe-Club Vaults California Canyon
- 51 Buildings in Paris Beginning to Reach for Sky
- 53 Personalities
- 60 Washington Column
- 73 New Products
- 81 Manufacturers' Data
- 99 Introduction: P/A Seventh Annual Design Awards
- 100 First Design Award: Urban Design Project DeMars & Reay, Architects
- 108 Urban Design
- 118 Commerce
- 122 Religion
- 126 Residential
- 134 Public Use
- 137 Recreation
- 140 Education
- 148 Health
- 152 Summary
- 162 Illustration Credits
- 177 Reviews: Let Anonymity . . . Claim the Man
- 212 Jobs and Men
- 216 Advertisers' Directory
- 218 P.S.: Diary

world's largest architectural circulation

January 1960

CURTAIN WALLS

by GENERAL BRONZE

FOR THE NEW HOME OFFICE BUILDING EQUITABLE LIFE ASSURANCE SOCIETY NEW YORK CITY

Contractor: Turner Construction Co. Architects: Skidmore, Owings & Merrill

Here's another of America's outstanding buildings-the new Home Office of the Equitable Life Assurance Society of America. And like so many other distinctive buildings, it too features Curtain Walls engineered, fabricated and erected by General Bronze.

To give a pleasing contrast to the natural finish aluminum grid and panel units, the architects, Skidmore, Owings & Merrill, have used black glass spandrels below each of the fixed light windows as well as black finish louvers on all the mechanical equipment floors.

If you are planning a curtain wall building in either aluminum, bronze or stainless steel, we can help you in many ways. For detailed information on GB products-curtain wall systems, windows, revolving doors, architectural metalwork-give us a call or see our catalogs in Sweet's.





PERMATITE DIVISION - Custom-built Windows, Curtain Walls, Architectural Metal Work and Revolving Doors. ALWINTITE DIVISION - Stock-size Aluminum Windows and Doors. BRACH MFG. CO. DIVISION-Radio, Television and Electronic Equipment. STEEL WELDMENTS, INC. DIVISION-Custom fabrication in Steel and Iron.

Can an Architect Be Charged With Fraud?

It's the Law Column by Bernard Tomson and Norman Coplan

P/A Practice of Architecture article describing a case where an architect was charged with fraud for failing to disclose to the owner defects in construction.

Can an architect be charged with fraud because he failed to advise his client that a defect in the structure resulted from improper plans or specifications? This was the issue which the Supreme Court of State of Oklahoma was recently called upon to consider. The Court ruled that failure of an architect to disclose facts which would substantiate a claim for damages against himself did not constitute fraud, and therefore affirmed the decision of the trial court, dismissing the action against the architect.

An architect may be liable for damages sustained by his client as the result of his negligent performance or of his fraud. Negligence is measured by whether the architect has exercised reasonable professional skill and diligence, and has conformed to accepted architectural standards. Fraud is based upon representations made by the architect to his client which are false, which are known by the architect to be false, and which are relied upon by the client to his detriment. The facts of the Oklahoma case referred to above are of interest in connection with both these types of potential liability.

In the Oklahoma case, the plaintiff alleged that in 1945 he entered into an agreement with the defendant architect in connection with the preparation of plans and specifications and supervision for the construction of a building in Tulsa, Oklahoma. The architect prepared the plans and specifications, and thereafter the building was constructed and completed in 1946 under the architect's supervision. The plaintiff further alleged that the architect represented that the building would be designed in a workmanlike and sufficient manner, but that, in fact, the building was not designed and constructed in accordance with such representation. The plaintiff further claimed that within one year after completion, the roof of the structure began to leak, but that he was advised by the architect that the roof was well constructed, that there was nothing structurally wrong, and that the roof conformed to the building code. It was charged by the plaintiff that such statements were untrue and made by the architect to cause the plaintiff to forego further inquiry about the roof structure.

The plaintiff further complained that in 1955, some nine years after construction was completed, the roof leaked so badly that he requested the architect to reexamine it and that at that time the architect denied any fault on his part for the condition of the roof. The complaint further charged that the roof had not, in fact, been constructed and designed in a proper manner, and that proper materials had not been used. Specifically, it was alleged that the joists were not of proper quality or properly spaced; that the bridging of the joists was not in accordance with good practice and design; that the joists had become misplaced; that that the roof was warped, cracked and could not be maintained or repaired; that the sheet rock used on the roof is not recommended or used by competent architects, engineers, or building suppliers, nor approved for such use; and that the defendant knew or should have known that such materials were wholly unsatisfactory. In conclusion, the plaintiff alleged that due to the misrepresentation and concealment of the defendant, he delayed investigation and action and did not discover that defendant had failed in his obligation and duty until the fall of 1955.

According to the plaintiff's teatimony at the trial of the action, the roof of the structure began leaking in 1947, but the condition did not become serious until 1951. Further, he testified that the roofing company made 5 calls to make repairs upon the roof during the year 1951, 13 calls in 1954 and 15 calls in 1955.

A consulting engineer and an architectural engineer also testified at the trial. The substance of this testimony was that the joists were not of proper material. were not properly spaced, and that the bridging was poorly done. These witnesses further testified that the sheet rock used on the roof was not appropriate and should not have been used. As pointed out by the court, however, both of these witnesses, as well as the plaintiff, "testified that the spacing of the joists, the bridging, and the sheet rock could be seen with the naked eye from the rear of the building; that none of the joists or bridging were concealed or covered, but were plainly visible to any one who took the time to look."

The defendant, as one of the defenses to this action, contended that any suit against him for failure to properly per-

form his contract with the client was barred by the Oklahoma statute of limitations, as more than five years had elapsed since the acceptance of the structure by the owner. He further contended that any suit for negligence or fraud was also barred, as under Oklahoma law such a suit must be brought within two years from the time the cause of action accrued. In opposing this contention, the plaintiff asserted that the time within which an action predicated on fraud may be instituted is measured from the date of the discovery of the fraud, and that he had instituted suit within two years of the time he discovered the alleged misrepresentations on the part of the architect.

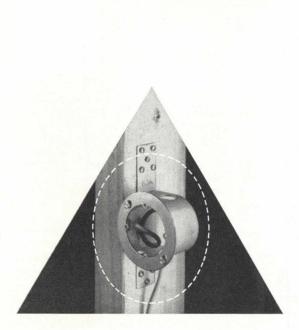
The Court, in its conclusions, upheld the contention of the architect that an action based upon breach of contract for unworkmanlike performance was barred by the statutes of limitations. The Court said:

"In the case at bar, the contract between plaintiff and defendant specifically recited 'the architect will endeavor to guard . . . but does not guarantee the performance." We therefore conclude defendant did not warrant or guarantee a perfect plan or satisfactory results and would only be liable to exercise reasonable care and professional skill in performing their services. If a cause of action existed at any time, it accrued at the time the building was completed and accepted by the plaintiff, and since the plaintiff accepted the building in August, 1946, the breach of duty, if any, occurred at that time, and the statute of limitations began running, unless the defendants were guilty of false and fraudulent representation which tolled the statute.'

The Court further rejected the plaintiff's contention that an action for fraud was not barred by the statute of limitations because plaintiff had allegedly been delayed in learning of the true condition of the roof as of an earlier date because the architect had not revealed to him that he, the architect, was at fault. The Court stated:

"Without question, fraudulent concealment constitutes an implied exception to the statute of limitations and one who perpetrates such concealment cannot take advantage of his wrongful acts. However, if defendant did not commit some actual artifice to prevent knowledge or some affirmative act of concealment or some misrepresentation to exclude suspicion and prevent inquiry, the statute is not tolled as the mere

(Continued on page 9)



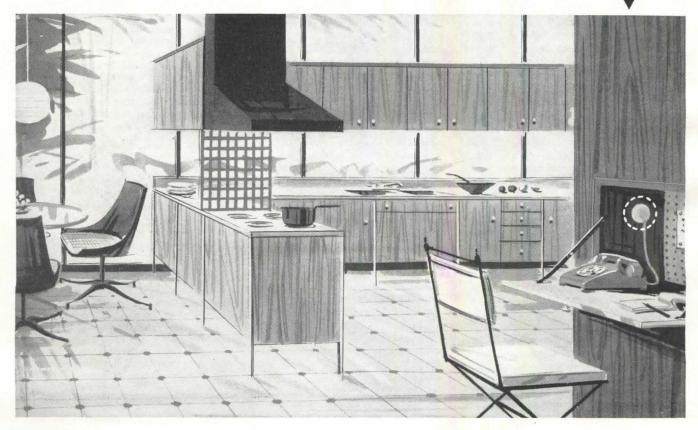
STRATEGICALLY LOCATED

telephone outlets add
a new degree of livability
to the homes you design.
Wiring is concealed
within walls, preserving room
beauty. This is telephone
planning...modern...
practical...wanted.

Bell Telephone System (🚑



For details of home installations, see Sweet's Light Construction File, 11c/Be.



Can an Architect Be Charged With Fraud? (continued)

failure to disclose that a cause of action exists is not sufficient to prevent the running of the statute. . . Although the plaintiff testified that he talked to the defendant, . . ., on many occasions, in fact, every time the roof leaked, the evidence does not disclose any representations or statements made by . . . defendant, nor is there any evidence of any actions by the defendant which would mislead or lull the plaintiff into a sense of security from the date the building was completed in August, 1946, to the fall of 1955. The fact the roof leaked almost from the time it was completed and continued to leak was sufficient notice to the plaintiff that something was wrong. Yet the very things which he complains of in his action and in his evidence submitted, such as warped and split joints, improper bridging, improper materials, and wrong spacing of the joists, were visible to the naked eye from the rear of the building. The plaintiff was on the roof and saw the ridges, the sunken places in the roof and cracks; but so far as the evidence is concerned, it is silent of any representations or statements of the defendant or either of them with respect thereto, and there is no evidence of any fact or omission on the part of the defendant that would prevent inquiry into their failure to perform the services agreed upon."

Although the architect, in the case discussed, successfully defended against a claim of fraud, it must be kept in mind that a trust relationship exists between owner and architect. Under the primary obligations of good faith and loyalty imposed upon the architect, it is his duty to make a full disclosure of all matters upon which he has information which it is desirable or important for his client to know.

The Need For Basic Architectural Research

A P/A Practice of Architecture article describing the results of a survey by the University of California and discussing the relation of research to practice and the need for more basic rather than applied research in architecture.

A survey of the status of architectural research in American universities was made recently at University of California. Fifty-seven universities were circularized in this survey and forty-eight answered. Of these, three had full research institutes in operation, twelve had recently completed at least one research project, nine others had commenced and were currently engaged in such projects, nine were in the planning stage and fifteen universities were not contemplating research. The fact that thirty-three universities are doing or intend to do research constitutes a considerable increase in such activity and shows that interest in architectural research is growing in our universities.

The idea of increasing the body of architectural knowledge through orderly and systematic investigation is not new. Many architects have documented their work and findings, and through their efforts a considerable fund of knowledge has been built up. There are many historical records of this documentation from the time of Vitruvius to the present. Today we find that the technological advances of our present era are so rapid that the practicing architect is hard pressed to keep abreast of new developments, let alone solve the specialized and highly technical problems which are con-

by Ezra D. Ebrenkrantz*

tinually emerging. These problems can best be solved by trained architectural researchers. In medicine, a similar situation exists, as the general practitioner is no longer responsible for the major advances in medical science. Specialists in the many subdivisions of medicine and in the primary fields upon which medicine depends, such as biology and chemistry, are making most of these advances. The G.P. is often hard pressed to keep up with the development and use of the new wonder drugs and methods of treatment. The building up of the body of knowledge in any field eventually requires specialization, because a point is reached when a single individual can no longer cope with the acquired fund of information, let alone advance it. This point has been reached in architecture and is undoubtedly a major reason for the great increase of interest in architectural research which is presently taking place at our universities.

Architectural research may be divided into a number of categories. The policy statement of the Committee on Architectural Research at the University of California lists:

1 Research in perception esthetics and design theory.

2 Program and function analysis.

3 Relation to architecture of structural concepts and the expanding technology. 4 Urban studies and the role of the architect in them.

5 Architectural history and documentation.

6 Architectural education and practice.

7 Physics of environment.

8 Other fields.

The institutions which answered the survey had 110 different projects completed or under way. Table 1 contains a breakdown of these subjects under subject headings.

Table 1	
Research Area	Number of Projects
Program and Function Analysis, particularly housing and	
schools	45
Physics of Environment-lighting,	
acoustics, ventilation	19
Structure	16
Urban Studies-planning,	
esthetics	7
Prefabrication	7
Plastics	7
Product Design	3
Solar Energy*	3
History	2
Landscape Architecture	ī
Total.	110

Most of the work which has been completed and almost all the work currently in progress is of an applied nature, as distinguished from basic research. Although there is considerable agreement about the difference between professional practice and organized research, there has been much discussion about the difference between basic and applied research. One way of differentiating between basic and applied research is to state that applied research deals with requested or marketable solutions to immediate problems, while basic research deals with the development of new information, the defining of new problem areas and the quest for solutions regardless of demand or current marketability.

Architecture, like medicine, has been described as a secondary professional discipline. Both interpret and use information derived from primary dis-

(Continued on page 11)

* The project at MIT is listed as a single project, although some 65 publications have resulted so far.

*Assistant Professor and Assistant Research Architect, University of California.



dramatizes walls with the elegant look of silk moire



Like all Vicrtex Vinyl Wallcoverings, beautiful Seta-Venetia is made by an exclusive qualitycontrolled process to assure exact pattern reproduction, complete color uniformity and exceptional wear-resistance. But see for yourself! Write for color samples and information about the whole exciting Vicrtex series.

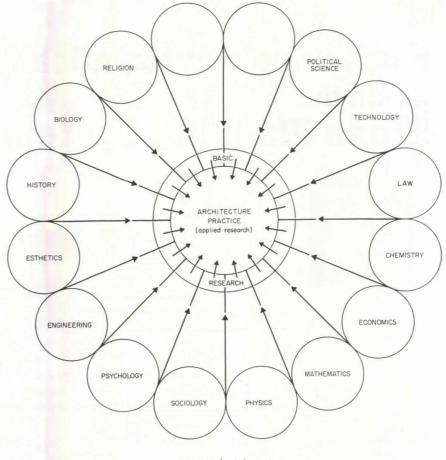
* Vinyl Electronically Fused

ciplines. It is in the assimilation of material from these primary disciplines and in transforming the material into a form useful for the architect that basic architectural research is done. The diagram illustrates one view of basic research in a secondary profession such as architecture. In this figure, architectural practice is the focal point. Other diagrams could be drawn showing basic research or the primary disciplines at the center.

Information which comes from the primary fields is generally in a form where it cannot be applied directly to architectural practice. Basic research for a secondary profession must interpret this information and put it into a form which can act as a guide for the practitioner.

In solving problems of daily practice, the practitioner is doing applied research: studying how to fit certain products together, trying to find a new structural system, developing an efficient classroom for a particular educational philosophy or composing the "esthetic," light, color, space, etc. This applied research may be so complicated that engineers, physicists, sociologists or economists may be called in to help with the work. In many cases, the amount of time and the varieties of competence demanded to do a thorough job may make it necessary to do this applied research outside of the practitioner's office.

Basic research must aim at developing fundamental architectural tools and theory to solve architectural problems. These tools, if determined solely by members of the primary professions, will frequently be of little or no use to architects. The importance of having experienced architectural researchers working with experts of other fields on these problems should not be underestimated. An interesting example arose in England where mathematicians were asked to work out a system of product sizes which could become a basis for standardization, giving considerable design flexibility with a limited number of sizes. The mathematicians explained that this was very simple. As brick is used for the major part of British construction, the mathematicians decided to concentrate on this material. The standard length of brick is 9" and the mathematicians developed an answer saying that if two sizes of brick were used, one 11" and one 7", productivity of labor would remain the same, as 9" would still be the average, and with these two sizes it would be possible to lay bricks to any inch-dimension; for example, 60" seven 7''s + one 11'', 61'' = four 7''s +three 11"s, 62'' = one 7'' + five 11"s, 63'' = nine 7''s, and 64'' = six 7''s +two 11"s. The difficulties encountered by a mason-working with two piles of



How of Information

bricks in different sizes and having to work out the correct combination to fit a given distance—were not part of the mathematical solution! Architect-mathematician research teams are needed to do realistic work in this field. In the same way, architects must work with sociologists, physicists, and many other specialists in order to make the knowledge derived in these primary disciplines useful to architecture.

One of the main reasons why the architectural research work being done today in our universities is almost entirely of an applied nature can be appreciated when we look at the sponsors for the research projects in the survey, listed in Table 2. This table does not include those projects done at research institutes, as the sponsors were not listed in the returns.

Table 2

Sponsor	Number of Projects
University	18
Government	13
Industry	13
Foundations	5
Private Individuals	2
United Nations	1
Undesignated	5
Total number of projects	

57

excluding those done at research institutes: The university grants are generally very small so that the main sponsors of architectural-research projects are Government and industry, and their interest lies mainly in immediate problem solving. A member of the facualty at the University of California has prepared a proposal for a research project which deals with perception. Sponsorship for a project of this nature probably will not come from government or industry and the major foundations approached do not generally support projects which deal only with architecture. The reason for this is that the foundations which support the social sciences have, until recently, regarded architecture in the same category as engineering, which receives most of its research money from government and industry. Therefore, most of the projects which have received financial support have been those which could answer questions posed by industry or government.

Basic architectural research itself remains neglected through lack of support. The danger of this situation, if it is allowed to continue unchecked, is that considerable progress in the applied fields of architectural research, without a firm foundation provided through basic research, may lead many people on false paths.

You pay no more for unequalled SLOAN quality...

Flush urinals automatically with the **Sloan Flushing System**



DAY-NIGHT TIMER

for large number of Flush Valves. Controls urinal Flush Valves for each toilet room in sequence at five minute or one hour intervals according to traffic hours of the building.



DOOR-OPERATED TIMER employs door switch (not furnished) which starts Timer as user enters toilet room. Flushing occurs within succeeding five minutes while successive door openings have no effect.



SINGLE CIRCUIT TIMER for flushing one Flush Valve (or two simultaneously).

THREE CIRCUIT TIMER for sequential flushing of three Flush Valves. Either one connected to light switch so that flushing occurs only when light is on and toilet room ready for use.



• In public and semi-public toilet rooms, the Sloan Automatic Flushing System provides important benefits for both user and owner. It is the most ideal method of urinal operation ever devised.

Pioneered through Sloan research, the system:

- · Eliminates the need of user operation
- · Encourages better housekeeping
- of the toilet room
- Assures more hygienic conditions

The Sloan Automatic Flushing System provides accurate electric clock timing; is dependable in operation and trouble-free . . . while saving tremendous quantities of water. The Sloan Urinal Flush Valve is actuated by a Motor Operator (illustrated above); the. flushing cycle is controlled by any one of several Timers (explained in captions at left.)

The Sloan Flushing System is already proven through thousands of installations in satisfactory daily service-and recent improvements bring it to peak efficiency. Here is another product packed with that bonus of quality you expect from Sloan. And, since you can have Sloan quality at no extra cost, why not make sure you get it.

SLOAN

SLOAN VALVE COMPANY . 4300 WEST LAKE STREET . CHICAGO 24, ILLINOIS

I VALV

New Lighting Standards Require Fresh Solutions

Mechanical Engineering Critique by William J. McGuinness

P/A Practice of Architecture column on mechanical and electrical design and equipment, devoted this month to practical considerations of higher illumination levels.

The recent Blackwell Report* set new standards for lighting intensities, increasing intensities for many tasks. But "easier said than done" is a cliché that has considerable meaning for these proposals. Robert A. Galemmo, Lighting Specialist, has undertaken to point out some difficulties, to suggest some solutions, and to aid architects, engineers, fixture manufacturers, and owners in conforming to the improved standards. Galemmo represents the firm of A. Ernest D'Ambly, Consulting Engineers of Philadelphia, a long-established office with a newly-formed lighting department. An abstract of his report follows.

Dr. Blackwell conducted his research on the relationship between lighting levels and visual tasks while director of the Vision Research Laboratories at University of Michigan. He and his associates determined that five assimilations per second were the maximum number of images the average eye could perceive. This number was then considered the optimum in visual performance, and, with this requirement in mind, test subjects were put through specific seeing tasks under varying lighting levels until the optimum (one fifth of a second) imageassimilating efficiency was reached. It was discovered that as the task became more difficult, the need for light increased.

At the conclusion of the 10-year program, Dr. Blackwell presented his report to Illuminating Engineering Society, and since then it has caused much controversy among architects, engineers, builders, and potential purchasers of lighting equipment. Many people have interpreted the report to suit their own needs.

It is evident to the IES that achieving maximum visual acuity is, in many cases, only possible by increasing the illumination levels. The IES offers documentary proof that a poorly-lighted industrial plant showed an increase in production and accuracy when the lighting was made adequate. This incontestable evidence shows that through a small investment in good lighting, a large return was realized. As a guide to the achievement of good

seeing, the IES has published new mini-

mum footcandle levels for specific applications. It was previously recommended that 30 ft-c were needed for general office work; the new recommendation is 100 ft-c. The old requirement of 30 ft-c for classrooms has been increased to 70 ft-c.

At first glance it seems relatively simple to give more light to a roomsimply increase the number of light sources. To increase the lighting level in the average office today, however, without changing any other part of the office environment, would be disastrous. The eve would find the new brightness ratios unbearable. Colors evaluated for 30 ft-c cannot be expected to be as pleasant at 100 ft-c. The lighting designer must effect changes in the reflectances of all surfaces in the office. Similarly, on new installations it also becomes necessary to control reflectance values of furniture and walls. Efficient seeing can only be achieved with seeing comfort. If more light produces visual discomfort, a drop in efficiency results.

Since the aims of good lighting apparently necessitate more control over reflectances of colors, interiors could tend to become flat and sterile. The technique of moving color values from one plane to the next, to provide an exciting environment, cannot be used in a room with 100 to 400 ft-c. Use of colors in lighting —to accent displays, planters, sculpture, or other interesting objects—would be needed to invoke interest in the area. Another method to stimulate the environment would be to use more light to illuminate a textured wall.

The employment of more light thus requires correlation of esthetic and functional aspects of the lighting. It would seem that closer co-ordination of the lighting media with the other portions of the interior is absolutely necessary.

Raising illumination levels will also affect air conditoning, raising the costs of installations directly. Unless a substantial increase in visual efficiency can be expected, a higher lighting level is not justified.

In existing areas, better lighting can be justified if production or morale is low, if the plant has a high accident rate, or if a high product-rejection rate exists. Conditions such as these can usually be improved by better lighting. Here, again, a lighting designer should be called upon to evaluate the environment of the area. It may be possible to raise efficiency simply by repainting or by conducting an extensive maintenance program, rather

than by dogmatically purchasing lighting equipment. But more often than not, industrial areas not showing a good return for the investment dollar can blame their poor lighting.

Research into visual efficiency has left manufacturers of lighting equipment far behind in fixture development. Aside from luminous ceilings and other largearea illumination systems, there is no equipment available to efficiently and effectively achieve the new illumination recommendations for commercial areas. To apply the new levels of illumination with existing equipment would result in increasing the number of 4-ft fluorescent fixtures, in a 20' x 30' room, for instance, from 8 for 30 ft-c, to 16 for 60 ft-c. To produce 90 ft-c, 24 fixtures are needed, and to produce 150 ft-c, the 40 fixtures needed would occupy 160 sq ft of a 600 sq ft ceiling. In order to adhere to most of the new recommendations, it is thus necessary either to design new equipment for the specific job or to use luminous ceilings extensively.

Where possible, it would be wise to consider the use of natural light in a building's design. Natural light, however, can only be considered in applications where it will be available throughout the useful day. Fortunately, classrooms lend themselves exceptionally well to the use of natural light. If properly designed, a classroom can expect a bonus of at least 10 ft-c of natural light even on the darkest days of winter. These 10 ft-c, added to the earlier recommendation of 30 ft-c, brings the level significantly closer to the optimum.

In conclusion, the report emphasizes the following points:

1 High levels of illumination are necessary to achieve optimum visual acuity.

2 An evaluation of the necessary degree of visual acuity must be made in order to receive the greatest return for the investment dollar.

3 Reflectances of all surfaces must be controlled by the lighting designer, when higher footcandle levels are desired.

4 Higher lighting levels should not be permitted to make the interiors appear flat and sterile.

5 Combined esthetic and functional lighting are necessary for visual comfort.

6 Raising illumination levels will affect the cost of air conditioning.

7 Present lighting equipment limits the applications of new lighting levels.

8 The possibility of using supplementary natural light should be considered.

^{*} MECHANICAL ENGINEERING CRITIQUE, SEPTEMBER 1958 P/A.

This is what you can SAVE...

That's right! The electrical engineer for a leading contractor figured this: You can save as much as 630 feet of wire and 160 feet of conduit in lighting a 50' x 54' area, using fixtures equipped with Certified CBM ballasts (instead of low power factor ballasts).

> when fixture BALLASTS wear this emblem

CBM Ballasts are checked by tests regularly, at E.T.L.



And there are other benefits too . . . such as peak light output, long lamp and ballast life, positive starting, dependable service. Because CBM ballasts are made to definite specifications . . . checked and certified by ETL. And of course, they're UL listed. It pays to specify fixtures with CBM ballasts. For the latest dope, ask us to send you CBM News.

CBM

CERTIFIED

by

E

CERTIFIED BALLAST MANUFACTURERS, 2120 Keith Building, Cleveland 15, Ohio.

Participation in CBM is open to any manufacturer who wishes to qualify.

Recommended Section Combines Samples, Shop Drawings

Specifications Clinic by Harold J. Rosen

P/A Practice of Architecture article describing method of combining samples and shop drawings into a single section of specifications, for greater control in office and field. A guide specification is suggested.

A system of listing samples and shop drawings in one section of the specifications entitled, "Samples and Shop Drawings," is herewith suggested as offering several advantages over the method generally in use. When samples and shop drawings are listed in one section, there is more control in the office and in the field, since this section forms a check list for all concerned and there is only one source for reference. When samples and shop drawings are listed under the several sections, variations may occur in the number of samples or copies required, the place where they are to be approved, and the manner of submission.

Another recommendation offered refers to the manner in which shop drawings are submitted for approval. In lieu of submitting four, five, or six copies for approval, a reproducible ozalid is submitted. The reproducible copy is marked and corrected by the architect. He strikes off as many copies as he needs for himself, sends the reproducible ozalid back to the Contractor who strikes off his copy, and then on to the Subcontractor who makes copies for his own needs. This system reduces the clerical work involved in transposing corrections to the various copies, with that possibility of committing errors, and also reduces the time required to log in and log out the several copies of each drawing.

The following section represents a guide specification for "Sample and Shop Drawings."

SECTION__: SAMPLES AND SHOP DRAWINGS

The contractor shall provide samples and shop drawings listed below and those requested under the mechanical-specifications sections, in accordance with the following specifications. No materials shall be used which do not equal the approved samples. Until such approval has been given, any materials or appliances to be so approved must not be fabricated or incorporated in the work. The approval or acceptance of samples will not preclude the rejection of any material upon the discovery of defects in same prior to the final acceptance of the completed work. After a material has been approved, no change in brand or make will be permitted unless satisfactory written evidence is presented to, and approved by, the architect that the manufacturer cannot make scheduled delivery of approved material, or

that material delivered has been rejected and the substitution of a suitable material is an urgent necessity, or that other conditions are apparent which indicate the approval of such substitute materials to be in the best interest of the owner. Samples, shop drawings, material lists, manufacturers' literature, and other required information shall be submitted in sufficient time to permit proper consideration and action on same before any materials and items-which such samples, shop drawings, and information represent-are delivered on the work. All samples of materials requiring laboratory tests shall be submitted to the laboratory for testing, not less than ninety (90) days before such materials are required to be used in the work. All other samples, manufacturers' literature, and other sample information shall be submitted for approval not less than thirty (30) days before such materials are required to be used in the work. The contractor will be held responsible for any delay in the progress of the work which may be due to his failure to observe these requirements, and the time for the completion of his contract will not be extended on account of his failure to submit samples and shop drawings promptly in strict accordance therewith.

2 SAMPLES

(a) Samples shall be submitted in duplicate and manufacturers' literature and material lists in quadruplicate, except where a greater or lesser number is specifically required by the specifications.

(b) Samples must be submitted by the contractor only, unless he has authorized his subcontractor to submit them and has notified the architect to this effect. Such samples shall be shipped (prepaid) by the contractor.

(c) Samples will receive consideration only when covered by a letter signed by the contractor. This letter shall contain a list of samples, the names of the project, contractor, manufacturer, brand, and quarry; also the job number, the specifications paragraph numbers to which samples refer, the ASTM or Federal Specifications Number (if any), and such additional information as may be required by the specifications for the particular material being furnished. Copy of the letter must be enclosed with the samples, and any samples received without the identification letter will be considered "unclaimed goods" and held for a limited time only. Any deviation from contract requirements shall be so stated in the letter of transmittal.

(d) Each sample and manufacturers' literature shall be labeled to indicate the name of the project, name of contractor, manufacturer, brand, quarry, job number, and Federal Specification or ASTM Number where required. In addition, catalogs shall be marked to indicate the specific items submitted for approval.

(e) Samples which are rejected by the architect must be resubmitted as soon as possible after notification of the rejection,

and shall be marked "Resubmitted Sample" in addition to the other information required on the label.

(f) In connection with the mechanical work of the project (plumbing, heating, electrical work, etc.), the contractor shall submit a complete list of materials and other required information, as listed under the respective mechanical sections of the specifications, within thirty (30) days after date of notice to proceed; no consideration will be given to partial lists submitted from time to time. (g) Where an asterisk (*) occurs before a material, the contractor may submit brand name, manufacturers' literature, and manufacturers' certificate of compliance with contract requirements in lieu of samples.

(h) The right is reserved to require submission of samples of any material or any material lists, whether or not particularly mentioned herein.

3 SHOP DRAWINGS

(a) The contractor shall submit one copy of shop, erection, or setting drawings required. Such shop, erection, and setting drawings shall be ozalids that are acceptable, legible, and reproducible ozalid (sepia) prints with positive side up for the purpose of annotation and correction by the architect. Drawings shall be submitted rolled within a mailing tube, fully protected for shipment. After approval by the architect, each party receiving the drawing will strike off the required number of copies for his own records. A space of 4" x 4" shall be reserved on each ozalid print to accommodate the architect's approval or rejection stamp. These drawings and details shall be submitted sufficiently in advance of the work which they cover, and in accordance with a prearranged schedule, to afford ample time for checking, correcting, and rechecking-if necessary for such drawings and details; no claim for delay will be granted the contractor if caused by his failure to comply with the requirements of this section.

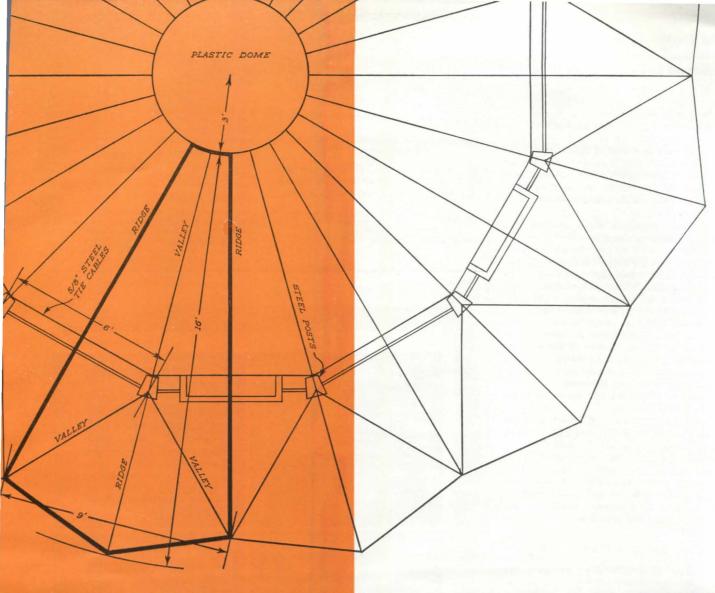
(b) Before submitting shop drawings for approval, the contractor shall check the shop drawings of subcontractors for accuracy, shall ascertain that all work contiguous with and having bearing on other work shown on shop drawings is accurately drawn, and that the work shown is in conformity with the contract requirements.

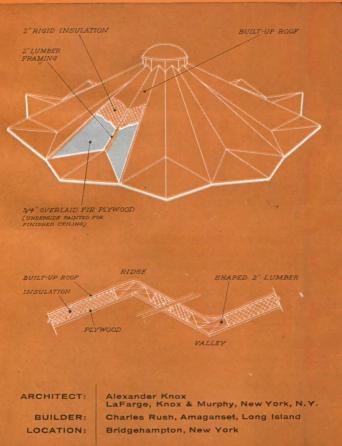
(c) All such drawings and details at the time of submission must bear the stamp of approval of the contractor as evidence that such drawings and details have been checked by the contractor. Any drawings submitted without such executed stamp of approval, or whenever it is evident (despite the stamp) that the drawings have not been checked, they will be returned to the contractor for resubmission and will not be considered; in such event, it will be deemed that the contractor has not complied with this article and the contractor shall bear the risk of all delays to the same extent as if no drawings or details at all had been submitted.

(Continued on page 18)









THE PLEATED ROOF that crowns this pavilionlike living room is a prime example of the bold and imaginative forms derived from the basic fir plywood folded plate principal. Shape rather than mass is the key to its strength. The distinctive sawtooth configuration capitalizes on fir plywood's high diaphragm strength to create, in effect, a series of rigid, lightweight "V" beams. Intermediate posts, trusses and bulky framing are eliminated.

In this sophisticated circular design, the plywood folded plates provide a dome, spanning 26 feet, wall to wall. No central support is required. Where desired, far greater spans could be achieved utilizing the same basic system.

The roof itself is composed of 12 basic "boatshaped" fir plywood components which were crane-lifted into position atop the steel supporting columns. Each component, in turn, is made of four triangular pieces of 34" overlaid fir plywood, perimeter framed and interconnected with shaped two-inch lumber. Alternate projecting and recessed stiffeners along the ridges connect each component with its neighbors. Each component combines roof deck, insulation and finish ceiling.

For basic design data or other information, write (USA only) Douglas Fir Plywood Association, Tacoma 2, Washington.



the practice of architecture

(Continued from page 15)

(d) The contractor shall prepare composite drawings and installation layouts, when required, to solve tight field conditions. Such drawings are to consist of dimensioned plans and elevations, and must give complete information, particularly as to size and location of sleeves, inserts, attachments, openings, conduits, ducts, boxes, structural interferences, etc.

(e) These composite shop drawings and field installation layouts shall be co-ordinated in the field by the contractor and his subcontractors for proper relationship to the work of other trades, based on field conditions, and shall be checked and approved by them before submission to the architect for his final approval. The contractor shall have competent technical personnel readily available for such co-ordinating and checking, as well as for the supervision of the field installation of the work in accordance with the shop drawings and field installation layouts, which have been previously determined by him to be correct and carry the architect's approval stamp.

(f) In instances where the work of more than one contractor is involved, except as in (2) below, the general contractor shall prepare and submit composite drawings that show and define the work under all affected contracts or trades, shall submit such drawings to the architect and obtain approval thereof and, after approval, shall distribute prints of approved drawings to all affected contractors.

> (1) Affected contractors and trades shall co-operate in the preparation of above composite drawings to assure proper co-ordination between all trades. (2) Whenever only the mechanical and/or the electrical work is involved, the composite drawings referred to above shall be prepared by the heating and ventilating contractor, and it shall be his responsibility to see that the work is co-ordinated with that of all other trades affected.

(g) The submission of shop drawings (in either the original submission or when resubmitted with corrections) constitutes evidence that the contractor has checked all information thereon, and that he accepts and is willing to perform the work, as shown, in a workmanlike manner and in accordance with the best standard practice. No claim for an extra shall be based on work shown on shop drawings, unless such claim is noted on the contractor's transmittal letter accompanying the shop drawings.

(h) The cost of any changes in construction due to improper checking and co-ordination by the contractor shall be paid for by that contractor, and said contractor shall be responsible for all additional costs, including co-ordination.

(i) Upon receipt of shop drawings, the architect will assign a file number thereto. The contractor, in any subsequent correspondence, shall refer to this file and identification number assigned by the architect to expedite replies relative to previously approved or rejected shop drawings.

4 SHIPPING ADDRESS

The following items shall be sent to the

architect:

(address)

(name)

(The samples and shop drawings are then listed in the numerical order of the Specification Sections. A typical listing follows.) MASONRY SECTION NO. 1 SAMPLES

Cast stone, each kind, 8"x8"x4" Cut stone, each kind, 8"x8"x4"

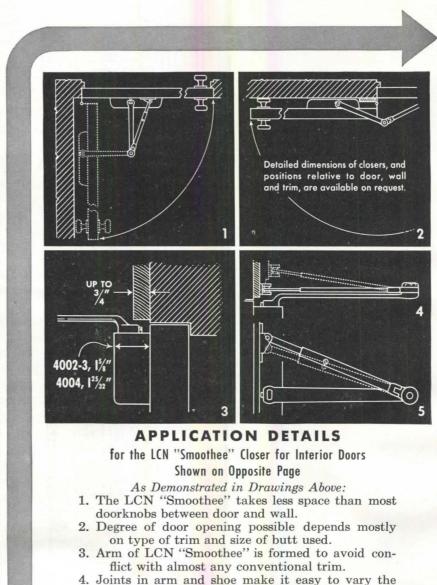
Face brick, showing quality *Glass Block Granite, 8"x8"x4", each kind, showing finishes. Structural facing tile 2 MANUFACTURERS' LITERATURE

Calking compound

Fire brick Mortar ingredients

3 SHOP DRAWINGS

Complete cutting and setting drawings of all stonework, showing jointing, bonding, anchorage, and connection with other work, including full-size details of moldings and ornament.



height of shoe as needed for beveled trim.

5. Power of closer is increased or decreased by simply reversing position of shoe.

May we send a descriptive folder? Or a complete LCN Catalog, if you like? Address

LCN CLOSERS, INC., PRINCETON, ILLINOIS Canada: Lift Lock Hardware Industries, Ltd., Peterborough, Ontario

PROGRESSIVE ARCHITECTURE published monthly by REINHOLD PUBLISHING CORPORATION, 430 Park Avenue, New York 22. N. Y. Ralph W. Reinhold, Chairman of the Board: Philip H. Hubbard, President and Treasurer; Fred P. Peters, Vice-President and Secretary; Alfred E. Fountain, H. Burton Lowe, Merald F. Lue, D. Bradford Wilkin, William P. Winsor, Vice-Presidents: Kathleen Starke, Assistant **Treasurer. Executive and Editorial** offices: 430 Park Avenue, New York 22. N. Y. Subscriptions payable in advance. Subscription prices to those who, by title, are architects, engineers, specifications writers, designers or draftsmen, and to government departments, trade associations, members of the armed forces, college libraries, college students, publishers, advertisers, prospective advertisers and their employes-\$5.00 for one year, \$8.00 for two years, \$10.00 for three years. Above prices are applicable in U. S., U. S. Possessions, and Canada, All practicing architects and engineers outside U.S., U.S. Possessions and Canada-\$10.00 for one year, \$16.00 for two years, \$20.00 for three years—ALL OTHERS: \$20.00 for one year, \$40.00 for two years, \$60.00 for three years. Single copy —\$1.00; special issues—\$2.00 for three years. per copy. Printed by Publishers Printing Co., New York, N. Y. Copyright 1960, Reinhold Publishing Corp. Trade Mark Reg. All rights reserved. Indexed in Art Index, Architectural Index.







thought provoking

Dear Editor: I enjoyed reading your SEP-TEMBER and OCTOBER 1959 P/A article on the "New Sensualism," because your ability to analyze and catalog some of the more recent architectural creations (good or bad), are most deserving of close study.

You have always been my favorite nonpracticing-architect journalist as well as good friend, confidant, (on occasions), and therefore, by virtue of your architectural background, your editorial on sensualism is to be commended for its thought-provoking quality.

Not all the time have we agreed on architectural principles, but I do agree that the rectilinear steel-glass boxes are close to running their course (we trust). Somehow, though, I feel there might be a better name for examples named in your editorials for structures such as the chapel at Ronchamp, the TWA Terminal, and the like. To me, they come closer to the real "googie" department than anything else, although the TWA job does have a studied sculptural quality of a streamline form, first seen years ago in Mendelsohn's inspired sketches. The French chapel has always been my favorite ugly building no matter how you look at it. For this, I blame you editors for giving it space. Our youngsters could get the wrong idea: i.e. make a structure as ugly and badly proportioned as possible and get it published-for whatever this may be worth.

I'll also say I might have to agree with Sylvester that I don't even know some of the names you mentioned (I try to not only "keep up," but lead also), and most of them you list could hardly be mentioned in the same breath with the Old Man. We're not just enough avant garde in Texas.

Now that I have this off my chest, I'll go back to my backlog of fourteen months of architectural journals in hopes that this urge will not come again for awhile and I'm sure you do too.

> KARL KAMRATH, F.A.I.A. Houston, Texas

likes criticism

Dear Editor: Your recent critical articles have been outstanding. Please continue and expand.

JOHN W. LAWRENCE, Acting Dean School of Architecture Tulane University New Orleans, La.

often wise

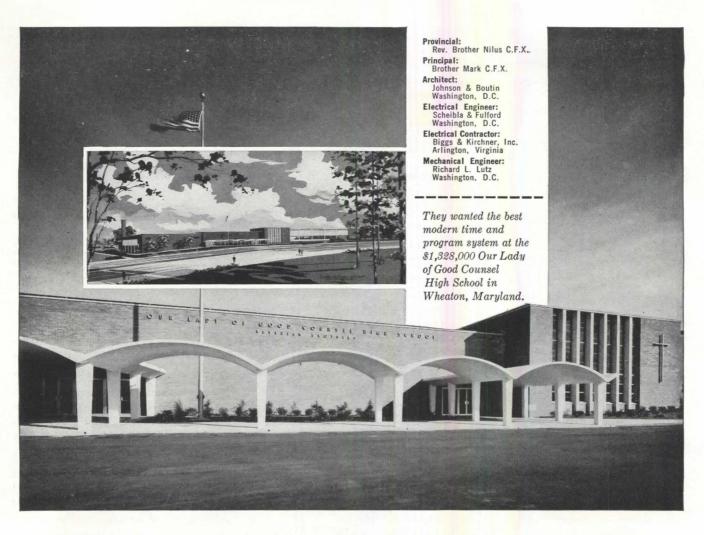
Dear Editor: Bravo on your two articles on the "New Sensualism!" Your approach was most stimulating and often wise—except for some of your closing paragraphs, which I suspect may have been prompted more by the editor's wish to provoke a "Great New Debate" than to serve as a firm evaluation. Is this conceivable?

Many of us have somehow begun to equate the "professional status" with the achievement of artistic excellence. For example, there may be many contemporary professional sculptors but how many come to mind whose works are a source of genuine delight? As always, some of us speak in a whisper scarcely avoiding grammatical errors, the great majority manage to speak a respectable prose, while a few gifted souls sing out in lyric poetry—and this is true no matter what the art form, or the formal training.

The architect should receive training in sculpture, but he should think of it as another tool of design, important in much the same way as life drawing or water color.

Working singly or in the collaborative, with him alone rests the final responsibility of decision. Is the shape of the ceiling, esthetic though it may be, justified in terms of the probability of less acoustical excellence? Should there be three buildings or one? Or perhaps the whole program should be revised and the site changed. The totality of viewpoint remains with the architect, and any attempt to divide or separate it is as futile as trying to conceive of a Moore figure-sculpture as part solid plasticity

(Continued on page 36)



They chose Stromberg's new Electronic

Time and Program System

FEATURES OF STROMBERG SYSTEMS INCLUDE:

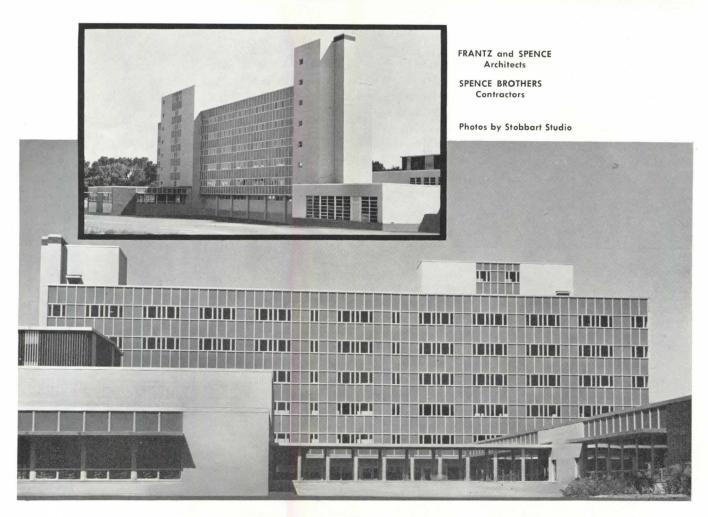
- Jeweled Master Clock movement with automatically wound 72-hour spring power reserve.
- Secondary Clocks standard with hourly and 12-hour supervision correction cycles completed in only 60 seconds.
- Program Unit, capable of 1440 signals daily on each circuit, immediately resets following power interruption.
- Central operations panel for control of utilities.
- Seven-channel transmitter-one for clock supervision, six for program signals.
- Installation and maintenance service available throughout U.S.A. and Canada.

A product of the laboratories of one of the largest clock manufacturers in the world-YOUR GUARANTEE of performance, quality and dependability.





MAIN STREET, THOMASTON, CONNECTICUT Sales & Service Offices throughout the U.S.A.



VAMPCO ALUMINUM WINDOWS AND CURTAIN WALLS ARE THE HIGHLIGHT FEATURES OF THE NEW, MODERN SAGINAW Y.M.C.A.

Today, more than ever, architects and builders are depending on Aluminum Windows, Curtain Walls and Entrance Doors to accentuate the modern design of new institutional buildings, schools, churches, hospitals, and industrial plants.

The beautiful, new Saginaw Y.M.C.A. at Saginaw, Michigan, (pictured above) is a striking example of how Vampco Aluminum Windows and graceful masonry construction have been combined to provide a dramatic look that is modern and inviting.

Added structural strength, lifetime durability,

better lighting and ventilation, lower original and upkeep costs (no painting required), and the speed with which buildings can be erected with Vampco Curtain Walls are but a few of the many added advantages Vampco provides.

Vampco Aluminum Windows include: casement, combination casement, awning, intermediate projected, curtain walls of varying sizes and thicknesses, heavy construction, glass block and customdesigned types. Let VAMPCO'S special designing service help you solve your unusual building problems. Mail coupon below today!

VALLEY METAL PRODUCTS CO.	VALLEY METAL PRODUCTS COMPANY Dept. PA-10, PLAINWELL, MICH.
SUBSIDIARY OF MUELLER BRASS CO. PORT HURON, MICHIGAN	 Send 60-page Industrial-Institutional Window Catalog. Send Light Construction Aluminum Window Catalog. Send Curtain Wall Catalog. Send Entrance-Door Catalog.
See Complete File in Your	NAME
A NAME THAT MEANS THE VERY FINEST IN LIFELONG ALUMINUM WINDOWS	ADDRESS

p/a views

(Continued from page 31)

and part hole. Equally unproductive is speculation as to whether Ronchamps is more sculptural than the UN building, when the question should be: "Is it successful architecture?" Our cause for concern need not be the prospect of a "community of sculptural-sensualist structures, frightful to contemplate" but rather the very real and ever present spectre of mediocrity. We must be certain that our search for beauty through order is important to the project at hand. Too often it seems that order itself is valued as a separate virtue much as a child boasts of his clean fingernails.

This is readily understandable as you scan our cities and note everywhere buildings neither Miesian, Wrighteous, rational or sensualist-sensational but just downright bad. No architecture, no



Haws Wall Mounted "Off the Floor" Water Coolers break with tradition to "clear the deck" for uncluttered maintenance ease. Crisp styling and the completely enclosed plumbing-electrical unit make this distinctive cooler a Haws "first"—in beauty *and* engineering !

Haws-Kramer Residential Flush Valve System utilizes the newlydeveloped Nyla-Phragm valve to reduce bathroom flushing noises and eliminate long, noisy tank refill. And here's another "first": outof-sight H-K "Silent Service" operates with *conventional residential pipe sizes* !

Specify these new Haws items. See them in Sweet's Architectural File or write for complete Haws catalog-today!



EXPORT DEPARTMENT: 19 Columbus Avenue . San Francisco 11, California . U.S.A.

architect, no design at all, but the familiar everyday variety of sordid, quiet chaos. In such an atmosphere, the creation of a clean, orderly environment is a commendable social act, or more correctly, a political act; and to expect under these circumstances the full flowering of the esthetic sensibilities as well is perhaps too much to demand.

But the situation is changing, and we may soon find ourselves in the rather sad position of the professional revolutionary with no cause for complaint, the battle won, the carte blanche fully offered. We write, but the awareness of the occasion overwhelms the text, and we are uneasy. Oh where, oh where are my lost orders?

The American citizen-architect should feel particularly fortunate in possessing, at once, a strong tradition of freedom and a wealth of technology and materials for exercising this freedom. The possibility that we may misuse them will always be with us but these are some of the risks of the multiple choice. As in the cultural heritage of its many peoples, there can be infinite riches in the variety and complexity of its architecture.

A Playful Ode to Incompetence

Saarinen, Oh most sensual soul, Sensibilities slothfully slaughtered by

cultivated Creighton. How architecture sighs in sightless seemliness.

Waiting for the dulcet fruits of thy first course in sculpture.

LEONARD PULLAN Van Nuys, California

identical viewpoint

Dear Editor: Yesterday, I got the newest copy of P/A, where I found your critical survey, "The New Sensualism," which I discovered with pleasure was much identical with my point of view.

> WERNER M. MOSER Zurich, Switzerland

order, clarity, fulness

Dear Editor: I am afraid that Thomas H. Creighton's well-intentioned articles on the "New Sensualism" (SEPTEMBER-OCTOBER, 1959 P/A) have as their basis the same flaws that he attributes so eloquently to the new "styles."

(Continued on page 42)

major contributions to curtain wall panel design

cellular glass insulation

See how much this unique material has contributed to the curtain wall designs pictured on these pages. Send for our curtain wall brochure. Investigate the benefits of FOAMGLAS insulation for *your* next curtain wall design. Write Pittsburgh Corning Corporation, Department AB-10, One Gateway Center, Pittsburgh 22, Pennsylvania. In Canada: 3333 Cavendish Boulevard, Montreal, Quebec.

RNING

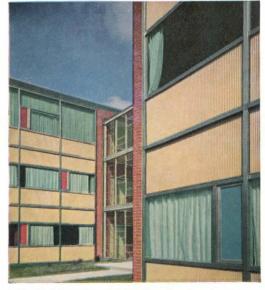
PITTSBURGH



SALVATION ARMY TERRITORIAL HEADQUARTERS, Chicago, Illinois

Architects: Skadberg-Olson Co., Chicago, III. Curtain Wall Manufacturer: Kawneer Co., Niles, Mich. Panel Fabricator:

Ingram-Richardson Mfg. Co., Beaver Falls, Pa.



RCA CHERRY HILL OFFICE, Camden, New Jersey Architect: Vincent Kling, Philadelphia, Pa. General Contractor: Turner Construction Co. Panel Fabricator:

Ingram-Richardson Mfg. Co., Beaver Falls, Pa.



Only FOAMGLAS insulation combines complete resistance to water and vapor with high compressive strength and complete dimensional stability.



GULF OIL CORPORATION, Bala-Cynwyd, Pennsylvania Architects & Engineers: George M. Ewing & Co., Philadelphia, Pa., and Welton Becket, FAIA & Associates, Los Angeles, Calif. Curtain Wall Contractor: Williams & Williams Products Corp., New York, N. Y. Panel Fabricator: Seaporcel Metals, Inc., Long Island City, N. Y.

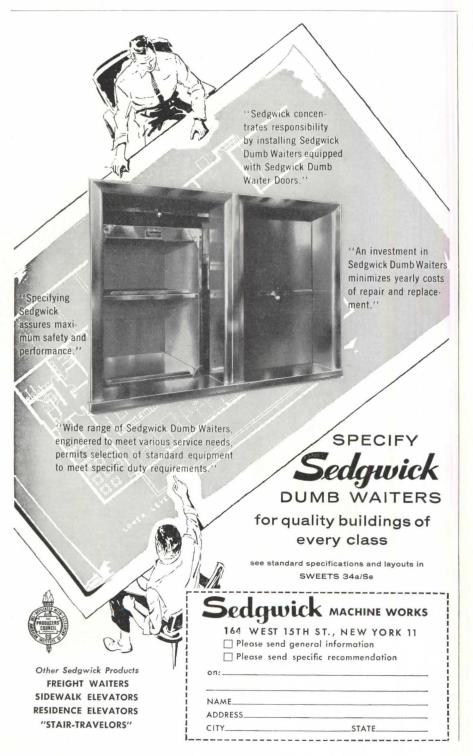
p/a views

(Continued from page 36)

Creighton's approach is purely formalistic-esthetic; it is a game played in relation to formalistic architectural solutions (this, of course, is not true of many examples cited), and thus is merely the other face of the same coin.

The real question to which architects and planners (they cannot be separated) must address themselves is the need for giving order, clarity, and fulness to the physical environment. Perhaps this is not possible today when life has become so fractionalized, yet an attempt must be made.

Important architectural movements do not have as their basis the egocentricity



of architects to satisfy their craving for recognition under the convenient pretense of self-expression. This does not imply that purely esthetic questions have no place in architectural criticism, but it means that we must establish a hierarchy of values. Thus, if architectural criticism (and naturally architecture itself) is not concerned with the underlying and all pervasive social aspects of life, it must fall short, as this is an art trying to aid and give expression to human activities.

If architects cannot face this challenge it is only natural that we as a profession are looked upon as a luxury to be afforded merely by clients with sophisticated taste or with enough money to impress their contemporaries with the newly acquired "modern" possessions, rather than as professionals concerned with the well-being of people by means of construction and its resultant forms. GEORGE ANSELEVICIUS

Associate Professor of Architecture Washington University St. Louis, Mo.

tightly written

Dear Editor: Because I read slowly and start late I am late in congratulating you on your article dealing with buildings of a highly developed appeal to the senses.*

It is tightly written and requires careful reading as you take us in and out of tight categories. My only complaint would be the profusion of italicized words which tend to defeat easy reading. *WALKER 0. CAIN New York, N.Y.*

*Milton, 1 am told, invented the word sensuous specifically to avoid the derogatory meaning associated (then and now: with the word sensual. Please find a new title.

the calm approach

Dear Editor: I enjoyed very much reading your articles on "The New Sensualism" (SEPTEMBER-OCTOBER 1959 P/A), especially the calm manner in which you approached the subject.

PROGRESSIVE ARCHITECTURE JANUARY 1960 MEW/S REPORT

Architecture's Monthly News Digest of Buildings and Projects, Personalities, New Products

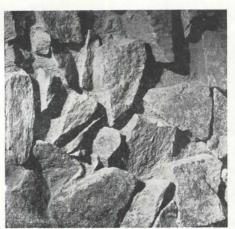
Saarinen Designs Two New Colleges for Yale

Cites New Departures in Design, Construction

NEW HAVEN, CONN.—Two new colleges for Yale University "to be placed in the shadow, on the one side, of the pseudo-Gothic gymnasium . . . and, on the other, of the pseudo-Gothic Graduate School" have been designed by Eero Saarinen & Associates. Saarinen states that the relationship of the new buildings to these neighbors and to their own oddly-shaped site formed a particularly unique problem.

Samuel F. B. Morse College and Ezra Stiles College will arc in a crescent opposite Payne-Whitney Gymnasium. A passageway leading from the center of the crescent will be bounded on both sides by college dining halls (the common kitchen will lie beneath the passage), and will lead to a lower court upon which the libraries will front. Masters' houses will be beside each college at points of the crescent. There is a possibility, if the town of New Haven proceeds with its plans for a circumferential highway behind the gymnasium, of closing the parkway which the colleges face. In this event. a third college can be built to close the crescent.

Student rooms have been planned to

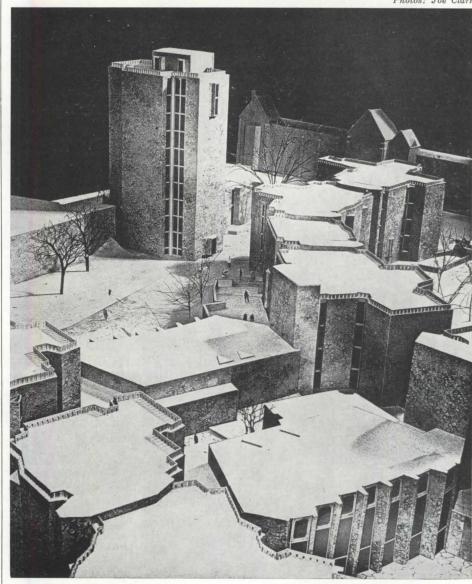


Detail of exterior wall for which Saarinen evolved new technique.

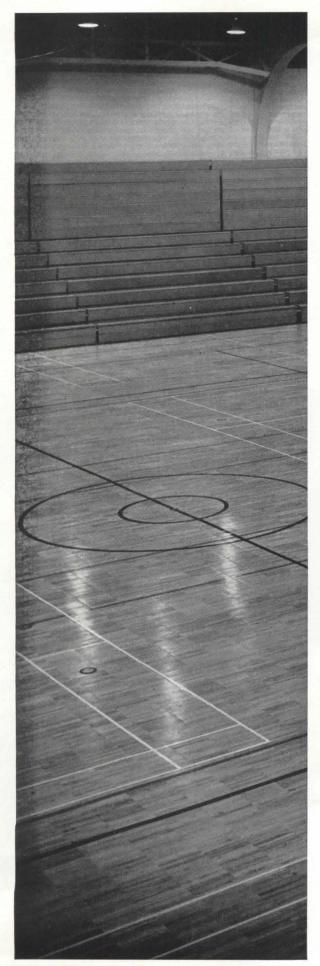
be "as individual as possible, as random as those in an old inn rather than as standardized as those in a modern motel." Rooms will be angular or polygonal, with three-ft-wide floor-toceiling windows. Resident Fellows' apartments will be distributed among student rooms.

To achieve a happy relationship between the two new colleges and existing Yale buildings, Saarinen has chosen walls of monolithic masonry. He developed a new process to make this method of construction economically feasible today. "Formwork is built as if the wall were to be poured in concrete; but crushed stone in pieces ranging between 3" and 8" are first dumped into the mold; then *Continued on page 47*

Photos: Joe Clark

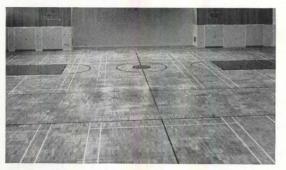


Monolithic stone exteriors, generous courts, and walkways mark colleges.



79,000 sq. ft. of smooth, resilient beauty for MICHIGAN STATE UNIVERSITY

The 60,000 sq. ft. Ironbound* Continuous Strip* Hard Maple Floor installed in the new Men's Intramural Sports Building at Michigan State brings MSU's total Ironbound floor area to approximately 79,000 sq. ft. This includes Ironbound floors in gymnastic areas, squash courts, exercise rooms and handball courts in the new building and the 19,000 sq. ft. installed in 1958 in MSU's Women's Gym, shown below.



Ironbound floor in MSU's Women's Gym. Arch: Ralph R. Calder, Detroit; Installer: Bauer-Foster Floors, Inc., Detroit



May we tell you of the many benefits Ironbound offers you? For information and name of your nearest authorized installer, write Robbins Flooring Company, Reed City, Michigan, Attn: Dept. PA-160.

ROBBINS FLOORING COMPANY

Reed City and Ishpeming, Michigan

Manufacturers of Ironbound^{*} Continuous Strip^{*} Maple Flooring, Perma-Cushion⁺ Resilient Floor Systems and other hardwood flooring

*T.M. Reg. U.S. Pat. Off. †U.S. Pat. No. 2862255

Background photo is Ironbound floor in Men's Intramural Sports Building, Michigan State University, East Lansing, Mich. Arch: Lewis J. Sarvis, Battle Creek, Mich.; Installer: Bauer-Foster Floors, Inc., Detroit. Flooring Dri-Vac treated.

Saarinen Colleges

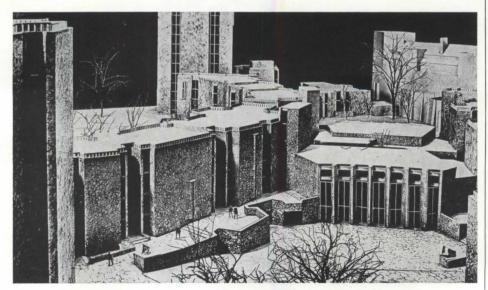
Continued from page 45

high-strength grout-cement mortar is pumped through hoses inserted in the form wall between the stones; after the form has set and the outer form is removed, the wall is washed with water under 100 lb of air pressure, thus removing some of the surface mortar and exposing the stones." The visual result is compared to the stone walls of England's Cotswold.

Saarinen considers that the design possibilities which evolved from the special conditions of this project may have wider applications for our time. "I believe there are many potentials and developments inherent in this polygonal and masonry architecture," he claims.



Site plan. Note provision for commercial buildings at left of colleges.

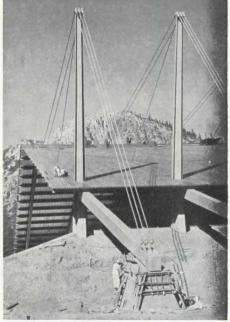


Each college will have own tower, following tradition of older colleges.

BUILDINGS READY FOR WINTER OLYMPICS

SQUAW VALLEY, CALIF. — Imaginative buildings designed for 1960 Olympic Winter Games are ready for the arrival of athletes and spectators next month. Architects, engineers, construction workers, and California Highway Department have been on *charette* to get the Games area set for what is expected to be an overflow crowd.

Theme building for the Games is, of course, the dramatically-roofed main arena, which won the Recreation Design Award in P/A's 1958 Design Awards Program. Opening and closing pageants for the Games will be held here and in the adjacent speed-skating oval. The cantilevered cable-suspension roof of the arena rises to 85 ft at the ridge line, providing 8000 spectators with wide-angle views of the arena rink, and portions of the speed rink and jumping hill. Roof is of structural steel, boxed-plate girders, and cellular steel decking. Two halves of roof are suspended from cables running from backstayed masts. A sliding connection equalizes ridge deflection of the adjacent halves. Decking serves as ducts for reverse cycle



Mast, cable, and girder supports for Arena roof based on "derrick" principle.

heat pump system which will cause snow on roof to melt and slide away, and will also provide 50-60° heat to keep spectators comfortable.

The closely-knit group of Winter Games buildings, includes, in addition Continued on page 48

Winter Olympics

Continued from page 47

to the Arena, two spectator centers at either end of the speed rink, press building, administration building and housing for officials, athletes' reception center, athletes' lounge and dining rooms, housing for athletes, and a lodge. There will also be an on-site medical center with outlying first aid stations for skiing casualties. Two chapels—one for Protestants and one for Catholics—will be near the Olympic site.

Architects for the Olympic buildings are Corlett & Spackman and Kitchen & Hunt, San Francisco; Structural Engineers, H. J. Brunnier and John Sardis, San Francisco.



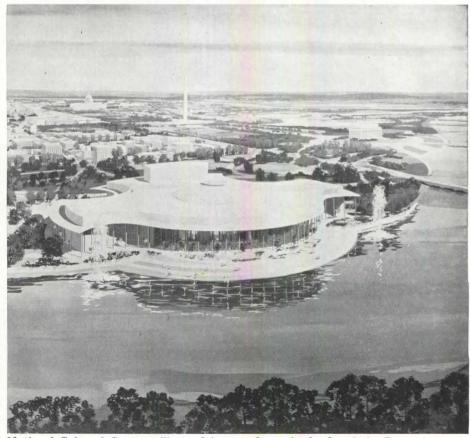
Olympic buildings sit in Squaw Valley, extraordinary natural snow bowl.

Cultural Center Design Shown

WASHINGTON, D. C.—Designs for Edward Durell Stone's gleaming white National Cultural Center on the banks of the Potomac have been revealed. Ambitious plans call for narrowing the river by 200 ft at this point, to provide room for vast terraces descending in tiers to the water. At each end of the building, tall fountains will issue from the river. Facing the center across the water will be Theodore Roosevelt Island, a wildlife sanctuary.

Stone compares his concept for the Cultural Center to that of L'Enfant for Washington: circular planning featuring white buildings in green parks.

A grand *salon* for state receptions will take advantage of the sweeping river view over the terraces. There will be a 3000-4000 capacity opera house flanked by two smaller auditoriums for lectures and experimental theater. In addition, there will be a 3000-seat concert hall and a playhouse with 1000-1800 capacity.



National Cultural Center will stand in a park on the banks of the Potomac.

Americans Design Hospital for West Berlin

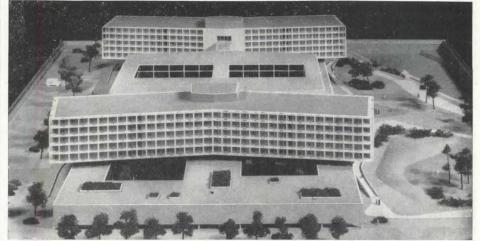
Medical Center to Be Major Education Facility

WEST BERLIN, GERMANY — Architects from Louisiana and Alabama have collaborated on the design of Germany's most notable medical project since before World War II. Curtis & Davis, New Orleans, and Sherlock, Smith & Adams, Montgomery, working under a commission from Benjamin Franklin Foundation, created a multifaceted health center which will combine nursing units, out-patient clinics, and intensive education and research facilities. Franz Mocken, Berlin, is associate architect.

A major design requirement was made by the sun-loving Germans—that all nursing unit windows face south. To accommodate this wish, the architects designed an ingenious honeycomb-balcony system which slants exposures of all rooms this way.

In plan, the Free University Medical Center consists of a central core containing operating rooms and research laboratories bounded front and rear by wide, V-shaped nursing units. Other teaching and medical facilities occur in the connecting links between these elements. In front of the main building, there are a student center and a building for preclinical training. A service wing is connected to the rear of the hospital. In a parklike setting at the rear of the grounds is the graduate nurses' unit and quarters for student nurses. A relaxation and recreation pavilion for graduate and student nurses completes this little living community.

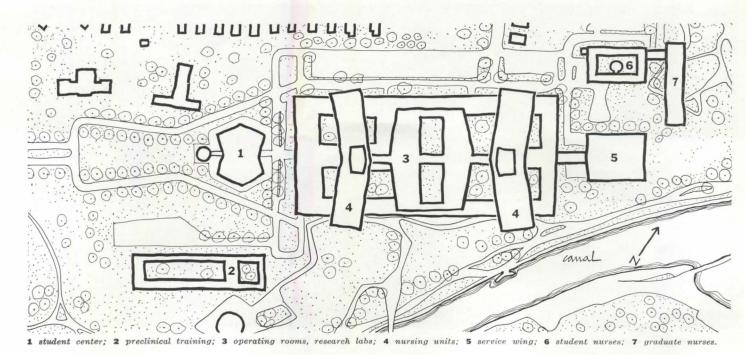
Provisions recalling the relaxed living patterns of Southern U.S. highlight the medical center. Aside from the balcony-window arrangements, there are generous court arrangements dotting the hospital, for the convenience of guests and to speed the convalescence of patients. The grounds are to be carefully landscaped with trees, drives, and walkways. A canal exists at the corner of the site. *Photos: Foto Kessler*



Balconied nursing units seem to float above educational floor of center.



Side view shows central core containing operating rooms and labs.

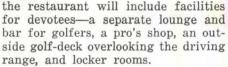


Curvaceous Cafe-Club Vaults California Canyon

Reinforced-Concrete Structure Planned for Coast

OAKLAND, CALIF. — Architects Irwin Luckman and Burns Cadwalader have created a stunning design for a proposed restaurant and club house in nearby Dimond Canyon. Commissioned by Oakland Park Department, the building will overleap the 150-ftdeep canyon in a dramatic thrust of reinforced concrete and glass.

To be built in connection with a small golf course and a driving range,

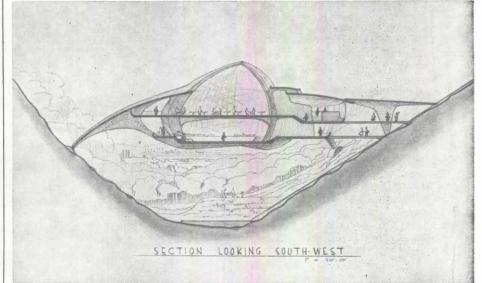


Two levels will accommodate, in addition to golf facilities, a banquet room and kitchen on the lower floor, and a cocktail lounge and bar and glass-domed main dining room on the upper floor. Both levels will be ringed with spacious decks for outside dining or golf-watching. A distant view of San Francisco Bay will be framed by the canyon walls.

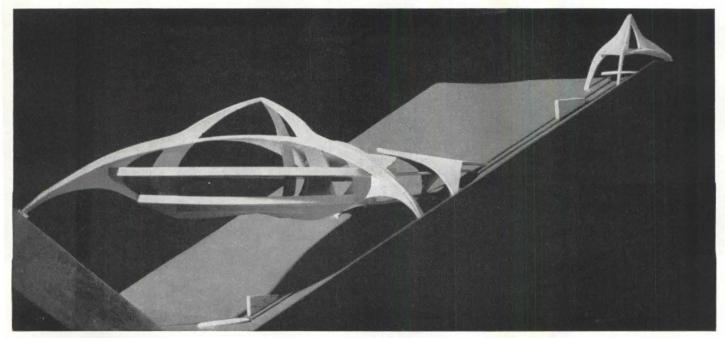
Parking will be at the top of the canyon, convenient to the entrance

structure of the restaurant-clubhouse. Access to the building will be via funicular railway which will stop at both levels, and also carry passengers to golf area at canyon's bottom.

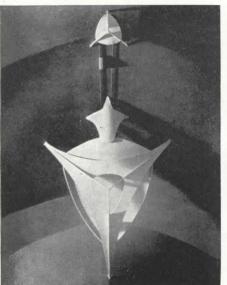
Cadwalader reports that precasting and prestressing of reinforced concrete will be practiced wherever feasible. Conforming to California's earthquake laws, he states that "tripod form of the main bents will allow for vertical displacement of the canyon walls due to earthquake action, and roller connections at the three bearing points will absorb unsynchronized horizontal movement of the canyon walls."



Dome of dining room will be of clear and tinted heat-absorbent glass.



Restaurant-clubhouse springs over Dimond Canyon near Oakland, Calif. Patrons will reach restaurant by funicular railway.



Reading top to bottom, are shelter, funicular railway, and restaurant.

Buildings in Paris Begin to Reach for Sky

UNESCO Followed by Modern Design in Paris

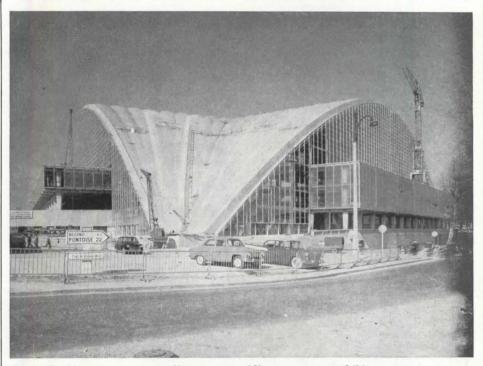
PARIS, FRANCE-"Paris never changes," the architectural visitor is used to saying. In fact, it was many years since an important new building had appeared on the gabled and chimneyed Paris skyline until UNESCO outdated the comment. Now, not only are new, modernistic apartment houses springing up around the *Étoile*; a huge new Exposition Hall has been completed on the city's outskirts, and a U.S.type urban redevelopment project is planned for the Maine-Montparnasse section.

The CNIT Exposition Hall (Centre National des Industries et des Techniques) was designed by Camelot, Demailly, and Zehrfuss. It is a great spanned space (740 ft on a side) covered with a system of three pendentives made of prefabricated triangular sections of reinforced concrete, meeting at arcs d'arete, and constructed as a double shell, with access for maintenance between the shells. This structural system was adopted after earlier schemes by Nervi and Freyssinet had been turned down.

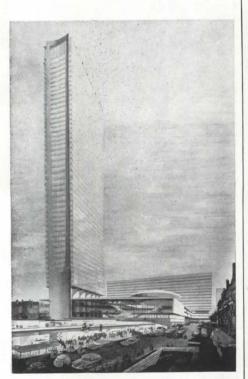
The Maine-Montparnasse project, being developed by a Société d'Economie Mixte, will include a railway station, a post office, apartments, a commercial area (stores and office buildings), conference and exposition halls, a huge hotel-the first skyscraper in Paris, for which a special zoning ordinance had to be passed. Traffic around and to the project has been carefully

studied, and the developers (headed by Henri Bouret) have co-ordinated it with a ring-road system which Paris is planning to implement as traffic palliative. Chief architect of the project is Maurice Beaudouin.

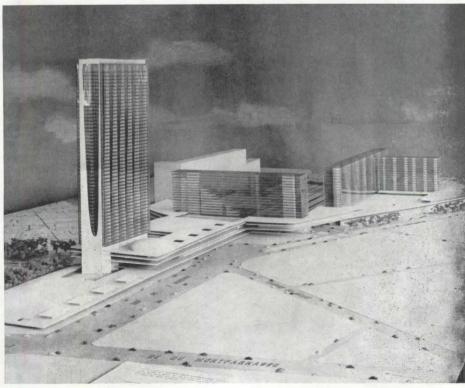
Thomas H. Creighton



CNIT Building spans great distance, providing generous exhibit space.



Maine-Montparnasse redevelopment will



be built in stages, starting in 1960. 100-meter skyscraper hotel required special zoning law to be possible.

Symmetrical City Set for Texas

EL PASO, TEXAS—Lucio Costa, planner of Brasilia, has been commissioned to plan a complete, new, 167-sq-mi city near here (in association with Architect Nicholas Sakellar and Land Planner Guy Greene, both of Tucson, Ariz.

Initial designs for "Horizon City" indicate a 1100 acre city core which resembles CBS-TV's "eye" logo. At the center of this core would be a 350-acre park, football-shaped, containing a man-made lake. Surrounding the park in a circle would be city's legislative, executive, and judicial buildings, financial and business centers, cultural center with auditorium and bandshell, and radio-television facilities. In the park there would be two heliports, television towers, and footbridges spanning roads to the city center buildings. At one end of the main east-west artery through the city would be a recreational area containing two golf courses and a multi-purpose sports stadium.

Horizon City's symmetrical traffic pattern consists of a peripheral ring road around the circular city core, connecting at six main points with high-speed trafficways coming in from the residential and industrial parks areas. Two great loops take the northsouth through roads over the city, and the east-west roads enter the city and surround the park on each side with three high-speed lanes separated by wide green dividers, bounded by parking and a slow-access street.

Construction of minor elements starts this summer.



Football-shaped municipal park lies at center of Costa's Horizon City.



High-speed three-lane roads plunge through center of city, circling park.

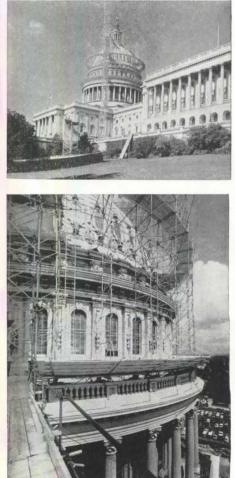
Capitol Dome Gets Unique Scaffolding

WASHINGTON, D.C.—When the dome of the nation's Capitol underwent inspection and repair recently, a particular problem was presented by erection of scaffolding which would not harm the venerable structure.

General Contractor J. F. Fitzgerald Construction Company, Canton, Mass., and Universal Manufacturing Company, Zelienople, Pa., solved problem with a "hanging" pipe-and-clamp scaffolding erected at four equidistant points around dome. From top of these points, truss was made to *tholus* of dome, and scaffolding hung therefrom. To counteract cantilever forces created by trusses reaching to *tholus*, cables were run from tops of quadrant point towers to spring line of dome.

Because of work on East Front of Capitol, inspectors were forced to reach dome over 50-ft terrace walkways of West Front. Thus, 50-ft towers were built to span 120 ft over terraces to dome work.

Work was under supervision of Engineer J. George Stewart, Architect of the Capitol.



PERSONALITIES



Ambidextrous MAX ABRAMOVITZ became interested in architecture when he wrote a high-school paper on American architecture. After graduation from University of Illinois and Columbia, he spent two years at l'École des Beaux Arts.

He joined Wallace K. Harrison in 1934 and did much work on the first New York World's Fair (1939). Four years of war service were followed by duty as deputy director of planning for the UN buildings, whence he went back into service as colonel during the Korean emergency. Currently the "A" of Harrison & Abramovitz, he was recently in the news during groundbreaking for his Philharmonic Hall, the first unit in New York's ambitious Lincoln Center for the Performing Arts project.

Judges for second annual Design Competition of Mastic Tile division, The Ruberoid Company, are HENRY L. KAMPHOEFNER, WILLIAM W. CAUDILL, JOHN LYON REID, EBERLE M. SMITH, and DR. HARRY J. CARMAN. Professional advisor is A. GORDON LORIMER. Theme of this competition is "Education for Youth and Adult-Recreation for All the Family." Details of the \$25,000 program can be had from Mastic Tile Division, The Ruberoid Company, P. O. Box 128, Vails Gate. N.Y.... New Project Director for all Federal Housing Administration advisory services provided by Building Research Advisory Board of National Academy of Sciences-National Research Council is JOSEPH A. WILKES, formerly Associate Professor of Architecture at University of Florida. . . . Winner of first prize in 63rd American Exhibition of Painting and Sculpture at Chicago's Art Institute was ISAMU NOGUCHI. His sculpture, "The Self," was picked by painter ROBERT MOTHERWELL, Toledo museum director OTTO WITTMAN, JR., and San Francisco critic ALFRED FRANKEN-STEIN. ... LOUIS R. HOWSON, Chicago consulting engineer, was named Chicago Civil Engineer of the Year for "excellence in his profession, leadership in the society [Illinois Section of American Society of Civil Engineers], and for his humanities."

Five new trustees were named to board of American Federation of Arts, among them New York Architect EDWARD DURELL STONE. All new members will serve three-year terms. ... Chicago industrial designer RICH-ARD S. LATHAM was elected 1959-60 president of American Society of Industrial Designers. After heading the product design department of Raymond Loewy's Chicago branch, he formed his own firm, Latham, Tyler & Jensen, in 1955. . . . Annual working fellowship for Japanese architects has been announced by Welton Becket & Associates, Los Angeles. WELTON BECKET decided on annual award after his visit to 1959 Tokyo International Trade Fair, for which his firm did U.S. exhibit buildings. Selection of annual winner will be with co-operation of Japan Architects Association headed by KUNIO MAYEKAWA.

Two years after ex-combat infantryman VICTOR A. LUNDY got out of



service in the European theater. he was back as a civilian on a Rotch Traveling Scholarship. From 1948 to 1950, he studied postwar reconstruction in Scandinavia, Western Europe, Middle East, and North Africa. No shrinking violet, Lundy since has risen to national

prominence through his structurally dazzling churches, stores, and recreation buildings. In a recent address on Recreation Buildings at New York's Architectural League, he made an impassioned plea for the return of beauty in our country. "Travelers in the States," he said, "come away with an impression of a great hodge-podge. much of it ugly. We ruin our material beauty—our natural resources—where virtually all of the European countries have deliberately conserved and utilized their land. . . . What a tragedy when we have the talent, national drive, technology, wealth and natural resources to give real beauty and happiness to everybody. . . . Maybe we in America can finally restore the 'artist,' be he builder, master craftsman, architect, landscape architectpurveyor and executor of beauty in every manner and field-to his rightful place in our society, as we have finally recognized the scientist."

Chairman of Community Service Society's Business Committee for its 1959 Family Fund Appeal is Skidmore. Owings & Merrill partner ROBERT W. CUTLER. . . . Also serving the New York community is EARL H. LUNDIN, Carson & Lundin, who is Chairman of Architects Division for the Visiting Nurse Service. . . . NATHAN R. GINSBURG has been elected president of New York Society of Architects, succeeding H. I. FELDMAN.

Project Director of Collaborative Research in Hospital Planning, a project sponsored by AIA and American Hospital Association under the Hospital Research and Educational Trust, is JAMES J. SOUDER of Kiff, Colean, Voss & Souder, New York. First study will be preparation of mathematical formulæ for forecasting efficient hospital design. Bolt, Beranek & Newman, Boston, will work on the report. . . . DR. NORMAN BIENENFIELD, General Manager of The Alumiline Corporation, was elected president of Store Front and Entrance Division of National Association of Architectural Metal Manufacturers. . . . MORRIS LAPIDUS, creator of Miami Beach albergos, quoted in the Chicago press: "I have no desire to become the Gertrude Stein or James Joyce of architecture." . . . Architects WILLIAM W. CAUDILL, Bryan, Texas, and HERBERT H. SWINBURNE, Philadelphia, are on advisory board of Overview, new magazine for "educational executives." . . . H. BUCKLEY DIETRICH was reelected president of American Institute of Steel Construction.

Parhaat Onnitteluni to Finnishborn architect EERO SAARINEN on his



recent election to membership in the American Institute of Arts & Letters. (Elected with him were writer ROBERT PENN WARREN and composer VIRGIL THOMSON.) Educated in the atélier of his renowned architectfather, Eliel, and at Yale, Saarinen has become one of the driving forces

of American design. Always one to break an icon of his own making if it does not conform to the next project, his recent, and widely differing, commissions have included the soaring TWA Terminal at New York's Idlewild Airport, the stately embassy in Oslo (pp. 90-91, NOVEMBER 1959 P/A), and the romantic colleges at Yale (pp. 45, 47, this issue). Recent whispers from St. Louis give hope that his award-winning design for the Thomas Jefferson-Louisiana Purchase Memorial (1948) may proceed in the near future.

Architect VICTOR GRUEN was featured in a recent issue of Life magazine devoted to leisure life in America.

Sketches by Romers Corbellete.

Piccadilly Circus Plan Raises Ire of Critics

Proposed redesign of a large sector of London's Piccadilly Circus by Architects Cotton, Ballard & Blow (with Consulting Architect J. G. L. Poulson) has started a controversy in British press and architectural circles.

Project is a 13-story, reinforcedconcrete building with Portland-stone facing slabs, on a 31,032-sq-ft-site facing Circus' famed Eros statue. Huge, unbroken areas of exterior walls have been left blank for neon advertising signs, and a special rotating crane has been placed on the roof to lift and lower signs.





Complaints about the project have been heard from Royal Fine Art Commission, newspapers, and various art and civic groups. J. M. Richards, Editor of *The Architectural Review* writes P/A that the proposal "is a very depressing one. . . . We can only hope that, when the other side of the Circus is redeveloped, something better is done."

Gracious Motel to Rise Near Taliesin West

Scottsdale Inn, Scottsdale, Ariz., has been designed by Edgar Tafel Associates, New York, with Associate Architects Gonzales & Ludlow, Phoenix. Motel, which will be on road to Wright's Taliesin West, will have 43 rental cabanas, 146 room units in twostory buildings, sunken pool area,

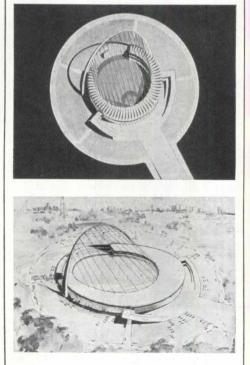


restaurant, bar, coffee shop, and parking for 375 cars. Construction will be of precast floor and roof slabs and block walls. Ex-Taliesinite Tafel chuckles, "Those Taliesin guys will have to pass it every time they go to town!"

Retractable Roof Proposed for New Stadium

Attempts of New York's city fathers to get another major-league baseball team have resulted in proposals for a new stadium on the probable site of 1964 World's Fair, Flushing Meadow Park.

One such scheme is by Oscar Nitzchke, director of architectural services for Jim Nash Associates, Inc.



Interesting roof system would have plexiglass running up ten stationary suspension cables which rise to arch over the field. Transparent plastic would be folded into roof of stadium when not in use, and drawn up over field in case of bad weather. Light photo shows plastic retracted, dark photo shows it in place.

First Units Announced for N.Y. College

Expansion plan for Sarah Lawrence College, Bronxville, N.Y., begins with construction of dormitories designed by Philip Johnson Associates. Dormitories, for 150 students, will be splitlevel design with 3 stories in front and 4 in back to conform with slope of site. Dormitories will be in 3 units, faced with red brick, and connected by glass-enclosed staircases. Johnson felt that Sarah Lawrence's stress on independent work, combined with the close relationship of student to student and student to teacher required an approach different from other educational institutions. He considered the task one of expressing this special intimacy. Opening date of dormitories expected for Fall, 1960.



Future plans for expansion include new library, building for plastic arts, science building and music building.

Two New States; Two New Buildings

Eleven-story addition to Princess Kaiulani Hotel in Honolulu will consist of poured-in-place columns, pre-cast, prestressed beams, and a structural slab system with pre-cast, pre-stressed tension sections for the lower half of each slab and poured-in-place for the top half. Hotel will include complete air-conditioning, individual lanais for all rooms, and multi-deck parking lot



in rear. End walls will be non-bearing hollow block masonry. Addition is one

of 40 projects in Sheraton Hawaii Corporation's building and remodeling program in Waikiki. Architects, Wimberly & Cook; Associate, George V. Whisenand.

Providence Hospital, Anchorage, Alaska, will be one of first major constructions in new state. Designer, Charles Luckman Associates, emphasizes efficiency and speed of construction. Nursing unit consisting of patient rooms located directly across corridor from nursing station enables minimum staff to care for increased number of patients. With climate permitting only four months of outdoor



construction, fireproof steel and masonry were chosen for rapid progress. Aluminum louvers of double thickness on exterior walls of nursing unit can be used to cover glass areas in case of prolonged storms or severe temperature. A similar arrangement of louvers could be used during a military emergency. Expectation is that Providence is to be beginning of large medical center for Anchorage.

Plethora of Pavilions for Princely Pleasure Dome

Residence for Prince and Princess Sadruddin Aga Khan, San San Bay, Jamaica, consists of four separate pavilions on six-acre site. Pavilions are of varying sizes on irregular site. Main living pavilion, guest pavilion, and master's cottage pavilion surround swimming pool and overlook bay. Each pavilion is raised on stone, grass-covered platform, with walls of white stucco and louvers of natural



cedar. Roofs are of Canadian cedar shingle which will turn silver gray. Cottages connected by grassy paths and stone steps. Pavilion in right distance is gazebo for entertaining. Architects, Ballard, Todd & Snibbe; Engineers, Fraioli - Blum - Yesselman; Landscape Architect, Paschell Campbell.

American Drug Firm Plans Center in Italy

Parke, Davis & Co. plans for branch in Milan, Italy, are underway. Two connected buildings, on 15-acre tract near Milan airport, provide production unit and administrative office.

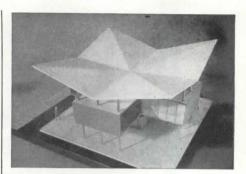


Buildings are to be constructed of reinforced concrete, aluminum, tile and glass, and are designed to insure maximum daylight in working areas. Approximately 100 employes will occupy 54,000 sq ft of floor space. Expected completion, Fall 1960. Architects: Mazzoni & Guicciardi, Milan.

Weather-Wise Design for Coast Guard Houses

Architect I. William Ricciuti's designs for U.S. Coast Guard personnel homes aim at successful resistance to floods and high winds of lower reaches of Mississippi. Plans for isolated Head-o-Passes Light Station consist of six two-story residences raised on concrete platforms three ft above ground and supported by steel columns (three columns on each side of foursided cross-shaped structure). Attached to columns is star-shaped umbrella roof, inverted over weather roof and composed of plastic covered wood panels. Roof serves as windscoop, rain-gathering surface, and cooling surface which affects temperature of interior. Rain drains down sloping surface of roof into cistern located in center of ground floor, providing total water supply for family. Overhangs of roof provide protection against violent, semi-tropical rainstorms.

Second floor design is cross-shaped to provide maximum circulation of air regardless of which way house is oriented to sun. Each room occupies one leg of cross-shaped plan and has two



cross-ventilated exposures.

Walls of houses, made of light concrete block and laid in weak mortar, provide adequate waterproofing but also give way in event of destructive wave wash, leaving a minimum of resistance to wave damage.

Los Angeles Arena Opens for Business

Los Angeles Memorial Sports Arena has opened. First event of national importance to take place there will be national convention of the Democratic Party during July. Versatile arena can accommodate 20,000 for boxing, 18,000 for basketball, 15,000 for hockey, 9500 for trade shows and



business exhibitions. Welton Becket & Associates were Architects; Structural Engineers, Brandow & Johnston; General Contractor, L. E. Dixon Company.

Photo courtesy Gladding, McBean & Co.

MET'S LAST DAYS

Architects, nostalgic decorators, and opera lovers now are paying to make strenuous backstage tours of Metropolitan Opera House, from basement passages to roof rehearsal stages, anticipating demolition of the old structure when Lincoln Center for Performing Arts is completed. Among the first of sightseeing groups were Architectural League members, who were welcomed and guided through at top speed by the Metropolitan's au-*Continued on page 57*



the new closed-cell insulation

that's self-extinguishing...stops "sweating"...is watertight!

PRESST-O-CEL'S low "K" factor protects against condensation and heat loss. It provides a vapor barrier and will not support combustion—that's the work record of new PRESST-O-CEL, the closed-cell insulation for protecting tube and pipelines on comfort conditioning and refrigeration installations.

Millions of tiny expanded cells are filled with inert gas with the result that new PRESST-O-CEL is lightweight and flexible, yet ruggedly durable. For example: it is resistant to oils, acids, alkalis, fungus, rodents and vermin... is water and air tight. For the best—and longest lasting—installation, always specify PRESST-O-CEL.

MORE INFORMATION on this amazing new insulation on request. WRITE Dept. B-14.



3766 CHOUTEAU AVENUE . ST. LOUIS 10, MISSOURI

Continued from page 55

archivist. thoritative (and agile) Mary Ellis Peltz. Some notes made on the run: Architect Josiah Cleaveland Cady (often derided by modern knowit-alls and "tastemakers" for the elongated-horseshoe auditorium, the vulgarity of its red-and-gold decor, for lack of scenery storage-space backstage) actually executed his commission with the conscientiousness worthy of such a well-known 19th Century church and college architect -sightlines to the great stage were thought secondary to optimum views from tier to tier of bejewelled patrons; Cady's decor in 1883, decidedly non-garish Antique Gold, was "too quiet" for patrons and gave way to red-and-gold after the fire of 1892 resulting from management refusal to use Cady's safety devices; as for backstage storage, there was *ample* room for all the painted drops needed for the entire repertory before the 20th Century brought elaborate threedimensional sets.

The "Met" has dead spots, one cannot see from most of the auditorium, backstage is crowded and musty, it looks like a not particularly welldesigned loft building—and many will be very sorry when they have to leave the old pile.

Charles Magruder

"Economy School" Drops Corridors, Saves 40%

NEW YORK, N.Y.-After more than a year of development, Ketchum & Sharp, New York, have announced their "Economy School." Almost devoid of corridors. T-shaped plan provides classroom access directly to outdoors, and interior circulation (when necessary) through adjacent classrooms. For further economy of space, central areas serve dual purposes, e.g., all-weather play shed doubles as bus shelter and entry. Cost of 24-classroom elementary school, based on 1960 estimates, is \$516,000, saving 40% over average price-tag for comparable facilities. (Cost comparison derives from an RPI study of eight typical elementary schools, made in 1958 at request of New York State's Department of Education. Average square footage for walls, corridors, toilets, and stairs was 32% in RPI schools, 16% in 31,220-squarefoot Economy School.)

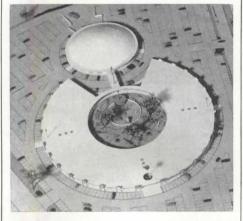
The firm emphasizes that its Economy School is a rock-bottom solution aimed at getting maximum well-constructed educational space for minimum dollar outlay. They feel that it cannot be expected to suit all educa-



tional programs, tastes, and sites, nor do they believe that all schools *should* be alike. "Variation I" clusters its 18 classrooms according to age groups, and provides separate spaces for special projects, music, and stage. Other programs would determine further variations, still below average in cost.

Shopping Center with a Center Designed for Louisiana

Shopping center in the form of a circular building around a large landscaped court and nursery area will be built in Bossier, La., from designs by Shreveport Architect-Engineers Frey-Huddleston & Associates. A 25,400 sq ft, round supermarket will be situated in a wedge cut from the shopping center circle.



Construction of dome for the supermarket represents one of the largest uses in this country of on-site earth as form. In this technique, on-site earth is molded to curvature of the dome, concrete is poured over this form, dome is lifted to proper height by lift-slab technique when set, then earth is redistributed on site. Interesting sidelight on this construction technique: When the dome of the Cathedral at Florence was added (1420-37), a proposal was made to use the earth-fill technique. Someone advanced the question, "How are we to remove the earth afterwards?" The answer to this was to announce to the poor of the city that golden coins had been buried in the earth fillfirst come, first served. Admirable as this eleemosynary suggestion was, Santa Maria del Fiore dome was built another way.

One Roof to Cover Vast Florida Shopping Center

"Bazaar International" will be huge shopping center with an international flavor in Riviera Beach, Fla., near Palm Beach. Designed by Miami Architect Alfred Browning Parker, the center will be continuously roofed by a modular system of folded plates.



Center will feature a 225-ft trylon, "highest in the county," which will also serve as an aircraft warning signal. An outside glass elevator will carry tourists and viewers to its 180-ft level.

Structural Engineers, Norman J. Dignum Associates.

Rockefeller Pushes for Stock School Plans

Newspapers in New York state carried proposals of Gov. Nelson Rockefeller that the State Education Department undertake a program of making stock plans available to school districts. His suggestions indicated that about a half-dozen plans would be on file, varying in size and urban and rural concept.

Rockefeller's proposal was hastily repudiated not only by New York professional societies, but also by AIA President John Noble Richards, who said that such plan "are not a help but an additional burden to the taxpayer" since they admit no architectural knowledge of advancing building techniques and design economies.

Another well-known governor, Long of Louisiana, also proposed anti-architect measures. When he got out of the laughing academy last summer, Long proposed a steep reduction in architects' fees for all state work. Long was recently defeated at the polls. Continued from 57

Ceramics Fellowship Set

Cambridge Tile Company, Cincinnati, Ohio, has awarded Florida Gulf Coast Art Center, Clearwater, Fla., an annual \$1800 fellowship for graduate study in ceramics. Selections will be made yearly on national basis. Write: Hal Riegger, Ceramic Department, Florida Gulf Coast Art Center.

Three New Presidents

Paul B. Belden, Jr., was elected 1959-60 President of Structural Clay Products Institute. Harry C. Gurney, general sales manager of Janitrol Heating & Air Conditioning, became president of National Warm Air Heating & Air Conditioning Association. New president of Harvard Graduate School of Design Alumni is John C. Harkness of The Architects Collaborative.

Asia House Gets Johnson Curtain Wall

Asia House—permanent headquarters for Asia Society and Japan Society recently moved into new New York building designed by Philip Johnson Associates. Seven-story glass and steel building has white trim, and includes an art gallery, meeting rooms, library, and administrative offices of both organizations. There is a small Jap-



anese garden in the rear of the house. Speaking to P/A's reporter at the opening, Johnson said: "This is from my Bunshaft period."

3M Plans Expansion

Minnesota Mining and Manufacturing Company has announced plans for vastly expanding its research center near St. Paul, Minn. Multimillion dollar program will reach final completion in 1970. First units of expansion are this 14-story administration build-



ing and two-story cafeteria structure. Designed by Ellerbe & Company, St. Paul, administration building will stand behind a reflecting pool, and will be connected with the cafeteria by a tunnel.

Scholarships, Fellowships

Exercises preliminary to selection of 71st winner of Rotch Travelling Scholarship will be held in April 1960. Applicants must be citizens of U.S., under 31, whose architectural background includes study or experience in Massachusetts. Write: William G. Perry, Secretary, Rotch Travelling Scholarship Committee, 955 Park Square Building, Boston 16, Mass., before March 1. . . . Fellowships and scholarships for 1960-61 from Cornell's Department of City and Regional Planning have been announced. They range from graduate fellowships of \$1500 plus free tuition and fees, to university scholarships of \$175 plus free tuition and fees. Write: Chairman, Department of City and Regional Planning, Cornell University, Ithaca, N. Y. . . . University of Pennsylvania offers fellowships and scholarships in landscape architecture; ranging from \$500 plus free tuition. Details from Ian L. McHarg, Chairman, Department of Landscape Architecture, University of Pennsylvania, Philadelphia 4, Pa. . . . Kate Neal Kinley Memorial Fellowship must be applied for no later than May 18. Basis of award is indication of "unusual promise" in fine arts, including architecture. Write: Dean Allen S. Weller, College of Fine and Applied Arts, University of Illinois, Urbana, Ill.

New Airport for New York?

Port of New York Authority last month reviewed with New Jersey Officials results of three years of preliminary studies on need for and location of a new, major four-runway airport for transcontinental flights into the New York-New Jersey metropolitan area. Study revealed that by 1965 existing airports-mainly New York International, LaGuardia, and Newark -will be inadequate to handle expected passenger traffic of 25,000,000. This traffic is expected to reach 45,000,000 by 1975. Site under consideration is in Morris County, New Jersey, a largely undeveloped, swamplike area. Provisions to shield neighbors from jet noise would include one used at Dulles International Airport, Chantilly, Va. This is the "island" concept, in which the landing strips are placed with distance of 4-5 miles from start of aircraft take-off roll to nearest community.

ASM Headquarters Opens

Headquarters of American Society for Metals, appropriately located in Novelty, Ohio, was designed by Cleveland architect, John Terence Kelly. Curved building is situated under aluminum geodesic dome which Society calls "a tremendous architectural detail."



Building is equipped with stainlesssteel sunshades—designed from study made by School of Architecture of Princeton University, sponsored by Committee of Stainless Steel Producers. Screen is said to provide effective control all year except at 4:30 P.M., December 21, when sun is at lowest point in sky.

Essential Books in the Architectural field ANY ONE* FREE WITH MEMBERSHIP IN THE SEVEN ARTS BOOK SOCIETY

ARCHITECTURE U.S.A. By Ian McCallum. "A remarkable book." – London Times. 240 pp., 8½ x 11, 500 photos, plans, drawings. Retail \$13.50. Member's price \$9.95.

THE NATURAL HOUSE and THE LIVING CITY. Both by Frank Lloyd Wright – purposeful small house living and correctives for over-centralization. Illustrated. Combined retail price \$15.00. Member's price (for both books) \$11.00.

PABLO PICASSO. By Wilhelm Boeck and Jaime Sabartès. 606 illus. (44 in color). Retail \$17.50. Member's price \$13.50.

SPACE, TIME AND ARCHITECTURE. Sigfried Giedion's contemporary classic. 780 pp., 450 illus. Retail \$12.50. Member's price \$9.50.

THE GREAT AMERICAN ARTISTS SERIES. Six handsomely boxed vols., 480 illus. (96 in color): Winslow Homer and Albert Ryder by Lloyd Goodrich; Thomas Eakins by Fairfield Porter; Willem de Kooning by Thomas B, Hess; Stuart Davis by E. C. Goossen; Jackson Pollock by Frank O'Hara. Retail \$23.70. Member's Price \$13.95.

THE MOVIES and MASTERS OF PHOTOGRAPHY. Two lavish vols., tracing the history of new art forms. Combined retail price \$27.50. Member's price (for both books) \$20.00.

ARCHITECTURE AS SPACE. By Bruno Zevi, A high point in art analysis and A HISTORY OF MODERN ARCHITECTURE. By Jürgen Joedicke. A comprehensive survey. Combined retail price \$17.50. Member's price (for both books) \$13.45.

MASTERS OF MODERN ARCHITECTURE. By John Peter. Over 60 foremost architects in vivid repros. 230 pp., 232 photos, 9½ x 12¾. Retail \$15.00 Member's price \$10.95.

THE NOTEBOOKS OF LEONARDO DA VINCI. Ed by Edward MacCurdy. Two vols., boxed. Retail \$10.00. Member's price \$7.50.

PIET MONDRIAN. Michel Seuphor's exhaustive study. 444 pp., 600 illus., 34 in color, 8½ x 12. Retail \$17.50. Member's price \$13.50.

*You may choose two books marked "count as one" as your *free* gift or as your first selection.



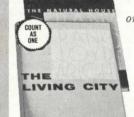


Piet

Mondrian

...an invitation to those who want the finest in architecture and the arts

ARCHITECTURE is one of the major areas represented among Seven Arts Book Society selections — books, like those pictured here, that maintain a constant high level of scholarship, production, illustration, and significance. Members receive monthly notice and



SPACE TIME AND ARCHITECTURE authoritative review of such books, and order only the ones they want — at appreciable savings. We invite you to join the Seven Arts Book

We invite you to join the Seven Arts Book Society now, and to take advantage of the services and savings its members enjoy regularly.

Begin your membership with one of the outstanding books shown here, and choose any other to be sent to you *free*, as an introductory gift.

> Your savings on this introductory offer alone can amount to as much as \$37.25.



THE SEVEN ARTS BOOK SOCIETY 2

You may enter my name as a member and send me the free gift and first selection (at the special members' price plus postage and handling) indicated. I agree to take as few as five additional selectionsor alternates--in the next 12 months. I am to receive each month without charge the attractive Seven Arts News containing an extensive review of the forthcoming selection and descriptions of all other books available to me at member's prices. If I do not want the selection announced I can return your simple form saying "send me nothing," or use it to order another book from the more than 100 authoritative volumes offered in the course of a year. I may cancel my membership at any time after purchasing the five additional selections or alternates.

FREE GIFT					
FIRST S	SELECTION				
MR.					
MRS MISS	please print				
Address	picase princ				

Politics Expected to Dominate Current Congress

Housing, Urban Renewal Should Be Reconsidered

WASHINGTON, D. C. It's January, Congress is back, and there's only one thing in this town that's a really safe bet: It won't be "politics as usual" this session. It will be "politics with a vengeance."

That, and one thing more: The session will be as short as it can decently be made, probably ending before July is very far advanced. With the White House, the whole House of Representatives, and a portion of the Senate at stake, no Congressman wants the session to interfere with the business of politicking.

From a practical political standpoint, there will be plenty of room for maneuver.

Most of the really controversial

legislation was gotten out of the way by the time Congress wound up its record-breaking session last September—labor, foreign aid, farm matters, airport aid, the highway program. Most of it, too, was handled in such a way that it won't be necessary to consider again this time, but will come up when a new President has to face the problems.

That still leaves a few major matters to be argued about—most significant (from the standpoint of architects) being urban renewal and housing in general (bills which the President vetoed last time). There's also the whole subject of civil rights, but you can bet that the Congressional leadership will soft-pedal this if possible, lest it generate some really divisive inter-party battles.

Then there's Senator Kennedy's amendment to the minimum wage law (S.1046), which would raise the minimum to \$1.25 an hour, which is

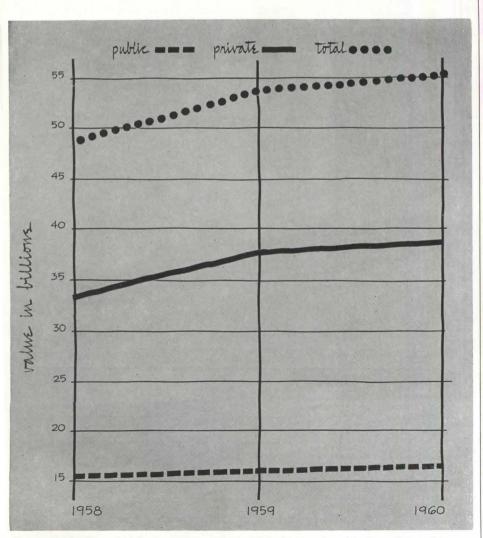


Chart of public and private construction, 1958-60, reveals widening of gap between them. Source: U.S. Department of Commerce.

heartily opposed by almost all business groups in the capital. There will be the usual battles over the appropriations bills for the military, the Bureau of Reclamation, and other agencies that do construction work for the Government. Up for consideration again-though nobody seems to expect any results-will be a number of proposals like Senator Keating's for the establishment of a "Department of Urbiculture" to do for the cities what the Department of Agriculture is supposed to do for the farmers; and several propositions for the consolidation of Government construction activities under one agency (Army's Corps of Engineers, under terms of some of the bills).

And—both as employers and as self-employed—architects will want to keep a close eye on what happens to the Forand bill, which would expand the social-security program to cover hospital, surgical, and home nursing care. Flatly opposed by the Administration last year, this bill has all the earmarks of a good election-year measure, since it promises something for almost everybody, and its cost is hidden in the monthly payments pulled out of paychecks and employers' coffers.

You can sum it up about this way: A short session, with furious accent on anything that looks like political advantage to either party—thus a lot of investigations, a lot of fury, not too much actual accomplishment.

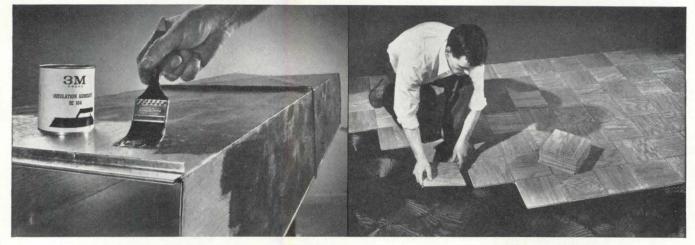
Interstate Investigations

On investigations, architects will be more interested than most in the series now going forward in the huge Interstate Highway Program. As you may know, three have been officially authorized—one by the House Ways and Means Committee, one by the House Public Works Committee, one by the Office of the President.

Of these, only one will be of real significance — the one by Public Works, with a subcommittee chaired by Wisconsin's John A. Blatnik. Ways and Means has happily dropped any investigation of its own (because of an embarrassing jurisdictional dispute with Public Works), and the Presidential investigation is looked upon as generally on the defensive side—just in case Blatnik's group comes up with anything damaging.

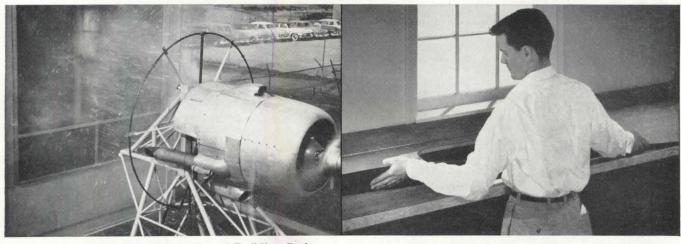
One thing you can be sure of: any ideas the Administration may have

Now! Choose from a complete line: **3M Building Adhesives and Sealers** for every bonding and sealing job



UNUSUALLY HIGH COVERAGE. Insulation adhesive EC-104 covers up to 200 square feet per gallon when brush applied. Goes on quickly, easily, uniformly. Provides fast grip even when wet. Open time: up to 20 minutes when both surfaces are coated.

STRENGTH, DURABILITY. Adhesive EC-194 bonds wood blocks to above-grade concrete or wood subflooring indefinitely. Suitable for use on radiant-heated floors. Water-resistant EC-194 grips immediately, dries rapidly. One gallon covers about 40 sq. ft.



LONG-LIFE SEAL. WEATHERBAN[®] Brand Building Sealer goes on easily, cures without shrinkage to a durable, solid rubber seal. It flexes, stretches, compresses with wall movement. And it lasts through sun, ice and winds of hurricane velocity.

QUICK GRAB. 3M Brand Sink and Counter Top Adhesive assures tough, flexible bond. It provides high initial strength yet lets you "skid" vinyl and linoleum into position. Fast drying, this adhesive is highly water resistant and covers up to 125 square feet per gallon.

SEE WHAT 3M ADHESIVES CAN DO FOR YOU—These are but four adhesive products researchdeveloped by 3M to improve your building installations, cut your building costs. 3M offers the widest range of experience and products for your adhesive, coating and sealer needs. Call your 3M Field Engineer. Or, for more information and free literature, write on your company letterhead, stating your interest, to: A.C.&S. Division, 3M, Dept. SAC-10, St. Paul 6, Minnesota.



ADHESIVES, COATINGS AND SEALERS DIVISION

MINNESOTA MINING AND MANUFACTURING COMPANY

... WHERE RESEARCH IS THE KEY TO TOMORROW



Continued from page 60

had about cutting out the urban part of the Interstate Highway Program have been dropped. The Congressional reaction to rumors that this was being considered (and the rumors had a sound basis) was too immediate and too positively opposed.

But you can see why the idea was tempting to budget-minded Administration people — the urban share of the 40,000-odd mile Interstate net would account for only about 12 percent of the total mileage, but will cost in excess of 42 percent of the total. Some States, like California, are putting nearly two-thirds of their Interstate Highway money into urban areas—thus it's no trick to figure why Congressmen won't buy any outs.

There is an argument, and a strong one, in favor of the urban work, too: something like 45 percent of the total revenues to the Highway Trust Fund (which now pays for all Federal-aid highway work) comes out of urban areas.

Actually, the whole problem of the Interstate and other highway networks is a little academic, anyway until 1961, at least. In that year, the Bureau of Public Roads is scheduled to submit to Congress a whole series of reports on highwayuser benefits, costs and the like. These will be used in what's expected to be an actual rewrite of the highway program, on a more realistic basis.

Days in Court

The *manner* in which you pay an employe—not his title or what you consider his duties—is the only acceptable test of professional status. That's the meat of the U.S. Supreme Court's action in refusing to review a lower court action involving employes of a California engineering firm.

The lower courts had decided that the men—despite the fact that they were graduate engineers—were hired on an hourly rate of pay basis, thus were entitled to overtime pay, and could not be classed as professionals. They were awarded overtime and costs that totalled as much as \$3000 per individual, in a suit against West Coast Engineering Co., a Los Angeles mechanical and electrical consulting firm.

Take this lesson to heart from the U. S. Tax Court: if you are entitled to receive expense money from your employer, collect it from *him*. Don't try to collect it from Uncle Sam, via the tax-deduction route. The case involved—oddly enough—an employe of

the Internal Revenue Service, who drove his car to work each day. He was, according to testimony, entitled to mileage since he worked at points away from the home office, but didn't claim it on an expense voucher, instead entered it as a deduction on his income-tax report.

Parks in Peril

Public apathy, and the zeal of highway-transportation and public-works planners, are nibbling away dangerously at the parks in most major cities, Harry T. Thompson, superintendent of National Capital Parks, complained recently.

He commented that park land is often the most easily available when new highways or public buildings are planned in Washington—and added that parks officials have been perhaps too co-operative in moving public facilities to other areas to make way for planned "improvements."

A remedy: force the highway department, for example, to donate as much land for park purposes as it wishes to take. This, commented Thompson, would make taking park land so expensive that they'd shy away from the parks, take over instead land already developed.

Primer for Renewal

Calling its program, "A Balanced Program for Community Development," U.S. Chamber of Commerce's Construction and Civic Development Department is getting ready to plunge into the urban-rehabilitation problem with both feet.

Basis of the Chamber's activity is a seven-volume series of handbooks which take up, in order, the need for community analysis; comprehensive planning; urban-renewal planning; need for modernizing local governments; the all-important problem of financing such development; and means of developing community leadership.

Objective is to give local businessmen a primer on the problems facing most urban areas, and on steps toward a solution, in somewhat the same manner as an already-established Chamber program on political action. Booklets are available from Chamber headquarters (Washington 6, D.C.).

Also available lately to urban planners is a new study, *Urban Transportation Administration*, issued by the Bureau of Highway Traffic, Yale University. General Services Administration is again pushing its long-held idea for construction of something like 12.8 millions sq ft of new office space in and around Washington. Such construction would, says GSA, eliminate 52 eyesore "temporary" buildings scattered around the city, end leases on some 55 other structures.

What makes the idea stand a better chance now than before is wording of a rider passed by Congress, as the last session ended. Here's the point: under the new law: (1) GSA is set up as sole agency of construction for the Government in Washington, with approval powers for all other agencies; (2) GSA-recommended construction may be authorized by a vote of the House and Senate Public Works committees-instead of the full Congress; and (3) once such committee approval is given, GSA can seek direct appropriations, regardless of budget items.

Avoiding Labor Pains

If you have a labor matter that might go before a State court (under terms of the Landrum-Griffin Bill, which eliminates the "no man's land" area where NLRB refuses jurisdiction), have your lawyer check with National Labor Relations Board offices in Washington for a copy of new procedures just set up.

Basic point of the new procedure: NLRB will give a written opinion, quickly, as to whether it will take jurisdiction, or whether the matter may properly go to a state or territorial agency or court.

Research on Roads

There's a new source for research money for highway-safety programs now being established in Washington. It's the Insurance Institute for Highway Safety, backed by some 532 casualty companies.

It will make direct grants for studies, and will go into States (on invitation) to co-ordinate studies already under way, make its results available to all concerned.

Controlling Contractors

The Federal government has made up no "blacklist" of contractors and subcontractors—and will not—despitemisleading headlines in Washington newspapers recently.

What GSA has done, as of right now, is to insert a new clause in *Continued on page 66*

ONE NUT SETS THE SEAL

STAB THIS SIMPLE COUPLING with two lengths of Pyrex lifetime drainline. Turn the single nut until the torque wrench spins free. You've got a positive, lifetime seal.

Plus: Ten-foot lengths mean fewer joints. Light weight means fewer hangers. One-nut joint means fewer work hours.

For the complete story, write for our new bulletin. Plant Equipment Dept., 20 Crystal Street, Corning, N. Y.

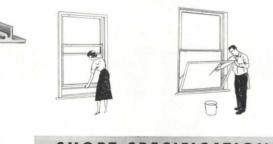


A Product Report for Architects...

Inside Window Washing

with the new Fleetlite double hung Monumen-*tilt* !

For the architect engaged in conventional and curtain wall design of offices, schools, hospitals and other high rise buildings, Fleetlite offers the only monumental double hung aluminum window that can be fully screened and still cleaned at floor level from inside the building.



FOR WASHING

SHORT SPECIFICATIONS

MATERIAL All frame and sash are extruded aluminum alloy 6063-T5 with a minimum tensile strength of 22,000 psi. DESIGN FEATURES Upper and lower sash have extruded glass-frames hinged at the lower rail of each sash. For inside cleaning, glass-frames pivot "hopper style" when in the lower position. Jambs of adjoining windows fastened with male and female screws and splined for weather tightness. Continuous head and sill for mullioned units up to 20' wide.

> HARDWARE Sash balanced with removable spiral type balances. Glass-frames lock into sash by concealed stainless steel cam locks. Installation anchors of heavy gauge steel cadmium plated.

> > **WEATHERSTRIPPING** Perimeter of sash double weatherstripped with wool pile. Glass-frames continuously weatherstripped to sash.

AIR INFILTRATION Shall not exceed .50 cubic feet per minute per foot of crack length under static air pressure equal to winds of 25 mph velocity.

GLAZING Glass and glazing up to and including $\frac{1}{2}$ " insulating glass under separate contract.

MAXIMUM SIZE 4'6" x 8'0" frame overall dimensions.

SCREENS Fiberglas half or full length screens available.

FINISH Lustrous satin-like finish. Anodizing provided if specified.

Complete specifications and full size details available upon request.

Fleetlite

FLEET OF AMERICA, INC., Dept. PA-10 2015 Walden Avenue, Buffalo 25. N.Y.

For more information, turn to Reader Service card, circle No. 305

Continued from page 62

all of its contracts which requires, in effect, that all concerned must agree to testify before courts or other proper agencies on any matters concerning Government contracts that they are about to sign—or on any other Government contracts on which they may have worked.

Objective, of course, is to prevent contractors from "taking the Fifth" and refusing to give evidence, as was done by a St. Louis bricklaying contractor who, it was said, now holds two Federal subcontracts, despite the fact that he refused testimony to the McClellan committee.

GSA's remedy is simple: if you don't sign the contract clause—you don't get the job.

Recruitment Repugnant

Recruiting practices of many American industries are beginning to produce reaction from technical schools.

An example was the recent announcement by Dean Martin Mason, of the engineering school of George Washington University, that he has imposed a "code of practice for recruiters" to put a stop to "wild" and "disgusting" recruiting at his establishment. Mason's code outlaws special gifts to undergraduates, as well as payments and bonuses.

"It is needed," he commented, "to end cutthroat bidding for graduates which is disillusioning to new graduates, makes some quit in disgust, delays their adjustment to professional status."

One company, he added, hired 50 more men than it could use, then turned them over to another company "for a consideration."

Senior students who heard Mason announce the code, incidentally, expressed surprise. Three of them told interviewers they "weren't interested" in such inducements wanted only steady jobs with well established companies.

Fund Source to Check

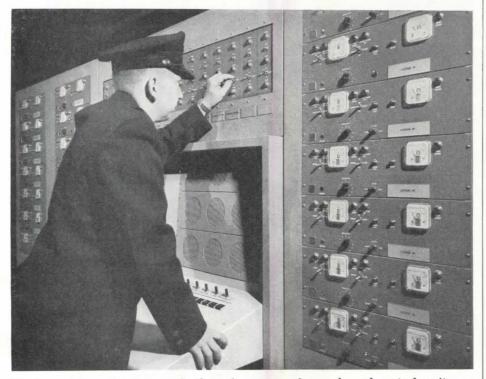
A source of construction money, not often reported because of small individual amounts, is the \$30 millions annual fund doled out by HEW to aid in construction of health and research facilities throughout the nation. Latest series of grants (mostly to colleges and universities) total \$16.2 millions, for work at 72 institutions. Schools match Federal money on a 50-50 basis.

Building Security System Centralizes Guard Control

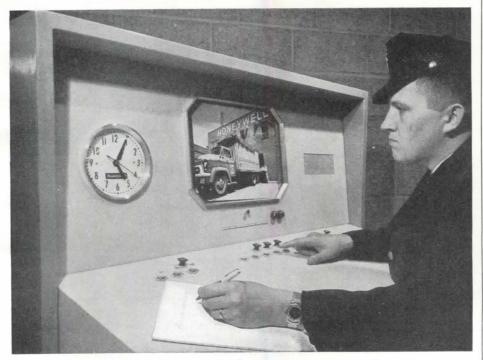
Concept Eases and Improves Vigilance

Security control of large industrial and commercial buildings, historically an expensive and at best a "spotty" operation, can now benefit from a maximum amount of control by a reduced guard staff (with consequent cost savings).

"Security Control Center" consists, essentially, of a network of remotelylocated electronic detection devices tied into a master control panel. "Building block" system security



Single guard maintains watch through system of console, sub-control units.



"Building block's" TV unit permits guard to oversee any or all entrances.

maintenance permits a wide range of variations, depending on the needs of the building. Means of warning or detection which may be tied in with the control board include fire and smoke detector heads, tamper-proof magnetic switches, electronic noise and motion detectors, capacitance-type electronic fencing, TV cameras, magnetic unlocking switches, and holdup alarm.

System is custombuilt to meet particular requirements, but most activities at control board will be similar. When security violation occurs, main control panel gives an audible signal (horn, bell, buzzer, etc.) and a visual alarm by lighted switches. To identify the trouble area, the guard looks at the adjoining sub-system panel, where a light tells him its location. Sub-system panel for intrusion alarm also includes two-way intercommunications unit enabling guard to listen in on affected area, and, if desired, speak with persons there. Console TV screen operates for determining persons who wish to enter the building.

A number of new warning devices have been introduced with the "Security Control Center." There are two new motion-detection systems: "Vitronic Eye" and "Sone-Sentry." Vitronic Eye detects motion in indoor and outdoor lighted areas. Whenever light pattern between transmitter and amplifier is disturbed, an alarm system is energized, giving alarm at control console. Sone-Sentry gives alarm when constant audible signal into a control area is interrupted.

A new capacitance-type circuit for use with security fences detects presence of anyone within a yard of fence, but screens out false alarms from blowing paper, birds, etc. Minneapolis-Honeywell Regulator Company.

On Free Data Card, Circle 100

Innumerable combinations of detection devices may be used with system.



New Kitchen-Sink Concept Integrates Activities

Radically-new "Cuisine Centre" design outmodes the kitchen sink by providing maximum utility in compact one, two-, and three-bowl models. Food arrives, is processed, and waste is disposed of, in a simple sequence. All models feature flat-bottom bowls, re-



mote pop-up drain controls, and new square-pattern crumb baskets. Model LCRN-4322 (shown) also has Nutone unit built into the stainless-steel apron. Cutting board's overhang directs scraps into disposer opening of small bowl. Elegant "Tiara" longspout faucet is also new. Styling by Raymond Loewy Associates. Elkay Manufacturing Company.

On Free Data Card, Circle 101

Square Roof Ventilators Have Low Profiles

Designed to harmonize with low rectangular roofs is a new line of lowsilhouette roof ventilators in square



and rectangular shapes. Both gravity ("Air-X-Hauster") and power ("Powair-X-Hauster") units have same lines, for compatible use on the same installation. Full range of sizes, from 10" through 60", is available. G. C. Breidert Company.

On Free Data Card, Circle 102

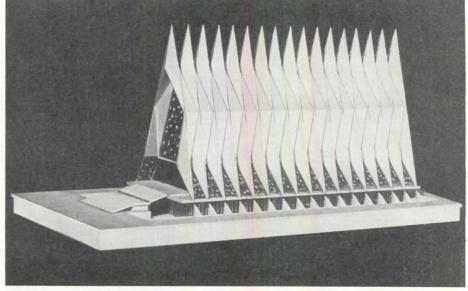
Sliding Windows Insulated by Air

Blanket of air, 1³/₄" thick, between sash of sliding windows, provides in-

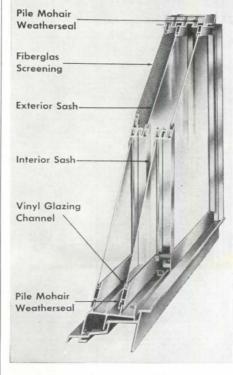
Glass Is Heat-Reflecting

A new laminated heat-reflecting glass, first of its kind, is used widely in Air Force Academy's chapel at Colorado Springs. Together with glare-reducing glass, it permits only one percent light transmission to illuminate the chapel. Laminated glass is made by sandwiching polyvinyl butyral plastic between two sheets of glass; changing the components of the interlayer varies reflection, absorption, and transmission. Dearborn Glass Company.

On Free Data Card, Circle 103



sulation without the high cost of insulating glass. Windows consist of interior sash, self-storing storm sash, and glass fiber screen in a four-channel extruded-aluminum frame. Operation is on nylon guides, with no



metal-to-metal contact. Widths up to 16', in Quad Slides, are available. Fleet of America, Inc.

On Free Data Card, Circle 104

Easily-Removed Oven Door Shown In 1960 Group

Removable oven door, for greater convenience in cleaning, is one of many new features in the 1960 line of appliances. Other improvements: surface-mounted electric ranges are now shallow enough to install over cabinet drawers; refrigerators use the airconditioning method employed in atomic submarines—activated carbon —to purify air and remove odors; refrigerator doors seal tightly with a "million-magnet" gasket and open with minimal force; ovens are available in new 24" width. Whirlpool Corporation.

On Free Data Card, Circle 105

Grilled Midget Louver Simply Installed

New midget louver, with grill openings smaller than regular screening, eliminates the need for additional screen unit. Anodized aluminum makes outdoor installation—even in marine work—practical. Simple installation is another considerable advantage: a hole is drilled and the louver wedged in securely, without nails or screws. Six sizes, from 1" through 4", are available. Midget Louver Company.

On Free Data Card, Circle 106

Long-Span Roof Acts Without Support

By eliminating dead weight of bracing, beams, sheathing, and built-up roof, new roof of light-gage sheet steel can span wide distances without support—up to 300' in a flat roof, 200' in a cantilever overhang, and possibly 1000' in an arched roof. "Dubl-Panl" units are channel-grooved panels, galvanized or aluminized, that are bolted together to form a stressed-skin building that needs no framework. Panels form upper and lower chords of the roof and also serve as roof and ceiling. Between panel-chords are rows of diagonal struts, 41" apart, bolted to tabs on the panels. This strut system transfers lateral load to the walls, eliminating need for lateral bracing. Load factors and distance to be spanned determine panel gages and depth of roof. Depth is usually 1/20th of span. Behlen Manufacturing Company.

On Free Data Card, Circle 107



Communicating Intercom Has Seven Stations

Compact and economical is this new miniature pushbutton-telephone-intercom system. It consists of seven telephone stations which provide direct call facilities to any internal location. It thus offers a decided operating advantage over the conventional voicebox intercom in that any phone in the



"Rapidofon" system can communicate with any other. "Rapidofon" is designed for small factories, firms, and stores, and is adaptable to expanding needs. Instrument can be placed on a desk, immobilized by its foam-rubber base, or can be wall-mounted. TeleNorm Corporation. On Free Data Card, Circle 108

Air Supports Vinyl Swimming-Pool Shelter

Year-round swimming is possible with "Space-Arena," a portable, transparent enclosure of vinyl sheeting. It has no structural members, being airsupported by a small 1/10 hp blower (equivalent in electrical consumption to a 75-w bulb). Unit is held in place either by water tubes constructed in the base or by sand bags. Entrance is through a zippered doorway. Continuous change of air is provided. Plastimayd Corporation.

On Free Data Card, Circle 109

Heater Adapts to Cooling

Occupying less than 5 sq ft of floor space, a new gas heating unit is adaptable to central cooling, either at installation time or later, by simply adding a cooling package at the top. Height without the added package is only 57". Capacities range from 65,000 to 125,000 Btu, thus including most popular sizes used in new home construction. "Type 144/145" series is smartly designed, in straight lines and two-tone finish. Mueller Climatrol Division, Worthington Corporation. On Free Data Card, Circle 110

Oil Heat Now Smokeless

New smokeless operation gives great economy and cleanliness to oil heating. No chimney is needed, since new "Custom Mark II" boiler provides its own air for combustion under precisely-controlled conditions; an inexpensive exhaust pipe to the outdoors is sufficient. Smokeless principle also means freedom from smoke, odor, and soot, sharply reducing servicing and cleaning costs (the conventional annual cleaning is now unnecessary). Fuel consumption is reduced by 25 to 33 percent. Unit is a mere 201/2"x50"x35" high and is available for hot water or steam heat in capacities up to 145,000 Btu. Small size and new operating principle permit installation in almost any location. Iron Fireman Manufacturing Company.

On Free Data Card, Circle 111

Filter-Change Warning Signals Automatically

A low-cost signal, which whistles when filters clog, tells automatically when to change or clean filters on any air conditioning, air handling, or forced warm air heating system. "Filter Watcher" installs on blower enclosure between the filters and the blower. As filters become clogged, the blower sucks air through the whistle, gradually building up an audible whistling alarm. Installation is easily accomplished by tapping a $\frac{1}{2}$ " airpassage hole and affixing device with self-tapping screws. Viking Instruments, Inc.

On Free Data Card, Circle 112

Glare-Reducing Sheet Furnished Custom Cut

Vinyl sheeting for eliminating glare and heat at windows is available in sizes up to 48"x72", for application in factories and other large-window-area *Continued on page 76* Continued from page 75

buildings needing economical control of sunlight. Available in several transparent, translucent, and opaque colors, "Tox-Shade" is furnished custom cut to exact window dimensions. It is applied without adhesive by merely squeegeeing to the glass; the perfect bond lasts as long as required. Stripping is also a fast operation and makes seasonal storage possible. Even in extreme temperatures, "Tox-Shade" does not become brittle, maintains its original bond, and is as washable as the glass itself. Toch Brothers Division, Standard-Toch Chemicals, Inc.

On Free Data Card, Circle 113

Largest Plastic Ventilators Resist Acid Fumes

Six of the largest plastic roof ventilators have been installed in a chemical manufacturing plant where fumes of sulfuric and muriatic acids would have rapidly corroded metal fan and housing. Ventilators are $7\frac{1}{2}$ ' high and 36" in diameter. The assembly includes plastic housing, plastic airoperated dampers, and four-blade plastic propeller with 29,000 cfm delivery. Beetle Plastics Division, Crompton & Knowles Corporation.

On Free Data Card, Circle 114

Construction Key System Has Split-Pin Device

Security needs for new construction are effectively met by new "Construction Key System," which features an ingenious split-pin device in its lock cylinder. This pin remains inactive when construction keys are used and is activated only when building is completed and regular keys are issued. At this stage, construction keys can no longer operate the locks. Russell & Erwin Division, The American Hardware Corporation.

On Free Data Card, Circle 115

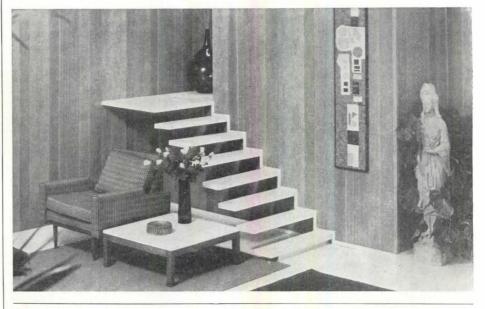
Lockset-Strike Method Faster Than Most

Newly-designed method for installing lockset strikes is four times faster than conventional methods. A hole is drilled, "Sok-It" strike is positioned, and the patented staking tool is hit with a hammer, to give a neat permanent installation without mortising or

Authentic Cherry Grain Added to Wood Line

An additional decorative group of interior hardboards, cherry-grained and grooved, has been introduced. The $\frac{1}{4}$ " panels are tongue-and-groove in 16"x8' sizes, and may be applied over existing walls, studs, or furring strips. In simulating a plank-cherry wall, with the plank-by-plank variations that exist in cherry woods, an authenticity superior to many veneers is achieved. Masonite Corporation.

On Free Data Card, Circle 117

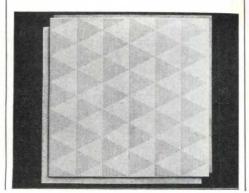


chiseling. There are no screws to come loose. For metal jambs, the former method of welding, drilling, and tapping strike tabs and box to the jamb frame is completely elimininated. Mass-production installations are possible by adapting the staking tool to an air cylinder or to a bench or foot press. Strike is available on all "400 Line" locksets at no extra charge. Kwikset Division, The American Hardware Corporation.

On Free Data Card, Circle 116

Ceiling-Tile Patterns Give Continuous Look

Two new patterns in wood-fiber ceiling tiles have been introduced. Alpine, shown, has finely-detailed triangles printed in soft beige on a white back-



ground. Designed to appear as a continuous ceiling rather than as separate tiles, concentric triangles form larger overlapping triangles and diamonds. Additions to the Decorator Temlok line, 12"-sq tile has tongueand-groove joints. Armstrong Cork Company.

On Free Data Card, Circle 118

New Sheet Metal Resists Wear, Corrosion

Versatile new material gives the building industry an all-purpose sheet metal having a unique combination of properties. A "master mix" alloy of titanium, copper, zinc, and "elements x", "Hydro-T-Metal" has extraordinary corrosion resistance in saline or industrial atmospheres; will not rust or stain surrounding areas; can be embedded in earth, concrete, or mortar without protective coating; can be readily spun, extruded, stamped, perforated, color coated, fusion welded, and soldered; weighs less than copper, brass, or stainless steel; will replace these metals because of equal performance at lower cost; is superior to aluminum in fabricating and performance characteristics. A few obvious uses are flashing, gutters, leaders, and termite shields. Illinois Zinc Company Continued on page 78

QUALITY-ECONOMY COMBINED

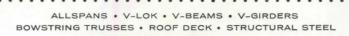
130,000 square feet of Macomber ALLSPANS support roof of Portland Memorial Coliseum. ARCHITECTS: Skidmore, Owings and Merrill

MACOMBER ALLSPANS choice of the building industry...nationwide!

Cold rollformed ALLSPANS, up to 120 feet in length, assure architects, engineers and contractors maximum reserve strength unhampered by excess weight. This unmatched combination of structural quality and erection economy, job-proven in thousands of installations, is backed by 36 years engineering and fabricating experience — guided by quality control unsurpassed in the industry.

Your local Macomber Sales Representative can show how ALLSPANS cut design time and erection costs — Call him today!

NEW	DESIGN M	 ANUAL	•••••		COMBER SPAINS
Exclu	usive structu	ral and econd	omy advantage ng 8 to 120 fee		mara l
NAM	E				
сом	PANY		POSITION		
ADD	RESS				
СІТҮ		•••••	STA	TE	1-60A



MACO

See our Catalog in Sweet's or write for copy Continued from page 76

Division, Hydrometals, Inc. On Free Data Card, Circle 119

Home, Office Furniture Varies H-Bar Design

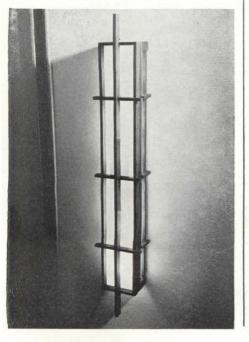
New line of desks; chairs; conference, occasional, and cocktail tables—designed by Robert Benham Becker has been introduced. Steel H-bar construction is used variously for walnut desks and tables: in the desk as an integral part of the pedestal, in the occasional table shown as base and support. Upholstered chairs have no standard frames; chair is assembled from curved plywood sections separately upholstered for a precise line. Table in foreground, 54"x18"x16¹/₂", is \$140; arm chair, in muslin, \$120; flush-top, L-shaped desk, 60"x18" L-unit and 60"x36" desk top, \$873; contoured armless chair, approximately \$200. Helikon Furniture Company, Inc.

On Free Data Card, Circle 120



Lighting of Wood and Plastic Has Varied Uses

Ten new designs for hand-crafted,



large-size lighting units—of translucent plastic set in oiled teak or walnut structures—have been planned for varied home or office use. Vertical wall light shown, suggested for installation in foyer or at head of a stairway, diffuses light from both sides and front through fiberglass; olive and yellow plastic panels are supported by the structure on the front; measuring 8½"x6½"x54", it is \$170 in walnut, \$180 in teak. Other fixtures —horizontal or vertical; standing, hanging or wall-attached—are available. Leslie Larson, Designer.

On Free Data Card, Circle 121

Air Conditioners Introduced in New Line

More than 100 models comprise the 1960 line of domestic and commercial air conditioners and heat pumps unveiled recently. New "Gold Medallion Special Custom Model 1350C" develops the highest capacity, at 13,500 Btu, of any 1-hp room air conditioner in the industry. Another model, the "2390C," is the most powerful room air conditioner made, developing 23,900 Btu capacity. Heat pump line includes 45 basic models, in capacities ranging from 2 to 5 tons (in a onepiece "convertible" design) and in 15- and 20-ton units (composed of a completed assembly of three modules). The Mathes Company Division, Glen Alden Corporation.

On Free Data Card, Circle 122

Lower Cost Possible with New Foam Systems

Based on castor-oil derivatives, new low-cost urethane-resin systems promise a more economical method of placing the rigid and semi-rigid urethane foams used for thermal and acoustical insulation. With new formulations, low-density foams exhibiting no aftershrinkage can be sprayed on vertical surfaces in any thickness without sagging. Decorative effects similar to stucco can be achieved by spraying in thin layers. New equipment reduces spraying costs considerably. Additional advantages of the castor-polyolbased foams over other systems include superior self-bonding properties, no crumbling under load, and ability to regain shape on stress removal. Baker Castor Oil Company.

On Free Data Card, Circle 123

Danish Furniture Is Available In Oak, Teak

Sofa/day bed with oak frame and teak sides, may be ordered in any combination—as shown or with or without arms or back. As shown in muslin, it is approximately \$338. Designed by Torben Strandgaard, it is



part of new group of furniture made in Denmark. Other pieces include stacking table/bench, desks, cabinets, conference tables, and chairs. Pacific Overseas, Inc.

On Free Data Card, Circle 124

AIR AND TEMPERATURE

Heating-Control Models

New models—in electric-heat controls, combination zone-control packages for both warm-air and hydronic systems, and two-piece oil burner controls augment a comprehensive line of automatic controls for heating, refrigeration, and air conditioning. Catalog K-1650, 56 pages, is cross-indexed for easy reference to controls by type or use. A brief caption, describing operation and general application, clearly introduces each product. White-Rodgers Company.

On Free Data Card, Circle 200

New Grills, Registers

A wide selection of new border and louver designs for extruded aluminum grills and registers is presented in a portfolio of loose-leaf bulletins. Information suggests appropriate building types and applications for each of the models. With their trim, linear appearance they are particularly suited to contemporary buildings. Titus Manufacturing Corporation.

On Free Data Card, Circle 201

Complete Gas-Fired Heating Equipment

Selection of heater, furnace, or packaged blower is facilitated by catalog's unique table of contents which lists units according to type, application, capacity, and major features. 28-page Catalog SA-5900 presents the company's full line. Valuable general information is given in the suggestions for room arrangement. All dimensional and performance data are included. Reznor Manufacturing Company.

On Free Data Card, Circle 202

Low-Line Exhausters

Combining efficient ventilation with low silhouette is a line of power roof exhausters, wall exhausters, and relief vents detailed in 12-page Bulletin 659. To provide utmost rigidity, units have sturdy cast-aluminum brackets attaching directly to curb. Silent operation is assured by neoprene dampeners. ExitAire Company.

On Free Data Card, Circle 203

CONSTRUCTION

Aluminum Screens Have New Patterns

New patterns in the "Karvalum" line of anodized-aluminum screens—decorative and useful inside or outside are presented in a folder of scale drawings. Screens are adaptable as sun screening, façade renewal, room dividers, etc., and can be made in sufficient thickness to be self-supporting. Unique manufacturing process enables the architect to design his own pattern, emblem, or monogram. Morris Kurtzon, Inc.

On Free Data Card, Circle 204

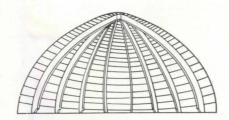
Standardized Colors For Porcelain Enamel

A color guide has been prepared as an aid to architects in selecting and specifying architectural porcelain enamel. Guide provides a standardized industrywide color system listing 47 of the presently most popular colors. It is noted that an enormous variety of colors not on the list will continue to be available. The designer is therefore not limited in his choice, but *can* simplify this choice by selecting a standard color that can be readily matched by any manufacturer. Porcelain Enamel Institute.

On Free Data Card, Circle 205

Steel Dome and Girder

Two newly-developed structural units —a dome and a triangular girder offer outstanding steel-construction economies. The low-cost dome is a stock package unit for the enclosure of large column-free areas up to 200'



diameter. The prefabricated triangular girder, with top flange of reinforced concrete, and webs and bottom flange of steel, is ready for immediate use as roof, floor, or bridge deck. Catalogs 450 and 725, each 4 pages, give additional information. Shlagro Steel Products Corporation. On Free Data Card, Circle 206

Plaster Pays In Construction Systems

Four construction methods—membrane fireproofing, "Trussteel" stud partition, 2" solid lath and plaster partition, and "Brace-tite" lathing system —are profusely detailed in four welldesigned booklets of company's "Plaster Pays" program. Some of benefits derived from systems are fire-resistance, high strength, effective vapor barrier, improved sound insulation, and light weight. Specific features and applications of each system are fully depicted in installation photographs and isometric details. United States Gypsum Company.

On Free Data Card, Circle 207

High-Stress, Open-Web Steel Framing Members

Design information on new "Allspan" open-web steel framing members is available in 28-page Manual MA-59. Book gives complete dimensions, properties, and construction details of the members, which have a design stress 25 percent higher than conventional open-web structurals and a safety factor 12 percent higher. Suitable for spans up to 120', these short-, intermediate-, and long-span framing members can for the first time be chosen from a single table of allowable loads. All sizes are made with cold rollformed V-section chords, and both top and bottom chords are nailable. Macomber, Inc.

On Free Data Card, Circle 208

DOORS AND WINDOWS Effective Predictions For Daylighting

A new, easy-to-use prediction technique that enables architects and illuminating engineers to calculate maximum advantages and skillful use of natural light has resulted from a 10year research study conducted at Southern Methodist University. The 28-page pamphlet explaining the new method is the first of its kind ever *Continued on page 82*

Continued from page 81

printed on this subject. It is well documented by technical papers approved by the Illuminating Engineering Society. The findings are applicable to all types of structures. Write to: Libbey-Owens-Ford Glass Company, 608 Madison Avenue, Toledo 3, Ohio (\$.50).

Versatile Folding Partitions for Many Uses

The wide versatility of electric and manual folding partitions is shown in 24-page design brochure. One type operates without floor track or exposed hardware and with remote stacking. Photographs show installations in schools, churches, auditoriums, gymnasiums, restaurants, banks, etc. Layout and planning data are given; swatches of vinyl coverings and prefinished wood paneling are included. Torjesen, Inc.

On Free Data Card, Circle 209

Mosaic Glass for Today

Step-by-step sequence in making contemporary mosaic glass, as done at Chartres, is described in 4-page brochure, which follows the craftsman



from creation of preliminary design and full-sized cartoon, to hand-chipping of 1"-thick glass and final setting of glass in reinforced cement. These sparkling church windows have a range of 400 rich colors, and are low in first cost and maintenance. Studios of George L. Payne, Inc.

On Free Data Card, Circle 210

"Balanced Door" Control

Complete and effortless control of the "Balanced Door" is explained in 12page Catalog 46. Because the hinge stile swings inward as the door opens, wind pressure and interior suction are counteracted, traffic can move without interruption, and outward projection of the door is less than with the normal arc. Photographs of actual instal-

lations show use of these exterior doors in many notable public buildings. Complete construction details are given. Ellison Bronze Company, Inc.

On Free Data Card, Circle 211

ELECTRICAL EQUIPMENT AND LIGHTING

Emergency Power Sets

With properly sized and installed "Sure Power" generator sets, any degree of partial or complete protection can be provided for hospitals and other institutions during power failure. New 8-page Bulletin 569 gives information on determining size of generator sets, conditions for using manual or automatic starting, estimation of costs, and types of cooling methods. Engine-Material Handling Division, Allis-Chalmers Manufacturing Company.

On Free Data Card, Circle 212

Revised Electrical Code

The 1959 edition of the National Electric Code has been approved as American Standard Cl-1959 by American Standards Association. Code sets up minimum requirements necessary for safety in use of electricity for light, heat, power, radio, signals, etc. Frequently revised since the first edition in 1897, the current revision not only includes many changes in substance, but also a new numbering system. Because of this new system, an appendix provides cross-references with the 1956 edition, with revised sections indicated in bold-face type. Code is sponsored by National Fire Protection Association. Write to: American Standards Association, Dept. PR 100. 70 East 45th Street, New York 17, N. Y. (\$1.00.)

Outdoor Aluminum Lighting Standards

"Hapco" line of aluminum-alloy lighting standards is presented in a new 32-page catalog. Detailed descriptions, dimensions, and typical installations are furnished on lighting standards with various bracket styles, floorlighting standards, lamp posts, and traffic poles. Hubbard & Company. On Free Data Card, Circle 213

Quality School Fixtures

Information on "Engineered Economy" line of school lighting fixtures is available in new 4-page folder. New "Federal," an attractive fixture ideal for classroom and other school lighting areas, is featured. Although priced to meet exacting budget requirements, it is a quality-constructed unit that provides high over-all lighting efficiency with a minimum of maintenance. Smithcraft Lighting.

On Free Data Card, Circle 214

PROTECTORS AND FINISHERS

Fire-Retardant Wood

Use of fire-retardant lumber and plywood in public buildings to comply with existing fire-code requirements is discussed in 12-page booklet. The brochure discusses fire-retardant decorative plywood paneling, the interpretation of flame-spread ratings, and the importance attached to materials bearing the Underwriters' Laboratories Inc. label. J. H. Baxter & Company.

On Free Data Card, Circle 215

Lacelike Wall Pattern

Interiors resembling costly wallpapers are possible at low cost with new paint concept, "Matalace." Tiny ribbons of gold and silver paint are sprayed onto the base coat while it is still wet; the colors do not blend but maintain their own characteristics. Any surface may receive the treatment. Plextone Corporation of America.

On Free Data Card, Circle 216

Maintenance Problems

Engineering data and specifications to help solve many problems of waterproofing, damp-proofing, painting, calking, roofing, and flooring are contained in 1959 Building Construction and Maintenance Handbook. Included in the book are estimating guides *Continued on page 84* another case history of

A R C H I T E C T S P E C I F I E D M A I N T E N A N C E

"... After 2 years, these HILLYARD-TREATED FLOORS look newer than ever!"

Specified for initial treatment, recommended and used for follow-up maintenance, Hillyard specialized treatments have preserved the "like-new" condition of the floors in this beautiful modern building. Time has served only to deepen the lustre, brighten the colors. "These floors have actually improved in appearance!"

Professional Building, Rockford, III. Architect: Marshall T. Munz



Concrete Floor:





Ask the Hillyard "Maintaineer®" for an expert's opinion on floor usage problems, and the treatment of choice after installation. He'll gladly serve as your "Job Captain". No charge; he's "On Your Staff, Not Your Payroll".



WRITE FOR FREE AIA FILES

Product information, draft specifications, material for your recommendations on follow-up maintenance. One for each type of flooring.

Continued from page 82

helpful to architects, contractors, and dealers. The 128-page pocket-size handbook is indexed for quick reference both by product names and by uses. L. Sonneborn Sons, Inc.

On Free Data Card, Circle 217

INSULATION

Roof-Deck Insulation

"Insulation for Modern Roof Decks," a comprehensive 32-page booklet, discusses practical economics and advantages of effective insulation for modern roof-deck construction. Major considerations for evaluation of abovedeck insulation materials-insulating efficiency, strength, durability, and ease of installation-are discussed in detail. Booklet also includes comparative construction costs, a heatingseason zone map indicating number of "degree days" per year, and insurance ratings for above-deck roof insulation. The Celotex Corporation.

On Free Data Card, Circle 218

Calking and Protection

Three new products, designed to resist manmade or natural corrosive atmospheres inside or outside, are described in new catalog of acrylic, epoxy, vinyl, alkyd, and other plastic-base coatings: (1) a non-staining sealing compound for use on white and other lightfaced marble or stone, (2) an alkydaluminum-pigmented coating base that "seals down" roofs and sidings, and (3) several new colors in the widely-used vinyl, epoxy, and synthetic-rubber coatings. Also featured in 16-page Bulletin 105 is "Del Synthetic Rubber Compound," a Thiokolbase calking, sealing, and glazing compound. David E. Long Corporation.

On Free Data Card, Circle 219

SPECIALIZED EQUIPMENT

Line of Snack Bars

Snack bars, serving either from the front or from behind, and intended for use in office, motel, recreation room, or patio, are shown in 4-page brochure. Many features for easy,

gracious preparation and serving are available in different models. Com-



plete dimensional data is given. Dwyer Products Corporation.

On Free Data Card, Circle 220

Integral-Hinge Brackets For Toilet Compartments

New factory-applied integral-hinge brackets reduce installation costs, improve appearance, and reduce maintenance of toilet-compartment doors. Strength and long life of hinge-andbracket are indicated by pictorial and documentary evidence from independent testing laboratory. This important advance in toilet-compartment construction is described in 8-page folder. Sanymetal Products Company, Inc.

On Free Data Card, Circle 221

Space-Saving File System

Divider-type shelf filing can save 70 percent of cost of drawer files and 50 percent of floor space, without any sacrifice in efficiency, according to 6page Folder LBV-725 Rev. 3. Shelves are easily adjustable and removable without need for tools. Innumerable applications have been developed for widely varied fields. Remington Rand Division, Sperry Rand Corporation.

On Free Data Card, Circle 222

Hospital Grab Bars

Wide range of new hospital-type grab bars is available for geriatrics and convalescent homes, therapy centers, and hospitals for the crippled and handicapped. Appearance as well as strength has been designed into these bars. All parts are manufactured in one unit, and mounting flanges are joined to the rail by silver solder, for maximum stability. All edges are rounded for safety. Many sizes and styles-vertical, horizontal, and rightand left-hand angles-are illustrated in 4-page Bulletin 68. The Logan Hospital Equipment Company.

On Free Data Card, Circle 223

School Kitchen Cabinets

New 18-page planning guide for domestic-science and home-economics classrooms, food laboratories, and sewing rooms, is available. Included are illustrations and elevation drawings



of more than 50 cabinets in line. Typical classroom layouts and many installation photographs show versatility and flexibility of the units. The Kitchen Maid Corporation.

On Free Data Card, Circle 224

SURFACING MATERIALS

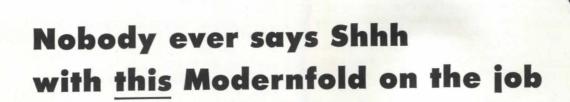
Economic Cork-Base Plastic Tile

New low-cost tile for residential use, designed to create economical floors of distinctive appearance, is described in 9-page folder. Six patterns uniquely combine pigmented color with randomcork background. "Decorlite" is composed of a genuine-cork base, with a permanently laminated clear-vinyl surface. Dodge Cork Company.

On Free Data Card, Circle 225

New Specifications for Vinyl-Asbestos Tile

Federal Government has just released a new Interim Federal Specification for Vinyl-Asbestos Floor Tile, L-T-00345. It covers requirements for size, thickness, indentation, dimensional stability, flexibility, and resistance to reagents and curl, of 1/8" tile. A somewhat similar specification for vinylasbestos tile has been prepared by Continued on page 86



• Now . . . the Soundmaster adds effective sound control to Modernfold's traditional space control. And you reap the greatest flexibility ever in wringing maximum utility from a floor plan.

Soundmaster by Modernfold

Get the specifics now. Find out how efficiently a Soundmaster folding partition can blot down sound on any job you do.

See your Modernfold Man . . . he's listed in the Yellow Pages, under "Doors, Folding." Or, write for: Soundmaster Facts and Specifications; NEW CASTLE PRODUCTS, INC.; NEW CASTLE, INDIANA. (In Canada: New Castle Products Canada, Ltd., St. Lambert, Que.)

Here's why:

You get an *all-around* sound barrier with a Soundmaster. Sound-smothering chipboard (Fig. 1) lines *both* interior sides. Sealer strips (Fig. 2) guard top and bottom. And the baffledesign jamb (Fig. 3) has a foam rubber liner that guarantees a leak-tight installation.

Fig. 2

Folding partitions for every need...every budget

From standard to giant-sized... from thrifty to luxurious... Modernfold has *the* door, divider or partition that answers your specific requirements. Choose from up to 60 vinyl fabric coverings in the steel framework models ... or from the selection of rich wood finishes.

For more information, turn to Reader Service card, circle No. 311

modernfold

Continued from page 84 Asphalt and Vinyl Asbestos Tile Institute. In addition to covering usual requirements for 1/8" tile, it also includes those for thinner gages of tile that are currently popular. Asphalt and Vinyl Asbestos Tile Institute.

On Free Data Card, Circle 226

Photos Replace **Tile Samples**

Amazingly accurate simulations of actual tile are reproduced in a "Designer's Portfolio" of full-color photographs. Complete set of eight exteriorpattern mosaic sheets can be conveniently carried or filed; samples of

ceramics are no longer needed. United States Ceramic Tile Company. On Free Data Card, Circle 227

Curtains with Control of Heat, Glare, Light

"Fenestration Fabric" is a new concept whereby curtains are used not only for beauty but also for superior properties of heat, light, and glare control at windows of air-conditioned buildings. Eight-page brochure provides figures to substantiate these utilitarian aspects. Fabric of proper weight, weave, and color gives superior thermal insulation against solar heat transfer. Daylight is diffused

pleasantly, eliminating sun glare while taking advantage of natural sunlight. Light transmission is reduced to 20%-35% of its original



intensity and is diffused uniformly, eliminating uncomfortable light contrast frequently found with conventional shading devices. Owens-Corning Fiberglas Corporation.

On Free Data Card, Circle 228

Washington News

Continued from page 66

Fiscal Facts

Bids on something like 7000 units of Capehart Housing for the Air Force will be asked within the next two months. This will clean up Fiscal 1960 program.

Meanwhile, all of the services are now busy putting together their recommendations for Fiscal 1961 (which starts July 1, 1960), for inclusion in the President's annual budget message due in mid-January. The program (at least what will be asked for) should be firmed-up before Christmas.

Federal Architecture Show

In an unusual move to get public approval and understanding, GSA is new displaying models of several million dollars worth of proposed Federal structures at AIA headquarters in Washington.

Displayed, for example, are models of a \$7.3 millions office building and a \$9.9 millions folded-plate roof medical library under construction at National Institute of Health; the \$46 millions headquarters complex for the Central Intelligence Agency (OCTOBER 1959 P/A NEWS REPORT) now under construction at Langley, Va. Among future buildings displayed are: A \$44 millions Federal office building planned as part of the rehabilitation of the Southwest area of the city; a \$749,000 auditorium for Gallaudet College; a \$2.3 millions headquarters building for the National Arboretum, and others.

Taxing Problems

At this moment, it's a complete toss-up as to whether the House Ways and Means Committee will come up with any meaningful legislation concerning tax reforms. Hearings that have been conducted throughout the Fall here in Washington have brought out about as many opposing views as there have been witnesses.

One proposal-though temptingyou can be sure will run into hot opposition, and won't get through. That's the suggestion, advanced by numerous economists on the university level, for removing the tax exemption from State and local government bonds.

Dispelling Degree Mills

That blast at "degree mills" which award phony diplomas by mailloosed recently by Secretary Flemming of Department of Health, Education and Welfare-is the opening gun in a campaign for legislation and co-operation in controlling such operations.

Behind the publicity is Flemming's hope that professional societies will come forward with plans for accreditation.

HEW's condemnation of "degree mills" was based on studies of National Education Association and others, which report that many of these disreputable "schools" have duped many foreigners, as well as Americans, with offers of "degrees" in practically any subject, including architecture and civil engineering.

Small Businesses Won't Invest

Washington is a little worried over the slow progress of the formation of Small Business Investment Companies (SBIC). When the program started about a year ago, predictions were that 300 SBIC's would be started this year.

But the actual number (as of the end of November) is 36, and predictions have now been shaved to "about 100" for the full year.

Reasons, as businessmen and attorneys look at the situation, stem from the multiplicity of taxes and regulatory agencies which seem to have some jurisdiction over these SBIC's; the slow return on investmentslargely due to the necessity of investing a lot of time and effort in finding and nursing along good growth industries that make proper investments for SBIC organizations.

There's some legislation already in the works that will attempt to untangle the legal nets and simplify procedure, since the act is not now living up to its intention of providing a new source of investment capital for small industries.

E. E. Halmos, Jr.

PROGRESSIVE	RCHITECTURE
NEWS R	EPORT
REINHOLD PUBLISH	IING CORPORATION
430 PARK AVENUE	NEW YORK 22, N.Y.
Publisher	D. Bradford Wilkin

Publisher	D. Bradford Wilkin
Editor	Thomas H. Creighton
News Editor	James T. Burns, Jr.

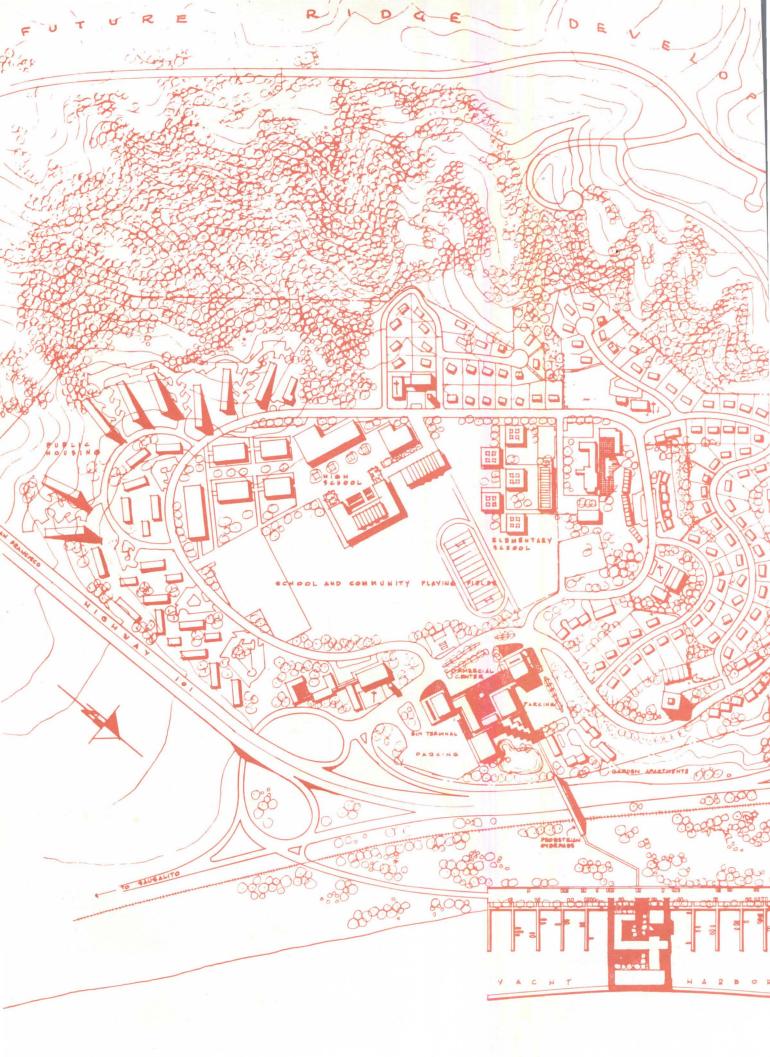
p/a seventh annual design awards

Nearly six hundred entries, arranged in ten categories, faced the Jury last September 21. William Caudill, Louis Kahn, Ralph Rapson, José Luis Sert, and Lyndon Welch—five fresh and vigorous critics—lit cigarettes, sipped coffee, surveyed the apparently impossible task ahead of them and set to work examining the first group of projects. Another Design Award Judgment—P/A's eighth—was under way. Several weary days later, the same five critics, rumpled, tired, in some ways depressed and in others exhilarated, lit the final cigarettes, sipped the last cups of coffee, and faced the 22 surviving projects. What feelings did they have, what conclusions had they reached, after evaluating the work U. S. architects considered the best designs in their offices, to be built in 1960? We give you here some excerpts from the final discussion which developed around the table, with the authors anonymous, since these were not prepared, but off-the-cuff remarks.

First, how much can one truly evaluate the state of design from submissions in a "competition" of this kind? "I think we can consider this pretty much a picture of U. S. architecture right now," someone commented, "since the magazine asks for no special presentations, makes it clear enough that what is wanted is just stuff swept off the drafting boards, so to speak, and sent along for us to see." Another felt that there was a certain amount of *competing*, nevertheless. "Perhaps," he said, "the belief of many architects was that they didn't have much chance in presenting good, ordinary work; that the competition wanted something out of the ordinary."

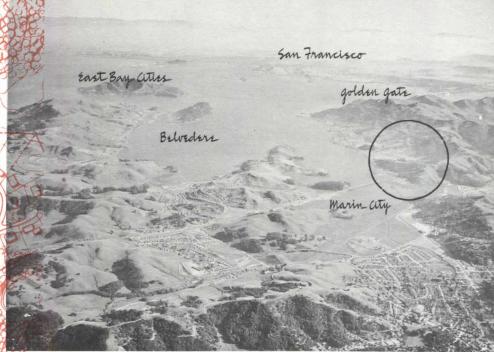
Here, as a matter of fact, was the strongest general criticism. "Looking at much of the work submitted, one has a rather alarming impression of the state of our colleagues as a whole, because there is too much of a sort of crazy approach to very ordinary problems, where this attitude isn't called for," said one. Another added: "In houses, particularly, there seems to be in general an overlooking of the important condition that one has to live in a house and the house should indicate a pattern of living, or a pattern of life." The Jury, in fact, was ruthless in its rejection of all but one house submitted (as the reader will see in the later pages). "Perhaps," the comment went, "we can shock the profession into a realization that when a thing rests only on the value of novelty it ceases to be novel in a few years." Another added: "We want excitement, yes... but you can't find an expression ... very exciting when there is nothing behind it. Excitement comes out of the relationship of spaces inside the building."

In this respect, another Juror criticized the lack, too often, of sections to explain spaces. "I think the cross-section is a revealing document of what really happens with spaces," he said. And this led to further criticism of entries in general. "A competition places tremendous value (Continued on page 152)



first design award

Redevelopment of Marin City, California DeMars & Reay, Architects



Proposal for the Redevelopment of Marin City, California, for James Scheuer: DeMars & Reay, Architects; Richard Foster, Ed Bennett, John Wells, Carl Wisser, Members of Firm; Lawrence Halprin, Landscape Architect; Wilsey & Ham, Civil Engineers. A spectacular site on one of the northern arms of San Francisco Bay is the area under study for redevelopment. Marin City came into existence originally as a temporary, wartime community to house workers in Kaiser's nearby "Marinship" yards. At its height, the population was 6000 but as vacancies are being frozen with impending redevelopment the population has dropped to a present low of 2415. "The hundreds of light-framed houses and apartments covering the hillsides," write the architects, "are now completely beyond repair or reuse and must be entirely removed. . . . Redevelopment proposals were invited in October, 1958, based on a master plan prepared by the County and reducing the community density from approximately 16 persons per acre to 12 persons per acre in the hope of preserving the rural character of the county." However, James Scheuer, the prospective sponsor of this scheme differed with the low density figure. Though he commended the wish to preserve the natural beauty, he considered the low-density figure a misguided principle on a countywide basis and suggested, instead, that Marin City could and should be developed as a relatively high-density area. In his bid proposal, Scheuer suggested a greater range of build-

urban design: first design award





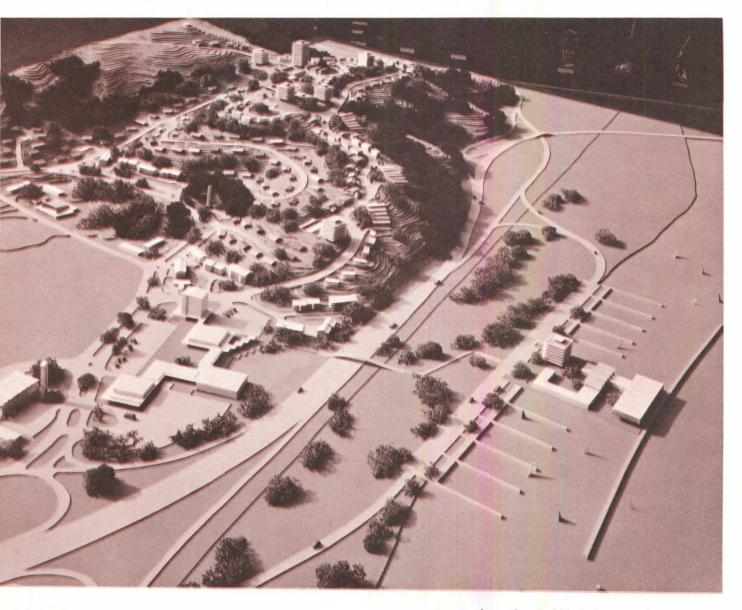
CITY

ing types, an increase in density, and accommodations for a greater range of income levels than that of the official master plan. "The expanded plan" states the report, "would justify a more complete shopping-center complex (below) with additional and more attractive amenities. The area is conceived as part of a town center (acrosspage) containing a variety of social, recreational, and community facilities and services, in addition to the neighborhood shops provided. The buildings would be one- and two-story structures designed to harmonize with the residential dwellings. They would be connected by walkways and gardens to easily accessible parking areas. On one edge of the commercial area the plan proposes a commuter parking lot and bus terminal. This facility would enable residents of the county to park their cars and take a bus to downtown San Francisco." Throughout the area, pleasant seating spaces and recreational areas are to be developed to take advantage of the unique site. The inclusion of fountains, reflecting pools, and a variety of street furniture (right) would provide a sense of gaiety and visual excitement in the community.



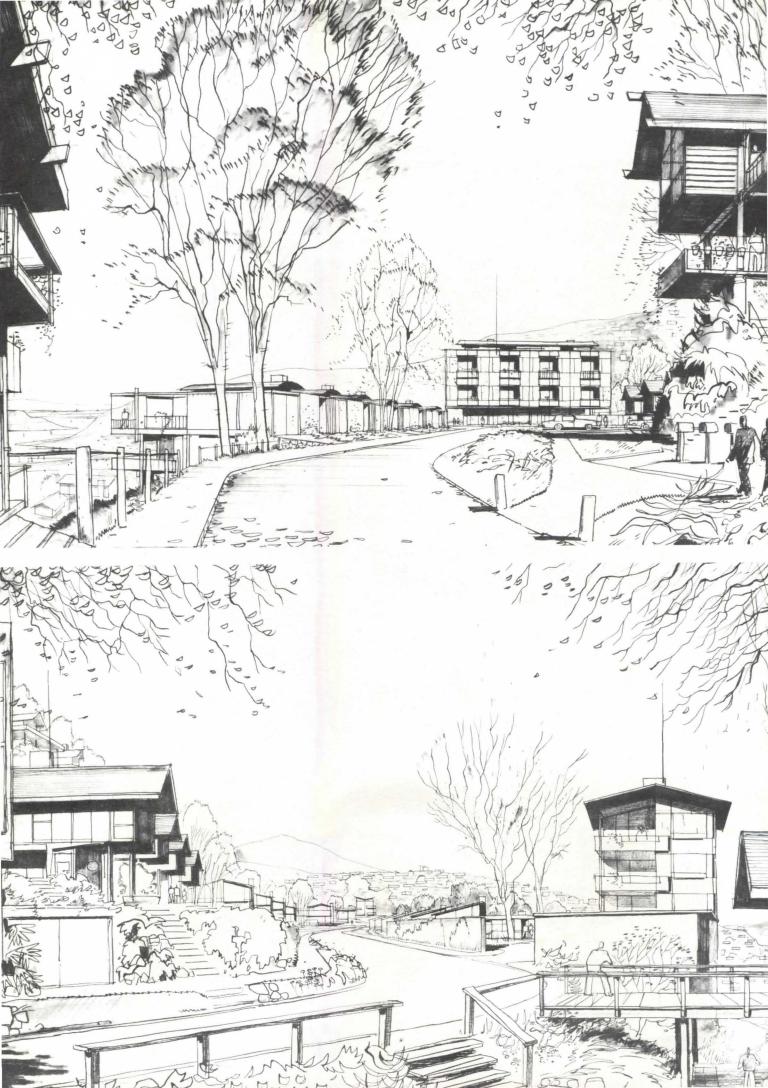


In addition to the town center, commuter-bus station, and professional offices, sites have been reserved for three churches, a fire house, and a community center. The agency also controls two pieces of land: the shore line, presently used as a dump but intended for development as a yacht harbor, the ridge area beyond the densely wooded 83-acre recreation zone, which is to be the site for more elaborate private homes. Outside the official redevelopment area there are to be 300 units of public housing (designed by Aaron Green and John Warnecke Architects), a new high school

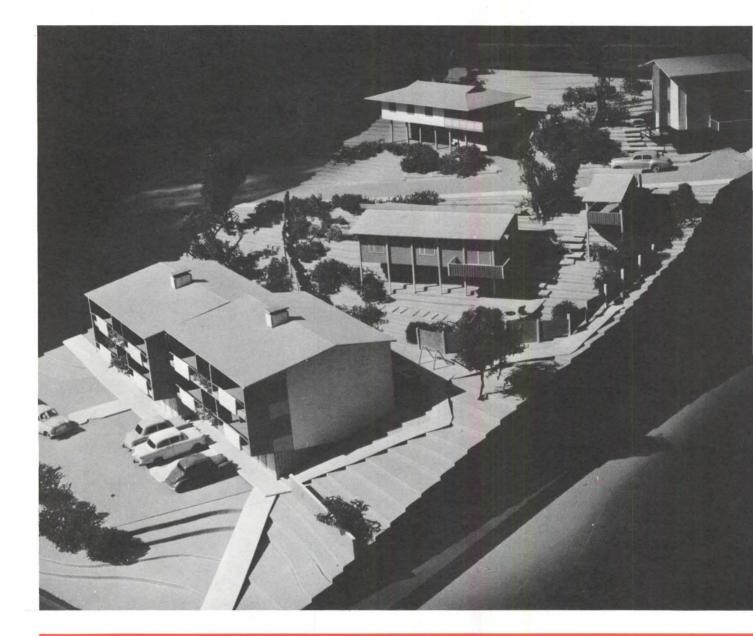


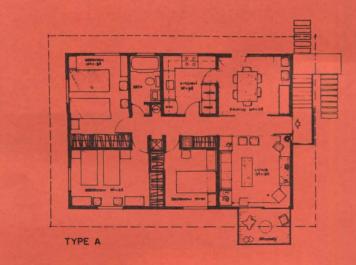
to serve the south end of Marin County, and an elementary school to serve Marin City.

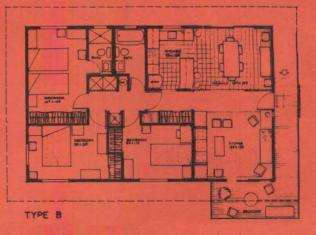
It was the residential design which particularly held the attention of the Jury. Taking full advantage of contours of the site—and of the sponsor's decision to combine various types of residential units—the architects have achieved a pattern of great visual variety and interest. Careful counterposing of the building types, such as the garden apartments adjacent to the hilltop towers (*acrosspage top*), or the combination of private homes and small rental units (*acrosspage bottom*) make this an outstanding example of urban planning.



urban design: first design award



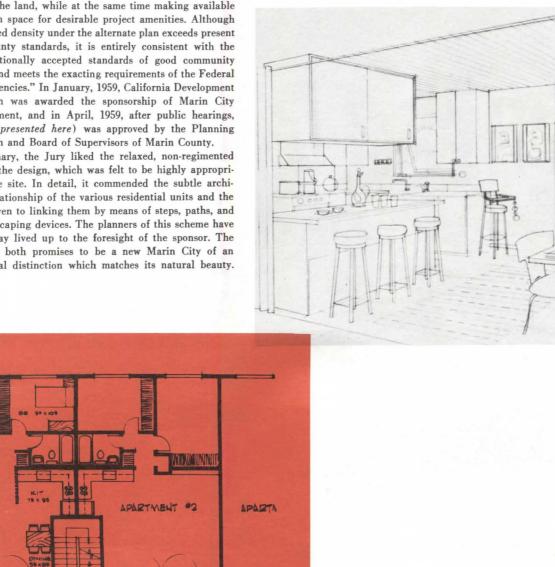




Specifically, the following residential units were called for in this scheme: 100 modestly priced homes for sale to former residents-price range of \$12,000 to \$16,000 (Type A acrosspage); 100 modest rental garden apartments for rent to former residents of Marin City-\$95 to \$125 per month (below); 38 homes for sale on open market-\$20,000 to \$25,000 (Type B acrosspage); 75 garden apartments for rent on open market-\$125 to \$175 per month; 300 additional apartments in 6 to 12 story towers-\$150 to \$250 per month.

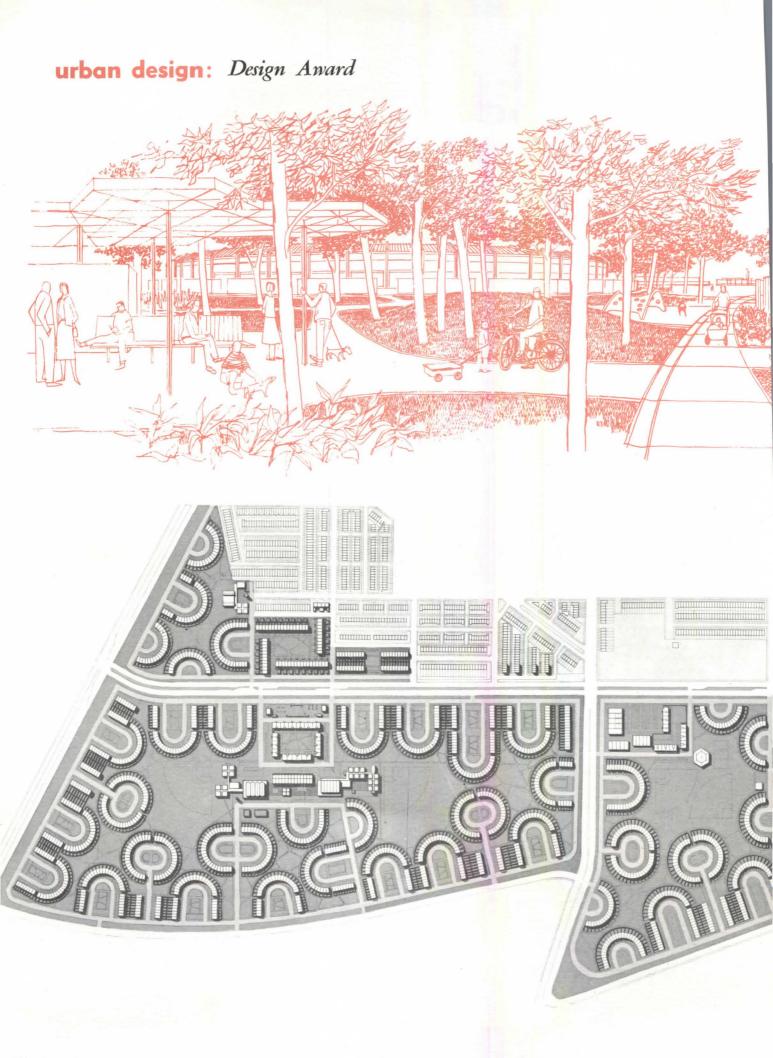
"A greater density of development," states the sponsor's report, "than that fixed by the Redevelopment Plan seems particularly appropriate in view of the proximity of the site to the City of San Francisco and the rapidly diminishing supply of residential land available for new construction in the entire bay area. A higher density development will achieve a greater economy of land use and therefore afford greater opportunity for families to live in Marin City, and at a cost within their budgets. The introduction of multifamily buildings accomplishes this objective without overcrowding the land, while at the same time making available ample open space for desirable project amenities. Although the proposed density under the alternate plan exceeds present Marin County standards, it is entirely consistent with the highest nationally accepted standards of good community planning and meets the exacting requirements of the Federal housing agencies." In January, 1959, California Development Corporation was awarded the sponsorship of Marin City Redevelopment, and in April, 1959, after public hearings, the plan (presented here) was approved by the Planning Commission and Board of Supervisors of Marin County.

In summary, the Jury liked the relaxed, non-regimented quality of the design, which was felt to be highly appropriiate for the site. In detail, it commended the subtle architectural relationship of the various residential units and the thought given to linking them by means of steps, paths, and other landscaping devices. The planners of this scheme have in every way lived up to the foresight of the sponsor. The reward for both promises to be a new Marin City of an architectural distinction which matches its natural beauty.



MODEST RENTAL GARDEN APARTMENTS

ALCONT



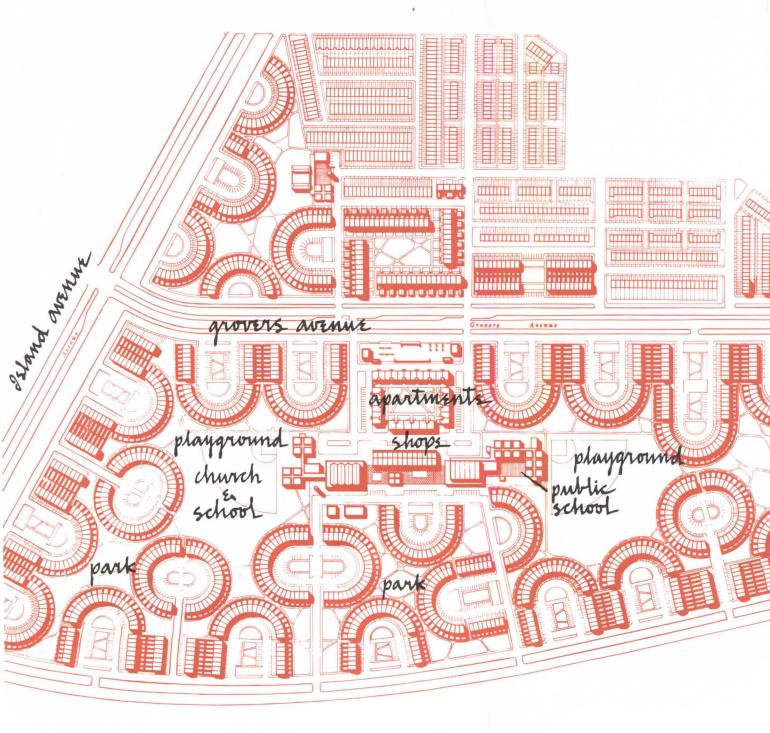
Eastwick Redevelopment Area, Philadelphia, Pennsylvania, for Greentowne Associates: Geddes-Brecher-Qualls, Architects; Sasaki, Walker & Associates, Landscape Architects; The Ballinger Company, Architects-Engineers; George Hinds, Planner; M. Todd Cooke, Jr., Co-ordinator for client. Residential area 1 (site plan acrosspage) is to be first of four residential and three industrial areas to be developed as part of Eastwick Redevelopment program. The major street system has already been established by the Planning Commission and Redevelopment Authority of City of Philadelphia. Stage One (illustrated here) will cover 363 acres of the 2100acre development. The following elements are provided for within Stage One: 2000 houses for sale (\$13,000 price range); one elementary school and playground; one parochial school and playground; a playfield and several neighborhood parks; two churches; several buildings for clubs and associations; a local shopping center; rental apartments.

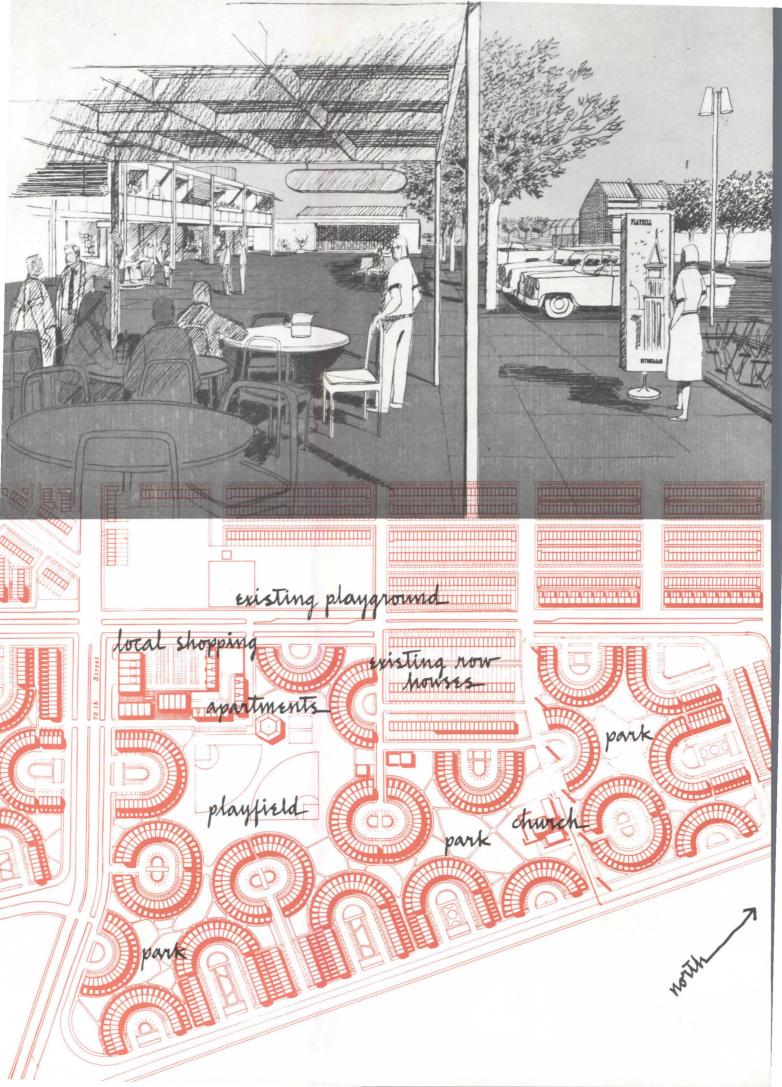
3

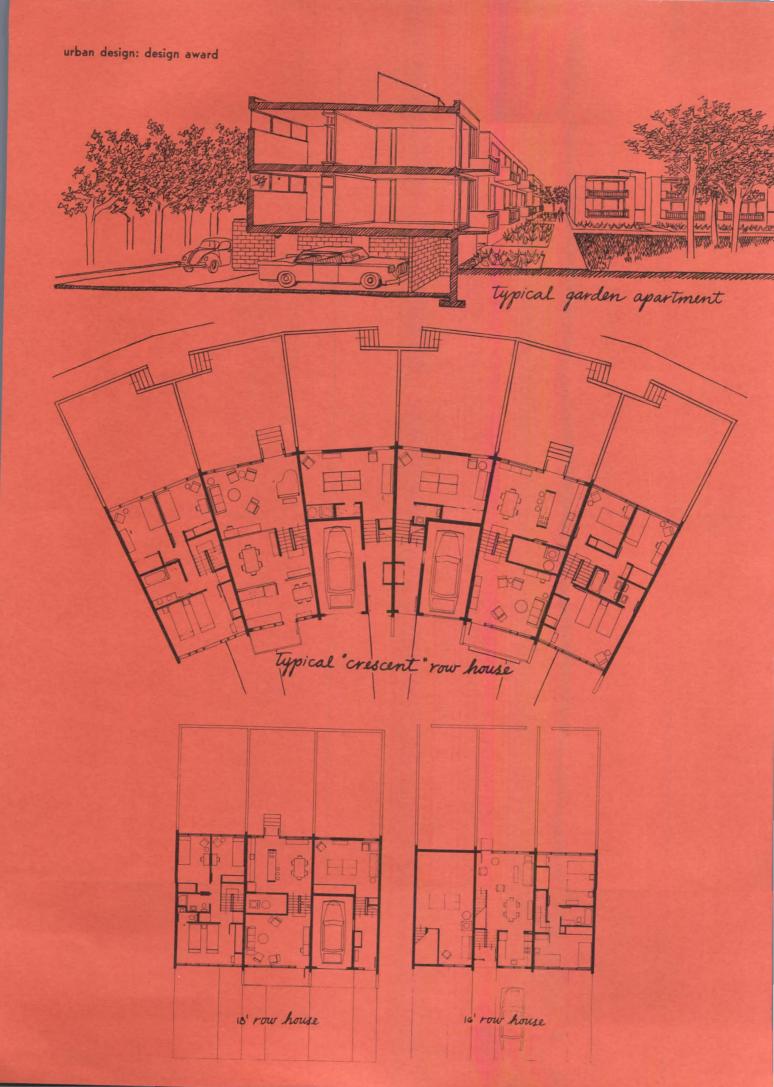
The vehicular-circulation system is made up of two principal elements: arterial roads, ringing the superblocks; and B

interior, local streets. Each group of houses is served by a dead-end street and thus excludes all through traffic. "No driveways enter onto the bounding arterial roads," explain the architects, "and no houses face directly either these roads, the railroad, or the adjoining industrial areas. From the highways bounding the superblocks, the prospect is of courts of varying depth and design, accented by landscaped open spaces, instead of repetitive rows of identical houses. The major advantage of the proposed vehicular-circulation system, however, is the almost complete separation it achieves of automobile and the street system, on the one hand, and open space and the related walkway system, on the other.

In an attempt to resolve the need for community life as well as private life, and the need for various kinds of spaces, the architects developed a wedge-shaped row house, which, in aggregate numbers, would form a crescent block. Through combinations of the crescent and the straight-line row house they have achieved a great variety of intimate, public spaces which are in sharp contrast with the private gardens and the







open park system on the opposite side of the houses. Though the Jury felt that the form of the crescent had been carried almost to a point of monotony, it highly commended the basic theory of the scheme—the resolution of scale between pedestrian and vehicular movements, the provision of intimate as well as open spaces.

private open space

pedestrian walkway

dining room / kitchen 0

guest parking

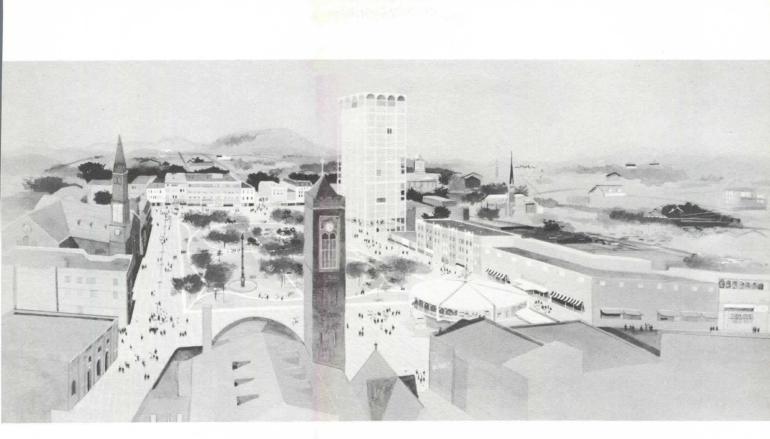
Living room

automobile entrance

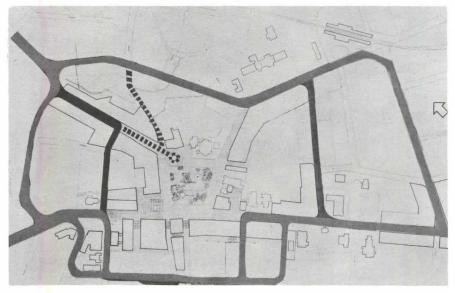
urban design: Citation

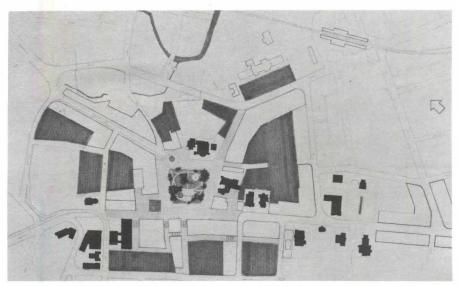
Renewal of Central Business District for Board of Aldermen, Morristown, New Jersey: Urban Planning Associates, Planners-Architects; John A. Kervick, Charles P. Boyce, Sidney L. Katz, Taina Waisman, Joseph Blumenkranz, Richard G. Stein, Read Weber, and Jerome L. Strauss, Members of Firm. To save downtown, the architects-planners evolved a simple, low-cost plan achieved by fullest use of the existing road pattern; maximum retention of existing buildings (dark areas on site plan acrosspage bottom); and revitalizing the town's historic Green as a pedestrian area. The transportation plan consists of an expressway system for through traffic; a perimeter street pattern circling the central business district, to allow in-town traffic to avoid the center and reach other commercial areas; and an inner loop system (acrosspage center) for traffic to the central shopping area with its off-street parking (light areas on site plan acrosspage bottom). Street closings around the Green will make it a pleasant open promenade. Only three new structuresan office building-hotel with street-level stores, a bus depotrestaurant, a medical office building-are planned.

XXXX

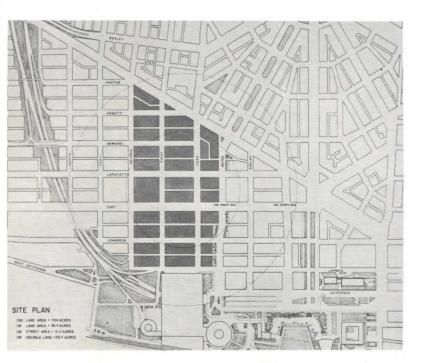




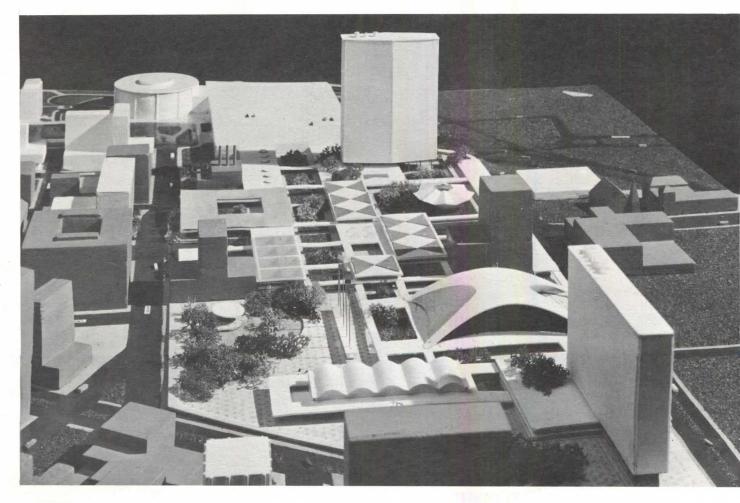


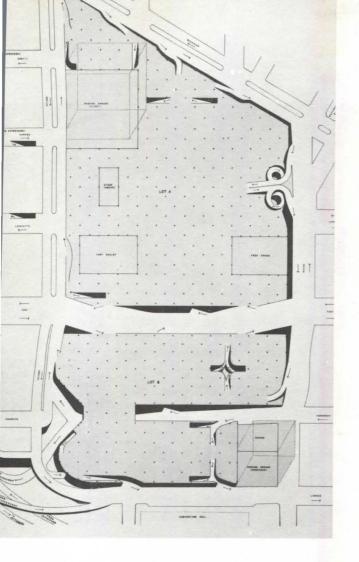


urban design: Citation



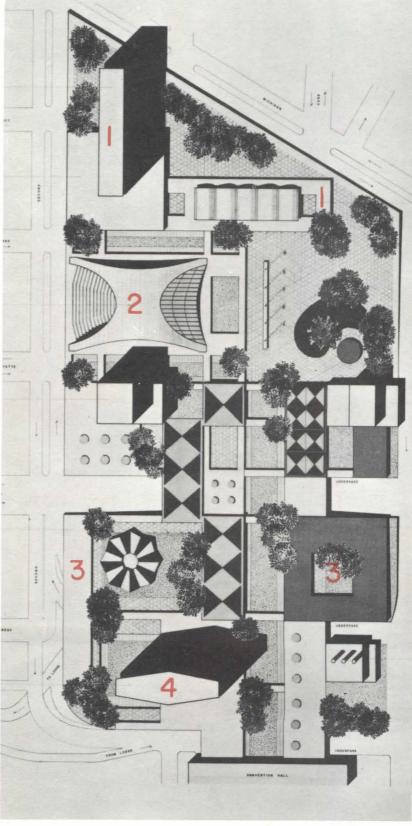
Civic Center Convention Mall for City Planning Commission, Detroit, Michigan: Harley, Ellington & Day, Inc., Architects-Engineers. The proposed Convention Mall is part of the Central Business District redevelopment. The center of the city, threatened by blight and deterioration, badly equipped to meet the needs of modern transportation, is being redeveloped to make it economically competitive with, and as efficient and attractive as such nearby planned centers as Northland and Eastland. The expressway system and the Civic Center, part of the master plan developed by the City Planning Commission, have already been realized.





The Convention Mall project, more than 38 acres of land reserved entirely for pedestrians, is planned to create a green strip as an approach to the Convention Hall; its open planted spaces and walks sheltered by canopies are designed to effect a pleasant pedestrian area.

Underground parking (*plan above*) will accommodate more than 7000 cars on two levels. An existing 3-story-high garage and a proposed 5-story-high garage will hold 1200 additional cars. Proposed buildings (*plan right*) will house: 1 offices, 2 recreation center, 3 specialty shops, and 4 hotel.

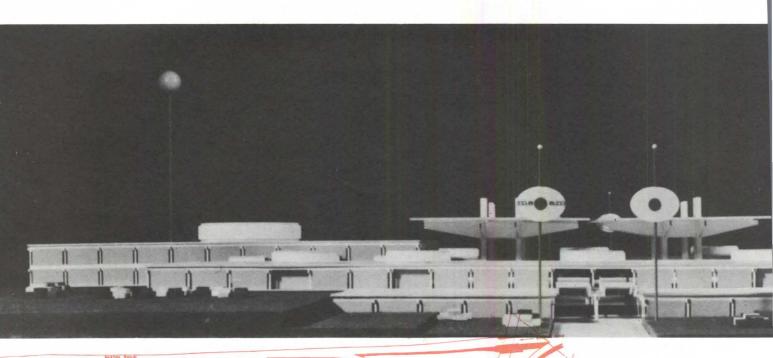


commerce: Design Award

0

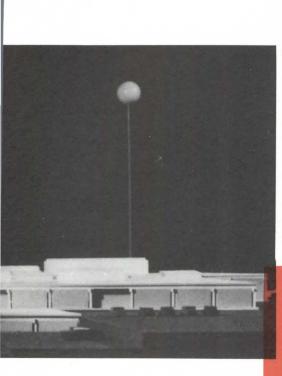
(0)

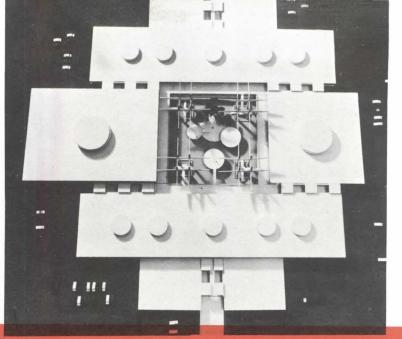
COUNTRY CLUB

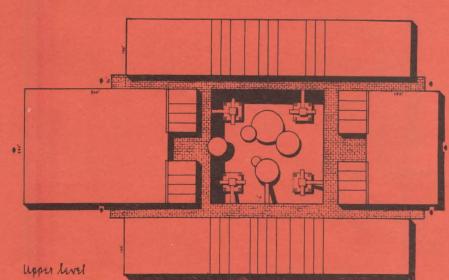


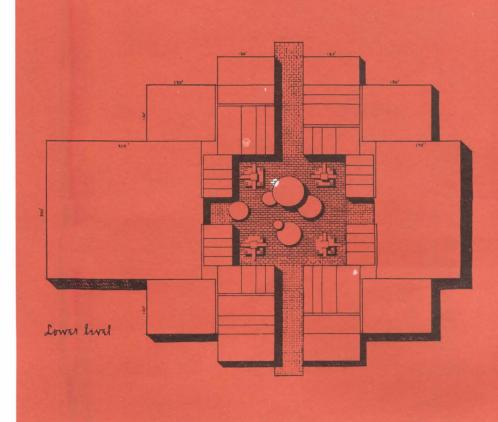
D

Cedarbrook Shopping Center for John W. Merriam, Philadelphia: Thalheimer & Weitz, Architects; Clarence S. Thalheimer, David D. Weitz, Jack A. Thalheimer, Partners; Adolph DeRoy Mark, Associate-in-Charge of Design. Expansion of Philadelphia's suburbia has placed this country-club site in the apex of three major arterial highways. The owner of the property wishes to develop the following elements: a 600,000-sq-ft shopping center, a small country club and golf course, and a 2000 unit high-rise apartment complex. "Our solution was," explain the architects, "to locate the shopping center in accord with the best access potentials of the site; place the high-rise units to achieve as much enclosure of space, utilizing the existing dense tree cover wherever possible." Since the apartment group seemed completely unrelated to the shopping element, the Jury restricted the award to the design of the shopping center for its clarity of plan. The center was designed as a succession of high and low spaces, climaxing in the one, high, central garden court.

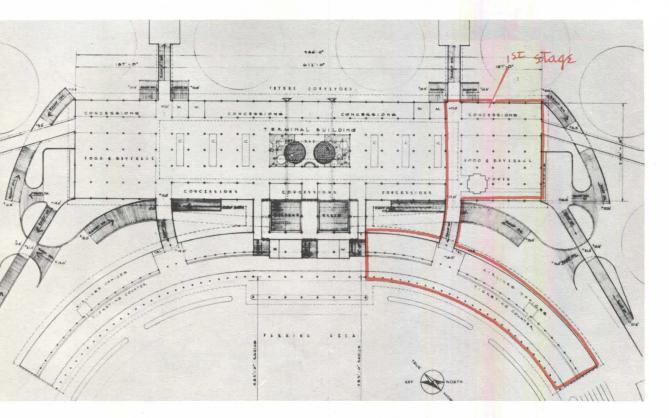




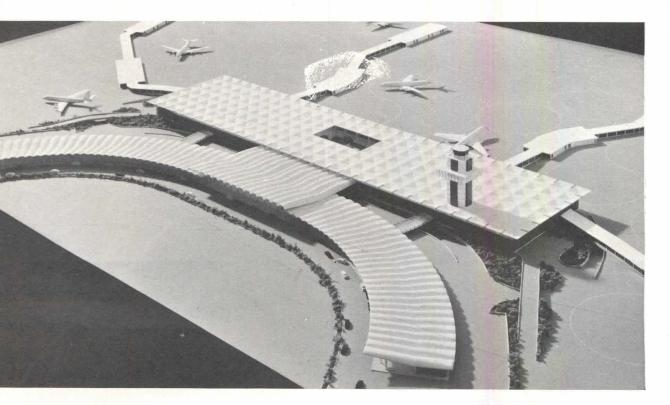




commerce: Citations

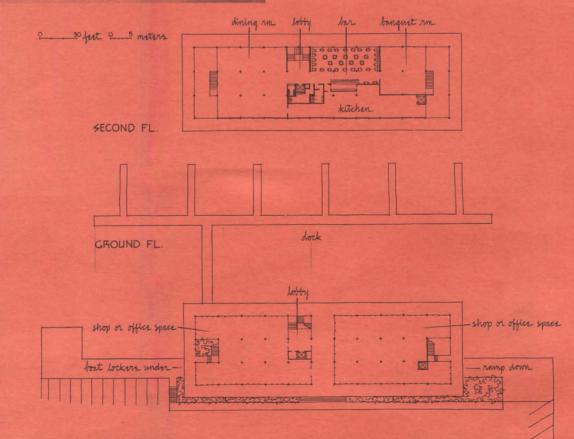


Metropolitan Oakland International Airport for Port of Oakland, California: Warnecke & Warnecke, Architects; Royston, Hanamoto & Mayes, Landscape Architects; Hamilton & Williges and Isadore Thompson, Structural Engineers; Clyde E. Bentley, Mechanical Engineer. This project is to provide airport facilities to meet projected needs within the next 25 years. The first stage will have 10 gate positions, ultimately to be expanded to 42. The design is basically a one-level scheme with specially designed ramps which will carry the flow of baggage around the building, thus eliminating conflict with passenger traffic. Section One of the building program will include part of the terminal building with one concourse, and an 11-story control tower; a central mechanical building, port emergency building, and airline-freight building. The structure is modular; the roof a hyperbolic paraboloid shell.



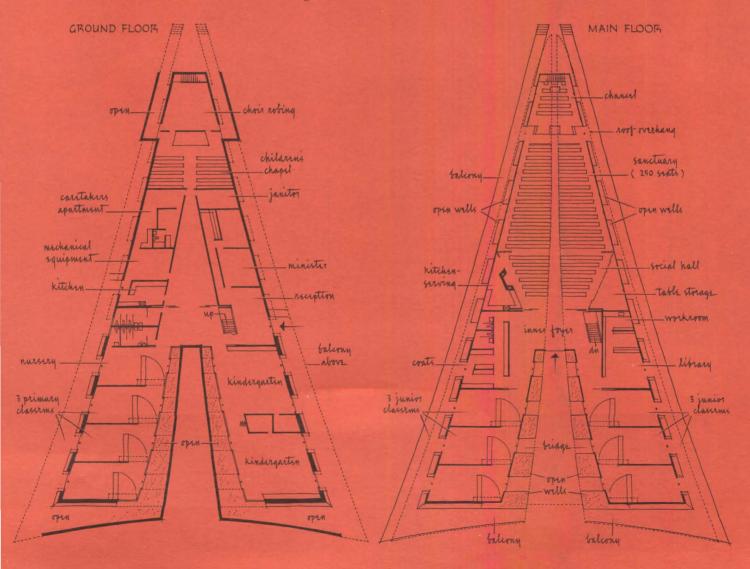


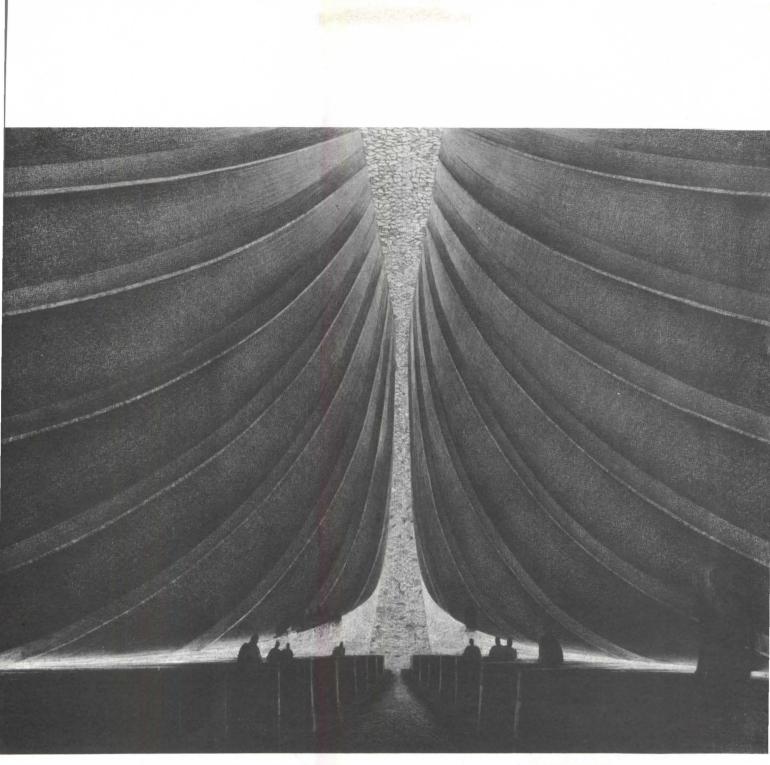
The Pavilion, Newport Beach, California: Ladd & Kelsey, Architects; Richard R. Bradshaw, Inc., Structural Engineer; Levine & McCann, Mechanical & Electrical Engineers. "The Pavilion," write the architects, "is to be located on a commanding site at the water's edge, facing the ever-changing panorama of boats and marina activities." To gain necessary parking space, the structure is to be built on piers in the bay; and, to gain the best possible views, the restaurant will be placed on a level above several shops and offices. Services for shops and restaurant are to be on a level below the first floor. Decoration of the restaurant will depend entirely on the grace of the quatrefoil-column structure, the sparkle of the Venetian chandeliers centered in each dome, and the fascination of the harbor scene.

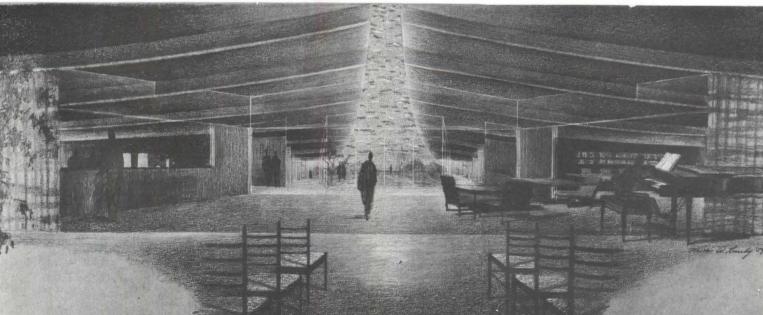


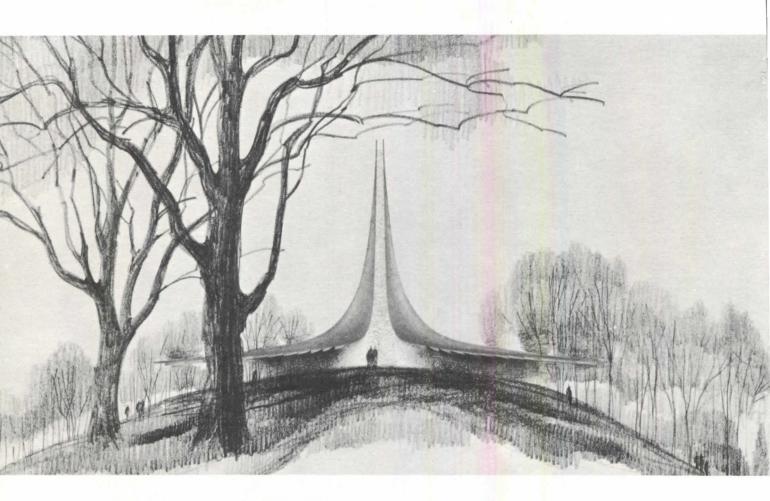
religion: Design Award

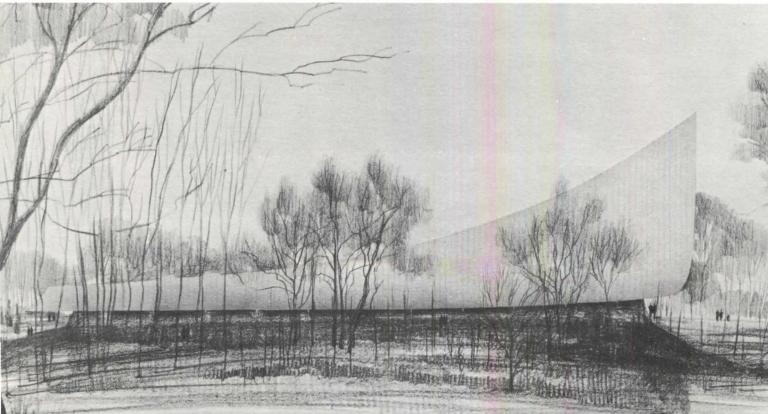
First Unitarian Church of Fairfield County, Westport, Connecticut: Victor A. Lundy, Architect. Two large roof planes-shaped to form both steeple and sheltering roof for the sanctuary, social hall, and classrooms-follow closely the ridge line of the property (model photo and elevations on following pages). A continuous stained-glass skylight was introduced to separate the two roof sections, to give the effect of a steeple of light when seen from the outside, and to bring into the interior the natural forms of leaves and branches and a view of the north star. On approaching the building from the parking area, members will be invited into the entry court (view from the sanctuary toward entry court, acrosspage bottom) through low, inviting eaves-to be drawn northward through higher, narrower spaces to the climax at the steeple end (view looking north, acrosspage top). The church is to be built in two stages: the ground floor to be completed first; the upper and main floor to be finished and furnished later. "The structure," explains the architect, "is something like the hull of a ship upside down." The main structural members are to be laminated-wood arches; spanning between these will be a slightly twisted and stepped wood deck of 2" x 4" members, which will also serve as the finished ceiling.

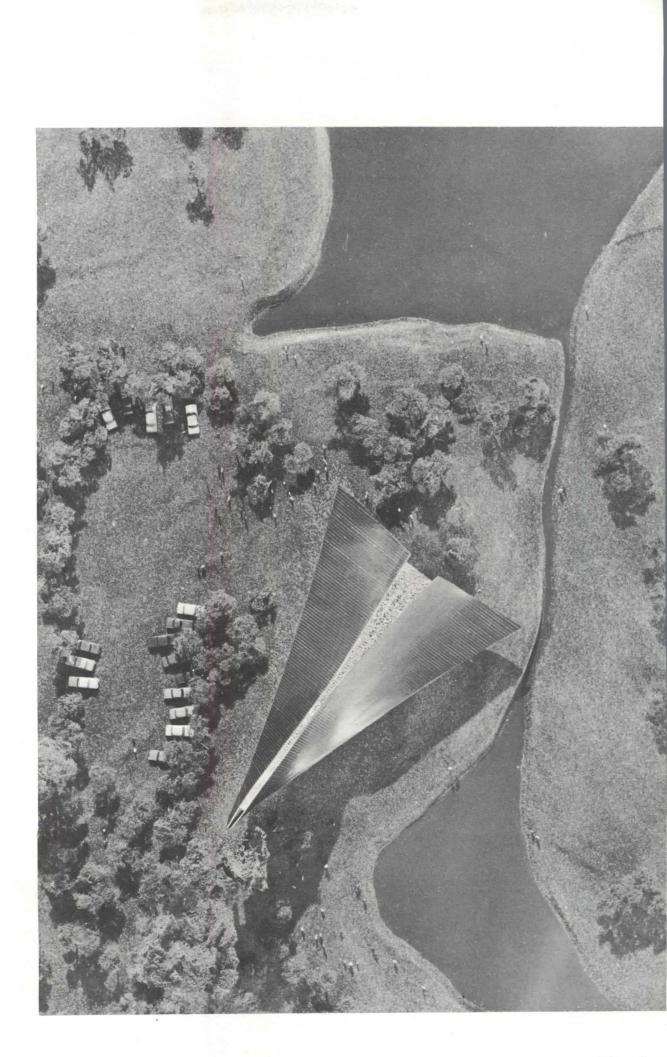






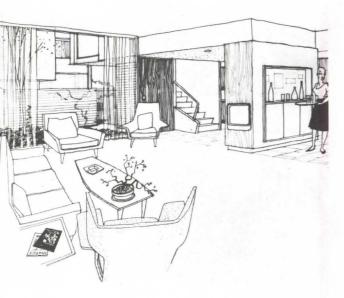


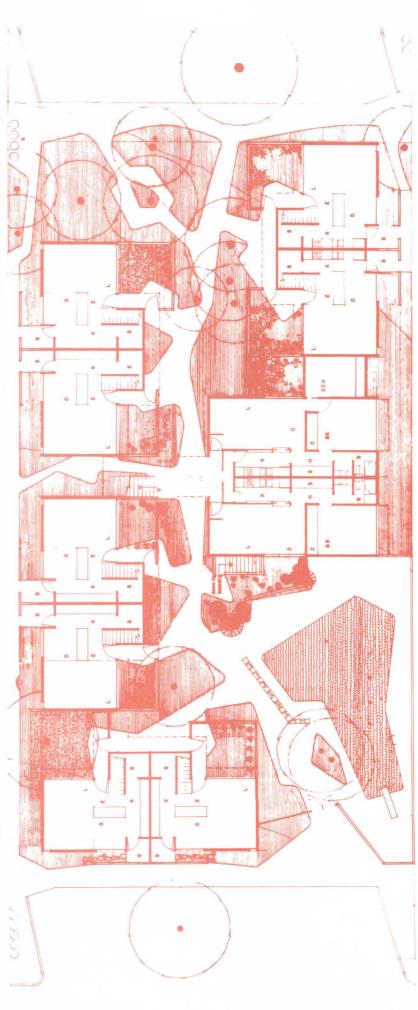


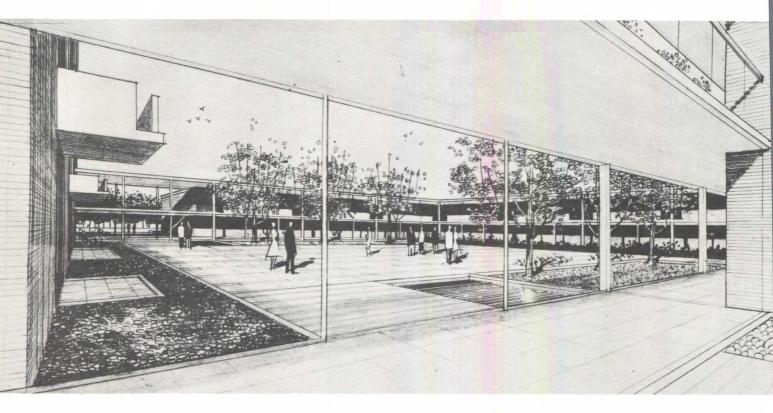




Apartment Building for R. H. R. Corporation, Austin, Texas: Pendley & Day, Architects; Paul E. Harrill, Associate Architect. In designing this 12-unit, semi-luxury apartment house the architects wished "to avoid the 'in-line,' 'L,' or 'U' solution and to create a small house environment with a 'patch of green' for each unit." To preserve privacy for all on the small site, windows were placed to face garden walls or solid walls of neighboring units. The entire complex is linked, as prescribed by local ordinance, by one continuous roof. Undulations of façades and garden walls, the Jury felt, resulted in pleasant court arrangements and enjoyable exterior spaces for the pedestrian.

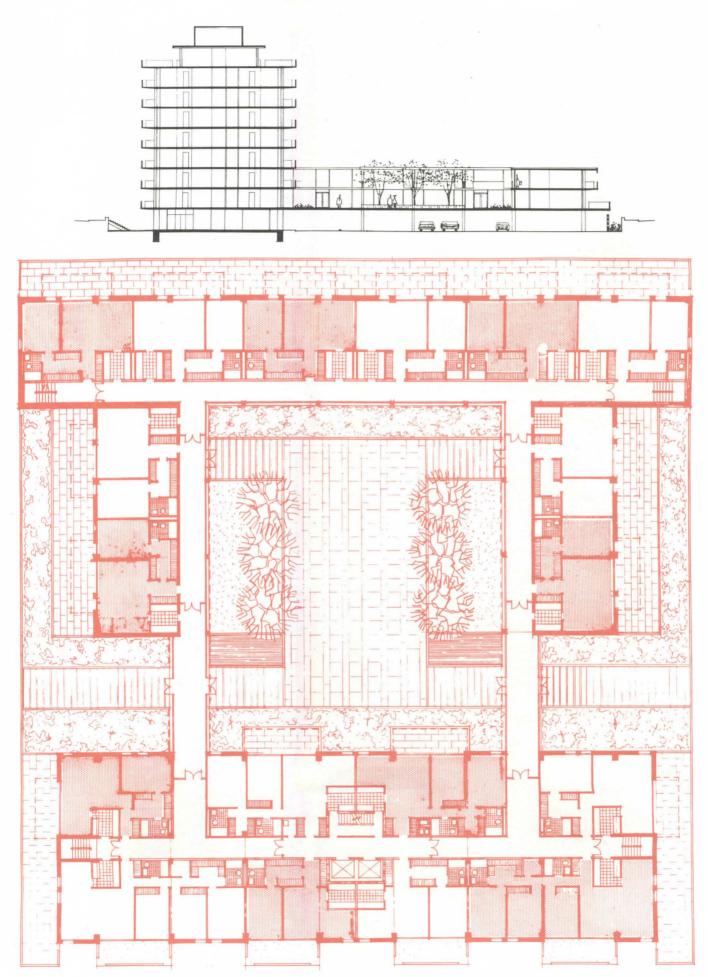




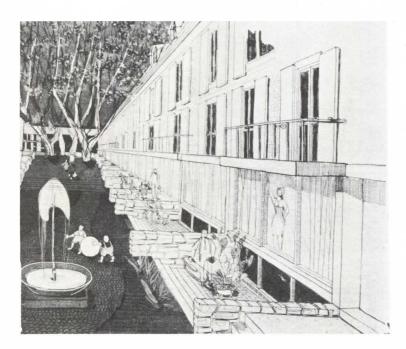


Riverview Redevelopment Project for Newmarket, Inc., Cambridge, Massachusetts: Edwin T. Steffian, Architect; Royston T. Daley, Designer. The architect's primary concern, in redeveloping two acres on the Charles River for upper-middle-income apartments, was "to create a strong, unified statement on an irregularly-shaped piece of land and under quite stringent zoning requirements," limiting building heights to 65' along the street and to 35' on the rest of the site. The program required 77 units (50% one-bedroom; 30% two-bedroom; 20% three-bedroom) with a parking space for each. The apartment buildings-one sevenstories-high and the other a low U-shaped building-form a courtyard on a paved and landscaped platform above street level. The formal central court is the primary community focus, though green areas for quiet recreation form pleasant boundaries for the buildings. Parking level below is screened with pierced walls to conceal cars; on this level, under the high building, are the main entrance lobby, storage, and boiler rooms. Because the architect wished "to avoid any second-class or leftover apartments either from the standpoint of living convenience and prestige or from a visual point of view," all units have balconies; many in the high building with river views; those in the low building, with views of landscaped open spaces. The exterior is to be red brick with white-concrete trim and balconies. Structure is to be reinforced-concrete columns and flat two-way slabs on pile foundations.

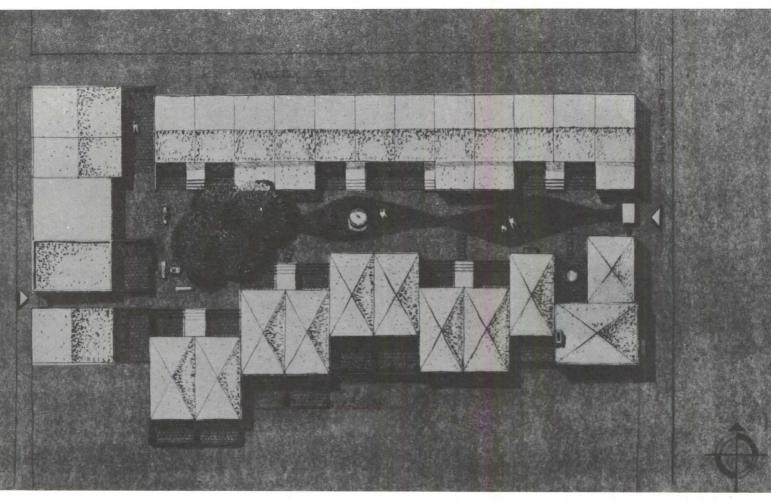


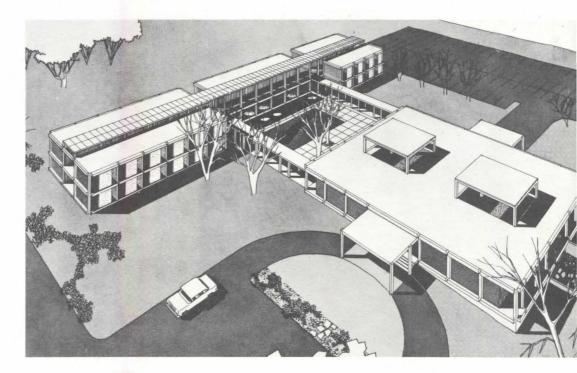


.

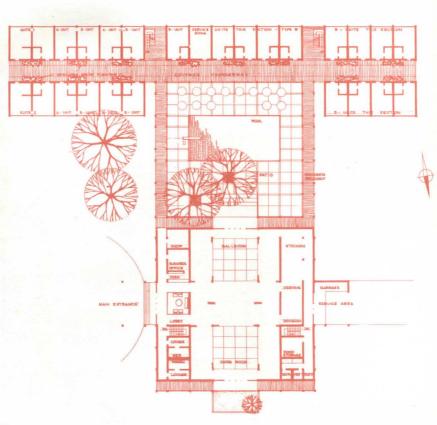


Smithson Square for Milton Hollander, Philadelphia, Pennsylvania: Adolph DeRoy Mark, Architect. This scheme —the redevelopment of an existing double row of houses is designed to create pleasant middle-income town houses with court living spaces. The program, which includes increasing the size of the row unit, consists of demolishing one row and staggering the new units (plan below) to give variety to the court space. The Jury commended this plan for the interesting spaces created in the court. Besides achieving "visual delight," the architect feels that this scheme "will give each owner the feeling of individuality that the average in-line row does not give." Existing units to be restored are brick and frame. New units, to be of precastconcrete frames, will have precast-concrete balconies, brick spandrels, roofs of plywood with marble-chip surfaces.



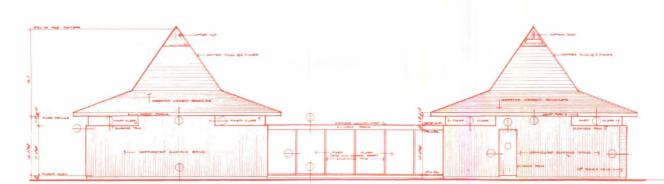


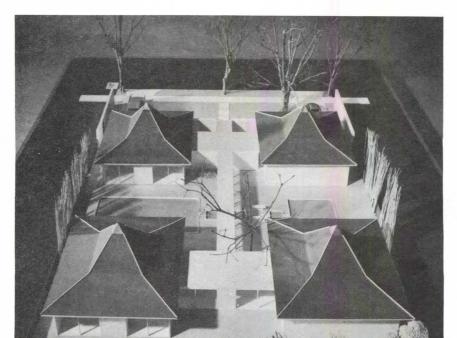
Motel-Hotel Development for Reelfoot Lake Enterprises, Inc., Reelfoot Lake, Tennessee: Mann & Harrover, Architects: United Service and Research, Inc., Consultants for Market Analysis. This development, in a scenic hunting and fishing area, will provide motel-hotel accommodations and dining, ballroom, and meeting facilities for local residents. The site is a 10-ft knoll sloping down to the cypress-bordered lake. The project includes, in the two-story bedroom wing, two permanent suites for the owners; eight housekeeping units which may combine with other rooms for two-room suites; and 42 one-room units. In the main building are all public and management facilities and, on a lower level, a lounge-meeting room for private gatherings. The Jury praised the clear plan which separates the bedroom wing from the public areas by a dining-lounging patio and swimming pool. Light and cross-ventilation for the bedroom wing are provided by an open, screened, sky-lighted corridor. Raised roof sections in the main building define the ballroom and dining room, admit light, and add spatial emphasis; these areas may be flexibly combined or separated with sliding partitions. A rigid reinforced-concrete structural system will be employed.

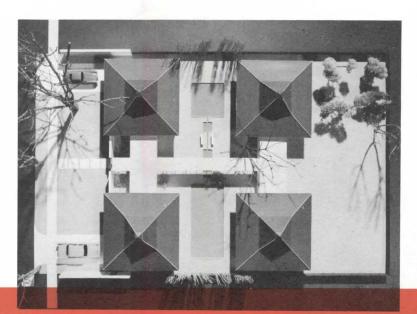


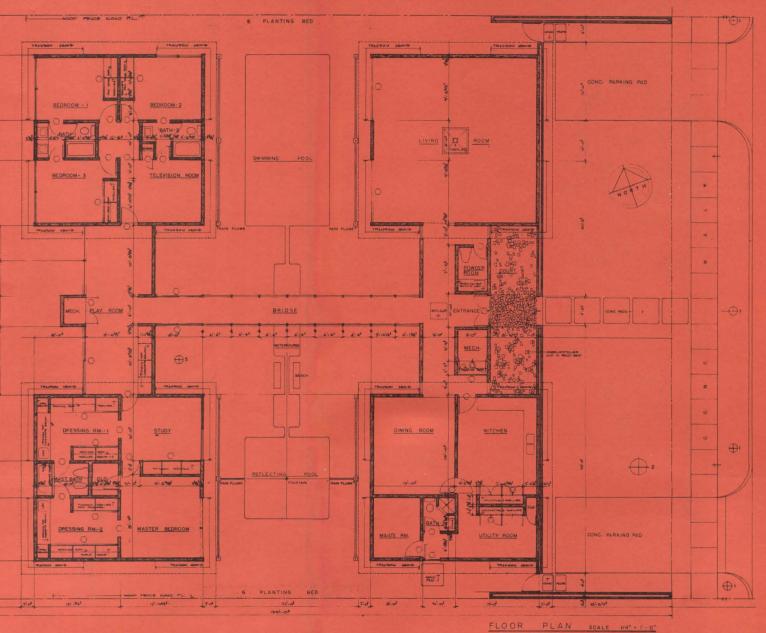


House for Dr. and Mrs. Henry G. Simon, New Orleans, Louisiana: Colbert & Lowrey & Associates, Architects; Charles R. Colbert, Architect; Mark P. Lowrey and R. J. Boudreaux, Associates; Ogle & Rosenbaum, Structural Engineers. Entirely enclosed by a high, wooden fence for privacy, the perfectly level site is divided into a forecourt for parking; a rear yard for gardening and children's activities; and two water courts between the four living units—one for meditation, the other for recreation. The Jury commended the plan which houses separate activities in individual units; questioned, however, the repetition of the same roof form for the varied functions. Construction is to be of wood, faced with corrugated aluminum on the exterior. Floors are to be of reinforced concrete; roofs of asbestos or slate shingles.



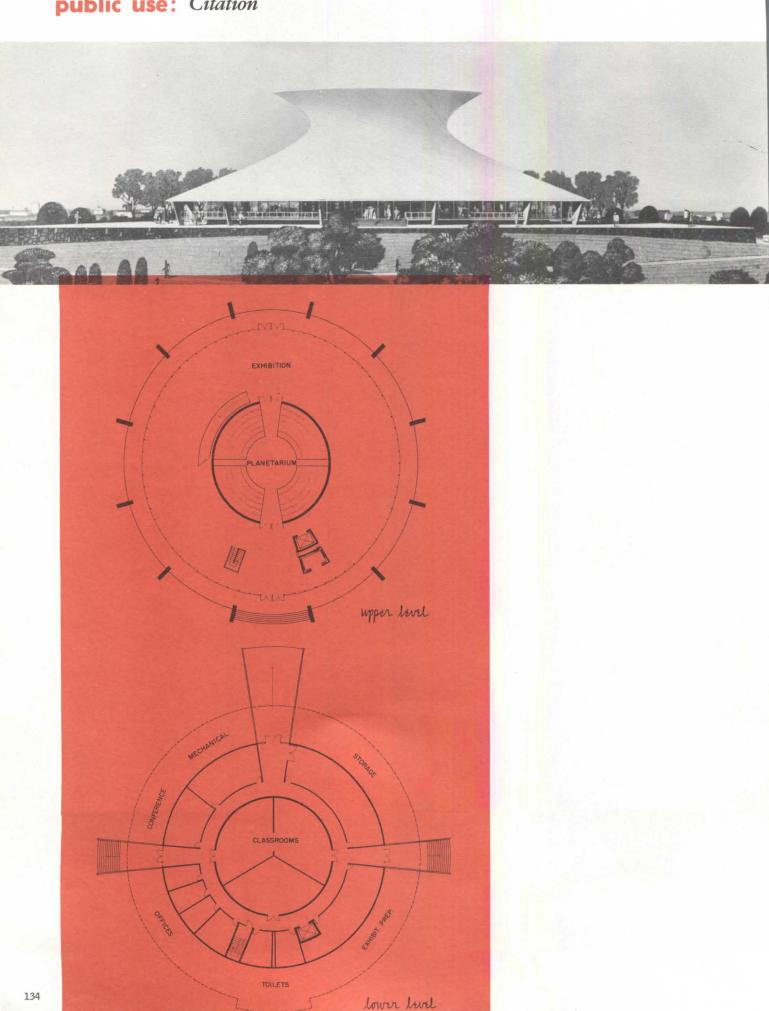




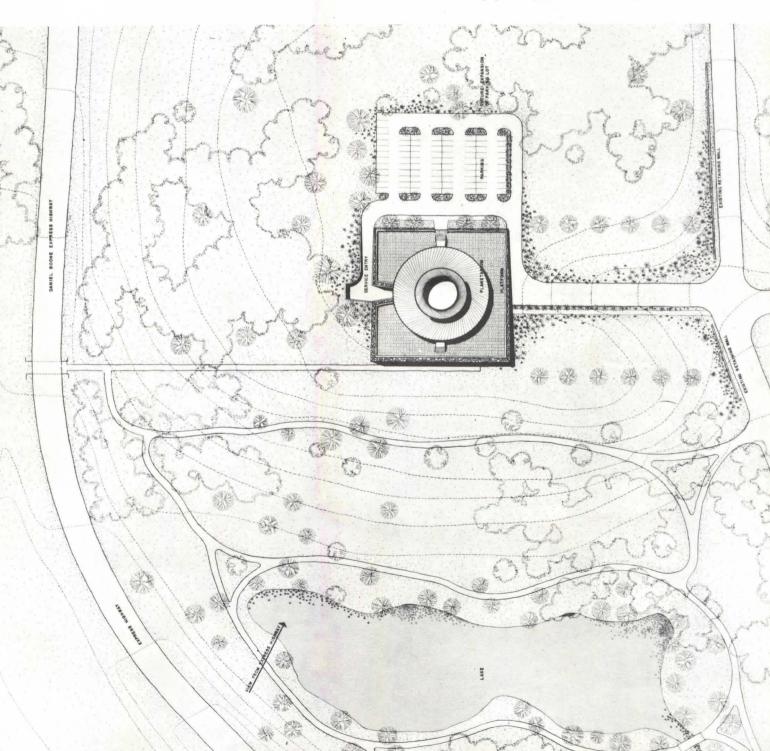


January 1960 133

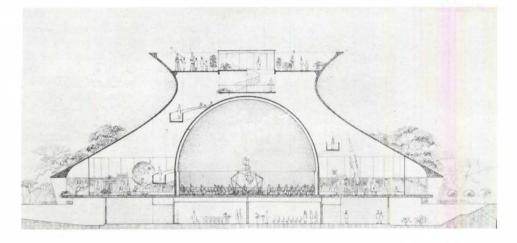
public use: Citation



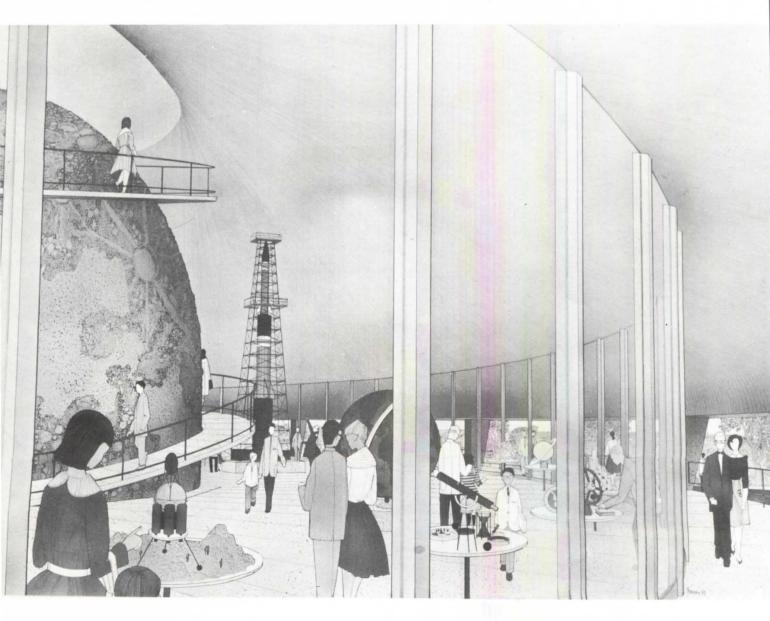
St. Louis Planetarium for City of St. Louis, Missouri: Hellmuth, Obata & Kassabaum, Inc., Architects; Albert Alper, Structural Engineer; Milo Ketchum, Consulting Engineer. The architects wanted "to develop a building with a strong form symbolic of its use and function" for this planetarium high on a park hill top, where it can be seen from many places. The circular building is raised above a square platform on equally-spaced columns at its perimeter. The thin-shell concrete form is generated by a straight line revolving around a vertical axis, which it does not intersect but to which it maintains a fixed position. The planetarium seats 450 under an interior aluminum dome surrounded by a glass-walled exhibit area; offices, service areas, meeting rooms are below grade (plans acrosspage). Though the Jury liked the sculptured form of the exterior, they felt that this shape was totally unrelated to the concealed dome and that the resulting space between the two surfaces, an area devoted



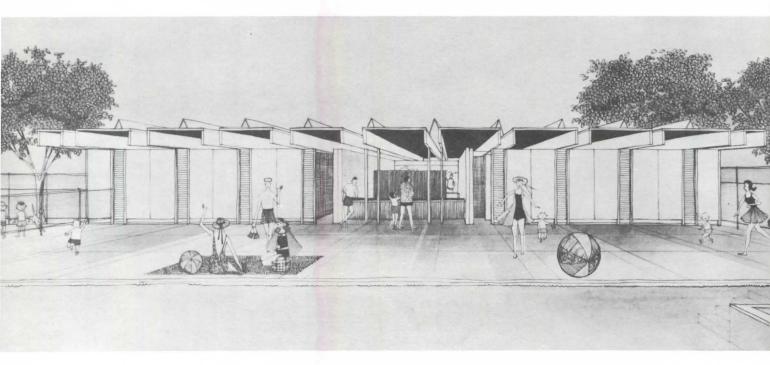
public use: citation



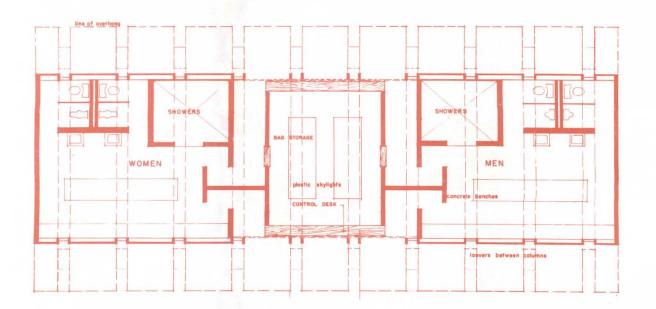
to exhibits, was awkward. A ramp spirals around the dome up to the 45-ft-high observation deck, formed by a diaphragm roof slab at the vertex of the curved structural form; spectators here are protected from ground lights by the upper edge of the shell.



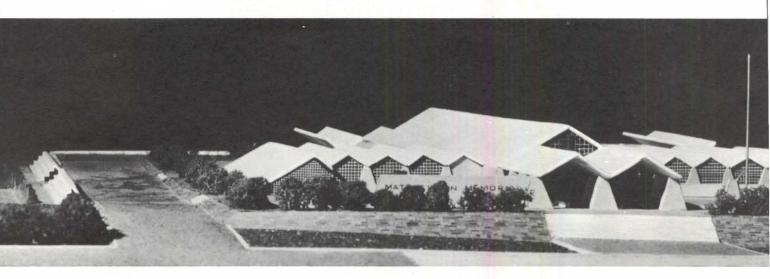
recreation: Citation



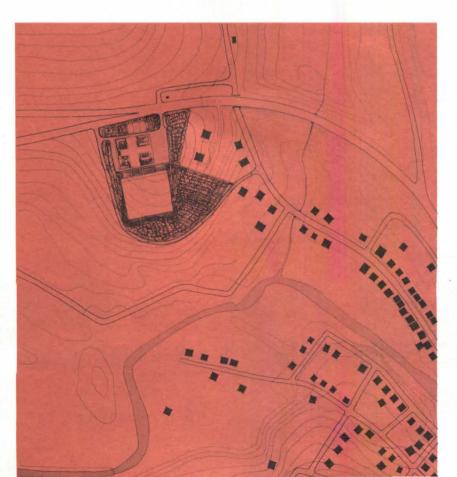
Municipal Bathhouse for Village of Foley, Minnesota: Willard Thorsen, Architect; James Stageberg, Designer; Meyer & Borgman, Structural Engineers; Lewis D. Freedland, Mechanical Engineer. This bathhouse, designed in conjunction with a swimming pool and a small wading pool, will provide men's and women's dressing rooms and clothes checking facilities. The plan is symmetrical about a central control desk which is open to the street as well as the swimming area. To roof the rectangular building, the architect proposes stressed-skin wood panels in the form of flat, inverted U's, to be supported on pairs of columns. Peaked, plastic skylights between the roof panels will introduce daylight into the building at regular intervals. Walls are to be of asbestos-cement panels. The Jury considered the two-way entrance scheme and its structure practical, as well as economical.

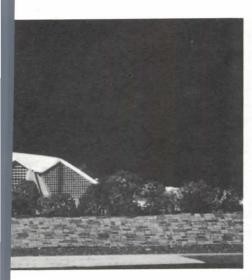


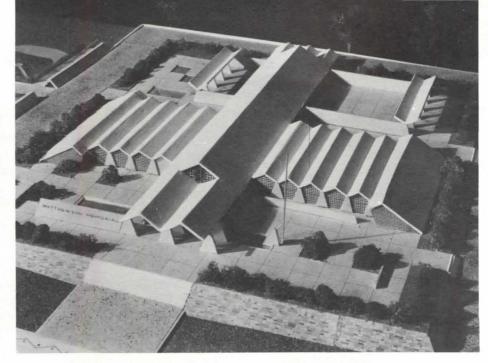
recreation: Citation

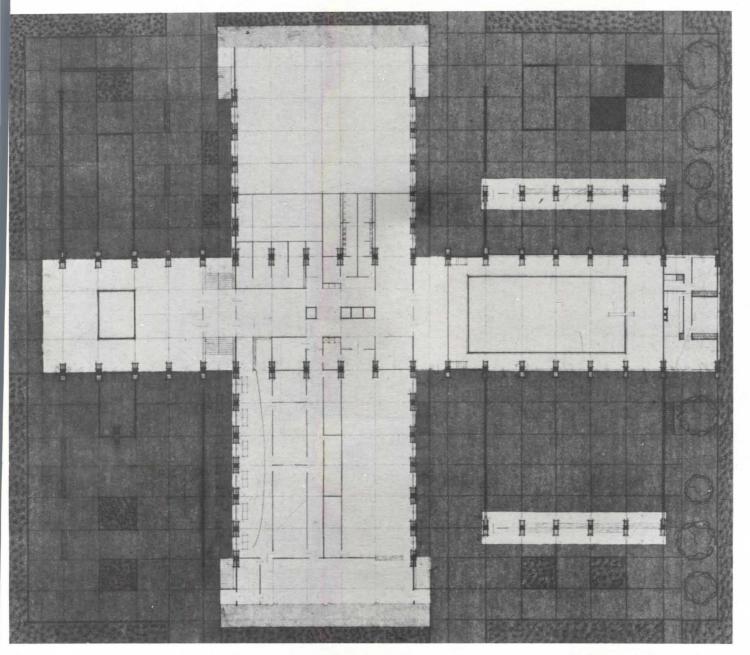


Christy Matthewson Memorial, Factoryville, Pennsylvania, for Matthewson Memorial Association: Bellante & Clauss, Architects; Joseph H. Young, Designer and Partnerin-Charge. This center, dedicated to the memory of a great baseball player, is designed to provide cultural, social, and recreational facilities for several rural, semi-rural, and village communities. The proposed site is a hill top visible from all directions of approach. It is proposed that a podium be created on top of the hill, on which to set the structure, and to provide parking space, athletic fields, and tennis courts, as well as unspoiled wood and meadow lands in the surrounding area. In this scheme the Jury commended the unity and simplicity of the repeated roof forms, which are to be of folded-plate construction. Fillers between the concrete frames will be brick and glass.

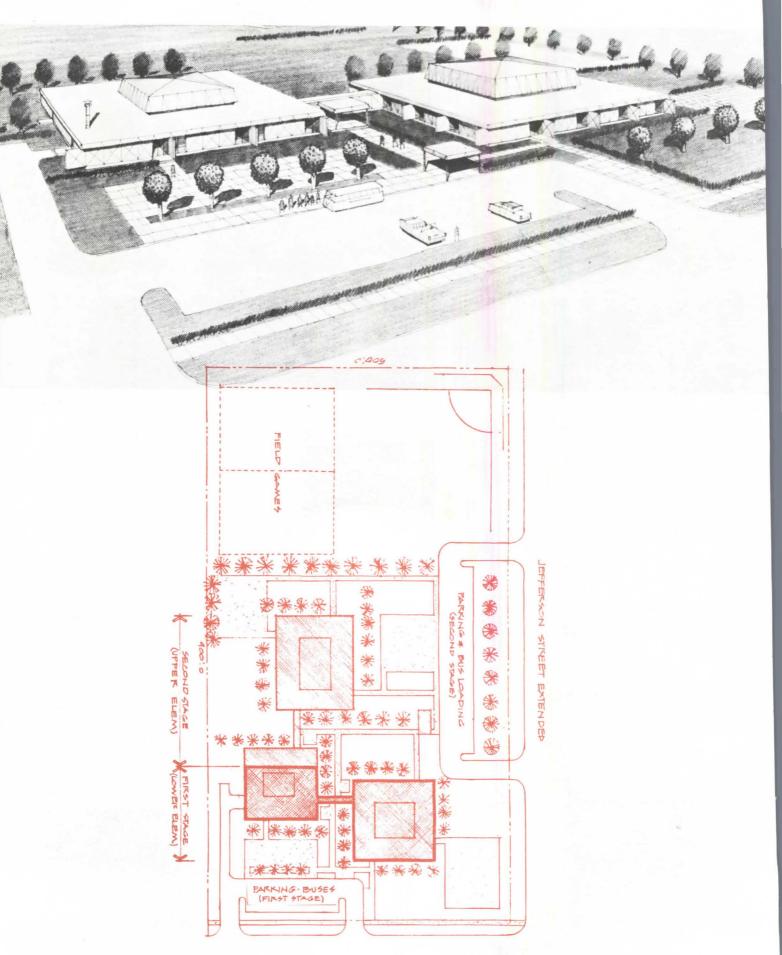




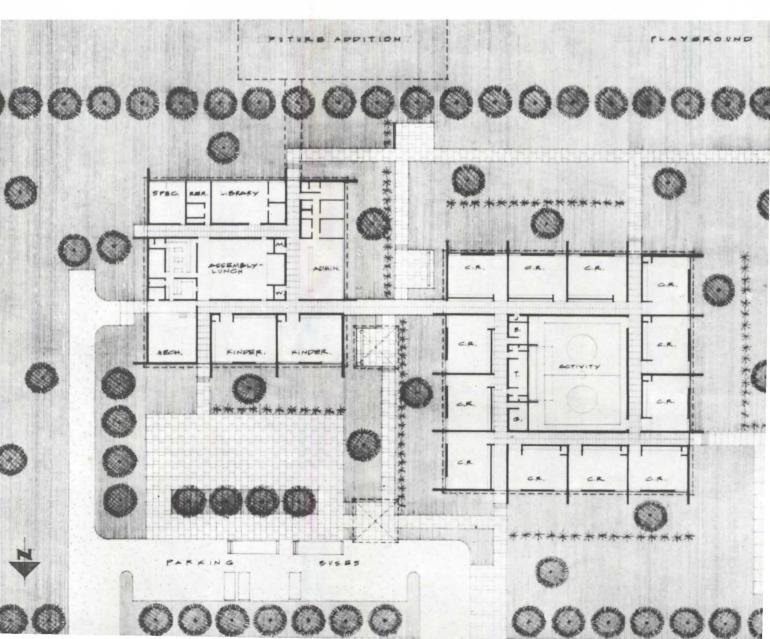




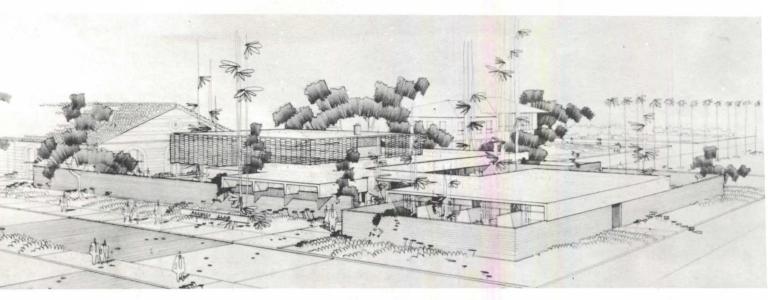
education: Citation

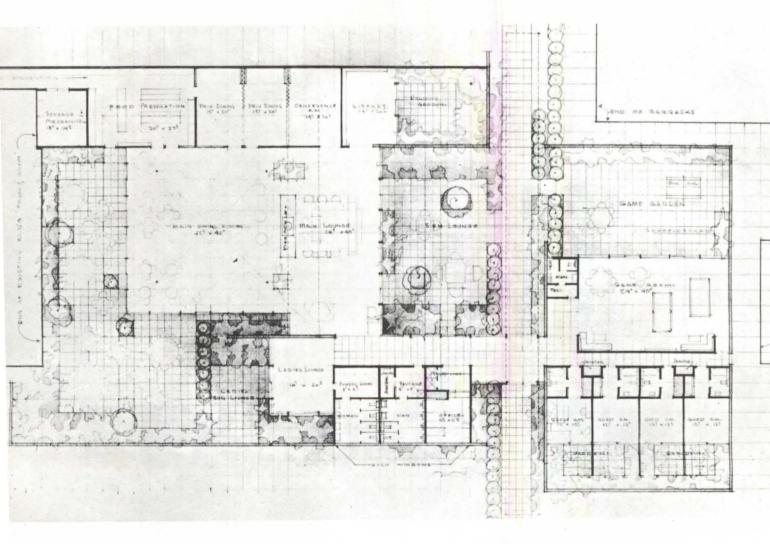


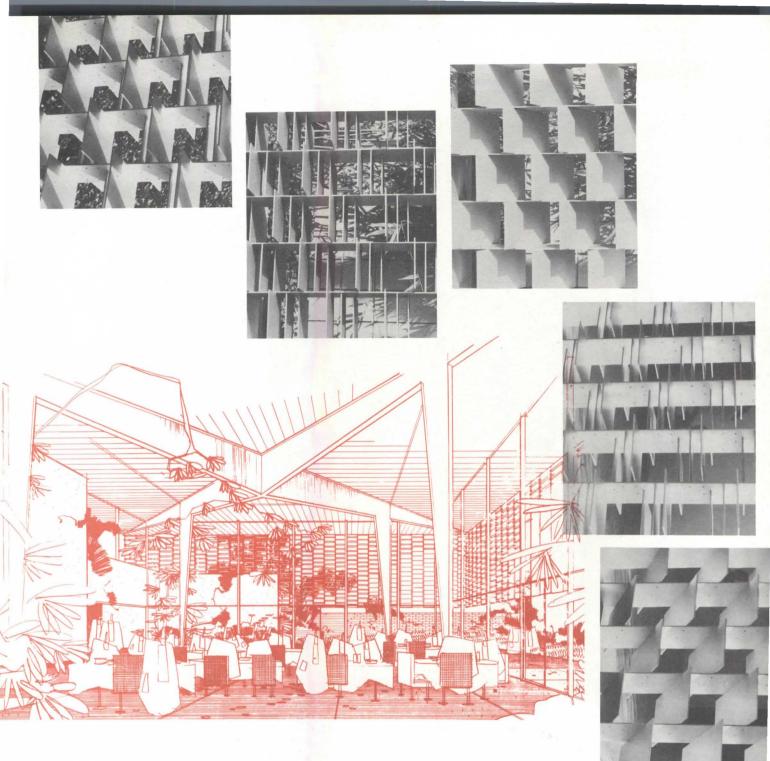
Elementary School for Stewartville Public Schools, Minnesota: Adkins & Johnson, Architects-Engineers; Lonnie O. Adkins and O. Reuben Johnson, Partners. A comprehensive master-plan study by the architects of the entire region preceded the design of this elementary school and determined its placement on the edge of the rapidly growing satellite community. Included in the first stage of the school's construction are to be 12 classrooms and their allied special facilities for a curriculum which encompasses kindergarten through sixth-grade classes. It is estimated that another 12 classrooms will be required to accommodate the ultimate growth of the area. The scheme, a 'dispersed-core cluster', will provide the desired child scale, will offer economies of construction, and solutions to the climate problems of this region. The roof is to be a space frame, or constructed of open-web joists with metal deck and built-up roofing. For the construction of walls, precast exposed-concrete-aggregate slabs or tilt-up slabs are being considered. Fascias are to be of standing-seam copper. In this design, the Jury commended simplicity of form and compactness of the plan but questioned in a practical sense the noisy activity room in each center area.



education: Citation

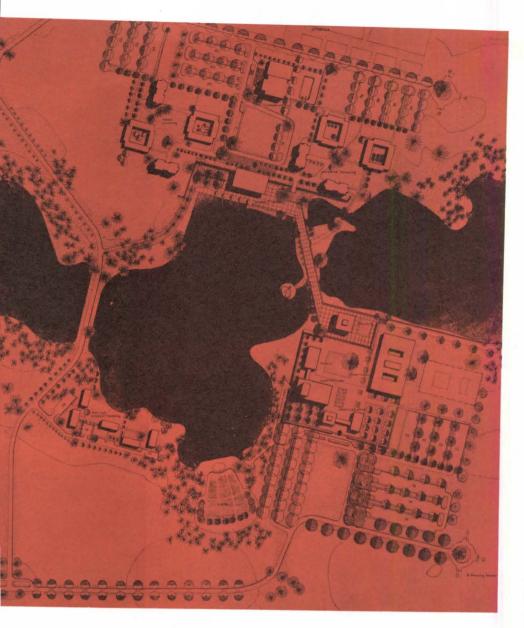




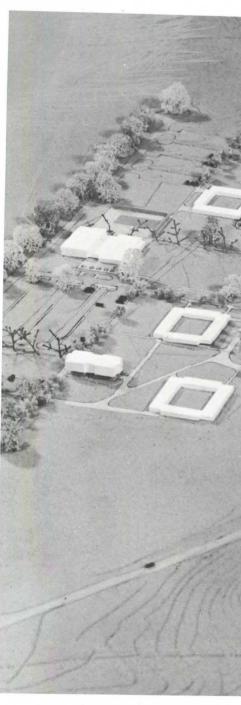


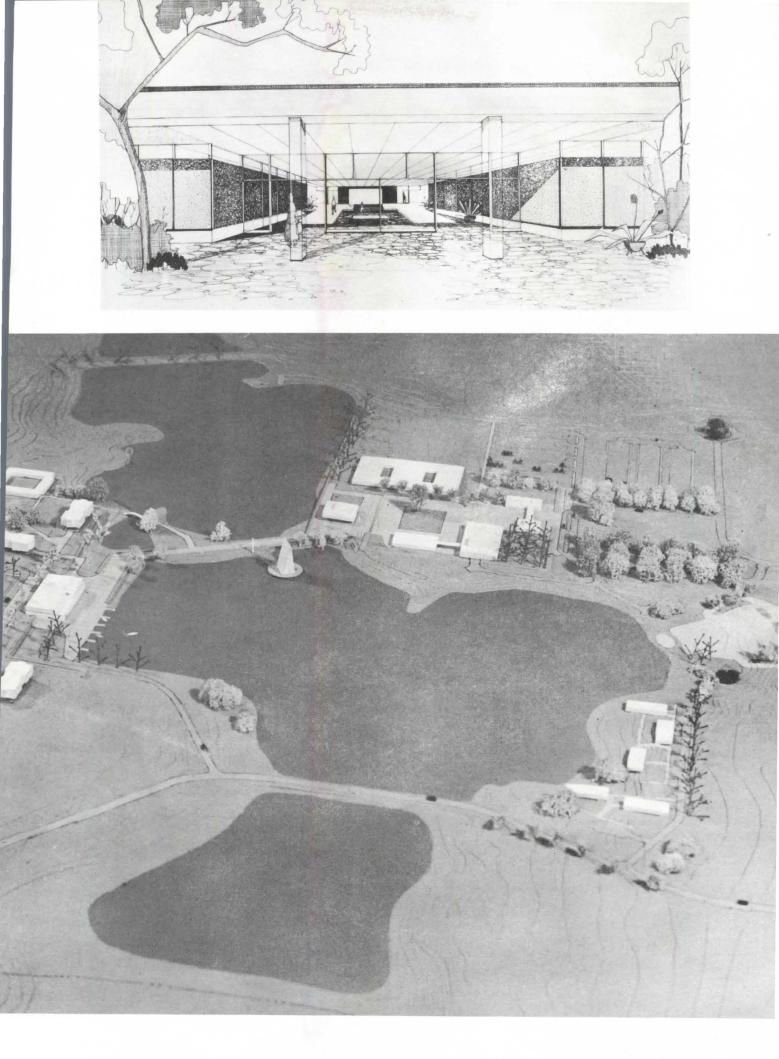
Faculty Club for University of Southern California, Los Angeles, California: A. Quincy Jones, Frederick E. Emmons & Associates, Architects; Ayres & Hayakawa, Mechanical Engineers; Kocher, Bradford & Nishimura, Electrical Engineers. The Club, attached to an existing building with kitchen facilities, features enclosed garden areas. Dining, lounge, conference rooms, and library in one building were separated from the visitors' guest rooms in the other; however, when club facilities are closed, guests may still come and go freely, using the game room as a lounge. Since garden dining was considered very important, the architects introduced a high, light, and open structure which integrates garden and dining room. An aluminum sun screen surrounding this space (photos of study models above) lowers the air-conditioning load, avoids draperies. Dining room and main lounge, divided by planting and a fireplace, may be flexibly used as a single space. Construction is to be of steel and wood; exterior brick will match that of existing buildings.

education: Citation

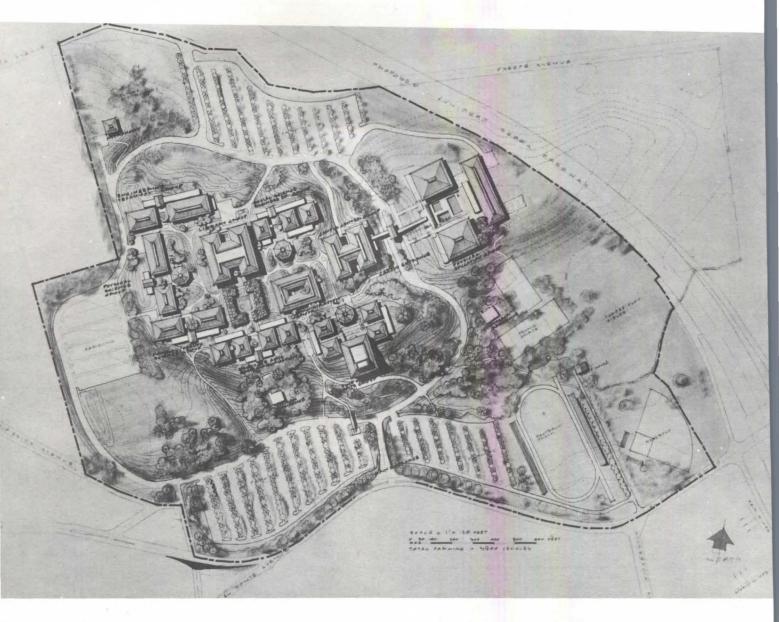


Consolidated Presbyterian College for Synod of North Carolina, Laurinburg, North Carolina: A. G. Odell, Jr., & Associates, Architects; Lewis Clarke, Landscape Consultant; Engelhardt, Engelhardt, Leggett & Cornell, Educational Consultants. The architects were commissioned to design a coeducational liberal-arts college for 600 students-to be expanded in 10 years to 2500 students. Instead of the flat, bare site first suggested, the architects propose to drain a shallow swamp area and form a clear-water lake, the key feature of the campus. The lake will reflect several buildings, especially the chapel, on a landscaped pedestrian causeway between the residential-recreational and academic areas of the campus. Both areas-courts or landscaped quadrangles recalling medieval cloisters-are entirely free of traffic. Dormitories-one-story units for 68 and three-story units for 80 -will give small groups of 8 to 12 students individual lounge and toilet facilities. To foster social activities, each building will have a multipurpose study-dining room, served by food carts from the student center (at left on plan above). Initially, two large and two small units will be built, for men and for women.

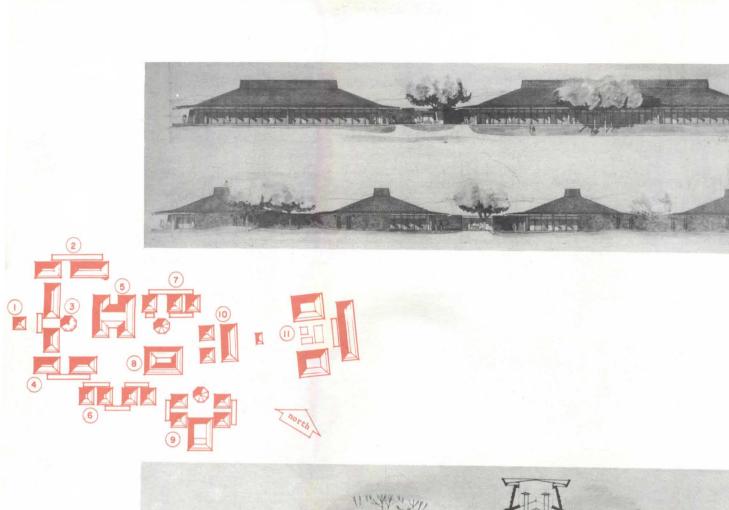


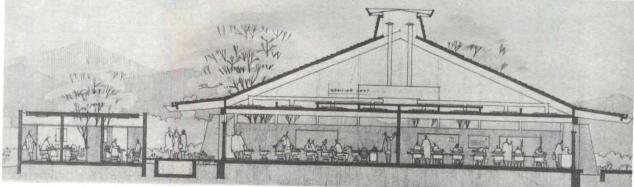


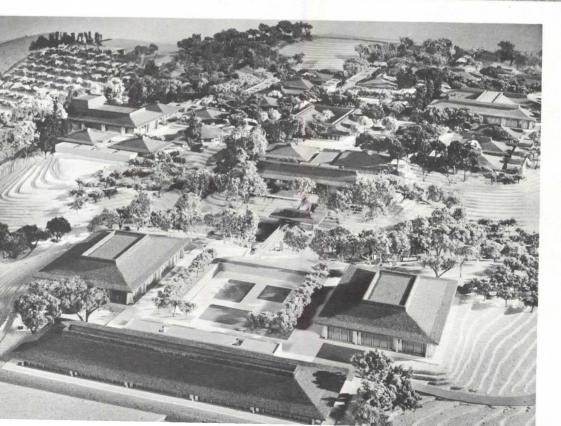
education: Citation



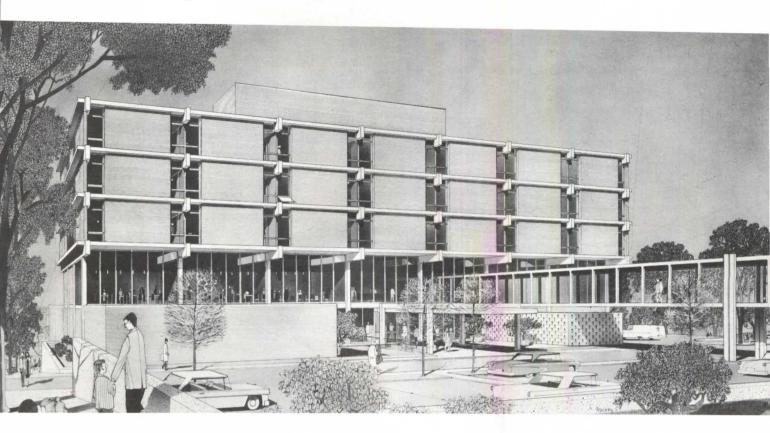
Foothill College, Los Altos Hills, California, for Foothills College Junior College District: Ernest J. Kump and Masten & Hurd, Associated Architects; Ernest J. Kump, Charles F. Masten, Lester Hurd, Stanley M. Smith and Arthur B. Swettser, Partners; Sasaki, Walker & Associates, Landscape Architects; Huber & Knapik and Earl & Wright, Structural Engineers; Keller & Gannon, Mechanical Engineers. In designing this junior-college campus for 3500 students, it was the objective of the architects "to create a total academic environment of naturalness and quiet dignity; to provide for maximum internal flexibility facilitating low-cost rearrangement of interior spaces to accommodate future curriculum changes." Natural advantages of the 122-acre site have been accented, and buildings placed to form a variety of dignified courts related in scale to the interior spaces they serve (site plan acrosspage: 1 astronomy; 2 engineering, technical; 3 physical science; 4 natural, health science; 5 library; 6 language arts, mass communications; 7 social science, business education; 8 administration; 9 fine and applied arts; 10 campus center; 11 physical education). Individual buildings are to be composed of one or more identical space modules (60'x68' floor area), each structurally and mechanically self sufficient. "Each basic space module," write the architects, "is defined by four exposed-aggregate concrete piers which take up lateral loads. The absence of arbitrary and inflexible shear walls provides for maximum flexibility of interior space arrangements. Complete mechanical facilities for each unit are contained in the attic (section acrosspage) and can be fed to any existing or future room space of 8'x8'. Shingled parapets which crest the hipped, shake roofs shield from view all vents, fans, etc." Academic and administrative offices will be housed in low, brick structures, related to each building group, while the special function of the three lecture halls has been accented by an octagonal building shape. Woods, native to the West Coast, are to be used in the construction of the complex. The Jury considered this solution eminently successful in these aspects: informality of scheme, appropriate scale, tightness and surprise element of site plan, separation of automobile and pedestrian traffic.



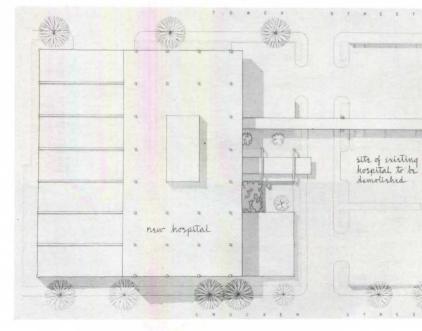




health: Design Award



Hospital for Sommerville, Massachusetts: Paul Schweikher and William Metcalf, Associated Architects; Gordon A. Friesen Associates, Inc., Hospital Consultants. A woodframe hospital built in 1893 and a brick addition erected in 1931 now occupy the site. This plan proposes updating the hospital complex in the following steps: I to construct a new 150-bed hospital on the northern end of the property; 2 to demolish the early wood structure upon completion of the new hospital; 3 to complete site development such as sidewalks, drives, etc.; 4 to build a bridge connecting the new hospital with the existing brick addition for the use of patients and staff, and to carry utility lines; 5 to convert the existing brick structure to a chronic-care unit and a nursing school; 6 to demolish the existing boiler room. The new hospital, on which the Jury's attention was focused, will have six floors and a basement. The main entrance to the building is to be on the second floor (acrosspage bottom); the first floor to contain the 30-bed obstetrical department plus administration and an auditorium. Kitchen and dining facilities, and a chapel are to be on the third floor, which will also be the level of the connecting passage to the chronic hospital unit. The fourth, fifth, and sixth floors (acrosspage top) will contain three nursing units of 40 beds each. The structure is designed to accommodate additional nursing units toward an eventual 250-bed capacity.



4th,	E dis	C+h	E1 0	ODC
4111,	oun,	Dru	FLU	una

- Nurses' Station
- Supervisor's Office Charting and Dictating Medications 3
- 4
- 5
- 6
- Clean-Supply Core Soiled-Supply Core Treatment 8
- Stretchers and Wheel Chairs Conference and Classroom 9
- 10 Day Rooms
- Typical One- and Two-Bed Rooms 11

SECOND FLOOR

- 1 Main Entrance Information PBX 3
- 4
- 5
- 67
- 8 9
- PBX Admitting Lobby Typing Pool Medical-Record Librarian Medical Records Doctors' Lounge and Library Cochier
- Cashier Interview
- Controller
- Business Office Ambulance Entrance

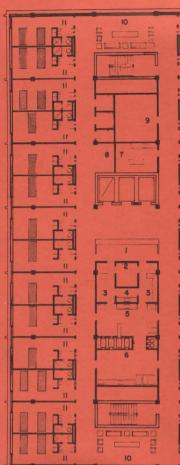
- Control Waiting Doctor's Office

- Doctor's Office Examination and Treatment Emergency Operating Room Supply Core Radiology Control and Files Film Viewing Radiologist's Office Radiography and Fluoroscopy Dressing and Toilets Dark Room Processing and Wet View

- Processing and Wet View Radiology Waiting Mobile X-Ray Park
- Surgery Supervisor Recovery
- Cystoscopy
- Fracture Operating Rooms Staff and Clean Supplies
- 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 33 34 35 36 37 8 39 40
- Clean-up Nurses' Lockers Doctors' Lockers Laboratory Control Pathologist's Office BMR, EKG, EEG Blood Donor's Room
- 41 42
- 43 Laboratory
- Future Expansion Area

44

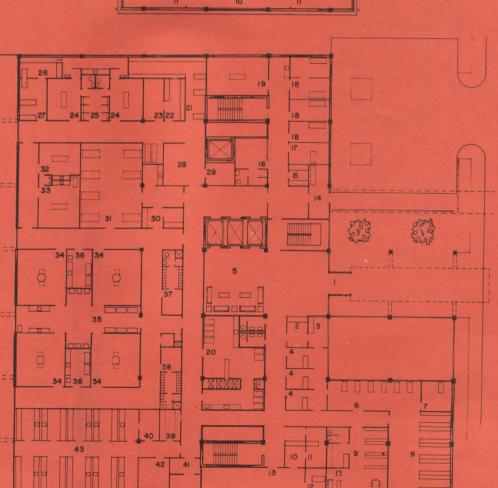




τ

T

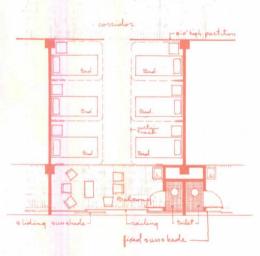
Ŧ

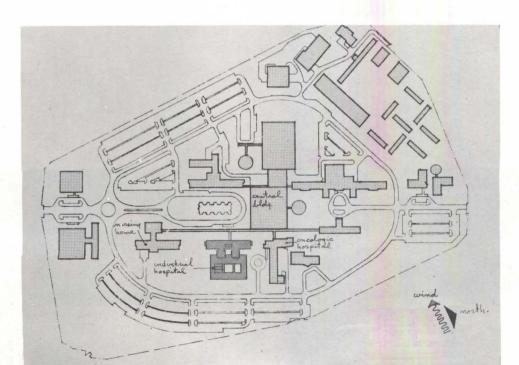


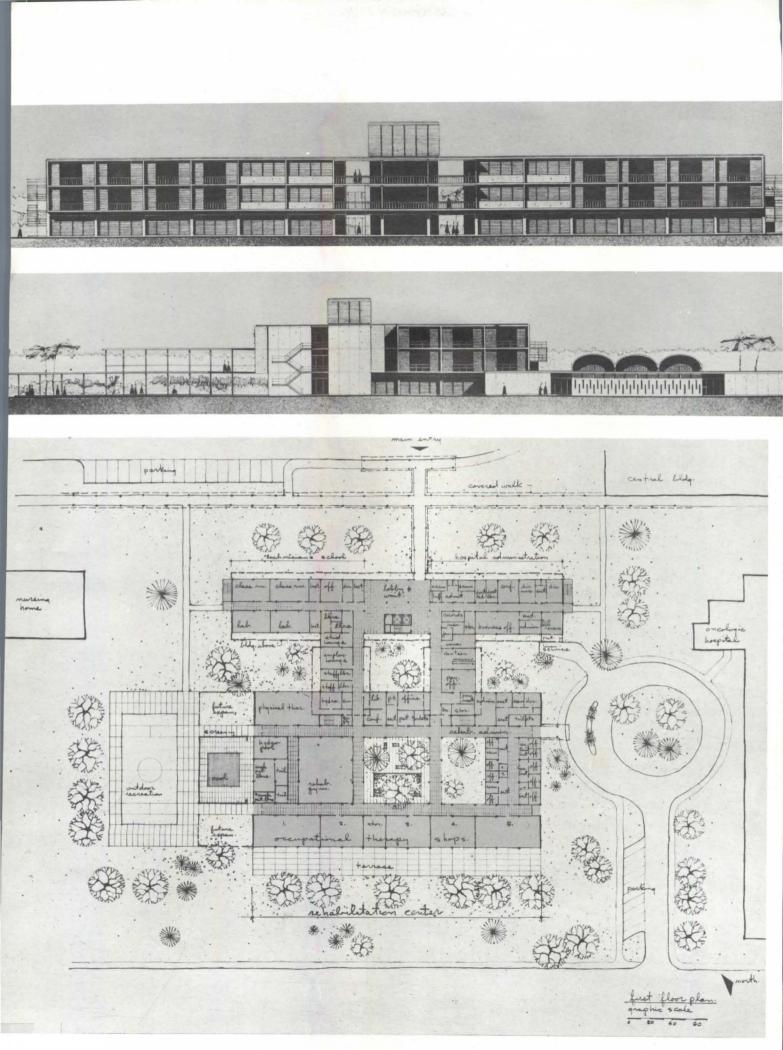
health: Citation



Industrial Hospital and Rehabilitation Facility, Rio Piedras, Puerto Rico, for Department of Public Works of Puerto Rico (agents for State Insurance Fund of Puerto Rico): Isadore and Zachary Rosenfield, Architects. The Industrial Hospital, part of the Puerto Rico Medical Center (site plan below), shares its major diagnostic, therapeutic, and ancillary facilities with three other hospitals and several allied institutions. Specifically, the Industrial Hospital will provide for 300 inpatients and 350 daily outpatients, all workers insured by the State Social Security Agency whose injuries or diseases stem from their work. Rehabilitation facilities on the first floor (plan acrosspage) afford easy access to the 150 outpatients housed in the adjacent nursing home and to the 200 outpatients who come from their homes for the all-day rehabilitation program. Most interesting departure in the design of the hospital is the typical nursing unit (right) on the second and third floors. Construction will be of reinforced concrete; exterior jalousies of aluminum.







jury comment

(Continued from page 99)

on the ability of the architect to communicate, and we've seen all degrees of ability and lack of ability in this regard; some entries were articulate, but many failed to be clear or orderly or logical. If the architect can't communicate to members of this Jury, then he must have a great deal of difficulty communicating to anyone else."

The Jury was concerned with trends shown by the entries. The question was asked: do the entries show a direction "toward an architecture?" Said one: "... not toward an architecture; toward a variety of trends in architecture, which I think is good. We are faced, in this country, with great changes in the open landscape, and most of the things we do are close to a city, close to the next building. And the greater variety we get, when the forms are appropriate, the better for the city... not everyone can do a sculptural building; it would be a great mistake ... the great thing in cities has always been that there were one or two cathedrals, a few monumental and symbolic buildings, and a background of quiet, well-proportioned architecture."

Should we "refine" what we have, instead of searching for new forms? "There should be variety, but it should be *thoughtful* variety . . . a fresh form too often is something to peddle—it immediately becomes everything, including a gas station . . . on the other hand a strong statement cannot easily be defiled . . . and there is no point in refining something not worth refining, that doesn't recognize what it wants to be; then you are just making out of marble that which began as cinder block."

What about the many screen-walled buildings submitted? "The device of the screen and the *brise soleil* is used too often to cover up bad design; it gives a textural quality which is externally good but disguises the negligence of the architect... further, this superficial decoration has finally taken away all traces of human use; the building becomes a scaleless abstraction; it may be a pattern for a lady's purse or a 30'x60' façade."

Why did this Jury, as several previous ones, find more quality in broader planning, even urban design, than in smaller individual buildings? "I think it indicates an awareness—even among the general public —that there is such a thing as interrelationship of buildings and the city landscape, and that that depends not on one or two buildings but on the complex of buildings that appear there." There was a strong warning, however: "The smaller and simpler problems seem to be neglected, or done not so well. And this is dangerous; we can't overlook these smaller problems; we have to live with them."



Caudill Rapson

152 Progressive Architecture

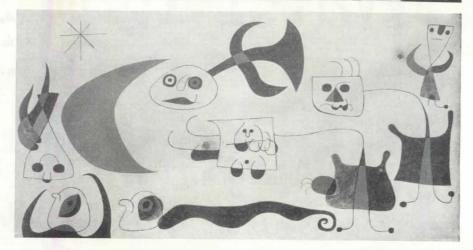
Miró: "Let anonymity . . . claim the man" Sidney Tillim*

Joan Miro. James Thrall Soby. Museum of Modern Art, New York, N. Y. Distributed by Doubleday & Co., Inc., Garden City, N. Y., 1959. 164 pp., illus. \$8.50

Looked at in a certain way, a photograph of a man in agony will appear to show him laughing. This is precisely the case with paintings by one of the few remaining "masters" of modern art-Joan Miró. In his popular style, Miró's symbolic representations of the human anatomy (a figure per se is not quite what he is after) ambiguously suggest both-and many other-extremes of feeling. Miró is actually a satirist, in that he employs both the ludicrous and the terrible in an extensive caricature of a life whose "absurdity often makes me sick." In an interview with Yvon Taillender which carried the foregoing comment by Miró, and which appeared too late to be referred to by Soby, Miró also indicated an "innate pessimism telling me that matters will turn out for the worse." And went on to add, "If something humorous figures in my work it has crept in without my volition and doubtless as an outlet to the tragic side of my temperament."

These remarks seem to bear out Clement Greenberg's observation, a number of years ago, that Miró "sports with his fears." And, indeed, they intensify (Continued on page 180)

* Painter, critic New York, N. Y.



The Olive Grove, 1919 (top); Still Life With Old Shoe, 1937 (center); and Women in the Night, 1946 (right).

Art

Tectum is Now Silicone Treated for Water Repellency

A Report from Tectum Research and Development Tectum is *now* water repellent. Every fiber in the composition of Tectum building materials is now treated with *Fiberguard*. This is not a mere surface treatment; the new *Fiberguard* process coats each fiber throughout the board with a specially formulated protective silicone. This outstanding product improvement is the result of three years intensive research by Tectum's Research and Development Department.

Here's What It Means To You, Mr. Architect: Capillarity is virtually eliminated; water migration is limited to exposed areas only. The inherent advantages of Tectum's insulating, acoustical and structural properties are now doubly protected. The hazards of inclement weather are sharply reduced during erection and the possibility of interior staining in later years due to roof leaks is greatly minimized. Result — greater client satisfaction.

And For You, Mr. Contractor, A Real Bonus: Improved Tectum offers added protection against roof deck damage. If sudden showers dampen the

Remember, Tectum has more inherent benefits as a roof deck material than any other product on the market.

Structural Insulative Acoustical Noncombustible Dimensionally Stable Light Weight Decorative Light Reflective

Resistant Factory Finished Tongue and Grooved or Rabbeted Beveled (Exposed Edge)

Felt Backed

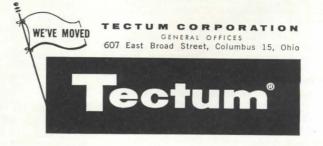
Rot and Termite

and NOW has Water Repellency with Fiberguard

unfelted edges of Tectum deck or if water leaks around unflashed roof openings, only the immediate exposed area is affected. Naturally, good practice dictates that proper precautions be taken in material storage and handling, but the hazard of possible staining from weather exposure is now effectively minimized. In case of roof leaks, water will drip vertically through the porous deck enabling you to quickly locate the source of the problem. Best of all there is practically no capillary migration laterally around the point of the leak. And, here is the big news; the new improved Tectum doesn't cost one cent extra. The price remains the same.

The Fiberguard silicone treatment is colorless, and odorless — does not change the natural color of the factory finished material. None of the inherent values including insulation and sound absorption are affected, and the weight remains the same. The general attractive appearance of the product is unchanged. The improved Tectum may be painted with oil or water base paints.

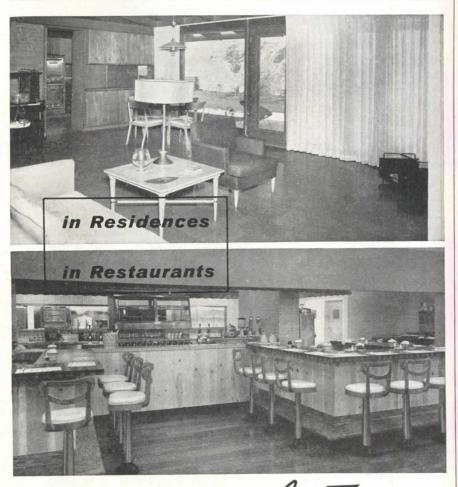
For complete details on this new manufacturing achievement — How Tectum board is now even better for roof decks, form plank and the many special applications as a structural insulating and acoustical material — see your Tectum representative at the first opportunity, or write the General Offices in Columbus, Ohio. Find out how laboratory tests have proved the advantages of the new *Fiberguard* repellent; how three years of testing and perfecting have developed an even finer Tectum for your building projects.



reviews

(Continued from page 177)

rather than contradict an impression of his work as comic and decorative—to many people, simply decorative. But Miró's personal tensions are undoubtedly related to a style that is unique in that, confronted at one point with a fork in the road of its development, it advanced, with significant readjustments, in *both* directions. On the one hand there was the plastic tradition, continuous from the Renaissance, which the Cubists transmitted to the 20th Century as bits of surface. On the other, there was Surrealism, a more literary, more pious version of the primitivistic temper of the new art. To all intents and purposes Miró turned to Surrealism in the mid-1920s, but his sense of formality, of pictorial rectitude, seems to have gained in strength at a rate roughly proportionate to his advances in "psychic automatism." Thus, by 1940 both "disciplines" had



5 WAYS **dodge** Mk Tile FITS IN WITH YOUR PLAN...

1. EASY CARE Dodge Vinyl-Cork tile needs only occasional cleaning with a damp mop. SG cork tile requires only half the maintenance of regular cork gleams with liquid wax.

2. BEAUTY Genuine cork's 3-dimensional texture and natural random shades blend with any color scheme; 34 patterns in three types.

3. LONGER WEAR Vinyl and SG surfaces resist abrasion, hide scuffs and scratches; impervious to spots and stains.

4. COMFORT High-density Dodge Cork *is warmer*, *softer*, more quiet underfoot, and has higher indentation recovery

than any other type of smooth-surface floor covering.

5. SAFETY Wet or dry, a high coefficient of friction makes Dodge the safest, most non-slip floor you can specify.

See all Dodge Cork Tile patterns in full color. Send for Catalog No. 60, or refer to Sweet's Architectural File, 13i/Do.

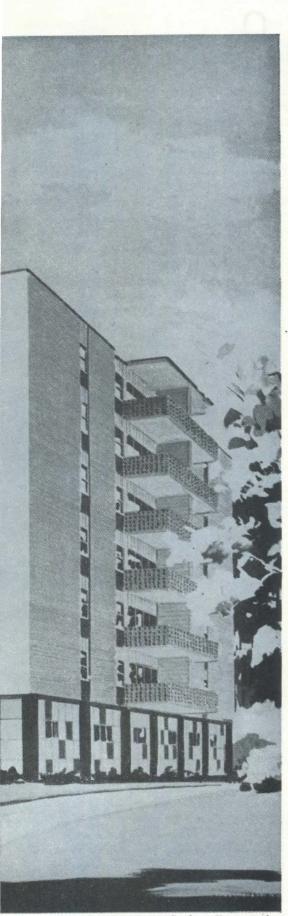


become at their extremes so alike dynamically that much of the motivation is drained from his conception.

Miró was born in 1893 near Barcelona. He settled in Paris in 1920, left France in 1940 when it fell to the Germans, and finally settled in Palma de Mallorca, where he now resides, in 1941. Andre Breton published *The First Manifesto of Surrealism* in 1924, and Miró exhibited with the Surrealists in their first group exhibition in 1925. Out of this alliance, Miró developed a symbolic apparatus that combined both literary and plastic virtues. But, as other writers have remarked, the lugubrious humor of his images has gone unnoticed by the public at large.

While Soby-almost indiscriminately partisan-is not nearly so preoccupied with abstract design and frankly delights in Miró's visual pranks, he nevertheless feels compelled to reassure the reader several times that recognition is not necessary to an understanding of Miró's pictures. Discussing Catalan Landscape (The Hunter), 1923-24, after having entered Alfred Barr's description of it (which is clearly helpful to an appreciation of the work) Soby comments: "Thus the painting's iconography is mostly legible after all, even if an understanding of it is by no means essential to an appreciation of Miró's uncanny pictorial eloquence, his piquant arrangement of triangular, rounded, and curlicued forms." It is difficult to imagine how this is possible considering what the picture actually contains and what, as he informs the reader through Barr, can be recognized. True, Miró's legibility varies, but a close study of the 35 helpful color plates in this physically appealing monograph precludes any rationalization of his literature on the basis of abstract design.

As a gallows humorist, Miró presents us with a recurrent problem in iconography. As indicated, Soby remains generally uncommitted, or ambivalent, on this score. But Miró is an artist of great importance, and any comparative study of his juniors—like the American, Arshile Gorky—would have stressed the pertinency of his content to his style. There is no humor in Gorky, because Surrealism in America was tied to an "expressionism" in which there was no



Akron's 7-story Carlton House to be cooled with individual Arkla-Servel units



Harry Sugar (left), one of the builders, and designer Matthew J. Rosenstock

Individual GAS units to cool and heat new \$2 million apartment house

Akron's luxurious Carlton House will mark the largest use of individual gas air conditioning units in a single apartment house.

Summer cooling and winter heating will be provided for the suites by 58 three-and-a-half and five ton Arkla-Servel Sun Valley gas air conditioners.

The Arkla-Servel gas air conditioning units were chosen after serious consideration of all types available. The designer insisted that each apartment have individual thermostat control as well as individual installations to eliminate the need for large compressors and any possible vibration. Because gas is also used for cooking as well as heating and cooling, there was no need for installing heavy cable, either.

The Arkla units will be installed in the utility rooms of each suite. Four small water towers, located on the roof, will provide condensing water for the system. The water will be constantly recirculated, thus keeping its cost at a minimum.

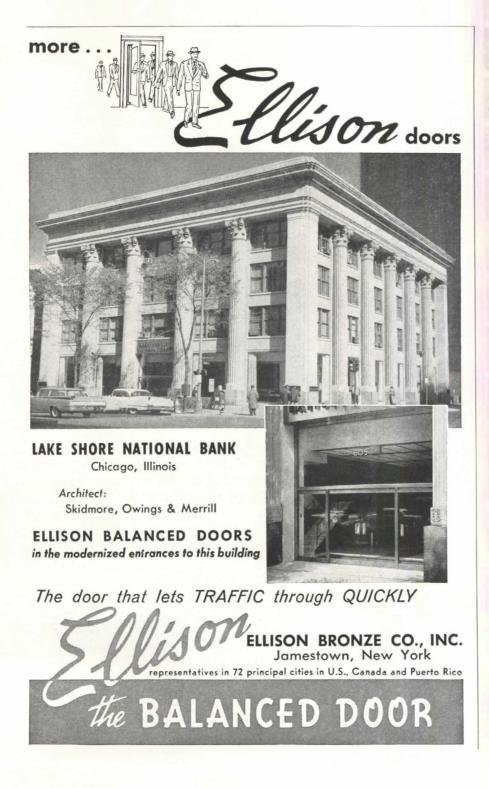
Check the facts and you too will see that modern Gas air conditioning out-performs all others. For specific details call your local Gas Company's air conditioning specialist, or write to the Arkla Air Conditioning Corporation, General Sales Office, 812 Main Street, Little Rock, Ark. *American Gas Association*

for Cooling, GAS is Good Business

reviews

(Continued from page 180)

room for irony and ambiguity. Miró's restraint was in part the discipline of a tradition of the image, and it is this sense of the past (and this struggle with its authority) that accounts for the uniqueness of his psychological satire whose symbols are disguised by abstraction. Naturally Miró had to pay a price for this singularization—the loss of a certain dimension in communication—but there is nothing in Soby's platitudinous catalog that suggests that Miró's development cost him anything in human terms and that this "cost" informed the nature of his style. Though Soby refers to Miró as an "idiosyncratic talent" his text is a prolonged Valentine to the "most instinctively talented artist of his generation," (first page), with "a starstruck hand" (last page). While Soby



obviously did not attempt a critical *coup*, he does not seem to realize how absorbed he is in his own vicariousness.

The 148 illustrations, in fact, are the book. (The monograph edited by Soby for the Arp exhibition cost half the price but only two of its 114 illustrations were in color, as compared to the 35 here). And, if one saw the retrospective last Spring, the book is more than a convenient reminder of that important occasion-an effective capsule version of it in reproduction. The generous selection of color plates ranges from a View of Montroig (1917) to one (Night) of the two ceramic walls that Miró created in collaboration with Artigas for the UNESCO Headquarters in Paris. In short, there is a gratifying range of pictorial documentation of Miró's navigation between plastic values and a symbolic iconography of considerable terror and decorum.

Soby approaches Miró's stylistic evolution chronologically, with occasional caulking of biographical fact. Much of the information is, necessarily, warmed over. One of the lengthiest analyses is accorded an early work, The Farm (1921-22), which belongs, incidentally, to Ernest Hemingway. The author is on safe ground here because it is a completely recognizable and certainly masterful work. Looking back we can see in it now the characteristic Miró vocabulary taking shape. In a tightly realistic context, the somber and the decorative combine to shatter the representational dominance. The predilection for certain shapes is incipiently evident, as is a highly developed sense of meticulousness that Miró never lost. It proved, finally, to be a threat to really free invention.

What went out of Miró's art (earlier than is generally thought; some signs are perceptible in his work of the late 1930s) was a sense of participation in his own symbolic experience. "Miró's vision had hardened into a system," wrote Hilton Kramer in an extensive review of the retrospective exhibition in *Arts* magazine. (Soby sees only unending fecundity). In a way Miró had merely oversimplified his means. When he turned increasingly to ceramics he hoped, perhaps, to reclaim a sense of effort and that simultaneously the new technique would implement his (Continued on page 188)

systems, INLAND covers everything!

absorb water, nor lose their strength when wet — the job stays on schedule.

0000 0000

Types A, B, C, and H decks have the additional advantage of a Bonderized, baked-enamel prime finish that resists on-the-job damage. One field coat of paint on these Inland decks usually does the job of two coats on ordinary decks.

Write for catalogs 240, 241, and 245 — or see Sweet's sections 2c/Inl, 11a/In, and 2a/In for full information on Inland steel roof deck and permanent centering. If you have an unusual problem, you can draw upon their diversified experience by consulting Inland's Engineers.

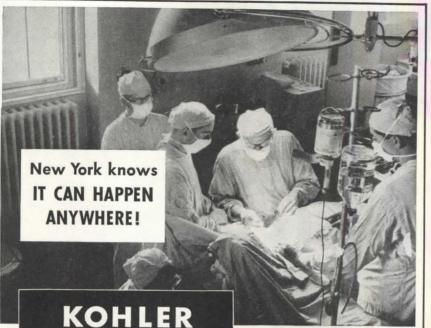


00000

DDDI DDD

ENGINEERED PRODUCTS DIVISION

INLAND STEEL PRODUCTS COMPANY Dept. A, 4069 West Burnham Street Milwaukee 1, Wisconsin



KOHLER ELECTRIC PLANTS

Major surgery in Mt. Sinai Hospital, New York, being performed with illumination from windows and one emergency light.

Reliable safeguard for power blackouts

The 13-hour power failure in New York's Manhattan last summer caused widespread hazards, inconvenience, discomfort or loss—in places without stand-by power. In hospitals, surgery was performed without proper lighting, patients were served by candlelight. Buildings of all kinds had no use of lights, air conditioning, elevators, freezers.

Kohler electric plants are reliable, easy to install for emergency power made vitally important by today's increasing dependence on electrical equipment. To help you write specifications for varied applications Kohler Co. will send on request a manual with complete data on sizes from 1000 watts to 100 KW, gasoline or diesel. Write Dept. G-59.

MODEL 100R81 100 KW, 120/208 volt AC. Stand-by. Remote start.



Enameled Iron and Vitreous China Plumbing Fixtures • Brass Fittings Electric Plants • Air-cooled Engines • Precision Controls

reviews

(Continued from page 184)

resourcefulness, with the accidental as a form of inspiration. But Miró's UNESCO mural appears, in reproduction, to be overpowered by technique.

To repeat: what we get from Soby is an endless pageant of masterpieces described in one ethereal cliché after another. At this stage of modern art it is outrageous to encourage further sycophancy by declaring: "The workings of Miró's imaginative process are mysterious and unpredictable." Whose aren't? "We know, for example," the author volunteers, in the tones of a scholar awed by the very magnitude of what he is about to say, "that in one instance he centered an otherwise painstaking composition around an accidental splash of blackberry jam."

On crucial points of interpretation Soby is either "mystical" or apologetic. For instance, on Miró's much remarked eroticism, he mediates: "Miró has made frequent use of genitals as symbols in his art. Yet his attitude toward sex is fundamentally innocent and far from vicious. It proceeds from a child-like curiosity and glee; it is unashamed and frank rather than salacious." Soby at least did not wax rhapsodic on this issue (as did artist Robert Motherwell in his article on the retrospective in Art News) but it is impossible to treat, in brief, his sentiments, which are so misleading where the content of aggressive impulses is concerned. The significant thing about Miró's eroticism is its essentially anaphrodisiac character. Symbols do not excite like an image of the real thing (though Miró's symbolization could be relatively explicit). They are further subordinated by the over-all esthetic properties of design, which, in Miró's case, ultimately swept the biologogical before it. Miró turned to ceramics as if to rediscover in primal material-clay-the seed of necessity. He was becoming too self-conscious. "To be explicit," he said in the previously quoted interview with Taillender, "let there be no Miró-that Spanish painter, hemmed in by certain frontiers, social conformities and bureaucratic limitations. Let anonymity, as it were, claim the man."

(Continued on page 192)

AT AWTABER OF

#9000 CASTELL Pencil with world's finest natural graphite that tests out at more than 99% pure carbon. Exclusive microlette mills process this superb graphite into a drawing lead that lays down graphite-saturated non-feathering lines of intense opacity for cleaner, more durable originals and clearer, sharper prints. Extra strong lead takes needlepoint sharpness without breaking or splintering. Smooth, 100% grit-free consistently uniform pencil after pencil, in full range, 8B to 10H.

#9007 CASTELL Pencil with Eraser.

#98005G CASTELL LOCKTITE TEL-A-GRADE Holder, perfectly balanced, lightweight, with new noslip functional grip that lightens finger pressure without slipping, and relieves finger fatigue. Unique degree lead indicating device.

#9030 CASTELL Refill Lead, matching exactly #9000 pencil in quality and grading, degrees 7B to 10H, packed in reusable plastic tube with gold cap.

Many other styles and colors of **CASTELL Pencils, Holders and Refill** Leads.

THIS IS JUST A SMALL PORTION OF CASTELL PENCILS

STELL MADE BENG

ASTELL

M CASTELL

R III CAST

ERECASTE

A.W.FABIR MAN CASTEL

A W.FABER ON CASTEL

This is just a small portion of CASTELL pencils that one Creative Man will consume during his career. To be specific, a typical engineer, architect, designer or draftsman will consume a minimum of 3,096 CASTELLS. From the combined excellence of the Creative Man and the world's finest drawing pencil will evolve an exciting new tomorrow for mankind.

It is not known how many holders and leads a man will use. But it is certain that top creative men will insist on the quality of CASTELL LOCKTITE SG TEL-A-GRADE 9800 and imported CASTELL 9030 Refill Leads.

Backed by nearly 200 years of uninterrupted manufacturing experience-since 1761.

> A.W.FABER-CASTELL 41-47 Dickerson Street, Newark 3, N. J.

> > H

CASTELL Pencils and Leads draw perfectly on all surfaces, including Mylar-based Polyester drafting films. Give graphite-saturated lines, easy to erase - excellent reproduction.

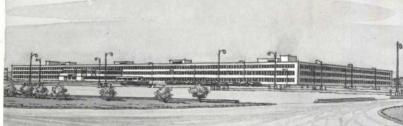
AW. FABER CRSTELL DRAWING REFILL LEAD 9030

CRSTELL USA LOCKTITE TEL-A-GRADE 9800 SG

Solve lime and **By Specifying Zonolite**[®] Insulating



Zonolite Insulating Concrete may be used two ways: (1) Poured as insulation over an existing roof deck such as structural concrete; (2) as an insulating roof deck when combined with galvanized steel, paper-backed welded wire mesh, formboard, or other supporting forms. For further details, mail coupon.



Finance Center, Fort Benjamin Harrison, Lawrence, Ind. Zonolite concrete poured over existing deck to provide positive drainage to sumps, plus added insulation of deck. Arch.: Ralph Manning, Post Engineer; General Contr.: Brown & Kerr, Evanston, Ill.

Cost Problems Concrete over galvanized steel decks!

Right now, all over the country, architects are confidently specifying Zonolite vermiculite concrete. (Page at left shows just a few recent jobs.) Reason is, Zonolite systems of roof construction do solve "time-and-cost" problems. But, above all, they provide seven very special plus benefits: (1) Speedy To Erect, (2) Fire Safety, (3) Lightweight, (4) Flexibility In Design, (5) Monolithic, (6) Insulating, and (7) Permanent.

They not only go on fast, but in many instances actually save thousands of dollars when compared to alternate systems. Why not consider a Zonolite system of roof construction on the project you're working on *now*?

MAIL COUPON TODAY for complete file reference and information, including design data, section drawings, specifications.

THE ROOF DECK SYSTEM PROVIDES 7 PLUS BENEFITS



Zonolite offers a program of practical assistance

VAVAVAVAVAVAVAVAVA

There's a national network of concrete specialists and experienced roof deck applicators, made available to architects by Zonolite Company to help you with practical assistance. Mail coupon for details.



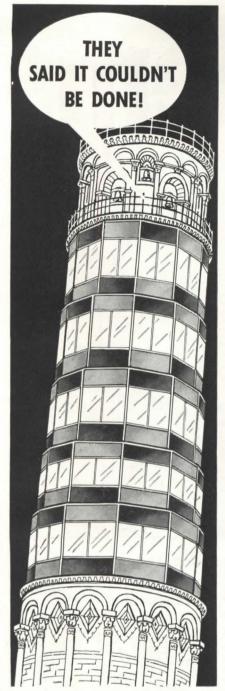
ZONOLITE COMPANY, Dept. PA-10 135 South LaSalle Street, Chicago 3, Illinois	
Please send me your new booklet, CA- insulating roof systems.	50, on firesafe,
Name	
Firm	and the second second

Zone

State

Address .

City _____



And, of course, it *couldn't*, not 800 years ago. But today, Glidorama Window Walls offer the modern architect the *flexibility* he requires for creative expression and pleasingly different building designs. Not monotonous repetition, but window wall patterns that emphasize the individuality of your architecture.

Glidorama's experience in fabricating modular unit window walls with integral horizontal gliding aluminum windows, assures you of dependable, superior craftsmanship on every job. We will be pleased to offer suggestions or assist you in developing Glidorama Window Walls which reflect your creative requirements.

> Write for architectural bulletin GL-10. Glidorama Division, Whizzer Industries, Inc., 353 S. Sanford St., Pontiac, Mich.



reviews

(Continued from page 188)

illumination-co-operation

Lighting in Architecture. Walter Kohler and Wassili Luckhardt. Rheinhold Publishing Corp., 430 Park Ave., New York 22, N.Y., 1959. 223 pp., illus. \$15

The ever-increasing technological complexity of modern building is not an unknown fact; that the solution to the problems posed other than purely architectonic can be solved only by intelligent collaboration is accepted. Too often esthetic responsibility must be borne solely by the architect.

Addressed as it is to a technically oriented audience, this stimulating and interesting book, translated from the original German edition, *Lichtarchitectur*,* possesses an additional worth beyond informative interest, in its repeated stress upon a collaboration between architect and illuminating engineer in which there must exist the prerequisite that "both possess artistic sensitivity." Obviously the same prerequisites should underlie the entire professional collaboration.

Following a collection of photographs illustrative of "light as an element of structure" is a two-part text. The first part is devoted to the historical-philosophical and the scientific aspect of light and color. (More explicit definitions of the technical terms used in the scientific portion would have been welcome.) Part two is a discussion, with illustrations, of the practical application of the many techniques available in illuminating space. No brief is made for the architectural quality of the spaces illustrated; the lighting principle in each case is considered more important.

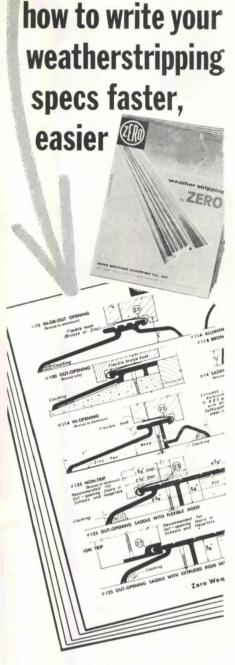
A technical book that places as much emphasis on humanistic values as does this one is unusual. *Lighting in Architecture* should prove to be a stimulus to anyone involved in the practice of architecture.

> PETER A. GIARRATANO New York, N. Y.

*Reviewed by Ilse Meissner Reese in MARCH 1957 P/A.

specialized planning

Camp-Site Development. Julian Harris Salomen. Girl Scouts of the United (Continued on page 196)

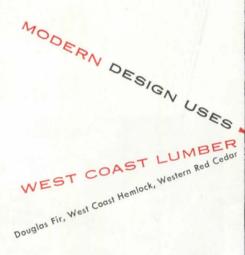


Send today for your copy of Zero's new 28-page catalog. Design and installation detail illustrations are drawn FULL-SIZE for easier visualization and incorporation directly into your plans with a minimum of scaling. Also contains important application data and many useful suggestions for writing weatherstripping specifications.

Weather stripping for:

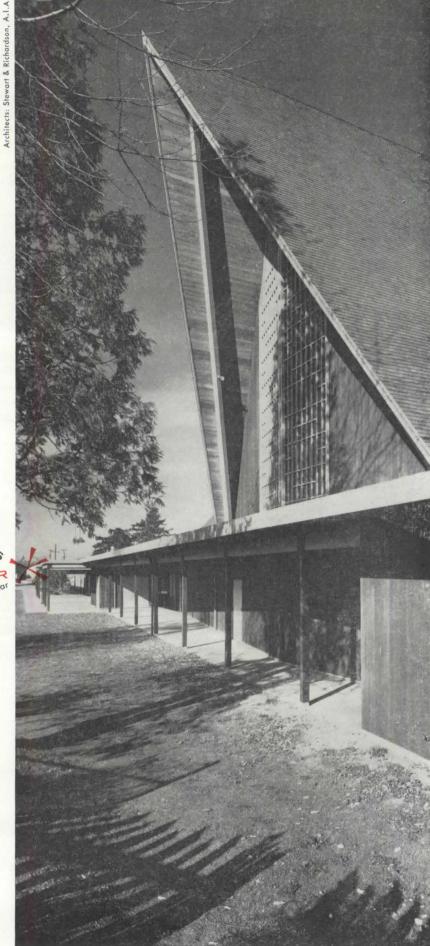
- doors windows
- saddleslightproofing
- soundproofing
- sliding doors
- saddles for
 - floor hinged doors

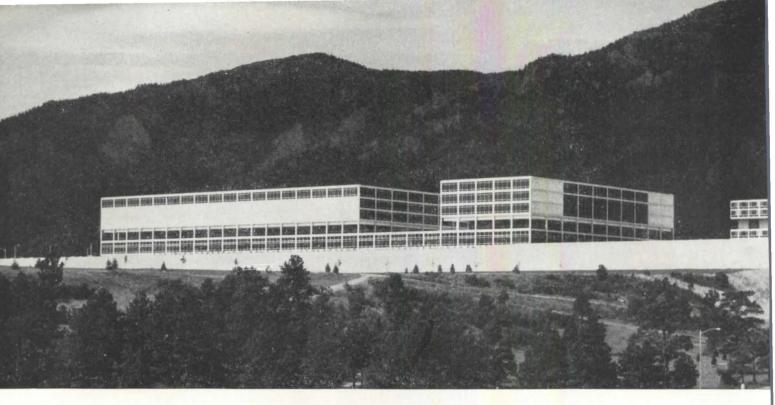
ZERO WEATHER STRIPPING CO., INC. 453 East 136th St. • New York 54 Phone: LUdlow 5-3230



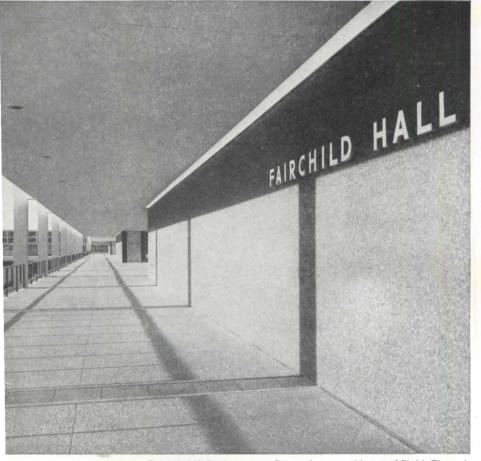
Towering lines give an air of spiritual power to the design of this modern church. The forceful, extended roof utilizes West Coast lumber's construction versatility. This and other components of the finished building gain in appearance from the natural warmth and beauty of lumber... the living material only a step away from its natural form. Here is an expression of design freedom at its finest. Use the wide variety of grades and species of versatile West Coast lumber to achieve *your* design objectives.







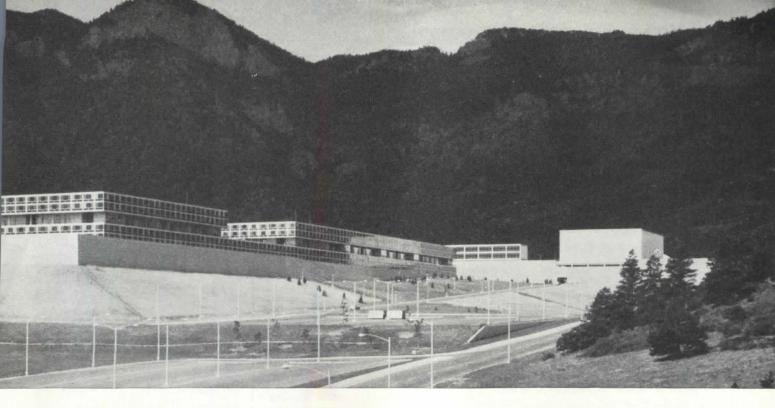
United States Air Force Academy, Colorado Springs ... dramatically positioned with the Rampart Range of the Rocky Mountains as a backdrop. Architects & Engineers: Skidmore, Owings & Merrill. Electrical Engineer: Syska & Hennessy, Inc.



Fairchild Hall where open floors give a semblance of flight. The outside corridors are illuminated by special corner fixture troffers using lenses to direct light outward.



Cafeteria in the headquarters building in the service and supply area. Here flush mounted troffers with curved lenses assured a pleasing lighting effect of low brightness luminescence.



A monument to tomorrow...

The Air Force Academy

Complemented by AllBrite Lighting in Keeping with the Space Age

A calvacade of contrast . . . that's the Air Force Academy near Colorado Springs.

Buildings of aluminum, glass and white marble in military order seem to march down a mesa of broad terraces. There are buildings within buildings, separated by courts. All in all, there is earthbound strength in their precise arrangement. Yet, a sense of air and flight permeates structures that stand on stilts. Here and there floors are left completely open. Colored walls of glass mosaic read as vertical planes to add illusion of height.

This feeling of the future challenged imagination in illumination so unusual effects were sought. In one instance open floor areas were illuminated by special AllBrite corner troffers using lenses which gave light an outward direction, adding to the semblance of flight. In another, an office area was bathed in low brightness luminescence to create an unusually restful atmosphere. This was achieved by AllBrite troffers with curved lenses.

Thus did architects Skidmore, Owings & Merrill wed lighting to the total design concept of a monument to tomorrow...and with special skills and products AllBrite engineering served the architects well. Curtis-AllBrite Lighting, Inc., AllBrite Lighting Division, 352 Shaw Road, South San Francisco, California; Curtis Lighting Division, 6135 West 65th Street, Chicago 38, Illinois.





East end of the headquarters building in the service and supply area. Lighting was achieved by troffers with curved lenses which assured an unusually restful atmosphere.

reviews

(Continued from page 192)

States of America, 830 3rd Ave., New York 22, N.Y., 1959. 160 pp. \$5.00

A comprehensive treatment of all facets of the development of sites for camping is offered in this book: phases of the subject ranging from preliminary programming, planning, site selection, building design, sanitary systems, utilities distribution layout, down to facilities and equipment for sports.

The author is Director of the Planning and Construction Section of the Camping Division of The Girl Scouts in this country. He has had considerable experience in camp planning. The information contained in these pages is applicable to all types of camps; the viewpoint manifest in the text, has been maintained broadly enough to encompass camps other than those for Girl Scouts. The current form of this work is a revised and enlarged edition of the book issued 10 or so years ago; efforts to bring the whole work abreast of current thinking and design are evident in the concise text and in the 70 simple, pen illustrations.

Admittedly, camp design forms a very small part of architectural practice: however, these pages could be advantageously followed as a guide for achieving simplicity and clarity in more important architectural publications. This volume will be interesting and valuable to architects and others involved in camp planning and design.

> LAWRENCE E. MAWN Alhambra, Calif.

growing category

Planning Homes for the Aged. Geneva Mathiasen and Edward H. Noakes, Editors. F. W. Dodge Corporation, 119 W. 40 St., New York 18, N. Y., 1959. 128 pp., illus. \$12.75

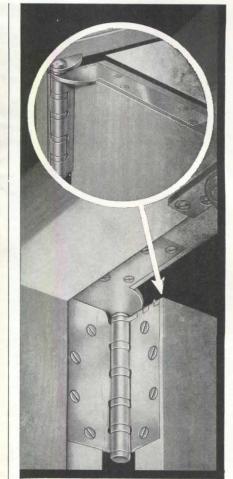
With the aged population increasing by 2000 every day, and with approximately five percent of these living outside their own homes, there is a growing need for information on planning homes for the aged.

This book arose from a recent competition sponsored by the National Committee on the Aging in conjunction with the magazines Architectural Record and The Modern Hospital. Pietro Belluschi was chairman of the jury. Sketches and plans of the six winning designs are supplemented by features from a number of the other entries. The selection is a wide one, covering low- and high-rise solutions of varying approach.

In the important opening sections of the book, 11 brief but significant essays outline the philosophic bases and practical criteria by which such buildings are designed and judged. The discussions are by professionals-social, medical, architectural, and administrative-who are experienced in the functioning of homes for the aged. Their chapters analyze these functional aspects, dealing with congregate living for older people, community needs and resources, location and site, common services, residence units and rooms, health needs, administrative and service facilities, design, construction, and the role of the architect.

Emphasis throughout is on the inclusion of balanced facilities for this special segment of the population. Their mental and emotional needs are unique and can be generalized, but residents of a home are still individuals and should not be expected to conform to the home in a one-sided adjustment. Provisions for privacy and a rich life within the group are essential if a home is to be more than an institution. Integration with the outside community must be in proper balance for best fulfillment of the residents' needs. Physical needs of older persons are unique, too, but the home is not a hospital-it is patient-centered, not disease-centered-and it should give flexible safe living conditions simultaneously with unobtrusive minimum hospital standards.

Awareness of particular needs of the aged suggests particular requirements for their living arrangements. Similarly, attention to the design of homes for the aged suggests a particular building type: neither apartment nor hospital, neither wholly integrated with the outer world nor wholly self-sufficient, neither private residence nor institution. The comprehensive background that this book gives to planners of such buildings makes it a valuable pioneering volume on the subject. E. P.



Now . . . <u>Two</u> hinges in ONE!

It takes a special kind of hinge to stand up to the punishment dealt out when overhead holders bring exterior doors to sudden halts. The new STANLEY full jeweled ball bearing PIVOT REINFORCED HINGE* is something special . . . two hinges in one . . . combining a pivot and butt hinge in one unit, in which they share the same pin to assure perfect alignment.

Interlocked corners prevent individual sidewise motion of either pivot or butt leaves, so that strain is shared equally by both.

Interlocked corners and mutual pin permit locating the screw holes to improve fastening and minimize the danger of splitting the door parts. For details write:

*Patents Pending

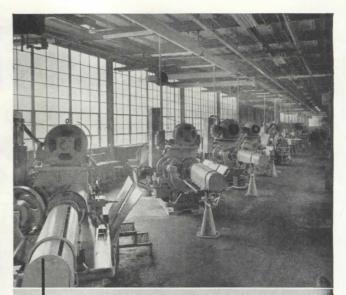
STANLEY HARDWARE Division of The Stanley Works Dept. A, 78 Lake Street New Britain, Conn.

FRANSLUCENT GLASS

Modern Buildings Utilize Diffusing Glass to Make the Most of Daylight

These outstanding buildings enjoy more and better daylighting per glazing dollar because translucent glass diffuses daylight deep into interiors to achieve even, comfortable, overall illumination at low cost. Areas are flooded with inexpensive, natural lighting, free of raw glare. Sharp shadows and contrasts are reduced to make seeing tasks easier. Translucent glass helps create a feeling of spaciousness and comfort. Occupants see better, feel better, work better under improved daylighting. The resulting efficiencies and improved morale moke it good business to install translucent glass.

> Today's leading architects are taking fullest advantage of translucent glass to achieve interesting, highly functional structures that provide high levels of low cost, natural illumination. Specify glass by Mississippi. Available in a wide range of patterns and surface finishes to solve any daylighting requirement.



Coolite, Heat Absorbing glass, glare reduced, installed in the Twin Disc Clutch Company, Racine, Wisconsin, floods work areas with conditioned daylight . . . absorbs up to 50% of unwanted solar heat. Glazier: Pittsburgh Plate Glass Co.

35,000 sq. ft. of Smooth Rough glass in the Kentucky Fair and Exposition Center, Louisville, Ky., brightens entire interior. Architect: Fred Elswick and Associates of Louisville Photo by: Royal Photo Co.

G

L

S

D

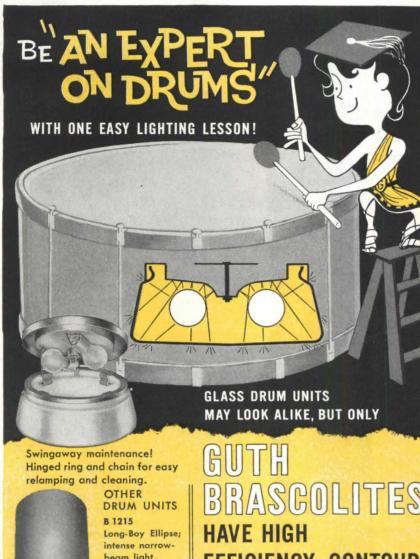
RE





ED

R





beam light, specular Alzak reflector. B 1210 Metal drum units, concave

prismatic lens

with genuine

Alzak reflectors.



B 1192 Prison and psychiatric units; cast guard, shatter-proof prismatic lens, tamper-proof screws.



B 1618 Gym drum units, with guard or louver, single to quadruple mountings.



BRASCOLITES **EFFICIENCY, CONTOUR** ALZAK REFLECTORS

Real parabolic-design provides permanent, efficient light control. Unlike flat-pan or aluminumfoil types, Alzak contour reflectors can't come ungluded, tarnish, or become permanently discolored from lamp heat. Super white opal glassware has satin-finish ceiling ring. Unit gives excellent downlight, plus good ceiling illumination above and around the fixture. Models to accommodate up to three 100-watt lamps. Complete selection available.



reviews

BOOKS RECEIVED

New York Metropolitan Region Study. The Newcomers. Oscar Handlin, Harvard University Press, Cambridge 38, Mass., 1959. 171 pp. \$4

New York Metropolitan Region Study. Anatomy of a Metropolis. Edgar M. Hoover and Raymond Vernon. Harvard University Press, Cambridge 38, Mass., 1959. 345 pp., illus, \$6

New York Metropolitan Region Study. Made in New York. Roy B. Helfgott, W. Eric Gustafson, and James M. Hund. Harvard University Press, Cambridge 38, Mass., 1959. 388 pp., illus. \$6.75

Offices in the Sky. Earle Shultz and Walter Simmons, Bobbs-Merrill Co., Inc., 717 Fifth Ave., New York, N.Y., 1959. 328 pp., illus, \$6

Urban Renewal. Official Report of Seminar at The Hague, 1958. Organized by International Federation for Housing & Planning. Edited by Peter T. van der Hoff. International Federation for Housing and Planning, Alexanderstraat 2, The Hague, Netherlands, 1959. 120 pp., illus. \$4, inc. postage.

A Synopsis of the Planning Legislation in Seven Countries. Stephan Ronart. International Federation for Housing and Planning, Alexanderstraat 2, The Hague, Netherlands, 1959. 130 pp. \$2.70 inc. postage.

Wendepunkt Im Bauen. Konrad Wachsmann. Krausskopf Verlag, Wiesbaden, West Germany, 1959. (Distributed in U.S. by Wittenborn & Company, 1018 Madison Ave., New York 21, N.Y.) 260 pp., illus. \$11.50

Experiencing Architecture. Steen Eiler Rausmussen. Technology Press, Massachusetts Institute of Technology, and John Wiley & Sons, Inc., 440 Fourth Ave., New York 16, N.Y., 1959. 251 pp., illus. \$4.50

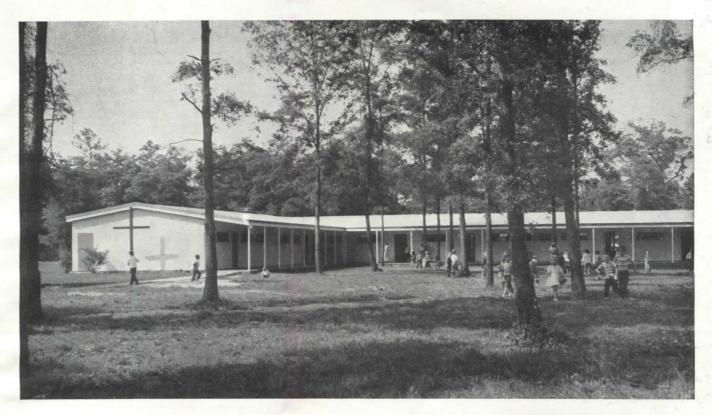
Noise Control in Buildings. Building Research Institute, 2101 Constitution Ave., N.W., Washington 25, D.C., 1959. 136 pp. \$5

An Outline of the History of Art. Jane Costello. New York University Press, Washington Square, New York 3, N.Y., 1959. 54 pp. \$1.50

WHEN YOU CHANGE YOUR ADDRESS

Please report both new and old addresses directly to P/A five weeks before you move. The Post Office will not forward your magazine to the new address unless you pay extra postage. Avoid this needless expense by notifying us five weeks in advance.

PROGRESSIVE ARCHITECTURE Circulation Department 430 Park Avenue, New York 22, N. Y.



"We were very pleased with the flexibility allowed us by Penmetal Structural Framing"

... says architect for new church school

Holy Trinity Methodist Church School in Houston, Texas, well illustrates the fact that a school can be both attractive and functional but low in cost. The final cost of this structure including landscaping and an excellent kitchen, was only \$7.96 per square foot.

According to Mr. Robert A. Talley, the architect, "Considerable engineering and construction time was saved through the use of prefabricated steel framing." At the shop of the Jim Doyle Company, a Penmetal distributor, sections were cut to length, then welded together to form the roof trusses and wall panels, which included door and window framing. This work went rapidly because the sections are designed for panelization. Light in weight, completed panels were trucked to the job, then speedily, easily placed without the need of heavy erection equipment. Wiring and plumbing were run through openings in the sections.

Send for *new* catalog SS-33, which describes this versatile framing system in detail. No cost or obligation.

PENN METAL COMPANY, INC. Structural Framing Sales Office: P.O. Box 1460, Parkersburg, W. Va. AXminster 5-4521 Executive Offices: 40 Central Street, Boston 9, Mass. Plant: Parkersburg, W. Va. District Sales Offices: Boston, New York, Philadelphia, Pittsburgh, Chicago, Detroit, Dallas, Little Rock, Seattle, San Francisco, Los Angeles, Parkersburg, St. Louis

PM-228





Here is a good example of the flexibility of the Penmetal system. To frame the large opening in this side wall, bridging was cut, fitted and welded to form a truss to carry the load imposed. Penmetal joists permitted wide overhangs.



Here Is Double Protection For Masonry Walls

BLOK-JOINT For Control Joints **BLOK-MESH** Deep Swedged Reinforcing

BLOK-JOINT is the cross shaped rubber extrusion for making fast, low cost control joints. It's used with ordinary metal sash blocks. There is no need for special blocks, building paper or mortar fill. It can be used in single block walls, with brick and block backup and at columns and pilasters. This time saving control joint forms a secure interlock that gives lateral stability and provides for *both* contraction and expansion in the wall.

BLOK-MESH is the "deep swedged" masonry reinforcing that gives additional strength and resistance to cracking. Its large, squared deformations allow the mortar to take a deep grip for maximum bond. Use both BLOK-JOINT and BLOK-MESH for maximum protection of masonry walls.



Available in the U.S. through Concrete Block Manufacturers and Building Materials Dealers. Distributed in Canada by Consolidated Concrete Industries, Ltd., 9th Ave. & 24th St., East Calgary, Alberta, Canada.

BLOK-JOINT and BLOK-MESH are products of the Carter-Waters Corp., 2440 Pennway, Kansas City 8, Missouri, Dept. PA

notices

new addresses

VICTOR M. VILLEMAIN, Planning Consultant, 157 W. 57 St., New York 19, N. Y.

C. DALE BADGELEY, Architect, 101 Park Ave., New York 17, N. Y.

p/a congratulates . . .

C. B. BURNETT, elected president and chief operating officer of the JOHNS-MANVILLE CORPORATION, succeeding A. R. FISHER, who will continue as chairman and chief executive officer. Also announced was the corporation's recent acquisition of the SCHUNDLER COMPANY.

LESLIE B. WORTHINGTON, succeeding the late WALTER F. MUNFORD as president and chief administrative officer; HARVEY B. JORDAN, named executive vice-president and chairman of the General Administration Committee; and EDWIN H. GOTT, as executive vice-president of production at UNITED STATES STEEL CORPORATION.

JAMES SAN JULE joins YOUNG & RUBICAM, INC., San Francisco office. His immediate assignment will be to the various companies of KAISER INDUSTRIES CORPORA-TION.

WILLIAM F. PETERS, appointed general sales manager, and CARTIS T. ROFF, made a vice-president of ANEMOSTAT CORPORATION.

A. E. BINGER, appointed vice-president of the Industrial Products Division, and GORDON S. HANSON, appointed general merchandising manager of building products at THE PHILIP MANUFACTURING COM-PANY.

MAURICE J. DAY, named to the newly created post of commercial vice-president, and WALTER E. GREGC, succeeding as director of technology at CRUCIBLE STEEL COMPANY OF AMERICA.

JOHN K. WALLACE, made chairman of the board, and CHARLES C. MORAN, succeeding as president at CUPPLES PROD-UCTS.

new firms

IRWIN LUCKMAN, BURNS CADWALADER, principals in the firm of LUCKMAN & CADWALADER, Architects, 4241 Piedmont Ave., Oakland, Calif. Just Published



Don't design a parking layout without using THESE QUICK REFERENCE TABLES.

They will immediately answer the two questions which most commonly arise: (1) what parking pattern can be most advantageously fitted to this particular site and (2) if a certain parking angle has been specified, how many parking stalls at this angle can be imposed upon this site, or alternatively, how big a site will be needed to accommodate a given number of cars parked at a specified angle.

For Architects-Factual Information-New Design Ideas

Parking presents for the first time a thorough study of parking facilities in all sizes. Included are over 200 photographs, sketches, plans, so beauti-fully done and ably handled that together with the concise, but extensive text, you can easily understand detailed problems and quickly digest essential information on the planning and design of parking facilities.

5	•				1				-		V			SINGLE ROY	•	-			OVERLAP	1	1	
h	T	OFFRI	T B	AKE	Ran	d BR	UNO	FUN	ARO		NO. OF STALLS	WIDTH 0 8'0''	OF STALL: 8'6''	9'0''	9'6''	10'0"	8'0''	8'6''	9'0''	9'6''	10'0"	
											1	16'6''	17'0''	17'6''	17'6''	18'0''						1
			~					14-1	-		2	25'6''	26'6''	27'6''	28'6''	29'6''	16'0''	17'0''	18'0''	19'0''	20'0''	
and the second	TOTAL	WIDTH (inc	uding acce	(shnor 22							3	35'0''	36'6''	38'0''	39'6''	41'0''	25'6''	26'6"	27'6''	28'6''	29'6''	
(Cineta)	Torne				_		_				4	44'0''	46'6''	48'6''	50'6''	52'6"	25'6''	27'0''			31'6''	
TALL	AISLE	NUMBER C	F ROWS								5	53'0''	56'0''	59'0''	61'6''	64'0''	35'0''	36'6''	38'0''		41'0"	
IDTH	WIDTH	1	2	3	4	5	6	7	8	9	6	62'6''	66'0''	69'6''	72'6''	75'6"	34'6''	37'0''	39'0''		43'0''	
											7	71'6" 81'0"	75'6'' 85'6''	79'6"	83'6"	87'0"	44'0'' 43'6''	46'6''	48'6''		52'6'' 54'6''	
8'0''	19'0''	39'6''	60'0''	95'0''	115'6''	151'0"	171'6''	207'0''	227'0"	262'6"	R		03 0	639.0"			43.0		485'0"			- 361
	18'6''	39'0''	60'0''	95'0''	115'6''	150'6''	171'6"	206'6''	227'0''	262'0''		282'6		338'6''	373'6"	394'0''	C.	450 0				
8'6''	18'0''	39'0''	60'0''	94'6''	115'6''	150'0''	171'0''	205'6''	226'6"	261'0"		282'0''	316'6"	337'6"	372'0''	393'0''	427'6''		483'0''		538'6''	559
			60'6''	95'0"	116'0''	150'6"	172'0"	206'6"	227'6"	262'0''		283'0''	317'6"	339'0''	373'6"	394'6''	429'0''	450'6''	485'0''	506'0''	540'6"	561
8'6'' 9'0'' 9'6''	18'0''	39'0''	000	120																		565



Here are illustrations of parking lots, ramp garages, parking decks, underground garages and elevator garages.

Examples are drawn from large cities and small towns. They range from suburban shopping centers to down-town stores, from hotels to drive-in banks, from office buildings to perimeter parking lots connected by bus to downtown. Special attention is directed to plans for redevelopment of existing cities. There are suggested zoning requirements for parking and freight dock space.

PARKING is an essential handbook for architects, engineers and town planners, for merchants and bankers, for city officials and for members of Planning, Zoning and Park Commissions.

ABOUT THE AUTHORS

GEOFFREY BAKER is now engaged on a special research project concerned with urban regional growth. As consultant on commercial site development, traffic and parking he works with architects, developers, retail stores, city officials and universities.

BRUNO FUNARO, because of his untimely death in 1957, was not able to see this book through to completion. He had collaborated with Geoffrey Baker on two other books published by Reinhold-Shopping Centers and Motels. At the time of his death Mr. Funaro was assistant-Dean of the School of Architecture at Columbia University.

QUANTITY DISCOUNT. Because of the importance of this book to every architect-you will need several copies for your office-we are making this special offer. Order 3 copies of PARKING and pay only \$8.08 a copy-a saving of 15%.

Advance Reservation Coupon

Reinhold Publishing Corporation, Dept. 5383

430 Park Avenue, New York 22, N.Y.

In Canada: BURNS & MACEACHERN, 12 Grenville St., Toronto 5, Ontario Check here

- □ Please send me for my Free Examination a copy of PARKING by Geoffrey Baker & Bruno Funaro @ \$9.50.
- QUANTITY DISCOUNT. Please send me 3 copies of PARKING by G. Baker & B. Funaro at the special price of \$8.08 per copy.

If after 10 days I am not satisfied I may return the book(s) and owe nothing. Otherwise, I will send \$9.50 or \$24.24 plus a few cents for postage. (No cash-send check or money order.)

NAME	·······	
OFFICE		
ADDRESS		
CITY	ZONE	STATE

SAVE MONEY! Send your check now and we pay postage. Add 3% tax on N.Y.C. orders. And remember, books bought for business purposes are tax deductible.

This demountable Steel	
Parking Deck could re- duce garage cost dra- matically in places where local building codes will allow non- fireproof construction.	
Here's an example of how the architect,	

how th through how the architect, through careful plan-ning, was able to save \$250,000 by building a one story department store with roof parking. Although reinforcing the roof would cost \$10,000 and building two ramps (one shown two ramps (one shown here) would cost \$40,-000 there was a saving of \$300,000 since the one story building would not need elevators.



A split-level plan with overlapping floors house 210 cars on a corner plot 90 x 100 feet in down-town Atlanta, Georgia. The beamless, rein-forced concrete floors are cantilevered on four sides. This reduced the number of columns re-quired and avoided dis-turbance of buildings on adjacent lots.



The two one-way helical ramps, one at each end of the building are the most striking feature of the Autorimessa outside Venice, Italy. Customers drive their own cars on these ramps. Passenger elevators connect all floors.





This month in New York, there will be held the Design Awards Dinner at which presentation of the Awards and Citations illustrated in this issue will be made, and in addition, for the fourth time P/A's Design Awards Seminars will take place the following day. Previous Seminars have been in New Orleans, at Tulane University; in Philadelphia, at the University of Pennsylvania; and in Berkeley, at the University of California. This year, the discussion sessions will be at New York's Architectural League, with the sponsorship and participation of the three schools of architecture in the New York area-those at Columbia University, Pratt Institute, and The Cooper Union. The Seminars are attended by the architects who have gathered to receive their plaques; by local architects who are interested in critical analysis; and by students and faculty members of the schools of architecture involved as co-sponsors.

These have been successful discussions of architecture in progress (the only failure connected with them has been a mechanical one; last year, in California, the tape recording-supposedly engineered by one of the students-didn't record, and the many interesting discussions of urban design and architectural matters by the faculty members, architects, planners, and developers assembled there were lost to posterity) and the reasons for their success are not, I think, difficult to discover. I believe that they are: thoughtful presentation; prepared critical analyses; rebuttal and general discussion which then follows naturally; attendance at the meeting by people who are predisposed to discuss architecture analytically; a beginning of the criticism at a pretty high level of agreement, with a priori acceptance of basic assumptions in planning and architectural design (which I will explain in a minute).

Because it seems to me that the technique which has been developed for these Design Award Seminars could be successfully used in other architectural gatherings—local AIA meetings, regional, and even national conferences and conventions—it may be worthwhile to review them briefly.

First, it is interesting to me that the projects discussed, during a preliminary design stage, have been in many cases important work which either has been or will be published and documented as completed architecture. I have found the early analysis, while design still might be affected by the discussion (and sometimes has been) to be much more inter-

diary

esting than the final presentation. Curtis & Davis presented and defended their New Orleans Public Library, and their George Washington Carver High School; Yamasaki argued for his American Concrete Institute Office Building, as did Paul Schweikher for his Fine Arts Center for the University of Buffalo; Gyo Obata stood up for his firm's Benedictine Priory in St. Louis; Geddes, Brecher & Qualls defended their Delaware County Housing Project; Vernon de Mars was articulate against comment on his and Don Hardison's Student Center at the University of California; Bill Corlett spoke for the group designing the Olympic Arena in Squaw Valley; De Mars again, with Don Emmons and Bill Wurster and Jim Scheuer, stoutly explained the Sacramento redevelopment scheme; Arthur Fehr and Charley Granger and their engineers supported the Austin Air Terminal; John Warnecke spoke for his University of California Residence Halls. This year the four Award winners shown earlier in the issue -De Mars & Reay; Victor Lundy; Geddes, Brecher & Qualls; Thalheimer & Weitz-will similarly present and defend their projects against prepared criticisms.

The technique which we use for these Seminar discussions is simple but, we think, one that is important in their success. Briefly, it is that the architect of the project is given a short time to make his presentation (the design has already been studied somewhat by the participants, in the magazine; the long prideful explanation that so often is preliminary to discussions at other meetings is avoided by allowing at the most fifteen minutes, with slides or whatever is wished as props, for this part); then a prepared discussant is allowed an equal amount of time to present an analysis, which can be as complimentary or as critical as he wishes, but which must be analytical and reasoned (he has had full material on the project to study for some time before the gathering). This seems to be the key to the whole following interplay of the meetings, because by the time the discussant has finished, it has inevitably followed that the architect of the project wants to reply, and others who are attending begin to take sides, want to get into the argument, wish to make additional new points of their own, and discussion begins at once. In every case it has been necessary to cut off the subject and go on to the next one while hands are still reaching for permission to say more.

Perhaps there is a certain sadistic

pleasure in having the privilege to attack a fine designer; perhaps, on the other hand, there is a protective urge satisfied in being able to defend publicly someone one admires. I don't think there have been any hurt feelings, although at times critical comments and suggestions have been sharp. I remember that Paul Schweikher took refuge, after a series of "Why in the world did you do that?" type of questions, in a frank, "I like it that way" reply. I recall Minoru Yamasaki being the most gracious and winning defender of his thesis, in the face of some quite sharp comment by such colleagues as Gordon Bunshaft and Harry Weese.

In addition to specific critical commentary on individual projects, from time to time excellent discussion of broader matters has come about: when to use and when *not* to use green areas; the matter of the difficulty of recognizing scale in contemporary structure; the question of openness vs. closedness in public buildings; parking and traffic matters in relation to redevelopment and housing planning; articulation and informality in group building design; and many more.

Finally, I said earlier that one reason we feel these Seminar meetings have been worthwhile discussions is that the people attending begin their considerations and their comments at a fairly high-level point of agreement. In the first place, these are closed architectural gatherings and no one has to explain elementary matters of design and planning to some lay group. In the second place, by their nature they are design-conscious gatherings and no one has to spend time defending a contemporary approach against someone who wonders why the project is so "modern." In the third place, there is always a realization-it has been expressed again and again at the meetings -that these projects that are being critically discussed are the best of those submitted in the Design Awards program; that many of the five or six hundred others that did not win Awards from the Jury could be criticized in a very different, more elementary way; that here a fine architect with an Awardwinning job is willing to discuss ways in which, granting its excellence, it might be done even better, or at least with a different approach.

Numias H. Ceighton