



Eleventh Annual Design Awards

Installation: Robert Stuart Junior High School, Twin Falls, Idaho Architect: Nat J. Adams and Associates, Boise Floor shown: V-815 San Marino; V-817 Adriatic





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RENDERING BY HELMUT JACOBY

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Mechanical Engineer: Edward H. Sanford & Assoc., New Orleans Consulting Engineer: Edward J. Yoerger, New Orleans General Contractor: Hogan Bros., New Orleans Structural Engineer: Walter E. Blessey, New Orleans Ceiling Systems Contractor: Belou and Company, New Orleans

CREDITS: Hilton Inn, New Orleans, La. MORE INFORMATION: For complete data, information and specifications on Information and specifications on the new Armstrong Luminaire Ceiling System, contact your local Armstrong District Office or Arm-strong Ceiling Systems Contractor. For a free illustrated portfolio and photometric data,

write Armstrong Cork Co., 4201 Watson St., Lancaster, Penna. For more information, turn to Reader Service

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VOLUME XLV, No. 1



Cover Townhouses, First Design Award (page 100) Sketch: Thomas Dodd

Frontispiece JURY MEMBERS, ELEVENTH P/A DESIGN AWARDS. Photo: Joseph A. Griffith

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VIEWS

October P/A Applauded

Dear Editor: The OCTOBER 1963 P/A on mechanical systems examined an issue that has been of great concern to me for quite a while. I have been upset over the inability of the consulting engineering profession to meet the needs of architects. This concern has led me to convince my alma mater, Rensselaer Polytechnic Institute, to establish a pilot project in the development of integrated design solutions. The students will be given problems in which they are responsible for the development of basic mechanical systems as well as the structural system and architectural development. Hopefully, some of these students would begin to think about mechanical services in a creative way. In professional practice, they would either spur their consultants into thinking about systems rather than catalogue components, or maybe take on the responsibility for system development in their own offices. Your October issue will make a good textbook for this experimental problem. RICHARD SONDER New York, N. Y.

The Glory of American Architecture

Dear Editor: The article on the proposed N. Y. State Capitol (SEPTEMBER 1963 P/A), and especially the letters in your November issue, are hardly in keeping with a reasonable assessment of the project and its very close relationship to the forces of transportation and public movement used by the public today. A superficial visual criticism of a project in its early stages will cloud what functional and meaningful purpose the designer intends. This project, if rendered by Hugh Ferris, might have occasioned raptures from Mrs. Moholy-Nagy and her friends. It was rendered by Mr. Schwartz, because that is the kind of drawing that the public-who must pay for this project-best understands.

Although I spent several years in the office responsible for this project, I did not work on it at all but can attest to the very serious attitude of the entire staff, and of a genuine desire on the part of the principals and employees to produce meaningful work. They generally succeed. It is evident that this project was not designed to copy "an Italian Hill Town," but to serve an America that travels in automobiles. That Americans choose to do this is more the concern of the sociologist. Where Americans have chosen not to do this, architects *Continued on page 8*

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Continued from page 6

have given them admirable urban plazas as at Lincoln Center, Rockefeller Center, and Phoenix Mutual Plaza. The New York State Capitol proposal looks to me like a wonderful place to ride around in a car, do your business, or park and take short walks along the water. It recalls the majesty of the canal at Fontainbleau.

I don't think that we have to worry about low quality of architecture from this collaboration, which has provided us with such buildings as Rockefeller Center, Time-Life, Corning Glass, CIT, and Phoenix Mutual—buildings that we sometimes feel are the glory of American Architecture.

SIDNEY M. SISK Columbia, S. C.

Beneath the Visiting Moon

Dear Editor: Courage is often needed today to praise the old architectural masterpieces. Their admirers-and, more particularly, admirers of traditional design-must take heed lest they be variously accused of senility, regression to childhood fixations, or of possessing closed minds. What a travesty on the teachings of former years. Time was when the experimenter in abstract design might have been labelled something of an anarchist. Today, such an architect may be accused in some circles of leaning to the right. Against this paradoxical background, Dean Burchard's essay in the NOVEMBER 1963 P/A seems to freshen the air.

What is so special about the masterpieces of traditional architecture? A quick examination will show that most of them are places of worship or have a similiar lofty purpose, wherein the nobler—rather than the utilitarian—aspirations of the architects have captured the secrets of beauty for all time. Is anyone insensitive to the universal appeal of a colorful bird or flower or sunset? In the same way, the beauty of the Taj Mahal is immediately evident. Professor Burchard seems to have made a commendable selection of other examples to place in this category.

Why are so many absurdities appearing in modern architecture? Perhaps there is too much preoccupation with attempts to create out of curves and angles the most grotesquely abstract design that can find approval by the critics. On the other hand, perhaps the theme of simplicity is being overplayed. This may be due to a number of causes, including overemphasis of its relation to beauty; lack of time, ability, or effort on the part *Continued on page 14* IS THE SIMPLEST SPECIFICATION THE ONE YOU'RE MOST APT TO FORGET?



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JANUARY 1964 P/A

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Continued from page 8

of the architect; financial limitations of the backer; profit motives in short-lived styles; submission to conformity and mass-materialistic thinking; escape from the growing complexities of life. Perhaps there is even too much concern with achieving the greatest economy of space, coupled with the ideal fitting of form to function—or possibly too little.

Dean Burchard's essay, like many recent opinions of your contributors and readers alike, seems to point up the need to re-examine where architecture is heading, what its future requirements will be, and how the virtue of the old masters can be applied to help solve these problems.

ABRAHAM BASKIN Brooklyn, N. Y.

Biased Viewpoint

Dear Editor: It is always interesting to read constructive or invigorating criticism. A docile and uncritical public can never be conducive to a high standard of architectural design. Nevertheless, one wonders why Sibyl Moholy-Nagy took such a biased viewpoint in her recent letter to P/A criticizing the Albany proposal (NOVEMBER 1963 P/A); it was distressingly unprofessional. The reader can sense that aspects other than architecture were the subject of the criticism. This hardly encourages confidence in such a critic.

We should welcome development of projects of the scope of the New York State Capitol, and not make judgments based on the superficial reactions to rendered views.

> T. M. LESKI Syosset, Long Island, N. Y.

American Architecture: Progressive or Decorative?

Dear Editor: It seems to me that our respective notions as to what constitutes a progressive architecture have become irreconcilable.

P/A has become increasingly concerned with decorative aspects of architecture, whereas I feel that we should be concerned principally with problems and their attempted solutions. This seems to me to be true with respect to social problems, such as housing and town planning, as well as technical, artistic, and philosophical problems.

Architecture that has become merely decorative is to me a sign of a certain decadence. I do not believe that your journal speaks for all American architects, but I think it represents a section that has drifted from rationality into a vague realm of sentimentality and lack of coherence.

Architecture represents one of the ways in which a culture, a civilization, the philosophy of a society, may be expressed in a crystallized and disciplined way. As expressed in your journal, it conveys, I am afraid to say, the intellectual degradation of a certain section of American society, a retreat from the collective mind to the individual, the subjective, the episodic. This retreat betrays some of the most brilliant and precious acquisitions of the American heritage. Above all, it has no future; it shows no way, save an arbitrary and sentimental play with forms that loses all meaning after the first impression, being without permanent or collective justification.

I write this letter without animosity, but in the hope that my views will stimulate discussion of the basic problems and ideas. I know, from my many contacts with architects both here and abroad, that I am not alone in the views I have expressed here concerning the state of architecture, as expressed in your journal, among others. MICHAEL KUHN

Architect and Town Planner Tel Aviv, Israel



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These weather-stable panels are constructed by reinforcing Durez[®] Hetron fire-retardant polyester resin with glass fibers and bonding it to "Tedlar" PVF film.

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DUREZ PLASTICS DIVISION

28

JANUARY 1964 P/A



Weldwood doors faced with sliced red elm at Lutheran Hospital, Baltimore, Md. Doors have stainless steel angles and stainless steel stretcher plates. They were factory machined to fit the opening and for the hardware – and surfaced with Weldwood Permagard® for extra protection against abrasion, stains, and the cleaning solutions essential for hospital sanitation. Permagard is a nonporous plastic-resin coating which is four times as wear-resistant as plastic laminates. Is easily washed clean with a damp sponge. Dramatically reduces door maintenance in high-traffic areas of any building. Architect: The Office of James R. Edmunds, Jr. Installer and general contractor: Kirby & McGuire Inc., Baltimore, Md.

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Heavy rains driven by high winds howling across Lake Erie from Canada create tough design problems for a lake-front building like this. Despite the precautions taken in the original design, water did get through the north wall of Marine Towers Apartments in Lakewood, Ohio, during extreme conditions.

The problem was solved by facing the entire wall with Weldwood® Glasweld® sheets. They were applied in panels, 2' x 4' and 4' x 4', held in place by anodized aluminum sections.

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This shopping center, commissioned by Zonolite, was designed by Stanley Tigerman of Tigerman and Koglin, Chicago architects. It was engineered by Chicago consulting engineer, Norman Migdal.

The structure makes the economy derived from concrete block construction even more beneficial by the use of Zonolite Masonry Fill Insulation in the block cells.

The added benefits gained from this material are twofold.

1) Lower construction costs. Initial material and installation cost for this insulation totals about 21¢ per sq. ft. for the 12" block used. The material is poured from the bag directly into the block cells. This compounds the savings on construction costs because interior walls do not need finishing. The interior is the same block that is exposed on the exterior. The interior surfaces stay warm and dry be-



cause Zonolite Masonry Fill Insulation is water repellent. Interior paint won't bubble or crack off. Another saving is made because a smaller heating plant may be used (see chart).

2) Lower operating costs. Zonolite Masonry Fill Insulation reduces heating and cooling costs approximately \$2,480 per year.

It actually costs less to install the material than not. According to consulting engineer Migdal's figures, the annual return on the client's investment in the insulation per sq. ft. of wall is 140%, compared with the annual mortgage payments plus operating costs figured without the insulation. Mr. Migdal used the formula at left below.

A number of other factors also contribute to the overall practicality of using Zonolite Masonry Fill Insulation. Among them, is its uncommon sound dampening capability. Loudness of sound transmitted through the walls is reduced 20% to 31%.

Additional facts worth investigating are contained in our Bulletin MF-83. Write Dept. PA-14, Zonolite Division, 135 South LaSalle Street, Chicago 3, Illinois.



DESIGN CONDITIONS		WINTER HEAT LOSS IN BTU/HR ASSUMING 75°F INDOOR —10°F OUTDOOR		SUMMER HEAT GAIN IN BTU/HR ASSUMING 78°F 50% RH INDOOR 95° FDB 70% FWB OUTDOOR		
	WITHOUT MASONRY FILL	WITH MASONRY FILL	WITHOUT MASONRY FILL	WITH MASONRY FILL	WITHOUT MASONRY FILL	WITH MASONRY FILL
WALL	12" LT. WT. CONC. BLOCK	12" LT WT. CONC. BLOCK WITH FILL	1,438,800	719,400	252,800	126,400
SOLAR AND TRANSMISSION	ROOF-2" INSULATION OVERHANG 4" BATT GLASS-HEAT ABSORBING 2" EDGE INSULATION		6,291,200	6,291,200	2,002,000	2,002,000
INFILTRATION & VENTILATION	27,900 CFM HEATING 23,500 CFM COOLING		2,570,000	2,570,000	418,000	418,000
LIGHTS			-	-	717,000	717,000
PEOPLE			-	-	70,400	70,400
TOTAL	1. 2. 3.		10,300,000	9,580,600	3,460,200 or 288 Tons	3,333,800 or 278 Tons
PERCENT SAVINGS WITH MASONRY FILL		10,300,000-9,580,600 10,300,000 × 100 = 7.0%		$\frac{288-278}{288} \times 100 = 3.5\%$		

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*Based on 6113 degree days. Gas at 7 cents per therm. Absorption. 70 hrs/week of ventilation operation.


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For more information, turn to Reader Service card, circle No. 390

JANUARY 1964 P/A



IBM Building, Kalamazoo, Michigan. Architect: Ezra Gordon, Jack M. Levin & Associates, Chicago, Illinois. Contractor: Miller-Davis Company, Kalamazoo, Michigan. Concrete Panel Manufacturer: Crest/Schokbeton Concrete, Inc., Lemont, Illinois.

GORDON, LEVIN & ASSOCIATES specified precast white concrete for the 6,650 square feet of curtain walls of this Kalamazoo office

building. The 8-by-15-foot panels, including the picture-frame units, are made with ATLAS WHITE portland cement with an aggregate of silica sand, blended with white and gray quartz. In addition to being aesthetically pleasing, the concrete panels support the roof of the structure. I Today, more architects are recognizing the structural as well as the decorative qualities of precast white concrete. One of the most versatile of building materials, it can be cast in a great variety

of sizes, shapes, colors and textures. Installation is fast, maintenance costs are low. ■ For specific information, consult your local precast concrete manufacturer. For a 32-page brochure titled "White Concrete in Architecture," write Universal Atlas, 100 Park Ave., N. Y., N. Y. 10017.

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Lee Hanley, St. John's Abbey

New dimensions in Pozzolith concrete at St. John's Abbey

St. John's Abbey, St. John's University, Collegeville, Minnesota. Design: Marcel Breuer. Project Architect: Hamilton Smith. Structural Engineers: Weisenfeld, Hayward and Leon. Structural Consultant on Theory: Pier Luigi Nervi. Coordinators for Owners: Traynor and Hermanson, Architects. Project Coordinator: Val Michelson. Contractor: McGough Construction Co. Construction Superintendent: Ted Hoffmeyer. POZZOLITH Concrete: St. Cloud Ready-Mix Concrete Co.





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The reinforced concrete bell banner is a huge plane, only 2½ feet thick at its base, that cantilevers upward 112 feet from supporting parabolic cross vaults.

PozzoLITH provided greater compressive strength, greater bond-to-steel strength, more durable finish, while it reduced drying shrinkage and prevented cold joints during placing operations.

² surface texture

Sidewalls and roof of the Abbey church are a series of reinforced concrete folds, untreated and unadorned. The folds enclose a volume of more than a million cubic feet. Maximum interior clear height is over 65 feet, overall width is 165 feet.

POZZOLITH contributed to the workability and cohesiveness of the mix to help create the distinctive architectural finish which is a faithful reproduction of the sharp corners and surface characteristics of the wood form boards.

3 plasticity and placeability

The north facade of the Abbey church is a selfsupporting geometric tracery consisting of 540 cast-in-place concrete hexagons.

POZZOLITH increased plasticity and workability with a minimum of water in the mix, and produced a weather-resistant surface.

For complete details on *all* the beneficial qualities of PozzoLITH in architectural concrete, please call your local Master Builders office. *THE MASTER BUILDERS COMPANY, CLEVELAND 18, OHIO. A CONSTRUCTION MATERIALS DIVISION OF* **MARTIN MARIETTA**

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*POZZOLITH is the registered trademark for The Master Builders Co. ingredient for concrete which provides maximum water reduction, controls rate of hardening and increases durability. For more information, turn to Reader Service card, circle No. 364



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TEDLAR* PVF Film is a tough, long-lasting filmfinish. Howlongwillitlast? We frankly don't know, because we haven't been able to wear it out yet. However, we predict that when TEDLAR is properly



bonded to a stable material, it might last up to 25 years or more without re-finishing. TEDLAR also provides outstanding resistance to fading and chalking. To keep your next building new-looking longer, consider these five products: 1) ARCHITECTURAL CURTAIN WALL consists of two fiberglass panels laminated to an aluminum frame assembly. TEDLAR on these panels prevents erosion, retains color and light-transmission, stands up to weather. Assembly shown is made with "Filoclad" fire-resistant panels by Filon Corporation.

2) ARCHITECTURAL RE-FACING PANEL gives existing buildings an attractive new exterior with long life, low maintenance, long-term freedom from painting. Shown: "Egyptian" pattern, postformed in aluminum by Architectural Manufacturing Company of America, who can supply accessory framing and installation components as well as re-



the film-finish that may keep buildings looking new for up to 25 years

facing panels in a variety of sizes and designs, all surfaced with TEDLAR.

ONE-PLY ROOFING MEMBRANE surfaced with TEDLAR, covers any slope, any shape from folded plate to compound curves. Name: Ruberoid T/NA 200. Applied with conventional roll-roofing techniques. Pliable, very lightweight, highly reflective. Stays white through any weather.

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TEDLAR seals joints. Shown here: rigid pipe insulation. 5) METAL WALL PANELS offer modern architectural look with excellent insulation. Surface of TEDLAR gives allweather protection and decoration. Shown: "Shadowall"t Type D, roll-formed aluminum panel by Elwin G. Smith Company. Other types available (insulated or uninsulated; factory- or field-assembled) with finish of TEDLAR.

MORE INFORMATION. For more details about any of these products or for more information about TEDLAR, write E. I. du Pont de Nemours & Co. (Inc.),



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Precast White Concrete Curtain Walls...



During construction of a new Collins Radio manufacturing plant in Richardson, Texas, the builders put up 162 square feet of exterior and interior walls with every swing of the crane. How? By using pre-cast, contoured white concrete curtain wall panels. Each panel was 6 feet wide by 27 feet high and was made of Trinity White and white marble aggregate.

Precast white concrete curtain walls gave the designers these four advantages—One—a building of startling beauty. Two—speedy, economical construction. Three—a maintenance-free exterior. Four—a building simple to alter as plant expansion is needed. Additional panels can be produced at any time from the original molds.

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



Sculpture garden of Breuer's Whitney Museum will draw attention and proclaim museum's function.

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For more information, turn to Reader Service card, circle No. 381

Strong Breuer Design for Madison Avenue

NEW YORK, N.Y. There will be no mistake when approaching Marcel Breuer's new Whitney Museum of American Art at Madison Avenue and 75th Street that this is one of the run-ofthe-mill apartment house or curtainwalled office buildings prevalent in the area. For Breuer has designed a powerful shape for the museum, one that, in his words, "is an attempt to form the building itself as a sculpture —a sculpture with rather serious functional requirements."

The pedestrian or visitor is drawn into the Madison Avenue entrance of the building by the partially belowgrade, open-air sculpture garden, which immediately announces the building's purpose. Crossing a bridge to the entrance, he finds himself in a lobby and exhibition space, whence he may descend a circular staircase to the indoor sculpture gallery and adjacent cafeteria, or take an elevator to three floors of permanent and circulating exhibition space (sections, right). Each gallery floor has two or three spaces for the permanent collection and a large gallery for temporary exhibitions. All permanent galleries are on the 75th Street side. Breuer is working on a flexible ceiling grid, lighting, and partition system for the galleries.

The main façade of the museum suggests an inverted ziggurat, not only producing a sculptural shape, but also giving a sense of protection to the open sculpture court below. Since windows are functionally unnecessary in the building, they occur only where psychologically appropriate in opening the galleries to the outside. Their free form relieves the profile's starkness.

Breuer's Co-Architect is Hamilton Smith; Consulting Architect: Michael Irving. Structural Engineer: Paul Weidlinger; Mechanical Engineer: Werner, Jensen & Korst; Lighting Consultant: Stanley McCandless.











News







Religious Architecture Since World War II

NEW YORK, N.Y. On January 14, a major exhibition of religious architecture opened at the Pepsi Cola Gallery in New York. Titled "Churches and Temples: Postwar Architecture," the show, sponsored by the New York Chapter AIA, will be circulated throughout the country for two years by the American Federation of Arts after it closes in New York.

Heart of the exhibition is 21 churches and temples from this country and abroad chosen from over 160 submissions by a board of selection consisting of Marcel Breuer, Lathrop Douglass, Percival Goodman, P/A Editor Jan C. Rowan, and Maurice Lavanoux, Editor of *Liturgical Arts*. According to the catalog that Pepsi Cola furnished for the show, "This exhibition represents not a picture of *all* significant postwar churches and temples, but [the board's] opinion of the best architecture from the buildings submitted for its review. As such, however, it does furnish the public with a view of what is happening in religious architecture today." "In this age," the catalog continues, "we can no longer profitably repeat past styles, but must find concepts for houses of worship that are meaningful for congregations of today and tomorrow."

Among the religious structures shown in the exhibition are: (1) "23 de Enero" Parochial Church, Caracas, Venezuela, by Carlos Raul Villanueva; (2) Congregation Shaarey Zedek, Southfield, Mich., by Percival Goodman

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and Albert Kahn Associates; (3) Chapel of St. James the Fisherman, Wellfleet, Mass., by Olav Hammarstrom; (4) Christ Church Episcopal, Woodside, Calif., by Clark & Beuttler with Charles W. Moore, Alan E. Morgan, and Jorgen Elmer; (5) Newport United Presbyterian Church, Bellevue, Wash., by Grant, Copeland & Chervanek; (6) St. Johann von Capistran, Munich, Germany, by Sep Ruf; (7) Priory of the Annunciation, Bismarck, N.D., by Marcel Breuer; (8) St. Barnabas Chapel, Greenwich, Conn., by
Philip Ives with G. E. Kidder Smith;
(9) Church of the Good Shepherd,
Calif., by Germano Milono; (10) Dixwell Ave. Congregational Church, New
Haven, Conn., by John M. Johansen.
Not shown are: Cathedral, Brasilia,

Not shown are: Cathedral, Brasilia, Brazil, by Oscar Niemeyer; Roofless Church, New Harmony, Ind., by Philip Johnson Associates; Hospital Chapel, Moline, Ill., by Henry Hill; St. John's Abbey, Collegeville, Minn., by Marcel Breuer; Church at Tampere, Finland, by Reima Pietila; Central Lutheran Church, Portland, Ore., by Pietro Belluschi; Synagogue, Lakewood, N. J., by Davis, Brody & Wisniewski; First Unitarian Church of Fairfield County, Westport, Conn., by Victor A. Lundy; Presbyterian Church, Lansing, Ill., by Edward D. Dart; St. Patrick's Church, Oklahoma City, Okla., by Murray-Jones-Murray; and Temple Sinai, Stamford, Conn., by Sherwood, Mills & Smith. The last three were presented in the NOVEMBER 1963 P/A.



POST OFFICE TO REPLACE SALOONS, ANTIQUE SHOPS



The projected Franklin D. Roosevelt Postal Station for Manhattan's Upper East Side will be precedent-setting in at least one respect: it will be the first postal building to utilize upper air rights. The design, by Architect Max O. Urbahn, proposes a 42-story building consisting of a 4-story base housing postal operations and a 38-story tower rentable for office space. The building will front on the east side of Third Avenue between 54th and 55th Streets, and will be set back to create an arcaded, tree-lined plaza along the entire block front. The walls of the Station above the ground floor will be windowless and constructed of gray brick framed with anodized aluminum; the tower will be of precast, hooded concrete panels. An outdoor garden restaurant has been suggested for the post office roof.

Postmaster General John A. Granouski is not irrevocably committed to the 38-story tower; its final height will depend on contractors' bids. However, the base/high-rise tower formula will be basic to future urban postal design, with tower space available for school, hospital, or office use.

CAMDEN PLAN GOES INTO EFFECT

CAMDEN, N.J. The notable study by Columbia School of Architecture students of Camden (pp, 64-65, APRIL 1963 P/A), proposing that three elementary schools be used as catalytic elements for community development, is now well on the way to implementation. Philadelphia Architect Alfred Clauss has designed for construction this year the Lanning Square Elementary School, basing his program on the same precepts as the Columbia study —namely, the functioning of the school





as a neighborhood education center rather than just as an 8:30 to 3:30 elementary school. After the children leave, the building will remain open for adult education and community activities.

The school is planned around a twostory-high central hall. Classrooms from kindergarten through the sixth grade are grouped at the corners of the building on two levels, with two open courts located at either side of the central area. Run-down residential and warehouse buildings will be removed from the site, leaving existing basements. These will be utilized to create a split-level entrance to the school—up slightly to the upper floor, down slightly to the lower floor. Play areas will occur below grade for enforced safety. The roof will also be used for play areas.



Tricky Tower for Teachers

SEATTLE, WASH. A building complex that will give somewhat the same feeling of rough sensitivity as Saarinen's Stiles and Morse colleges at Yale is proposed for the campus of the University of Washington. It is Frederick Morgan Padelford Hall, an office building for the administration and faculty of the Arts and Science College, designed by Walker & McGough of Seattle. Tenants will include the departments of English, Mathematics, Romance Languages, Linguistics, and General Studies, plus the offices of the Dean of Arts and Sciences and Assistant Deans.

The architect found that the faculty resisted "the regimentation that is normally found in office structures," instead considering their headquarters as areas of study and contemplation in addition to student counseling and day-to-day faculty work. The architect, therefore, with the aid of a crescent-shaped site, designed a building (really three closely connected structures) providing offices varying considerably in shape, but averaging 120 sq ft in size (*plan, right*). Differing corridor widths will create niches where students may wait for appointments with faculty members of the college. Substructure of the building will be concrete slab construction with exterior reinforced brick bearing walls above.

Unfortunately, a requirement of the program was to provide 700 parking spaces. The architect thus has had to devote a natural amphitheater at the rear of the building to automobiles. Making the best of a bad situation, Walker & McGough have designed a concrete terrace structure dotted with tree clumps and approached by steps and moving stairs.







VARYING APPROACHES FROM CAMPBELL & WONG

SAN FRANCISCO, CALIF. Campbell & Wong, long known for its sensitive treatment of the Northern California regional style, has in the past few years shown an interest in exploring other avenues.

Two of the firm's most recent designs illustrate this broadening spectrum admirably. One is the recreation building for the Hayward Area Recreation and Park District in San Leandro (top); the other is the cafeteria building at California State College in Hayward (bottom).

The recreation building will be in a public park surrounded by rather dismal tract housing, and consequently has been given a distinctive cellular arrangement of hexagonal areas topped by shingle roofs composed of converging planes. The buildings will sit on a deck extending into a lagoon.

The college cafeteria will be constructed of precast, prestressed concrete channels measuring 2' deep by 8' wide at the floor and 9' wide at the roof. They will span 48' over dining and serving areas; and will be continuous over two-story-high precast columns to provide overhangs where needed. Openings between will be used for horizontal runs for electrical and mechanical equipment, tracks for partitions, and skylight strips in the roof.







Model 6773 — Hour indicators in aluminum, brass or black; centers in white or aluminum. 13" or 20" diameter.

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Distinctive Howard Miller Built-in Clocks are available in polished or satin brass; copper, aluminum, chrome, black, white and five new appliance-matching colors. In addition Howard Miller maintains a special service for architects and designers to build clocks to special order. Manufactured around our self-starting synchronous movement, Howard Miller clocks in sizes from 6" to $26\frac{1}{2}$ " diameters are extremely reliable, easy to install, and may be ordered with secondary mechanism enabling them to be connected with a master clock system. Or, they can be furnished with a remote reset control. UL Approved.

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Model 6720 Battery operated in satin brass, copper, chrome or black finish. 9" to 12" diameter.



NOW . . . wireless built-in electric clocks with battery operated jeweled movements

All new ... a complete series of quality Howard Miller electrics which operate a year or more from one standard flashlight battery. The entire self-contained clock movement drops into a wall in minutes without wiring ... enables the estimator to shave cost, at the same time you offer the obvious appeal of built-in timekeeping. Quality 7-jewel movement for lasting performance. A broad selection of styles and colors. Installation requires a single cavity, $2\frac{5}{2}$ diameter, x $2\frac{5}{8}$ deep.



HOWARD MILLER CLOCK COMPANY BUILT-IN DIVISION / ZEELAND, MICHIGAN

For more information, turn to Reader Service card, circle No. 329

Model 6770 Ring in polished chrome or brass with black post and center disc; chrome or brass hands. 14" diameter.

Equal Opportunity

The New York State Association of Architects Convention in October heard and unanimously passed a resolution proposed by Architect Max O. Urbahn for the New York Chapter AIA. The resolution read: "Whereas the members of this Convention assembled feel that there can be no conflict between any tenets of the N.Y.S.A.A. and the patently justified aspirations and struggles of minority group persons to secure for themselves full and unqualified participation in every facet of the democratic process; And whereas the N.Y.S.A.A. realizes this to be the time that its position of leadership be reaffirmed.

"Now, therefore, be it resolved that

the N.Y.S.A.A. take appropriate action in the development and support of a program within the profession which will insure in training and in practice equal opportunities and increased incentives for all people."

Peace Corps Openings

There are opportunities for architects, engineers, draftsmen, and surveyors in Peace Corps projects in Tanganyika and Colombia, according to Director of Recruiting Robert L. Gale. Volunteers would exercise considerable responsibility over public works programs sponsored by the host country, and also teach in technical schools or universities. For further information, contact Gale, Division of Recruiting, Peace Corps, Washington 25, D.C.

"BRI Can Do It"

In a reply to a proposal by John Eberhard, Consultant, Office of Science and Technology of the U.S. Department of Commerce, that a National Building Alliance be established, Architect Leon Chatelain, Jr., noted that another organization is not needed and the Building Research Institute, of which he is president, can do the job very well. "With increased support from the building industry, and greater participation in institute activities," Chatelain said, "BRI could then assert its natural leadership role in the field of building research and development."



photo: Marvin Rand

Still Another Destruction Threat

The attrition of America's architectural heritage continues with news that the Los Angeles County Board of Supervisors, sensitive as similar boards in most cities to the spell of the real estate hog and the wrecking crew rather than the need for architectural and cultural continuity, has rezoned for high-rise housing an area of Hollywood containing Irving Gill's historic Walter Luther Dodge House (1916, years before such a landmark as Corbu's Villa Savoye of 1928-30). This, of course, means that the land sharks, promised a substantial increase in real estate values, will Blitzkrieg the area like Attilla's hordes. leaving little standing-probably including the Gill masterwork. Protests have been made by the Southern California chapter AIA, USC Dean of Architecture Sam Hurst, and Lewis Mumford. The Los Angeles County Museum of Art and the American Society of Landscape Artists gave pledges of support for the house. All to no avail.

The house, described by Esther McCoy in *Five California Architects* (Reinhold, 1960) as "the best preserved of all Gill's great houses today," is currently used by the Board of Education for training domestics. Mrs. McCoy wrote of the house: "In this reinforced concrete house, Gill accomplished what he had started out to do in 1908, when he first began his study of concrete construction as an art. It was to bring concrete to the architectural importance of stone. The Dodge house was not only a fulfillment, it was also a promise of change."

Back to the Old Drawing Board

Apocryphal story going the rounds in Cambridge, Mass., courtesy of Paul Feloney, architect who keeps an eye on things in those precincts:

Corbu to Sert after inspection of Harvard's Visual Arts Center, "José, it's beautiful. *Mais, ma foi,* it is upside down!"

You Said It

Richard Rodgers has written the official song for the New York World's Fair. Its title "Fair is Fair." We agree completely.

Schokbeton Franchise Granted in California

Rockwin Prestressed Concrete Corporation of Los Angeles has been granted exclusive franchise to produce Schokbeton precast concrete in California. In February, 1963, Schokbeton Products Corporation became a subsidiary of American Metal Climax, Inc., and is operated under Kawneer Division of the Corporation. Kawneer hopes to provide an entire wall composed of precast concrete and/or metal and glass, and place full responsibility in the hands of one contractor for the material erected.

Berkeley Chemists to Go Underground

Anshen & Allen's addition to the chemistry complex of University of California, Berkeley, creates maxi-



mum space with minimum site-clutter. Two out of five stories on the new concrete structure (*foreground*) will be located below a broad plaza. Placement of laboratories below ground will facilitate control of temperature and vibration during exacting experiments. Terra cotta screens and panels have been selected to harmonize with similar motifs on the adjacent Latimer Hall and with red-tile roofs of other buildings on the plaza.

Tent for Worship

An ancient tent interpreted with contemporary materials has been designed by Kivett & Meyers as a sanctuary addition for Congregation B'nai Jehudah, Kansas City. A helicoidal shape—the ceiling of the structure—



In the interior, smooth surfaces, a monochromatic scheme, and placement of the choir behind an acoustically transparent screen will reinforce the





Canadian Memorial to JFK

A memorial to the late John F. Kennedy will be erected in Fredericton, Canada—the town where Kennedy, then a U.S. Senator, received an honorary degree from the University of New Brunswick. Triangular roof of the reinforced concrete shelter will slope from a height of 12' at the front to 7' at the rear column. A commemorative plaque placed on the rear column will be illuminated through a vent in the roof by day and with artificial lighting by night. Design is by Architect D. W. Johnson. feeling of unity. Indirect lighting will be recessed at the continuously climbing ceiling line. The sanctuary—to seat 650–1000—will be connected to and deliberately contrasted with existing educational facilities. Ancilary rooms will be located below the sanctuary.

Year of the Fair

Here are three reminders that Flushing Meadows is about to burst into an incredible world of contrasts. After a flurry of design proposals comes this final version of the Israel Pavilion. Since withdrawal of the Israel Govern-



ment (see original P/A Design Award winning, government-sponsored design, page 130), the American-Israel World's Fair Corporation, a private organization, became sponsor of this design by Ira Kessler & Associates. Inside the redwood and mahogany-faced spiral will be an exhibit of 4000 years of Israel's history, a shopping mall, and a snack bar.

Design for SKF Industries by Pisani



& Carlos places an ovate theater below grade and seeks to emphasize "motion" in visible exterior elements. Parasol and tower are supported on three concrete buttresses by tinted glass sections.

Continued on page 60





1. To insulate masonry walls economically:

2. Remember Styrofoam[®] FR insulation board and specify it. It prevents moisture absorption and migration; keeps its low "k" factor (0.26) permanently.



5. Take wallboard. (No vapor barrier, no furring. You get a solid, insulated wall at almost the same cost as a furred, uninsulated wall.)



6. Styrotac goes on. Take your last look at Styrofoam FR.





3. Spot-apply Styrotac[®] bonding adhesive.

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7. Wallboard goes up. Finished wall (8-in. concrete block, 1-in. Styrofoam FR) has "U" factor of 0.16.

8. OK. Now forget it. Styrofoam FR won't absorb water, won't let moisture pass, won't need attention —ever! Any questions? See Sweet's Arch. File 10a/Do. The Dow Chemical Company, Midland, Mich.



Continued from page 57

Conspicuous throughout the fairgrounds will be a spinning example of contemporary trademarkism: an 80-ft



whitewall tire on which riders will get their best U.S. Rubber-sponsored ferris-wheel view of the Unisphere.

The Fox Falls

The San Francisco Fox, monument of the movie palace era, has tumbled, making way for NATSUN, a 36-



story office structure by Victor Gruen Associates. Development of the Fox site and of a lot diagonally across Market Street will extend over five years; estimated cost is \$25,000,000.

Personalities

Chosen as architectural consultant for the San Francisco Bay Area Rapid Transit District, DONN EMMONS, of Wurster, Bernardi & Emmons, hopes to create an over-all design concept which will "lure people away from their cars" . . . GEDDES-BRECHER-QUALLS-CUNNINGHAM design of Philadelphia's Police Administration Building recently received two honors: the Philadelphia-AIA Gold Medal

(for best all-around design) and the Benjamin Franklin Medal of the Producers Council (for best use of "quality materials") . . . Homes by GEORGE NEMENY, BRUCE CAMPBELL GRAHAM and LEONARD FELDMAN & HELMUT JACOBY were cited in the New York-AIA house competition; Nemeny's first-award design of a country house features a two-story central living area with sliding walls at the lower level. Judges for the competition were Ilse Meissner Reese, Associate Editor, P/A; Professor John H. Callender, Pratt Institute School of Architecture; Ulrich Franzen, AIA; and Richard Stein of the Chapter's Executive Committee . . . The New York Chapter-AIA Brunner Scholarship Committee awarded \$5000 to SIDNEY COHN, Seattle, to study the use of legislative action by European governments in the control of design standards . . . Competition for design of a new Boston Architectural Club will be sponsored by The Boston Architectural Center, this country's oldest architectural evening school. WALTER F. BOGNER, Professional Advisor, 320 Newbury St., Boston, will supply information to interested Massachusetts architects . . . University of Illinois exhibited the work of alumnus MAX ABRAMOVITZ during November and December . . . "Archangel," a major sculpture for Philharmonic Hall, will be executed in bronze and Monel metal by SEYMOUR LIPTON . . . GEORGE A. HINDS has joined the College of Architecture and Art, U. of Illinois; Hinds, as Planner for Eastwick Redevelopment Project, shared a 1960 P/A Design Award with Geddes-Brecher-Qualls (the project unfortunately was abandoned in favor of an inferior concept) . Elected President of the Association of AIA Student Chapters at its Ninth Annual Student Forum was JOSEPH E. MORSE, Howard University student from Tuskegee, Ala. . . . Honored at the recent convention of AIA-Gulf States Region were Auburn University President RALPH B. DRAUGHON, for his interest in architectural education, and Sen. LISTER HILL, co-author of the Hill-Burton program. . . Newly appointed as Professional Consultant to the Building Research Advisory Board is HAROLD D. HAUF, Los Angeles architect; Hauf was formerly with Charles Luckman Associates, Inc. . . . PETER L. HORNBECK joins Harvard Graduate School of Design staff as Assistant Professor of Landscape Architecture; Hornbeck was previously on the University of Illinois staff . . . REGINALD R. ISAACS has resigned as Chairman of City and Regional Planning of Harvard Graduate School of Design and will take a sabbatical during the spring term to complete research on the planning contributions of Walter Gropius; Isaacs will resume teaching at Harvard in September 1964. WILLIAM W. NASH, Jr. has been appointed new Chairman of the School . . . ROBERT C. PALMER, president of The R. C. Mahon Co., Detroit, will serve as president for American Institute of Steel Construction. . . GEORGE O. RAD-FORD has been elected president of the Architectural Aluminum Manufacturers Association; Radford is president of Radco Products, Inc., Calif.

Calendar

Third Congress of the International Council for Building Research, Studies, and Documentation has been scheduled for August 23-29, 1965, in Copenhagen; Congress focusing on advantages and problems of expanding industrialization will be open to public. Information is available from General Secretary, P.O. Box 299, Rotterdam, The Netherlands . . . Theme for 1964 National Engineers' Week, February 16-22, will be "Creative Engineering: Design for Tomorrow" . . . National Conference on Church Architecture, scheduled for Dallas, April 7-9, will feature exhibits on church architecture and religious arts, addresses by Felix Candela and Edward Sovik, and a performance in the FLLW Kalita Humphreys Theater. Architects wishing to submit post-1959 religious design for exhibition should contact Mrs. Hazel Anderson, Executive Secretary, 1346 Connecticut Ave., N.W., Suite 1123, Washington 6, D.C. . . . The American Society of Landscape Architects will hold its annual meeting at the Hotel Baker, Dallas, from June 28 to July 1 . . . The Annual Convention and Exhibit of the Associated General Contractors of America will be held in Las Vegas, March 2-5.

Obituaries

Charles G. Ramsey, self-taught architect and author of Architectural Graphic Standards, died December 10. Ramsey immigrated from Dublin in the early 1900's and practiced architecture in N.Y.C.

John Wellborn Root of Holabird & Root, Chicago, died October 24. Designs by Root's firm included Chicago's Soldier Field, Board of Trade building, and Riverside Plaza.

Roy Childs Jones, Professor and Head Emeritus of the School of Architecture, University of Minnesota, died on October 29.



LIPTON WISH-BONE SALAD DRESSING PLANT, Independence, Mo. Exposed aggregate panels—80 in all—form walls of plant offices. Owner: THOMAS J. LIPTON, INC., Englewood Cliffs, N. J. Architects: A. M. KINNEY & ASSOCIATES, Cincinnati, Ohio. General Contractor: SHARP BROS. CONTRACTING CO. Masonry Contractor: W. B. ROYSE MASONRY CO., INC., Stilwell, Kans. Stone Setting: RALPH MCCLAIN. Transit Mixed Concrete: STEWART SAND & MATERIAL CO. Precast Lightweight Concrete Roof Channels: CARTER-WATERS CORPORATION. "Incor" Concrete for Panels: READY MIXED CONCRETE COMPANY. Concrete Building Units: SLATON BLOCK CONCRETE PRODUCTS, INC. (all of Kansas City, Mo., unless specified otherwise)

Concrete panels – precast with Incor[®] – featured in new Lipton

plant How to combine architectural distinction and rugged practicality? More often than not, modern concrete is the answer. For proof, consider Lipton's new \$1.5-million Wish-Bone Salad Dressing Plant at Independence, Missouri.

The use of precast concrete panels offered decided advantages—speed of construction, economy, beauty, durability, fire-safety and a minimum of maintenance. And, to meet future expansion requirements, one side of the plant can be removed by lifting the panels out of their flanged frames and extended outward as far as desired.

All 260 panels in the Lipton plant were precast using "Incor"-America's *first* high early strength portland cement.

LONE STAR CEMENT CORPORATION, N. Y. 17, N. Y.



Reinforced concrete slabs—each 8 feet 4 inches high, 20 feet wide and 8 inches thick—are used for walls of manufacturing and warehouse sections. Slabs are laid horizontally tongue-and-groove fashion to form wall sections 25 feet high by 20 feet wide.



Complete plant, including offices, manufacturing and warehouse sections, covers 100,000 square feet of floor space.



Measures Under President Johnson



The sudden change of command in Washington must have two direct effects on architects (beyond anything personal) on a political and on a professional level.

The poltical implications are clear enough: Something like 97 per cent of the more

by E.E. Halmos, Jr.

than 15,000 bills in legislative hoppers can be considered dead, right now. It is obvious that the Johnson Administration will try for quick action on no more than two or three issues—civil rights, tax reduction, and some aid to education plus the normal appropriations measures, and be satisfied with this as something to take to the voters this November.

It must be remembered that Mr. Johnson is a political realist, and he has something less than six months (to the midsummer political conventions) in which to make a record of his own. He'll accept compromises, if he must, to get a "can do" record.

It must also be remembered that Congress is tired, and wants no repetition of 1960, when sessions dragged out beyond the conventions, to nobody's credit. Congressmen want to get to the business of politics as soon as possible. So you can bet on it that they'll make the current (and final) session as short as possible.

Obviously, in order to get a tax bill, the President will have to make concessions on spending—he's already more than hinted at that himself. That could mean a smaller budget than the one that was being prepared for President Kennedy—even if the cuts are simply and arbitrarily made for effect. It is not likely, however, that such cuts will be made in public works spending—not in an election year.

On a professional level, there undoubtedly will be a change in the emphasis on arts and architecture that characterized the Kennedy Administration. This, incidentally, was not yet so much a matter of concrete accomplishment—though it did include authorization for the long-planned Cultural Center, and redesign of Lafayette Square (facing the White House)—as it was a matter of "feel" and interest in the fitness of the capital to serve its function. That's not to say that the new President may

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not have an equal interest in such matters, but only that he won't have time for them—at least, not until after the November elections, and for some months beyond that, if his election bid is successful.

Two Court Decisions

Two recent court decisions will, in fact, have more impact on construction than much of the legislation under consideration.

In the first, the U.S. Supreme Court virtually closed all avenues of attack by labor unions on state "right to work" laws, which bar agency and union shops, and permit workers to refuse union membership if they choose. The Supreme Court's decision was that state courts may enforce such laws in cases where an employer and a union have reached agreements that may be in violation of such laws. Union lawyers argued that jurisdiction in such matters is exclusively reserved to the National Labor Relations Board, which has traditionally sided with the union position.

In another decision, a Federal Appeals Court ruled that an owner can go out of business—in whole or in part —if he so chooses. The NLRB had ruled such an action an "unfair labor practice" when a textile firm decided to close its doors rather than bargain with a union group. The decision to go out of business is the "absolute perogative" of management, said the Court, as long as no fraud or subterfuge is involved.

FINANCIAL

This is the time of year when economists polish up their crystal balls and start making predictions for the coming year for the construction industry.

This year, the forecasters seem agreed that there'll be no decline; rather, they look for a continuation of the mild gains of the past year somewhere in the neighborhood of 3 per cent.

Since the estimates of construction volume for 1963 now fall between \$63.3 and \$63.5 billion, that would put 1964 at about \$65 billion, which would be another record year.

But there's a good bit of cautious hedging on those predictions. Reasons aren't hard to find.

Housing (as has been noted in these columns for some months) seems very definitely to have arrived at a plateau, and no one is predicting any further gains in the coming year. Again, that's not at all bad: present rates of housing starts are at a level of about 1.8 million—a very respectable level indeed. But what makes the experts dubious about further gains is a combination of circumstances, notably that there's evidence that credit is being strained by many households right now, and that availability of money for new-home purchases may thus get shorter.

There's another factor involved the number of houses available for sale and for rent has remained almost unchanged over a period of months, indicating no upsurge in demand.

(Incidentally, the Census Bureau has found that the average sales price of new homes in the U.S. is now about \$18,600—some \$300 below the normal "asking price.")

As to public works, there's one bright spot, plus a number of dimmer ones. The bright spot is that spending on Federally-aided highways is due to reach a peak (about \$3 billion of Federal funds) this year, and total highway spending may top \$7.5 billion.

The dimmer spots center around Congress' long delay in passing major appropriations bills. This has saved some money for the Federal treasury, but it may eventually cause much higher costs when projects are resumed after having been allowed to grind almost to a complete halt.

But the slowdown in availability of Federal funds will certainly hold back Federal contributions for the rest of Fiscal Year 1964 (up to July 1) to the construction industry's business. If you couple that with at least considerable caution on the part of the Johnson Administration in initiating new spending programs, you get a slowdown of some proportions.

The spot that most economists cling to—as the area from which gains will come—is business spending on new plants and equipment.

Early surveys have indicated that manufacturers, in general, plan to spend at increased rates in 1964 to modernize and expand their operations. Since the area of private construction spending runs to something like \$40 billion annually, not too much expansion here could offset any slowdowns in Government and housing construction.

What remains to be seen is whether a tax-reduction bill (which now seems certain of passage, though perhaps much modified from the original Kennedy proposal) will spur businessmen into greater expansion of their spending for brick-and-mortar projects.



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ANOTHER LO-TONE CEILING INSTALLATION



Pavilion of American Interiors/New York World's Fair 1964-65 Thomas H. Yardley, Architect/John Vassos, Associate/Werner-Jensen and Korst, Engineers/Waldvogel Brothers, Inc., Acoustical Contractor

See new Lo-Tone ventilating ceiling system at the world's fair

It heats, cools, beautifies and sound conditions -

The Pavilion of American Interiors, a \$2,300,000 sweep of glass, steel and concrete, will demonstrate new Lo-Tone ceilings to an estimated 5 million people. Here is a preview of what the public will see at this New York World's Fair Exhibit.

About 70,000 square feet of Lo-Tone acoustical mineral tile and lay-in board will be installed. More than half of it will be Lo-Tone *ventilating* tile — the proven way to obtain effective room air distribution and sound control.

Lo-Tone ventilating ceilings offer the architect and engineer a combination of two important advantages in system design and control.

1. Optimum air mixing and distribution. Lo-Tone ceilings work according to the jet orifice principle. Specially engineered orifices in the ceiling tile create a balance between air volume and air mass. The air supply is discharged from the jet orifices, entrains air in the room and creates desirable room air motion.

Some ventilating ceiling systems distribute air through minute perforations in the tile. Tiny perfora-

tions can, indeed, move a volume of air. But they are too small to move an effective mass of air as Lo-Tone ventilating ceilings can. Without good air entrainment, discomfort often results.

Lo-Tone ceilings solve this problem with scientifically designed orifices . . . unobtrusive but highly effective.

2. Quick, simple adjustment of air distribution after the ceiling is installed. Lo-Tone ventilating products have adjustable metal control splines which are an integral part of the ceiling itself.

This permits the contractor to make final adjustments after the ceiling is installed, even after the tenant has moved in. Later, changes in air distribution can be made as room requirements change.

With Lo-Tone ventilating ceilings, adjustments are made from the room. It is not necessary to remove a single unit or to alter design.

For additional information about how you can put these exclusive benefits of Lo-Tone ventilating ceiling systems to work for your clients (either tile or ceiling board), write Wood Conversion Co., St. Paul, Minn.



Close-up of Lo-Tone adjustable orifice which controls air mass and velocity.



Arrows illustrate how Lo-Tone ventilating ceilings distribute air efficiently.



January 1964

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Aluminum exterior wall system called "Arcadia S-45" can be employed as either window-wall or storefront system. It is a "stick" system with interlocking members that require no screws or fasteners anywhere within wall. Complete S-45 installations present 13/4" sightlines throughout with flush glazing and vertical design emphasis. System takes all fenestration and shade components-sliding glass doors and windows, awning windows, casements, jalousies, opaque panels, and entrance doors-in range from 3/16" to 11/2" in thickness. Northrop Architectural Systems, Los Angeles 22, Cal.

On Free Data Card, Circle 100



Framing Space

Space-frame utilizes only five simple precision parts. They consist of two press-formed steel connectors, rolled channel strut, a nut, and a bolt. Basic

NEW PRODUCTS

structural units form three-dimensional integrated framework that is easily assembled in modules to accommodate standard panel and enclosure materials. System transmits load to columns or wall through more than one path. Dimensionally perfect grid work is ideal for locating building components such as columns, walls, lighting, and mechanical equipment. Unistrut Corp., 4118 South Wayne Rd., Wayne, Mich.

On Free Data Card, Circle 101



Tall Standard Lamp

In this floor lamp designed by Paul Mayen, four brass uprights and a polished chrome stretcher support a lumacryl cylinder. The four upright stems are invisibly attached to the lumacryl cylinder, which houses a combination of five bulbs (four standard and one reflector) and permits a possible 700 watts. A single switch controls several lighting combinations. Lamp is 68" high, 13" wide, and costs \$180 net. Habitat, Inc., 336 Third Ave., New York 10, N.Y.

On Free Data Card, Circle 102

Thonet Chair

Elegant small chair of Corbu-inspired design has chrome-plated tubular steel frame supporting a 4" foam-filled seat mounted on a plywood platform. The back, composed of wood strips padded with foam rubber into a semicircle, follows the line of the seat. Chair is covered in an elastic-backed vinyl material. It is 25" high; seat is 23" in



diameter. List price: \$189.60 F.O.B. Thonet Industries, Inc., 1 Park Avenue, New York, 16, N.Y. On Free Data Card, Circle 103



Lightweight Steel Channel

Recently developed is an 8" standard steel channel (*left*) that weighs 26 per cent less than conventional 8" standard steel channel (8.5 lbs per ft as compared to 11.5 per ft). Channel will be produced in regular carbon and high-strength steel grades. Jones & Laughlin Steel Corp., 3 Gateway Center, Pittsburgh 30, Pa.

On Free Data Card, Circle 104

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constructed of 8" wide panels of laminated solid wood block core and faced with wood veneers. Partitions include ball-bearing wheels for easy operation. Partitions can be stacked in a minimum area—only 1" per opening ft. Panelfold Doors, Inc., 1090 East 17 St., Hialeah, Fla.

On Free Data Card, Circle 105



Shelf Gives Light

A dual-purpose, wall-hung light that also provides shelf space consists of a fluorescent bulb encased in a textured vinyl-laminated-to-steel hood. "Shelf Lite" casts light down onto a work surface and up on items placed on the shelf through a narrow "slit" trough; it gives direct but glareless light. Available in several colors. Lightolier, 346 Claremont Ave., Jersey City, N.J.

On Free Data Card, Circle 106

Blower Coil Units

Blower coil units have been developed for addition of an independent cooling system to any hard-to-air-condition space, especially those which have hydronic heating. Manufacturer also states that units may be installed in existing homes having heating systems in which addition of cooling is not practical. Can be installed in areas such as closet, furred down hallways, attic, garage, or basement. "Hexaire" model rated at 15,000 Btu/hr can deliver 550 cfm of air. Larger unit is rated at 22,000 Btu/hr at 800 cfm. C. A. Olsen Mfg. Co., Elyria, Ohio. On Free Data Card, Circle 107

Glass-Fiber Ducts

Air duct, called "Micro-Aire," has been developed for forced warm-air systems. Duct is made of round, preformed glass fiber with embedded aluminum foil barrier or air seal. It



produces no sound from expansion or contraction. Duct is easily joined with standard sheet metal connectors, elbows, y's, reducers, and simple fittings. Micro-Aire is available in standard sizes from 4" to 16", ID, in 6' lengths, and in nominal wall thickness of $\frac{1}{2}$ ". It is recommended for systems operated up to 1" static gage pressure at velocities up to 2000 fpm. Johns-Manville, 22 E. 42 St., New York 16, N. Y.

On Free Data Card, Circle 108



Measuring Sun's Rays

Solar-compensation system utilizes sensitive thermostat mounted inside window box to measure incidence of sunshine on glass-walled buildings. System counteracts heating effect of sun on east, south, and west walls. It also automatically cancels out effects of outdoor temperature. System is mounted on a building exterior wall. System can be used to regulate heating, cooling, and heating-cooling change-over. Box is 8" high, 7" wide, and 5" deep. Honeywell, Commercial Div., 2727 Fourth Avenue South, Minneapolis 8, Minn.

On Free Data Card, Circle 109



Plastic Pews

Maintenance-free high pressure plastic laminated pews have been introduced. "Plas-A-Lam" pews are marproof and require no refinishing or maintenance other than wiping with damp cloth. They are available in choice of 27 wood-grain patterns including variety of pew ends and bodies. James Cabinet Corp., 1532 N. Elk Grove Ave., Chicago 22, Ill.

On Free Data Card, Circle 110

Small Mercury Lamp

Small mercury 100-w lamp for general illumination resembles light bulb in its size, shape, and base. Lamp is 27/8'' in diameter and 65/16'' in length. Uses include lighting for walkways and drives, building entrances, security and protection, and landscaping. It is available in both clear and phosphor-coated versions. General Electric Nela Park, Cleveland 12, Ohio.

On Free Data Card, Circle 111

Bidets in Bank

Recently, architects Bianculli, Tyler & Wiese decided to install bidet bathroom fixtures in Pioneer Bank Building in Chattanooga, Tenn. These fix-

QUICK!

Which sink takes the sulphuric?

> "Guessing games" are out-of-place in today's busy laboratories. So it's wise to bear these important facts in mind when you consider laboratory sinks: There is no question of which sink takes which corrosive (weak, mixed or concentrated) when you install "U. S." Chemical Porcelain Laboratory Sinks.

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BBBBBBBBBBB

GUARANTEE

000

The laboratory sinks which we manufacture from chemical porcelain are completely impervious and corrosion-proof. Their resistance to all corrosive agents (except hydrofluoric acid) is not limited to the glazed surfaces. Both the glaze, and the sink body itself, are made of the same basic corrosion-proof materials. Thus, there is practically no difference between the corrosion resistance of the glaze and that of the sink body.

We, therefore, make the following guarantee:

We guarantee, for the life of the building in which it is installed, that this sink will not be destroyed by the action of corrosive agents, regardless of whether glazed or unglazed surfaces are exposed to corrosion.

We also guarantee that this sink will not be damaged or destroyed by temperature changes or mechanical stresses encountered in normal laboratory usage.

(This guarantee does not include mechanical damage due to gross carelessness during installation or due to heavy impact, nor does it include etching of the sink surface by hydrofluoric acid. Natural and artificial silicates are attacked by hydrofluoric acid, and if such acid is emptied into sinks, the sinks should be flushed with water immediately to prevent damage to the glaze.)

Under the terms of this guarantee we will furnish without charge, freight prepaid, a new sink for any sink which fails to meet the service warranty above. This guarantee does not include any installation costs. We reserve the right to request the return of the defective sink, freight collect.

U. S.

319.H.3

CHEMICAL CERAMICS DIVISION



STONEWARE


tures, which have been employed in Europe for many years, are highly satisfactory for both male and female personal hygienic purposes. Architect Mario Bianculli states "that the use of these fixtures has been well accepted." Bidets can be employed in homes, institutional buildings, hospitals, clinics, and schools. Crane Co., 300 Park Ave., New York 22, N.Y. On Free Data Card, Circle 112



Embossed Panels

Double embossed aluminum panels with heavy texture designs have recently been developed. Embossed deep grain patterns are achieved by utilizing Pittsburgh Plate Glass Company's "Permlar" acrylic paint. Both horizontal and vertical panels have $\frac{1}{2}$ " butt and combine Pittsburgh snap-lock with pre-notched ends for nail-on application. U.S. Aluminum Siding Corp., 11440 West Addison St., Franklin Park, Ill.

On Free Data Card, Circle 113

Exterior Plastic Panels

Curtain-wall spandrel panels consist of outer skin of acrylic plastic and insulating core of PPG's "Foamthane" —a rigid polyurethane foam. "Permaform panels (manufactured by Structural Plastics Corporation of Osseo, Minn.) have thickness of slightly more than 1" and U-value of .12. Foamthane insulation is moisture-resistant. Panels are made up to 12' wide, 12" thick, and 24' long. Insulation is unaffected by organic petroleum solvents in elastomeric adhesives. Pittsburgh Corning Corp., One Gateway Center, Pittsburgh 22, Pa.

On Free Data Card, Circle 114

Roof-Mounted Unit for Year-Round Use

Year-round, roof-mounted, prefab airconditioning system provides multizone heating and cooling for one-, two-, and three-story buildings. Systems are available in 20-, 25-, 30-, and 35-ton units for cooling, with heating capacity ranging up to 1,200,000 Btu's. Roof-mounted in single systems or in combinations, units may be utilized for hot-water heating of perimeter zones combined with warm-air heating in interior zones. This wet-heat split system has its own hot-water generator for remote unit heaters or for radiation at any temperature from 55 F to 110 F. System also delivers ventilation. Atmos-Pak, Inc., 88 North Highland Ave., Ossining, N.Y.

On Free Data Card, Circle 115

Coating Reduces Solar Heat

Solar heat reflectant coating called "Plasticool" will reduce heat load on air-conditioning equipment. Coating reflects enough solar heat to maintain temperature inside building to equivalent of outside shade temperature. Plasticool also increases life of roofing material. Coating can be applied to unprimed galvanized steel and aluminum; primed structural steel; masonry of all types, transite, concrete, glass or wood surfaces. Plasticool is nonbleeding, nonyellowing, and has positive adhesion to surfaces for a warranted period of four years. It is available in white or tints. Coating Laboratories, Inc., 325 South Quincy, Tulsa 14, Okl.

On Free Data Card, Circle 116



Alphatized Steel

Low-carbon or carbide-stabilized steel with a chromium-rich case not available in any AISI type stainless steel has recently been developed. This Alphatized sheet and strip steel is produced in 12,000 lb coils. Base price of Alphatized strip steel is $22\frac{1}{2}$ ¢ a lb, compared with $38\frac{3}{4}\phi$ a lb for 430 stainless steel. This steel can be fabricated and welded with standard high production equipment. It is not subject to pin-holing, spalling, or flaking. It has good oxidation resistance at elevated temperatures and good resistance in various corrosive environments. Berry Steel Corp., Roselle, N. J., will texturize the new metal for such applications as architectural and appliance trim. Gasalloy Steel Corp., Elyria, Ohio.

On Free Data Card, Circle 117



Foursquare Bases

A uniform base designed by Bodil Kjaer for separate seating and occasional tables is adaptable to continuous units of tables and seating combined. Foursquare frames are of solid oiled walnut. Armchairs and side chairs are cushioned with foam rubber over rubber webbing. Tabletops can be finished in walnut veneers or plastic laminates. C.I. Designs, 230 Clarendon St., Boston 16, Mass.

On Free Data Card, Circle 118



Hospital Cabinet

Special cabinet for private or semiprivate rooms in hospitals, sanitariums and rest homes, "Model B-372" provides six accessories in a single stainless-steel recessed unit: cabinet, two mirrors, shelf, and dispensers for paper towels, cups and soap. All except the cup dispenser are on the checklist of equipment for patient care units of the Public Health Service. Unit is made of 22 gage Type 302 stainless steel with satin finish, including a drawn one-piece flange of seamless construction. Cabinet fits into wall opening approximately 151/2" x 283/4" x 41/4". Bobrick Dispensers, Inc., 503 Rogers Ave., Brooklyn 25, N. Y.

On Free Data Card, Circle 119

Cut-Out Felt

A die-cut felt fabric called "Feutron" is designed for use as drapery or wall hangings in interiors where the use of corporate emblems or other symbols can be advantageous. The cut-out pattern filters light like a casement cloth. Fourteen filigree patterns are available; custom designs can be executed. Feutron is available in either 36" or 72" widths and comes in 15 sun-fast colors. The dacron and coloray viscose combination produces several interest-



ing textures new to felt. Literature available. Central/Shippe, Inc., 24 W. 25 St., New York 10, N.Y. On Free Data Card, Circle 120



Bright Table

Dining table designed to solve the problem of a lighting installation in concrete slab apartment buildings: an uplight in the center of a walnut drawer unit shines through a glass top and gives a glow to the ceiling. Stainless-steel base, oil-finish walnut drawer unit 3" below 3/4" polished plate glass top, 48" x 60". Phillip Enfield Designs, 1020 Park Ave., New York 28, N. Y. On Free Data Card, Circle 121

Roving Shower Head

Combination shower unit called "Shower-All" can be employed both as wall and hand shower. Unit consists of chrome-plated heavy brass spout and 591/2"-long, corrugated, chrome-

plated hose. It can be moved to any area of the tub, or over to washbasin. When utilized for stand-up shower, unit is placed in overhead wall bracket. It can also be removed from the wall to wash children, pets, elderly and handicapped people. Unit can be installed in homes, hospitals, hotels, and outdoors for summer houses, camps, and cabanas. Edward L. Granger Co., 800 W. 47 St., Kansas City, Mo. On Free Data Card, Circle 122



Nurse Call System

Recently developed hospital communications system has been introduced. It features two-way voice communications between nurse and patient, twoway communications between nurses and ancillary departments, remote infusion monitoring, remote bed occupancy monitoring, pillow speakers for individually controlled radio and television programming, announcement and alarm facilities, and administrative intercom network. Executone, Inc., Long Island City 1, N.Y.

On Free Data Card, Circle 123

Unit Handles 10to 50-ton Capacities

"Convair" air conditioner has been developed to handle from 10- to 50-ton capacities. Fan at the base of unit draws in air and flows it over coil located on top of the unit. Plenum chamber is tapered toward the fan. which improves air distribution to coil surface. Fan operates in a ring in inlet of cool air, providing greater air weight to cooling surface and additional condensing capacity. Perfex Corp., 500 West Oklahoma Ave., Milwaukee 7, Wis.

On Free Data Card, Circle 124



New Marlite Murals

5'-wide panels for unique pictorial

effects in any room

With beautiful new Marlite Murals, a single panel covers the back wall of a tub recess from corner to corner. These exciting original panel designs, created by fine artists, will add a distinctive decorator touch to any room. Crafted in luxurious gold on a white background, Marlite Murals combine the charm of pictorial scenes and designs with the advantages of Marlite's soilproof baked finish. The result: custom-decorated walls that resist heat, moisture, stains and dents—stay like new for years. Easily installed, Marlite Murals are available in nine designs, all gold on white in a semi-gloss finish. All are 5/32'' thick, in 5' x 5', and 6' x 5' sizes (first figure indicates height, second width).

For complete information on new Marlite Murals and other Marlite paneling, see your building materials dealer, consult Sweet's Files, or write Marlite Division of Masonite Corporation, Dept. 114, Dover, Ohio.

Large photo illustrates

Marlite Mural #S371 South Pacific. Small photos in descending order: #S300 Aquatic, #S302 Seascape, #S325 Desert, #S340 Oriental, #S350 Fleur-De-Lis, #S370 Rangoon, #S372 Catalina, #S837 Snowflake.



ANOTHER QUALITY PRODUCT OF MASONITE® RESEARCH



LOF Testing Program for Plate Glass

For years, architects have had problems in employing large expanses of plate glass in their designs because of restrictions found in the empirical formulas for deriving strengths. Due to a recent laboratory testing program devised to develop strength data, architects will now have greater freedom to utilize large walls of plate glass. Strength chambers are able to test sizes ranging from 72''x72'' to 120''x240'' and thicknesses of $\frac{1}{4}''$, $\frac{5}{16''}$, $\frac{3}{8''}$, and $\frac{1}{2}''$. Some lights of glass weigh as much as 1200 lbs.

In the first series of tests, thicknesses of glass from $\frac{1}{4}$ " through $\frac{1}{2}$ " were used. Another series of tests utilizing glass over $\frac{1}{2}$ " and through 1" in thickness will be made. Glass over 1" thick may be tested in time.

Glass to be tested is glazed in a conventional manner by using Neoprene gaskets with aluminum stops, which



are bolted into position to hold rigidly the four edges of the glass. Break pressure is determined by applying a vacuum to the chamber, which places pressure on the other side. A gage is employed to determine the deflection and a manometer permits the operator at the controls to determine the extent of pressure at all times during the period of the test. Images reflected from a 10'x20' light during a test period illustrate (1) true reflection, (2) extreme distortion, and (3) start of break.

Results of the first series of tests revealed that some old concepts of glass strengths, safety factors, and wind loads versus wind pressures are not applicable to large glass areas in thicknesses over 1/4". Tests also indicated that the thickness of glass rather than the ratio of width to length is an important factor in governing its strength for larger expanses. Design load data derived from the testing program (4) now carries a safety factor of 2.5, which reduces the possibility of breakage to less than 1 per cent. Libbey-Owens-Ford Glass Co., 811 Madison Ave., Toledo, Ohio.

On Free Data Card, Circle 200

AIR/TEMPERATURE

Defining Humidity

Report, 17-pages, discusses humidity and its relation to environmental conditions. Definitions, humidity charts, and method of determining humidity requirements for homes by use of "Nomographs" is described. Nomographs determine amount of vapor a humidifier should provide to maintain a predetermined relative humidity under given conditions. Calculations contain factors such as type of home construction, occupancy effect, and safe, recommended relative humidity. The Lau Blower Co., Dayton, Ohio.

On Free Data Card, Circle 201

Automatic Furnace

Brochure, 2-pages, introduces "Pre-Vent" sealed combustion, gas-forced air furnace designed for use with central-duct systems. Furnace may be installed either as counterflow or hori-



zontal type unit. It is also adaptable to air conditioning and extends only 15" from wall. System is fully automatic, featuring low-voltage control system with wall thermostat, multiplespeed direct drive blower, built-in fans and limit control, and return-air filter (throw-away type). No chimney or flues are required. Specs and illustrations are given. Temco, Inc., Nashville 9, Tenn.

On Free Data Card, Circle 202

CONSTRUCTION

Stainless Steel

Fact sheet, 8-pages, discusses stainless steel. Five topics include: "Why Design in Stainless Steel"; "Thickness of Stainless Steel Used in Architectural Applications"; "Alloy Type Designations in Stainless Steel"; "Sheet Finish Designations"; and, "Designing in Stainless Steel." Charts, details, and illustrations are given. The International Nickel Co., Inc., 67 Wall St., New York, N.Y.

On Free Data Card, Circle 203

High-Strength Steels

Four charts describe "Tri-Ten," "Cor-Ten," "Man-Ten," and "Ex-Ten" highstrength steels. Information includes mechanical and physical properties, available product forms, chemical composition, applicable specs, and suggested welding and cold-forming practices. Charts are hole-punched to fit standard ring binders. U.S. Steel Corp., Room 6912, 525 William Penn Place, Pittsburgh, Pa.

On Free Data Card, Circle 204

Plywood Standards

Handbook, 112 pages, lists commercial standards for Douglas Fir and Western Softwood plywoods. Among topics discussed are grades, certification, nomenclature, tolerances, and veneers. Charts and sketches are included. Douglas Fir Plywood Assn., Tacoma 2, Wash.

On Free Data Card, Circle 205



Steel Joists

Manual, 68-pages, discusses standard open-web steel joists, high-strength open-web steel joists, bridging, steel roof deck, centering, and accessories used in joist-type roofs. Load tables, properties, dimensions, and specs are given. Ceco Steel Products Corp., 5601 West 26 St., Chicago, Ill.

On Free Data Card, Circle 206

Steel Column Manual

Column manual for all types of steel columns includes load tables and design data based on A-36 steel specs. Complete specs for prefab fireproofed steel columns and recent developments are also presented. Fire-Trol Corp., 8001 S. Western Ave., Chicago 20, Ill. On Free Data Card, Circle 207

Electrical Raceways

"Design Manual on Steel Electrical Raceways," 143 pages, has recently been published. Among chapter topics are Codes and Standards in Wiring Design, Basic Design Considerations, Steel Raceways, Systems, Hazardous Locations, Plans and Specifications, and Reference Data. Charts and illustrations are included. Copies are available from the Institute at \$1 per copy. Walter O. Zervas, American Iron and Steel Institute, 633 Third Ave., New York 17, N.Y.

Structural Steels

Booklet, 10-pages, outlines properties of several types of structural steels. Included are "T-1," "T-1 Type A," "Tri-Ten," "Man-Ten," ASTM A-36, "Ex-Ten 45," "Ex-Ten 50," "Ex-Ten 55," "Ex-Ten 60," "Ex-Ten 65," and "Cor-Ten." Charts give mechanical properties, product availability, chemical composition, and fabrication information. United States Steel Corp., 525 William Penn Place, Pittsburgh 30, Pa.

On Free Data Card, Circle 208

Laminated Wall Panels

Booklet, 8-pages, describes three nonload-bearing wall panel systems. Spline system consists of 11/16" thick panels recommended for walls or wainscoting. Batten and tongue-and-groove



systems consist of 5/16" panels recommended for light commercial applications. Panels are surfaced with "Textolite" laminated plastic in choice of 18 wood-grain patterns, 24 solid colors, and 10 mist solid colors. This melamine surface is resistant to heat, stains, and wear. General Electric, Laminated Products Department, Coshocton, Ohio.

On Free Data Card, Circle 209

Revised Steel Manual

Latest revisions of properties and dimensions for structural, plate, and other shapes of steel have been made available in 114-page manual. Among the topics are section modulus economy table, beams, channels, angles, tees, zees, corrugated sheets, floor plates, steel H piles, and structural tubing. United States Steel Corp., 525 William Penn Place, Pittsburgh 30, Pa.

On Free Data Card, Circle 210



Designing with Slate

Brochure, 4-pages, describes slate spandrels, panels, and facings. Slate is guaranteed nonfading and nondisintegrating. Spandrels, panels, and wall facings are recommended in thicknesses of 1" and $1\frac{1}{4}$ " (sometimes $1\frac{1}{2}$ "), in lengths up to 6'-6", and in widths up to 3'. Larger sizes are also available for special design conditions. Buckingham-Virginia Slate Corp., 1103 East Main St., Richmond, Va. On Free Data Card, Circle 211

All About Stone

"The Stone Catalog," 1964-65 edition, has just been published. It provides information on natural stone and its use with compatible materials, as well as basic data on products related to stone installation. Building Stone Institute, 420 Lexington Ave., New York 17, N.Y.

On Free Data Card, Circle 212

DOORS/WINDOWS Sound/Temperature Insulated Windows

Folder contains 12 sheets on sound-

and temperature-insulated aluminum windows. Specs, sound transmission, air and water infiltration, physical



load test, heat transmission, and condensation are discussed. Photographs and details are also included. Western Sky Industries, Hayward, Cal. On Free Data Card, Circle 213

Steel Doors for Modular Construction

Publication entitled "Standard Steel Doors and Frames for Modular Construction" has been made available. Three data sheets detail 6'-8", 7'-0", and 7'-2" doors showing how they can be adapted to concept of modular dimensioning. Publication contains details and specifications. Steel Door Institute, 2130 Keith Bldg., Cleveland 15, Ohio.

On Free Data Card, Circle 214

ELECTRICAL EQUIPMENT



Outdoor Area Lighting Catalog, 46-pages, discusses outdoor area lighting in three sections: selection guide, applications, and products. Product section includes all types of floodlights, filament luminaires, ballasts, controls, lamps, and poles. Charts, details, illustrations, and specs are given. General Electric Outdoor Lighting Dept., Hendersonville, N.C. On Free Data Card, Circle 215

Dimming Light

Electronic light dimmers from 600 to 3000 w are discussed in 2-page brochure. They feature smooth, gradual control of light from off to full bright for incandescent and/or fluorescent circuits. Dimmer electronically reduces flow of electricity and extends life of light bulbs. All models fit standard one or two-gang wallboxes. Brochure gives specs, illustrations, wiring, and details. Electro-Solid Controls, Inc., 8001 Bloomington Freeway, Minneapolis 20, Minn.

On Free Data Card, Circle 216

Calculating Light

Pocket-sized illumination calculator is being offered. It easily calculates room ratios and number of lamps required



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A life worth paying for

Mahon Rolling Steel Doors give you a long, long life-of convenience, protection, efficiency and maintenance-free operation. They are not bargain priced. They are economical . . . over the years, saving you space, time and trouble. That is worth paying for, don't you agree?

Rolling Doors from Mahon are designed, made and installed to the highest standards of *quality*. They are available in sizes and types (including UL labeled Fire Doors) to fit any opening, meet any application requirement. You can specify them as hand, mechanically or power operated. For the *quality* details and full installation information, see Sweet's Files or write for your personal copy of Catalog G-64. The R. C. Mahon Company, 6565 East Eight Mile Road, Detroit, Michigan 48234.





for specific footcandle levels in a given area. Reverse side of calculator contains "Ballast Sound Guide," which determines number of ballasts (with letter ratings) that produce equal sound. All sizes and types of commercial fluorescent lamps are shown in its lamp lumen section. Thomas Industries, Inc., Benjamin Div., 207 East Broadway, Louisville 2, Ky.

On Free Data Card, Circle 217

Ballast Manual

"Ballasts For Fluorescent Lamps" is a 24-page booklet discussing the rating and data for various types of ballasts. Among the ballasts discussed are rapid start for high-output lamps, preheat start, ballasts for circular lamps, and ballasts for low-temperature applications. Booklet contains wiring diagrams, chart on obsolete ballasts and suggested replacements, installation and operating instructions, and specifications. General Electric, 901 W. Burlington Ave., Western Springs, Ill.

On Free Data Card, Circle 218

Lighting Glassware

Booklet, 4-pages, presents glass panels, lenses, and bowls for interior lighting. Tabulated data for determining lighting requirements of any given area is included. Photographs show each of 15 types of glassware. Corning Glass Works, Corning, N.Y.

On Free Data Card, Circle 219

Flooding Light

Two brochures describe 2000-5000w floodlights. They have controllable beam patterns and adjustable centers of intensity. Lamp filaments can be shielded from direct view to minimize glare. Once location of floodlight is determined, reflector system can be preset to form horizontal or vertical rectangular beams to cover exact target size. Infranor of North America, Inc., 742 Worthington Ridge, Berlin, Conn.

On Free Data Card, Circle 220

Lighting Fixtures

Catalog, 56-pages, illustrates recently designed glass and metal lighting fixtures. Included are ceiling fixtures, wall fixtures, and pinups; table, floor, and architectural lamps; and price list. Photographs and brief description of each unit are given. Koch & Lowy Inc., 201 East 34 St., New York 16, N.Y.

On Free Data Card, Circle 221

FINISHERS/PROTECTORS

Pigments for Plastics

Booklet, 12-pages, illustrates inorganic pigments for plastics, paints, rubber, and other high-temperature coatings. Pigments have extreme heat- and chemical-resistant properties. They also have good tinting properties and color uniformity. Charts, color sample of pigments, and list of physical properties are included. Ferro Corp., Color Div., 4150 E. 56 St., Cleveland 5, Ohio.

On Free Data Card, Circle 222

FURNITURE



Danish Designs

Two catalogs show latest Danish furniture designs and lighting fixtures. Furniture catalog shows seating, tables, desks, and cabinets. Lighting catalog includes pendant- and flush-



/Lin Wall. PNEUMATIC PARTITIONS

Provide the floor and ceiling . . . specify an adequate number of AIRWALL Partitions and from then on your client can . . . (1) build temporary halls and rooms where he wants them, when he wants them . . . (2) use a double-run with an airspace between to separate "noisy" functions . . . (3) build a room within a room . . . ideal for dressing rooms, private caucus areas, etc. . . . (4) utilize panels as traffic guides near entrance doors or as privacy shields throughout the room . . . (5) set up a checkroom or ticket booth and . . . (6) set up a series of panels in a curved arrangement to provide a dramatic backdrop or focal point.

As illustrated, AIRWALL Partitions can be used *anywhere* . . . no floor or ceiling tracks are required and they can be moved at will in a matter of minutes. Just set the panels in place, add air and for all practical purposes you have a rich, genuine appearing portable wall that looks and functions like a permanent wall.

AIRWALL Partitions are economical to purchase or lease and require no installation costs. Write for complete information.



AIRWALL INC. SUBSIDIARY

rmation. 16716 S. GARFIELD AVE., PARAMOUNT, CALIF. For more information, turn to Reader Service card, circle No. 374

20 FEET Long Without A single Splice!

THE MOST ATTRACTIVE HYDRONIC BASEBOARD ON THE MARKET!

Edwards "wall to wall" baseboard radiation is available up to 20 feet in length. Long length baseboard, introduced to the industry by Edwards, improves the appearance of the job, reduces expensive labor and eliminates the cost of splices. Available in five attractive finishes chrome, woodgrain, coppertone, beige and white. Easy snap-on front cover. Made by the manufacturer of Edwards packaged hydronic boilers, motorized zone valves, chillers and cooling equipment.

WRITE FOR CATALOG PA-1

EDWARDS ENGINEERING CORPORATION



Pompton Plains, New Jersey PHONE: (201) 835-2808

"Packaged Heating and Cooling" For more information, circle No. 372



mounted ceiling fixtures, table lamps, wall lamps, and accessories. Both catalogs give illustrations and descriptive information; each includes separate price list. George Jensen Inc., 667 Fifth Ave., New York 22, N.Y.

On Free Data Card, Circle 223

INSULATION

Woven Pile Seals

Booklet, 8-pages, presents wool pile seals that can be employed in prime windows and doors; storm windows and doors; heating, ventilating, and air-conditioning systems. Six types of weather seals are available. Charts, details, and specs are given. The Schlegel Mfg. Co., 1555 Jefferson Rd., P. O. Box 197, Rochester 1, N. Y.

On Free Data Card, Circle 224

Closure Strips

Report, 32 pages, discusses closure strips. Part I, "Introduction," includes definition, importance, function, and types of closure strips. Part II discusses "Requirements of a Closure Strip"; Part III examines a "Comparison of Materials Used in Commercially Available Closure Strips"; and Part IV includes a summary of findings and recommended sample specs. Building Rubber Div., Asphalt Corp. of America, Danville, Ill.

On Free Data Card, Circle 225

SANITATION/PLUMBING

Bathroom Utilities

Flier, 2-pages, presents bathroom

facilities. Water closet has "Unit-Tilt" flush valve that eliminates running water, service callbacks, and handle jiggling. Also described are nondrip faucets and lavatories. Utilities are available in six fadeproof colors and white. Universal Rundle Corp., Box 960, New Castle, Pa.

On Free Data Card, Circle 226

Sewage/Sludge Pumps

Bulletin, 16-pages, presents horizontal and vertical nonclog sewage and sludge pumps with one-, two-, and three-vane impellers. Application information, cross-sectional views, composite selection charts, dimensional diagrams of horizontal and vertical arrangements, typical dry-pit and wet-pit installation diagrams, and other details are given. American Well Works, Aurora, Ill.

On Free Data Card, Circle 227

Stainless-Steel Sinks

Catalog, 32-pages, outlines line of standard and custom stainless-steel sinks, counter tops, and drainboards. Specs, surface finish, tolerances, dimensions, prices, and illustrations are included. Zeigler-Harris Corp., 11341 San Fernando Road, San Fernando, Cal.

On Free Data Card, Circle 228

SPECIAL EQUIPMENT

Skylighting

Booklet, 16-pages, describes plastic dome skylights. Types include double and insulated curb domes, triple-layer sealed dome skylights, gravity vents and hatchways, continuous vaulted skylights, vent units, self-flashing skylights, ceiling domes, thermal safety units, light-control units, circular skylights, continuous ridge units, and pyramid skylights. Photographs, charts, and details are included. The Pam Co., 1915 N. W. Wilson St., Portland, Ore.

On Free Data Card, Circle 229

File A Way!

Brochure, 4-pages, describes recently designed file cabinet. "Pro-File" takes only 518 sq in. to hold material as compared to 833 sq in. of conventional cabinet. "Rock-A-Tilt" compartment swings out. Center of gravity always remains inside, even with every compartment wide open. Compartment projection, 6", is less than 1/4 depth of standard pull-out drawer, thereby al-



lowing more than one operator to work at an open file without blocking aisles.
Brochure contains specs and illustrations. Yawman & Erbe Mfg. Co., Inc., 1099 Jay St., Rochester 3, N.Y. On Free Data Card, Circle 230



Pleasing Planters

Catalog, 28-pages, presents 50 different styles of planter boxes designed by Paul Mayen. Planters are built in combinations of "Texiloy" and wood walnut is standard, and teak, rosewood, ash, and others can be specially ordered. Texiloy is an aluminum alloy formulation that resists corrosion. Habitat, Inc., 336 Third Ave., New York 10, N. Y.

On Free Data Card, Circle 231

Controlling Snow, Ice

Folder, 2-pages, offers automatic control for snow- and ice-melting systems. Control turns on heating systems only when conditions are right for snow or ice formations before these conditions actually occur. Unit consists of sensing unit installed outdoors and control box installed adja-



Richards-Wilcox DOORS

provide indooroutdoor atmosphere at the Niles Township West High School swimming pool

Floor Plan, below, shows how the 18 R-W Doors were utilized to provide indooroutdoor flexibility. Architects: Orput and Orput, Rockford; Contractor: Mercury Builders, Forest Park.



This installation of R-W No. 847 Doors graphically illustrates how "custom-engineered" industrial type doors can be utilized to close a special opening. Eighteen doors, 22 feet high by 13½ feet wide were used in double rows separated by an air space. During the winter, warm air is circulated through the air space to provide effective insulation qualities. The manually operated doors are ruggedly constructed of tubular anodized aluminum frames with panel inserts finished in various shades of blue to complement the surrounding architecture.

R-W offers a *complete line* of "custom-engineered" doors to meet almost any conceivable requirement . . . you provide the opening —R-W will fill it—effectively and economically. For complete information, request Catalog No. A-410.



cent to defrosting or de-icing heater system controls. Sensing unit signals control box when both low temperatures and precipitation occurs. Specs and illustrations are given. Hygrodynamics Inc., 949 Selim Rd., Silver Spring, Md.

On Free Data Card, Circle 232

Rain, Rain Drain Away

Aluminum rain-carrying equipment is

offered in 4-page brochure. Guttering is available in both .032" and .027" aluminum and in stock lengths of 10', 16', and 20'. Gutter has white baked vinyl enamel finish that requires no additional painting. Inside of gutter is coated with "Butoxy," which is highly resistant to moisture and corrosion. Also featured is "Free Moving" hangar system that permits expansion and contraction of gutter without pulling seams apart. Hastings Aluminum Products, Inc., Hastings, Mich.

On Free Data Card, Circle 233

Solve your wardrobe and linen storage problems with...

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January 1964

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of tile units, design uses, acoustical correction, application data, and specs. Pittsburgh Corning Corp., One Gateway Center, Pittsburgh 22, Pa. On Free Data Card, Circle 238

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Specification and selection guide for vinyl wall coverings has been published. Weights, thicknesses, tensile and tear strengths are covered in 8page booklet. Data on UL-ratings and fire hazards, as well as installation procedures, are given. L. E. Carpenter & Co., Empire State Bldg., New York 1, N. Y.

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REINHOLD PUBLISHING CORPORATION 430 PARK AVENUE NEW YORK 22, N.Y. News Editor.....James T. Burns, Jr.

Publisher.....D. Bradford Wilkin Editorial Director....T. H. Creighton Editor....Jan C. Rowan Advertising Sales ManagerW.R.Evans,Jr. Production Manager..Joseph M. Scanlon









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Building: Home Federal Savings & Loan Assn., San Diego, Calif.

Architect: Frank L. Hope & Associates, San Diego

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January 1964 PROGRESSIVE ARCHITECTURE

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This year's P/A Design Awards Program was the first under my Editorship. This means that I had the task of assembling the jury (whose thoughtful countenances you can see on the facing page), and take care of all the other innumerable details. The record entry of 692 submissions did not make my job any easier. Nor was last September and October an easy time for other members of P/A's editorial staff. They had to open an avalanche of packages, index all the drawings and photographs, prepare them for viewing and reviewing by the jury, and finally return them to the architects. There are many intermediate steps in this process and for several weeks not much else gets done at P/A. Or so it seems, for in the meanwhile, to the amazement of all concerned, our regular issues somehow get published.

That all this effort is worthwhile, I have no doubt. Imitation is the sincerest form of flattery, they say, and we now have another magazine picking up our idea. The British *Architectural Design* just announced an annual "Project Awards" program, patterned exactly after P/A's program. Good luck to you, brother editors. You don't quite know what you are getting into.

Which reminds me that now I will have a chance to take a pot shot at the British way of architecture. For two years, that staidly frivolous prima donna of architectural journalism, the Architectural Review, competitor of Architectural Design, took note of our existence by letting her angry young editor indulge in a commentary on the results of P/A's Design Awards. The gist of what this gentleman said is that American architecture has reverted to Beaux-Artism but that such Neo-Academicism may change now that I took over the Editorship of P/A. Frankly, I do not know whether it will change or not. because it is not I who premiates the awards but the jury, and both I and my predecessor tried to have as balanced a jury as one possibly can. We would be delighted, for instance, to have on our jury the British editor just mentioned, (counterbalanced, of course). And so, Mr. Reyner Banham, you have my standing invitation to be a P/A juror.

Talking about juries, as in previous years, this year's jury expressed their impressions of what they saw during the two days of deliberations. These comments are summarized on pages 145-146. After listening to the discussions, what struck me as being the most significant is that no award was given in the "planning" category per se, but two awards were given, and other projects were commended, for both planning and the architecture of what was being planned. This seems to me to reflect a growing conviction that abstract "planning" is only so many lines on paper indicating nothing about the ultimate reality of the problem at hand. Conversely, the jury continually worried that many of the buildings were not shown as part of an environment. As Peter Collins said, the jury was more sympathetic toward "special problems." According to Collins, "What tends to differentiate architecture of a stable period is precisely the concern for environment or for some very peculiar problem." a statement with which I fully agree. For we are now in a stable period in the sense that there are today many architects capable of designing pretty good buildings. In this year's entries there were few masterpieces, but also very few monstrosities. The over-all level of competence was extremely high, much higher than in previous years. And so, since many can now design good buildings, it is only logical that the time is ripe to begin to design good cities composed of good buildings. This, it seems to me, is what the jury was looking for. Unfortunately, the achievement of excellence in urbanization involves many other forces besides the work of architects.

Jan C Rowan



FIRST DESIGN AWARD

residential and urban design

LOUIS SAUER, ARCHITECT • ADLEMAN, COLLINS & DU TOT, LANDSCAPE ARCHITECTS • VINOKUR & PACE, SITE ENGINEERS •



PROJECT: Eleventh and Waverly Street Town Houses for Harold Rosen & Company, Philadelphia, Pennsylvania. SITE: One-half acre portion of a deteriorated residential block near the center of Philadelphia.

PROJECT REQUIREMENTS: To provide 27 houses of two- and three-bedroom size for private sale. Of these, 17 are to be



newly constructed, 10 to be rehabilitated. Three of the latter are historically registered and therefore require restoration of the street façades. Six badly deteriorated structures on the site are to be removed. To insure saleability of these \$20,000-\$30,000 houses, it was essential that a diversity of plan types be developed.

DESIGN SOLUTION: "The houses are grouped to form a sequence of courts and walks," explains the architect, "maintaining a separation between public and private areas. This separation forms the basis of the house and site design. Planting, sculpture, fountains, benches, lighting, and changes in level are employed as site design elements." One large court (sketch, page 101) serves as a central focus within the residential complex. A second, though smaller court (sketch, page 105) lies beyond the Lombard Street entrance (facing page). To gain entry to the houses on the interior of the block, the ground floor of one of the structures on the perimeter has been made narrower to accommodate a public pedestrian passage. The Lombard Street entry will also serve as future connection to a park that is to be developed opposite Lombard Street. Another minor court is located at the junction of several walkways.

CONSTRUCTION AND MATERIALS: The structures will have masonry bearing walls and wood frames. The exteriors of the houses are to be of Philadelphia red brick, with copper, standing-seam roofs and cornices. Walks will be paved with brick, court areas with Pennsylvania flagstones.

JURY COMMENT: "The problem of housing," the jury insisted, "is mainly an environmental problem." In their opinion, a highly desirable residential concept has been evolved in this project. Old and new structures have been ingeniously merged by the architect into an ambience in which the aura of old Philadelphia has been refreshingly restated in contemporary terms. The jury particularly admired "the tightness of the plan," its "good scale" and "good spaces." and thought that the area would provide "pleasant walks" and welcome "changes of pace." In addition to the commendable over-all planning, the jury found the individual house designs to be of unusual interest. All of them, they felt, were highly individual, and all displayed a remarkable spacious quality in spite of the limited plot sizes.





LOMBARD STREET

JANUARY 1964 P/A



Eleventh Annual Design Awards 103



Several authentic Philadelphia town houses of the 1820's are to be preserved on the site of the Eleventh and Waverly Street Project, and these have largely set the standard for the new designs. It is interesting, therefore, to study Sauer's proposal for a number of new row-houses, which are placed on plots of similar size and maintain the height limits of the old structures. Street façades are simple in design and material to conform to the existing construction. Inside, however, shifting floor levels, step-back terraces, unusual roof sections, make for remarkable plan variety and spatial interest.







LEVORSEN

CITATION

residential design

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PROJECT: Diamond Heights, Red Rock Hill Development, Urban Renewal Project for San Francisco Redevelopers, Inc., San Francisco, California.

SITE: A 22-acre, terraced hilltop site near the center of San Francisco.

PROGRAM REQUIREMENTS: As outlined in 1961 by the San Francisco Redevelopment Authority, the original competition requirements were "to obtain the best possible schematic design for approximately 990 apartments in multiple residential buildings, which may consist of detached, semi-detached, and high-rise structures." This design proposal was one of four winning projects from which developers were free to choose one for bidding purposes. With the selection of the project by the successful bidder, execution of this design is assured. Construction is to begin with one of the high-rise buildings, containing 155 apartment units.

DESIGN SOLUTION: The architects' main concern was to establish a residential atmosphere true to the character of San Francisco. "By eliminating central corridors," they explain, "each apartment unit extends through the full depth of the building and provides opposite exposures and separate balconies or decks for both living and bedroom areas. These protected outdoor living areas yield views in four directions for each apartment. The resultant undulating façade and roof line are in keeping with the scale and informality of the city's street elevations and skyline."

CONSTRUCTION AND MATERIALS: The highrise units are to be built of reinforced concrete. Vertical furred walls, contain-







ing plumbing, mechanical and electrical risers, will be slip-formed. Floors are to be of flat-slab construction. The low-rise units will be wood-framed.

JURY COMMENT: Although the majority of the jury admired the "nice way in which the segments step down the hill," one juror voiced his reservations concerning a general trend in architecture toward segmentation. "You see a lot of this today," he said, "an attempt to give individuality to the parts, the components. One pretends that it was not built in one piece. Of course, it borders on chaos, but that's the romantic notion of what a city skyline should be." Nevertheless, it was felt that in this instance the segmentation made structural and economic sense, made the buildings "fit the site very well," and, most importantly, promised a residential complex "sympathetic to its environment."


right). The towers are composed of segments that vary from 10 to 13 stories in height, and are connected to form chains of structural units that follow the street pattern. The linkages thus formed undulate in both plan and elevation (site plan, facing page), and form protected outdoor areas for public use. The varied height of the tower segments is correlated with the topography (north-south section below) and with the surrounding apartments to insure maximum views for all rental units. Low-rise structures, each containing two apartments over a parking level, form similar linkages. All parking is provided on or above grade level. In the low-rise units, garages have been placed under the apartments with provision for direct access to each unit. In the high-rise apartments, the garage roofs are used as terraces and as means of pedestrian circulation.

In this scheme, 668 apartment units are to be distributed in high-rise towers (two typical floors, right), 322 in low-rise structures (two typical floors, below









residential design

LOUIS SAUER, ARCHITECT • LOUIS SAUER, JAMES HAMILTON, INTERIOR DESIGNERS • ROBERT TRÜB, STRUCTURAL ENGINEER • VINOKUR & PACE, MECHANICAL ENGINEERS •

PROJECT: House for Mr. and Mrs. James H. P. Hamilton, New Hope, Pennsylvania.

SITE: The one-acre property lies in a glen, one-and-one-half miles south of New Hope. A portion of the site is occupied by the ruins of an old mill. PROGRAM REQUIREMENTS: To provide living accommodations for the client, a theatrical set designer and contractor, his wife and four children. Because of the special culinary interests of the wife, the house is to function on occasions as a place for formal gourmet catering. Consequently, planning had to include separate facilities for family and guests. DESIGN SOLUTION: "The mill is to form the basis of the house," explained the architect, who was strongly moved by "the experience of being within the enclosing five-story stone walls of the original mill." "Consequently," commented Sauer, "it was inevitable that this existing place should form the core of the house, and the house itself lean against and give form to the intangible qualities contained within the existing four walls of the mill. Furthermore, it was felt that the focus of the house should be either within itself or outward





Only the stone walls of the old mill remain, leaving a five-story shell (above and below) free of the former wood partitions and floors. In his design proposal, Sauer transforms this shell into a dramatic courtyard, adding new construction in "lean-to" fashion (facing page) around two sides of the old structures.





to the site." Because it was felt that the court was too dominant, its proportions too formidable for everyday use, the architect oriented the living quarters outward to the site. The court itself is used in a somewhat ceremonial way for the planned, formal gatherings, a function that has been emphasized by having guests enter the house through the original tower and across the length of the court. A second guest entrance is provided through an archway—the original mill sluice—to an entry and loggia under the living quarters.

CONSTRUCTION AND MATERIALS: For economy, it was essential to utilize every available enclosure or wall. Thus, the existing walls form the basic load-bearing structure for wood framing. The interiors of these walls will be white, rough cast plaster. Where new construction is involved, it is entirely of wood. Floors on grade will be of brick, conserved from the remains of the original mill chimney. All other floors are to be of wood. Ceilings throughout will be of wood, either boards on joists, or joists left exposed. The exterior walls will be rough-pointed, interweaving the exposed, sound stonework with the new wherever possible. Siding is to be natural sawn cedar board in an irregular rhythm. The roof will be hand-split cedar shingles.

JURY COMMENT: The unique program and singular site conditions, in the opinion of the jury, required an equally original solution. Sauer's way of using the existing ruin was felt to be inspired, almost masterful, though one of the jurors termed the design "a mere curiosity, a way-out expression." "In a sense," this juror said, "the things that are published are a record of our declining civilization, and this is a pertinent example." The others felt that this design was simply another indication of a trend toward romanticism prevalent in architecture today-a valid and natural reaction to the design disciplines of the past years. "There ought to be more ruins," a juror was heard to remark; "they should be encouraged."

TT m SECTION C SECTION B-B SECTION A-THIRD FLOOR SECOND FLOOR







residential design

MOORE, LYNDON, TURNBULL & WHITACKER, DESIGNERS • CHARLES W. MOORE, ARCHITECT • PATRICK MORREAU, STRUCTURAL ENGINEER • STANLEY E. JOHNSON, MECHANICAL ENGINEER •

PROJECT: House for Mr. and Mrs. William S. Jewell, Orinda, California. stte: A handsome, wooded piece of property.

PROGRAM REQUIREMENTS: The clients—a university professor, his wife and three children—enjoy outdoor living but were anxious, at the same time, "not to bring the outdoors in through walls of glass, but to achieve maximum privacy by careful separation of rooms." They had also amassed a scrapbook full of delicately scaled Early New England houses and hoped to have some of the same qualities in their own home.

DESIGN SOLUTION: To achieve the desired separation and enclosure, without losing the advantages of the climate, the architects developed two types of interior spaces (*section below*): the first, an enclosed, clearly defined, and generally symmetrical space with hardwood floors, smooth walls, and flat ceilings: the second, an intermediate space between outside and inside, with beamed, sloping ecilings, large double-hung windows, wood-clad walls, and brick floors at ground level.

CONSTRUCTION AND MATERIALS: The house is wood framed—sheathed with horizontal wood siding and roofed with wood shingles.

JURY COMMENTS: As an answer to the program requirements, the jury believed that the device of two different spaces was not only workable but had been carried out with great sensitivity.



DRAWINGS: JERRY C. SHEERIN AND MARVIN H. BUCHANAN











The two types of interior space, clearly expressed in the plans, are also distinguishable in the elevations (above). Exterior walls of the "enclosed" spaces are to have white-painted, horizontal siding with recessed joints. The appended forms, which serve as the "transitional" spaces between the outside and inside, are to have siding without recessed joints, with surfaces stained gray.









DIETRICH



RANKINE



FREEMAN



FLANSBURGH

CHERMAYEFF

CHRISTIE

AWAR

commerce and urban design

CAMBRIDGE SEVEN ASSOCIATES. INC., DESIGNERS FOR SHOPPING **CENTER** • PETER CHERMAYEFF, ALDEN CHRISTIE, PAUL DIETRICH, TERRY RANKINE, DESIGN TEAM • FREEMAN, FLANSBURGH & ASSOCIATES, DESIGNERS FOR TOWER FOR THE **ELDERLY** • AMBROSE NANGERONI, MECHANICAL ENGINEER •

PROJECT: Washington Park Shopping Center for Cifrino-Washington Park Realty Trust, Boston, Massachusetts. SITE: This area, in the Roxbury section of Boston, is to be rehabilitated under a program of the Boston Redevelopment Authority.

PROGRAM REQUIREMENTS: In accordance with the program outlined by the Authority, an open competition was held in which developers were invited to submit proposals. This scheme was recommended by the design jury appointed by the Authority. The sponsors, a local chain of supermarkets, included in their program a tower for the elderly (as suggested by the BRA), a supermarket, self-service department store, and a number of smaller stores for the displaced businesses presently on the site.

DESIGN SOLUTION: According to the designers of this project, the plan was to encourage "the amalgamation of residential development and retail stores," and also to assist in "uniting new residential areas to the west and north, with the community uses immediately to the south." The various elements of the shopping center have been grouped closely together on a podium, on the southern third of the site. The higher elevation is to be gained by moving earth from the parking area to the building area, thus giving visual prominence to the shopping center and de-emphasizing, through the lowering of the parking level, the usual "sea of cars." CONSTRUCTION AND MATERIALS: Exposed concrete, in precast and poured-in-place form, is to be used throughout.

JURY COMMENT: The jury found the plan of the shopping center "very interesting," the tower for the elderly "to work well" within the center, and the urban design aspects of the scheme particularly commendable. For these reasons, the project was honored in the category of commerce as well as urban design.







The tower for the elderly (typical floor plan, left) forms the connection between the commercial and residential areas. To achieve the desired "intimate pedestrian scale" in the shopping center, buildings were placed closely together (sketches, facing page), and large retail areas divided into smaller departments wherever possible (plan below). In these areas, walls are to be of load-bearing concrete blocks, spanned by prestressed, precast double-T beams. The large retail areas will be clear-spanned, using single T-beams spaced 18 in. apart, to allow for sky-lighting and light fixtures.









commerce

TALLIE B. MAULE, ARCHITECT • ISADORE THOMPSON, STRUCTURAL ENGINEER • ACKERMAN & ARONOFF, MECHANICAL & ELECTRICAL ENGINEERS •

PROJECT: United California Bank Building for Hare, Brewer & Kelley, Inc., Palo Alto, California.

SITE: A block in downtown Palo Alto. PROGRAM REQUIREMENTS: To provide facilities for a bank, a brokerage firm, the main offices of the client, a men's club, and 120,000 sq ft of general office space for lease-totaling 170,000 sq ft. DESIGN SOLUTION: The objective was to create an "office center" in which the various participating businesses could maintain their identity. The bank and brokerage firm will occupy two low wings to either side of a 15-story office tower; the owner's offices, the ground floor of the tower; the men's club, the third floor and roof terraces of the flanking structures; typical offices, recognizable by their 3-ft deep precast concrete sunscreen and window units, are to begin at the fourth floor. For ease of through-circulation and for visual impact, the two side structures have been separated from the tower.

CONSTRUCTION AND MATERIALS: The tower is to be supported by poured-inplace concrete columns and arches at the perimeter, and a concrete service core at the center. For the actual tower portion, poured concrete columns will be used; edge beams at each floor; and concrete pan-joist floors. The side structures will have concrete frames with inset panels of glass and black granite. JURY COMMENT: Though the jury admired nearly all aspects of this building -the disposition and expression of the many necessary elements, the plan, the mechanical system, the architecture of the tower portion-they voiced strong reservations concerning "the confusion between the arch and the cantilever principle," evident in the base of the tower (sketch below).









commerce

GENE P. HOBART, ARCHITECT • ROBERT S. TOMLINSON, ASSOCIATE •

PROJECT: Falcon Livestock Auction Company, for Mr. Jerry J. Moerbe, Zapata, Zapata County, Texas.

PROCRAM REQUIREMENTS: To design a livestock auction yard that would include sales and buyer's pens, auction facilities, offices, and a café. Through the services of an architect, the owner hoped in his new building to achieve substantial savings in labor costs, utilize available material in its construction, to improve on the traffic flow of the conventional yard, and to gain a building of better than usual appearance.

DESIGN SOLUTION: In contrast to the conventional rectangular auction yards, which restrict cattle to the first level and buyers or sellers to the second level, this circular arrangement will bring the livestock as close as possible to the auction area and will speed up the process of guiding the cattle through the auction, selling the animals, weighing them, and directing them to the buyer's pens. It is expected that the design will cut necessary animal-handling personnel by 50 per cent, and selling time by 23 per cent. The plan also allows for expansion in various stages, according to an outline provided by the architect.

CONSTRUCTION AND MATERIALS: To avoid the "helter-skelter" appearance of the usual yard, the architect has treated structures and fences as one design problem. This complex will be constructed of owner-furnished labor, and of salvage material in the form of railroad ties, used bridge timbers for the main supports, and rough pine for fences and walls. Some building elements will be of oriental stucco. Gray glass has been specified to reduce glare and solar heat. Concrete pads will serve as foundation. The wood roof structure is to be hung by steel rods to eliminate all interior columns. Parts of the structure will be air conditioned, and provisions have been made for spotlighting of the arena.

JURY COMMENT: The jury considered this a straightforward and sensible solution to a problem that has rarely had the benefit of architectural study.











commerce

THE ARCHITECTS COLLABORATIVE, INC., ARCHITECTS • NORMAN C. FLETCHER, PARTNER IN CHARGE; H. MORSE PAYNE, DESIGN COORDINATOR; RICHARD W. HOMER, PROJECT COORDINATOR; LEONARD NOTKIN, JOB CAPTAIN; PHOKION KARAS, PHOTOGRAPHER • MASON & FREY, LANDSCAPE ARCHITECTS • WILLIAM M. C. LAM, LIGHTING DESIGN • THEODORE J. KAUFFELD, CONSULTING ENCINEER •

CONSULTING ENGINEER • CRABTREE, DAWSON & MICHAELS, FOOD SERVICE •

PROJECT: Research and Development Facilities for a U.S. corporation, which, since the Awards judgment, has decided to defer this project, and therefore wishes to remain anonymous.

SITE: Rolling farmland, bordered by a major highway and two minor roads. PROGRAM REQUIREMENTS: To design ad-

ministrative headquarters, research laboratories, and engineering facilities. Operations were to be organized into five separate but interacting centers of activity for project teams concerned with research and development. No manufacturing will be done on the site. It was important that the scheme, (encompassing the elements shown in chart, *below*), allow for future rearrangement and expansion.

DESIGN SOLUTION: The final scheme, preceeded by several preliminary proposals, followed an unusually thorough design process through sketches, and later through exact study models of the proposed buildings (over-all model, and photographic sequence showing entry









into the central court). In this proposal (plan of architectural organization and construction stages, *below*), the head-quarters building is the dominant ele-



ment. Its base contains the entrance functions for all of the buildings. Common facilities, such as the cafeteria, are below the plaza level, taking advantage of the natural hollow in the site (*facing page, top*). Research and Engineering



Buildings are three-story units, providing complete flexibility within the main blocks. The "core" towers contain all service risers (*mechanical plan*, *above*), stairs, and lavatories. Private offices, requiring less flexibility, are grouped in separate wings adjacent to the main blocks. Primary laboratory space is on the third floor, keeping high employee density on the floors below. Inter-building circulation presumes use of the plaza in all but inclement weather; however, all

Vehicular circularion - write - ponking

buildings connect also at the cafeteria level and on the upper floors. Vehicular traffic (*plan, above*) follows a peripheral loop road. However, to recognize the automobile as a vital part of the design, visiting vehicles are brought directly into the plaza (*facing page, bottom*). Service vehicles use a ramp from the loop road to a depressed receiving center incorporated into the common facilities area.

CONSTRUCTION AND MATERIALS: Precast concrete units are to be combined with cast-in-place elements. Their exterior finish will be exposed aggregate, as stripped from the forms. Precast "boxes" are to be used structurally, thus eliminating perimeter columns. The tower "cores" have been designed as independent structures in order to reduce vibration transmission to the laboratories. To diminish air-conditioning loads, exterior sun screens (section of engineering building, *below*) are to be provided. Interior lighting is to be accommodated in an open grid for ease



of access to mechanical and electrical services. Partitions will be of metal studs and plaster board up to a height of 7 ft; above that, they are to be glazed. JURY COMMENT: The jury was particularly impressed with the architects' thorough analysis of the problem, the approach to a solution of the vehicular circulation, the craftsman-like documentation of the design evolution, and, most importantly, with the coherence of the building complex.



Working model (above) of a "team area" in the laboratories shows arrangement of two-man cubicles around a central space with conference area.





Full-scale mock-up assisted interior design development: typical two-man cubicle (above); $8' \times 12'$ office (below).











recreation

DAVID REZNIK, ARCHITECT • RAPHAEL BLUMENFELD, LAZAR HESKIA, INTERIOR ARCHITECTS •

PROJECT: Israel Pavilion for the 1964 World's Fair for the Israel Commission for Participation in the 1964 New York World's Fair. (Since the meeting of the Awards jury, this project has been replaced by a privately sponsored pavilion.) SITE: A plot bordered by three streets. PROGRAM REQUIREMENTS: The building was to express "the spirit of present-day Israel" as well as "its connection with the Bible, the Diaspora, its struggle for existence, its in-gathering of exiles from all over the world, its way of freedom. the efforts of the people, and Israel's contribution to the Fair's theme: Peace through Understanding.'

DESIGN SOLUTION: The architects have developed these themes in chronological order, using the device of an upward spiral: Hall of the Wandering Jew: Hall of Remembrance; Hall of Prayer; the stages of immigration (a long staircase); New Israel and its struggle for independence (at top of stairs); Hall of the Latter Days. Then the viewer descends into a mezzanine where displays of handicrafts and tourism, restaurant and restrooms are concentrated. Main focus, and constant reminder of Israel's past, is the central court, which is paved with old Israeli stone and contains archeological finds and a large statue of the prophet.

CONSTRUCTION AND MATERIALS: Materials commonly used in Israel—concrete with rough plaster—were considered most appropriate. Spans are relatively small in this structure, which follows the circulation pattern.

JURY COMMENT: Of the projects selected by the jury, this one was considered by some to offer the most eloquent interior spaces. However, the building was also referred to as "a kind of scenery" and "a space with a billboard wrapped around it." Most significant to one juror was the fact that the building would "strike a certain foreign note" and that the "continuum" of this building would provide a welcome contrast to the "plain blocks and beams and all that muscular business," so prevalent in American architecture today.









Mell of Leones



Ancient Israel Courtyard





hail of the Vandering for



Hall of Altneuland



Entrance to Eall of Altheuland





education

HUGH STUBBINS AND ASSOCIATES, INC., ARCHITECTS • HUGH STUBBINS, PARTNER IN CHARGE OF DESIGN •

PROJECT: Senior Residences for The Dana Hall Schools, Wellesley, Massachusetts.

SITE: A gentle slope with many fine trees in the residential district.

PROCRAM REQUIREMENTS: The school, a well-known preparatory school for girls, presently maintains 18 converted former residences to house 290 students. It was essential that the 75-year tradition of the small living unit be continued. The program for future development proposes the replacement of some of the older houses by several new student residence centers, of which this senior residence group is to be the first.

DESIGN SOLUTION: This complex includes four houses and a central commons building with office space, large living room, and other joint services. Each house is to accommodate 32 girls in double and single rooms and will provide a living room for the students' use, as well as a faculty suite, toilet and laundry facilities. The houses are grouped to give each an entry court, and also to form the enclosure for a central common courtyard. While each building will have its own entrance, all are to be interconnected by an underground utility passageway.

CONSTRUCTION AND MATERIALS: Steelframed floors with 2 in. concrete slabs are to be supported on brick bearing walls. As in the buildings nearby, waterstruck brick is to be used for the exterior walls and the retaining walls, together with bluestone flagging for paths and courts, and raised-seam roofing. Inside, the buildings are to have resilient tile floors, steel-stud partitions with plaster or wood surfaces, acoustically treated ceilings, brick fireplaces, and built-in wardrobes.

JURY COMMENT: Minor reservations centered around the vertical louvers, which appeared to some members of the jury to be overly prominent in the design. However, these misgivings were far outweighed by the jury's approbation of the over-all design—the variety of spaces and forms, the appropriateness of the new architecture within the old setting, and the quiet unity of the complex.



The buildings are arranged on split levels (below), designed to step down the gently sloping site (facing page bottom). In deference to the neighboring community and the tradition of the campus, all of the new buildings are of a domestic scale, and constructed of materials in keeping with existing construction. The five buildings are tightly grouped around a central courtyard (above).









education

WURSTER. BERNARDI & EMMONS, ARCHITECTS • THEODORE C. BERNARDI, PRINCIPAL IN CHARGE • LAWRENCE HALPRIN, LANDSCAPE ARCHITECT • GILBERT, FORSBERG, DIEKMANN, SCHMIDT, STRUCTURAL ENGINEERS • GAYNER ENGINEERS, MECHANICAL ENGINEERS •

PROJECT: Cowell College for Regents. University of California,

sITE: Within the new Santa Cruz Campus of the University of California. The 2000acre site consists mainly of a virgin redwood forest. Rolling hills and glimpses of the bay, and the towering redwood trees, make this a particularly rare and beautiful site.

PROCRAM REQUIREMENTS: This liberal aris college is to be the first of about 20 similar enclaves. Specifically required were: housing facilities for 400 students, living quarters for a dean and a dozen faculty members, as well as classrooms and a small college library.

DESIGN SOLUTION: The objective was "to provide an environment where the ideatity of the student could be preserved by creating smaller groups, both for living and for studying, within the larger university. The project, then, has been conceived as a closely-knit complex. designed with warmth and simplicity.' Dormitories have been placed in threeand four-story buildings, where groups of 18 students share a common living room. Most of the teaching will be in the form of seminars and tutorials, so that classrooms, excepting two, are accordingly small. A future dining ball will accommodate not only resident members of the college but also 200 day students. CONSTRUCTION AND MATERIALS: The desire for low maintenance dictated the choice of materials: reinforced concrete walls, clay-tile roofs, wood-framed floors and roofs, precast concrete columns at the arcades, aluminum window sash with anodized finish, precast concrete balconies.

JURY COMMENT: The jury particularly praised the coherence between architecture and environment, a problem that had been unusually well resolved; they liked "the stable, quiet residential grouping" suggested in an "excellent site plan."







TYPICAL ALTERNATING BEDROOM & LIVING ROOM





The small-scale residential character of the dormitories (plans, above right) is further emphasized by their informal placement around two irregular courts (site plan, above). Library, classroom wing, kitchen, and dining hall (drawing, right) follow a more formal pattern around a third, rectangular court.









ALEXANDER

CLARK

CITATION

education

ROBERT E. ALEXANDER & ASSOCIATES, ARCHITECTS • ROBERT E. CLARK, ASSOCIATE IN CHARGE • RALPH J. ASKIN, AMORSOLO MANLIGAS, KARL TRAGSEIL, DESIGN TEAM • WIMMER & YAMADA, LANDSCAPE ARCHITECTS • PARKER, ZEHNDER & ASSOCIATES, STRUCTURAL ENGINEERS • BORIS M. LEMOS, MECHANICAL ENGINEER • FRUMHOFF & COHEN, ELECTRICAL ENGINEERS •

PROJECT: Residence Hall for the School of Science and Engineering, University of California, San Diego, California. SITE: Four acres within the 12-college campus, situated on a plateau 400 ft above the Pacific Ocean.

PROGRAM REQUIREMENTS: As originally specified, two 11-story structures were to house the 800 students attending the first of the eventual 12 colleges.

DESIGN SOLUTION: Instead of the highrise buildings, the architects proposed a complex of 12 small, split-level, fourstory walk-up houses, grouped into four clusters of three houses each. The two northernmost clusters (*site plan*, *right*) are to be constructed first. Each cluster is to be oriented around a small multilevel entrance court, interconnected by walks and planting areas to other clusters and surrounding buildings.

CONSTRUCTION AND MATERIALS: Concrete masonry walls and precast concrete slabs are to be employed. Interior finishes will consist of exposed masonry, hardwood, and plaster.

JURY COMMENT: The architects' decision to use low rather than high structures was applauded, as was their imaginative plan proposal for the individual units, their siting of these buildings in relation to one another, and their plan for the campus as a whole.









At ground level, each house will contain an apartment for a resident faculty member, a small lounge, public facilities and utility rooms (above). Of particular design interest on the typical dormitory floor (above right) is the widened corridor, which serves as study area for groups of 10 students. The rooms at the top level will have clerestory windows and pitched roofs, which will provide interest and variety not only within the interior, but also as observed in bird's-eye perspective from nearby taller buildings.







WITTENBERG

ARNOLD

CITATION

education

WITTENBERG, DELONY & DAVIDSON, INC., ARCHITECTS, ENGINEERS & SITE PLANNERS • GORDON G. WITTENBERG, PRESI-DENT; FRED E. ARNOLD, PROJECT ARCHITECT; A. B. CHAPMAN III, PROJECT DESIGNER; COURTNEY RENSHAW, JOB CAPTAIN • LEE W. BRANSFORD, CHIEF STRUCTURAL ENGINEER • BLAYLOCK, COOK, DEITZ & ASSOCIATES, INC., MECHANICAL ENGINEERS •

PROJECT: Junior High School for School Board, Little Rock, Arkansas. SITES A 46-acre suburban property bounded on its three sides by an expressway, a road, and a body of water. The building will occupy a plateau

between a heavily wooded slope and a flat, treeless plain, suitable for playing fields and a football stadium.

PROCRAM REQUIREMENTS: Phase I of the building program called for the housing of 750 students in a typical classroom teaching arrangement; Phase II was to accommodate 1200 students in spaces that must permit the use of the most up-to-date educational ideas and equipment.

DESIGN SOLUTION: In this axial plan, the nonteaching functions such as gymnasium, administration, library, and cafeteria occupy the high-roofed center portion. Academic spaces are to either side of two parallel corridors that follow the line of the clerestory windows (*model*, facing page). These expandable, column-free spaces have movable metal partitions that permit them to be subdivided according to current or future teaching methods.

CONSTRUCTION AND MATERIALS: Reinforced concrete columns and beams are to frame the long central axis of the building; steel trusses on 12-ft centers will clearspan the teaching areas.

JURY COMMENT: Interior sketches, as the one of the corridor (*right*), suggested to the jury "something very pleasant," and, seen in context with the other projects, the school was found to be "quite clearly the best we saw."





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CROSS SECTION TYPICAL CLASSROOM BAY

The space under the bleachers of the gymnasium (section B, top) provides a natural protected waiting area adjacent to the bus and car-loading courts. Mechanical equipment for the school's air-conditioning system (plan, facing page top) is to be housed in the space above the raised center portion (section A, above). From a central mechanical room, hot and cold water is to be piped through man-sized perimeter monitors to air-handling units located between each double column. A round duct with a continuous diffuser at the bottom, and a continuous pair of lighting tubes at the top, will traverse the length of each 12-ft wide structural bay in all teaching spaces (left and below). Ceilings in these areas are shaped to form a parabolic reflector for the 70 ft-c indirect lighting system.





JOHNSON

AWARD

education

PHILIP JOHNSON ASSOCIATES, ARCHITECTS • LEV ZETLIN, STRUCTURAL ENGINEER • MEYER, STRONG & JONES, MECHANICAL ENGINEERS •

PROJECT: Kline Science Center for Yale University, New Haven, Connecticut. SITE: In the vicinity of the Peabody Museum of Natural History, where Yale's main laboratories for the natural sciences are concentrated.

PROCRAM REQUIREMENTS: To provide facilities for the study of biology and the related sciences, as well as clubrooms on the top floor.

DESIGN SOLUTION: "A high-rise solution was chosen," explained the architect, "to create a focal central building for the new science developments of Yale University." The new structure will serve to tie together the diverse architectural elements on the site: the existing buildings, most of them erected in the 19th Century (gray areas on site plan), and the four other Johnson-designed structures—the already completed geology building, and the proposed auditorium, anthropology building, and chemistry wing.

CONSTRUCTION AND MATERIALS: The structural frame will be of reinforced concrete. Hollow columns with an inner lining of l'-9"-diameter, glazed, vitreous tile pipes will serve as fume exhaust ducts. The exterior facing materials are to be dark, iron-spot bricks and Longmeadow stone spandrels, selected to harmonize with adjoining buildings.

JURY COMMENT: The use of the tube cores for air-conductors and their strong architectural expression was generally applauded. Most of the jurors agreed that "this makes a great deal of sense." One juror, however, felt that the round form became obsessive and created many interior problems: "He has no articulation inside-it's a decorative shell, that's all." The jury was in complete agreement, though, with the architect's special effort to create a continuity between the new and the existing buildings: "People will be able to live with that building for a long time. . . . It's an elegant building and a very good neighbor."









The reinforced concrete columns, which incorporate vitreous tile ducts for the exhaust of laboratory fumes, are spaced 10'-6" on centers and have a diameter of 5'-3". At the first floor, the concrete supporting members are contained within round brick drums with 6" concrete block backing. On the typical upper floors, the reinforced concrete columns are held within half-moon-shaped exterior brick screens. Stone spandrels at the brick face of these columns (section left) are nonstructural and conceal one lighting fixture at the center of each window bay.




JURY DISCUSSION

After the exhilarating but exhausting job of selecting the best of almost 700 entries, the jury gave some thought to what their 14 selections imply about the state of architecture today. Opinions varied. Has architecture entered upon "a stable period," or does it still have "a long way to go before it settles down"? Are the winning designs marked by "a certain discipline," or by "a freedom from inhibition"? Are these buildings, even the rejects, "at a high level of excellence"? Can any one of them be considered "great architecture"?

Kling: I found it difficult to make some of the awards, because the importance of the surrounding area was never projected, never indicated. A few buildings here, however, are very much concerned with their total environmental relationship-the first award, in particular, considers everything around it as well as its immediate design problem. There is also great care with which the environment is brought into the Wurster, Bernardi & Emmons project. Kump: I'll second that. Sympathy with the environment is especially manifest in the Sauer town houses: it gives a definite reference and direction to the architectural objective. But many of the submissions couldn't be evaluated at all in these terms. They may be works of art, but they are in a vacuum. They may be good per se, but they aren't related to the character of the region or the neighborhood. Collins: But it seems to me that this is one of the signs of stability of architecture in the present decade. What tends to differentiate architecture of a stable period is precisely the concern for environment or for some very peculiar problem. And, I think we should say, in fairness to those many people who submitted schemes that didn't get an award, that the jury has been influenced by special problems. When you have the special site or special environment-as, for instance, the rehabilitation of an old building-then you get an opportunity for an individuality of treatment that programs in isolation just don't have. And many schemes were rejected because the general feeling was that it's very good but it's been done better. To me, that is quite high praise for a scheme. It doesn't suggest that it's an inferior one; it's quite simply that we've reached a point in architecture where forms are so accepted, so rational, and so standardized that there's a very high level of excellence even in guite ordinary schemes. Kling: Among the buildings we selected, I think the general mood is a freedom from writhing and thrashing, from an overt attempt to get some dynamic form simply to arrest attention. The winning buildings have a certain discipline, a quiet departure from the nervousness seen in so many other entries. This stableness is a strong force coming out generally, I think-it appears in the residential group for Cowell College, and it appears in the high-rise row house project in San Francisco. These have a coherence and unity and order that is quite different from the jumpiness of many vertical apartment buildings we've seen. This row housing for San Francisco is truly coherent-it comes from the fall of the land and the heritage of that part of the world, the hillside building with party walls of San Francisco. The whole thing hangs together, as a rational, logical outgrowth of the conditions of the site and the traditions of an area. Kump: One of the interesting trends, it seems to me, is a freedom from inhibition and a creative approach to various problems, an approach not dominated by the International style or local cliché. In materials and in concepts, there is a great variety of approach. This freedom is very refreshing, very healthy. We're reaching a maturity today that we didn't have before. In particular, the approach to planning that combines housing with shopping for a variety in living experience, is a splendid philosophy. Weese: Two of these examples just mentioned-the Philadelphia square and the Boston shopping center-derive from real social programs of use, which are often lacking in current abstract formalist approach. But I'm not so sanguine as some of you, that everything is jolly and going in the right direction. I think we're still in a big state of flux. I'm very

happy that there's still freedom of choice because, in my opinion, American architecture has a long way to go before it settles down. In a sense there is too much choice, there are too many ways of doing things. Le Messurier: I can't help but be impressed by the difficulty of designing an individual building out of a few simple elements. Among our winners here, there is no building as an individual thing that has its architecture based on what it is made of. Philip Johnson's building comes closest to it-a building with spandrels and windows and columns, and a strong form which is not separable from these elements. To me, this is always the mark of good architecture. Most of the other buildings here are masses-of brick or concrete-but nothing more sophisticated than that. They are arranged in groups, and the spaces between them are well designed, but the buildings themselves-not one of them is great architecture. One of them may have a nice roof form, but stops there. Another seems to have some promise, in the detailing of the window wall and in the structure generally, but it falls down in elements that can't be explained or in the confusion of extra elements that destroy an otherwise fine scheme.

Structural considerations were, of course, a major criterion. Time and again, the jurors returned to the written descriptions of materials and structural systems. Either the drawings were not sufficiently informative, or the jury questioned what the drawings seemed to show. Some of the most severe criticisms, in fact, were levelled against this aspect of many projects. But here again, there were different views. Do these projects on the whole show a commendable simplicity and appropriateness of structure, have we entered upon a period where most buildings are up to "a certain level of excellence," or has the pendulum swung too far in the direction of "emotional sensitivity"?

Weese: So much of what I deplore could be corrected by better education and more attention to the realities of structure. We've seen structural motifs and clichés cropping up that are not structural, that are used as devices only. We've seen a bearingwall scheme that looks as if it might be a frame. There's little real understanding of the art of building. These are paper exercises. If you can afford a good renderer, the client will buy; after that, you try to establish what it really was. Some of these submittals are give-aways of this process; they're very thin things-fancy renderings and no backup. No real plan. No deep concern for the reality that generates plan. The school at Little Rock, however, is a different case-it has a fresh look because it derives from a specific plan and program, and a specific structuring of the elements. Le Messurier: I applaud what seems to be a trend-avoiding the fancy. There's a considerable absence of shell forms. We didn't see a single hyperbolic paraboloid. No suspended roofs. Architects usually handled these things miserably in the past; very rarely was there something good, unless there was a real application for fancy structure. Kump: What I've noticed in these projects is a move away from a rationale of order and structure to a more superficial consciousness of exterior form. I don't think the two have been integrated yet. Some years ago, there was a great emphasis on construction, order, system, without much regard for emotional sensitivity. Now it seems that the pendulum has swung the other way. Perhaps the next year or two will see them come together more. At this point, it's hard to trace any structural sense in many of these, and there's a great deal of preconceived form and technical gymnastics. Weese: In many cases, it's quite apparent that the engineer has not been called in yet. Kling: But I think most of the buildings we've picked have an appropriateness of structure to the over-all concept. Weese: True, but look at what we've picked. None of these buildings is on a very big scale. With the exception of the Johnson building and the TAC design, everything is on a residential scale, surfaces are mostly flat. Kling: Unfortunately, those who did push structure ahead of everything else, didn't stand up to the scrutiny of this jury. **Collins:** But were they complete failures? The jury's comment was that they could have been done better, and that's the whole point of what' I'm trying to say. In any classical phase of any period in history, there are a great many excellent buildings, none of which is perhaps as good as the very finest of their type, but all of which have an inherent excellence simply because technology and planning have developed to a certain level of excellence. I feel that we owe it to everyone who submitted projects to make this point—that many schemes were, in fact, very handsome buildings which would be a credit to their environment and a credit to their owners. It just so happens that they're working in an idiom that is now fairly standardized and we didn't feel that these buildings offered anything which improved upon buildings we know of elsewhere.

It is interesting to see how the winners are distributed among the various categories. This year, for instance, there were no winners in religion, health, and public use, or in urban design per se (although two projects—one in Philadelphia, one in Boston—were honored for considering the problems of urban design simultaneously with those of residential or commercial design). In the jury discussion, there were observations on college housing, on educational buildings in general, and on speculative buildings, both commercial and residential. As for single-family housing, one juror took a quick first glance across the table and quipped "psychorama."

Weese: In rejecting a lot of designs. I've noticed that the planning of interior space--with attention to the people in that space was quite poor. That's why so many apartments were thrown out. I don't think we've seen any brilliant interior spaces of any kind, which is a tragedy, because the architecture of space is the most exciting thing of all. That's why we didn't have more churches. The only spatial architecture we have is the Israeli pavilion, which is a highly potent building, Kump: Comparing different buildings here, I am aware that the general quality of school buildings is much higher than the speculative work, commercial and industrial. Speculative projects have a completely different set of premises in the solution of a problem. They have to turn up a profit -- just the opposite from public structures. In apartments, for instance, all those cute, eclectic tricks were probably included at the request of the builder; the client has assumed the role of the architect. Kling: Some of these schools we've liked are rather frugal buildings, but they are good architecture because their sponsors were interested in producing good architecture. Educational and public institutions are willing to give the architect time to explore the problem and find the solution that best fits the functional requirements and educational demands. A commercial venture is necessarily more interested in a full asseptionely. We easily in HIIFs collean housing, there is all a sponthete design freedom, because the HPR is has not had been to build up a bareaveracy, whereas the FHA has here is existence 35 years or more and has developed rigor more. Kling: The law generates much of the form. Versust Every, Kling: Up not sure that HRFA won't event, the here is effect on collegiste housing, because they now to ", of build up the number of square feet per studied.

And a few concluding remarks about the basism security γ_{ij} gram. Are the cutries a fuir cross-section of the best i_{ij} as being done roday? How wood is that works what have is the impact of the P/A Deciga America on work that will be secure we during the coming year?

Weese: All in all, I confoss I think the submittals are snown I think there is some important architecture missing. That : inevitable. But the program is a fine one. It's a way for netalent to hubble up. More power to it. Kling: It's a marvelae. program. Many names are being seen for the first time. I juwish all those who presented these beautiful drawings conlisee what we've seen in the past two days. Fantastic, the amount of work being produced, and the good quality of it, too. In a way, though, I was most impressed by the excellent drawing I think that the graphics across the board were better the the buildings. While we've been concerned with poor graph's in the last decade or two, next year we're going to be concerned that their presentations are better than their buildings. Collins: One point I would like to make clear to the read-1 of P/A is that we're not forecasting the style of 1951, we can simply trying to pick out what seemed to us the best design d buildings presented to us Leave it at that. I think that he been this jury's attitude, I wouldn't want any misunderstanding as to what was the criterion upon which we based our judgment.

Other questions remain. To what extent does the composition of the jury-with its predifections and prejudices, special enthusiasms and experiences—influence the decisions? Would a different jury have picked totally different prepetty its have the changes in architecturat thinking been reflected in the projects selected since the program began in 1954? How many significant buildings, now built, received their first honor in this P/A program? It seems appropriate at this time to intestgate these questions—to evaluate the results, both tangible and intangible of more than a decade of Design Awards. In a future issue, we will present a comprehensive analysis of the program to date. In the meantime, we invite comments from readers on any subject pertinent to this evaluation: the winning projects of the current and past years, and the impact of the program as a whole.



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MECHANICAL ENGINEERING CRITIOUE



Valance Cooling

BY WILLIAM J. McGUINNESS

Excessive noise is a characteristic of many air-conditioning applications serving bedrooms and other areas where minimal noise levels are desirable. One completely silent yet effective system is described by the Chairman, Department of Structural Design, School of Architecture, Pratt Institute.

A most important requirement for residential and many other air-conditioning applications is silence. Recent tests have shown that fan-coil units in sleeping rooms, such as those in motels, often produce 45 to 60 db sound levels. This intensity would surely be as great in selfcontained, through-wall units employing a local compressor and a condenser fan. in addition to the fan used for the circulation and cooling of room air. People often find it difficult to sleep in a room subjected to this sound level, which approaches that of a busy office.

A completely silent, yet effective, method has been developed in which a blanket of cooled air descends from finned coils. Chilled water is circulated through the coils, which are hung in a room-length valance at ceiling height. No fans are used, but the source of cooling is so located that comfortable and welldiffused distribution is assured. Before the cooled air reaches the floor and starts

to spill toward the interior wall, it has been moderated by mixing with the warm air at the glass or other surface at the exterior wall. A comfortable and silent circulation results.

The valance cooling strip is part of a package arrangement recently announced by Edwards Engineering Corporation of Pompton Plains, N.J. It includes an aircooled refrigeration unit which circulates a chilled water mixture that is protected against freezing if its temperature should drop below 32 F. The capacities of the central chillers vary from 3 to 36 tons.

Supply and return mains carry the chilled mixture through each valance. Upon demand from a room thermostat, a motorized valve opens a branch supply to a multiple-pass, concentrated finnedcoil bank that possesses the extended heat-transfer surface qualities necessary for the no-fan gravity flow-rate of air. Omission of the fan assures draftless circulation as well as silence.

For public assembly rooms, an additional item is provided in the form of a central air-tempering unit. This draws in fresh air, cools it by the use of the same circulated chilled solutions, and delivers it by means of small ducts to a position just above each valance. Elsewhere, exhaust fans operate to maintain an air balance in the space, and to remove vitiated air near sources of moisture or odors. Because the delivery fans are remote, they do not contribute any sound at the room valance.

For sleeping rooms and general residential spaces, ventilating air has not been found necessary, provided that baths, kitchens, and laundries are equipped with proper exhaust ventilation.

Condensation of room moisture is caught in a pan-strip at the bottom of the valance coil-enclosure and led off to a drain. Variation in demand at the central chiller is accommodated through an automatic by-pass that operates when many of the motorized valves have closed against flow at the valances.

A companion baseboard package system, including a central hot-water heater and circulator, supplies heating baseboards installed at the bottom edge of exterior walls or glass. Control is similar to that of the cooling system.

The heat-absorption rating of the standard-cooling valance strip is 600 Btuh, and water is commonly circulated at 35 to 40 F. A width of 6 in. between the wall and the inner face of the valance is needed for the free discharge of cool air. Recessing this device into the ceiling is a desirable scheme, and this type of installation has been found successful. In the suggested detail (shown), all dimensions are approximate.



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SPECIFICATIONS CLINIC



Color-Anodized Aluminum

BY HAROLD J. ROSEN

Characteristics of a new proprietary, anodized, colored-aluminum finish are discussed by the Chief Specifications Writer of Kelly & Gruzen, Architects-Engineers.

There is now available a system for obtaining anodized, colored-aluminum finishes without the use of dye impregnations. When dyes were used to provide color in aluminum, only a limited number were found that could produce lasting colors. With this new system, Alcoa's "Duranodic 300" and Kaiser's "Kalcolor," lightfast colors can now be obtained that include a selection of colors ranging from gold through tan, brown, olive, gray, and black. In addition to lightfast colors, these new architectural anodic finishes provide greater durability and higher resistance to corrosion and abrasion.

The superiority of these new finishes over the older anodizing processes is due to the higher density of the oxide film obtained. These densities are approximately 20 to 40 per cent greater than those obtained from the conventional sulphuric-acid anodizing bath.

Color-fastness has been tested both in the field and by accelerated artificial laboratory tests, both of which have shown no perceptible fading or corrosion.

Resistance to abrasion by these new finishes is twice that of the conventional anodic finishes. Tests conducted by Taber abrasive and jet abrader methods have verified this fact.

Exposure to soft-spray tests, waterfog tests, marine environments, and industrial atmospheres have resulted in virtually no corrosion effects.

Essentially, the uniformity of color obtained through this new anodizing process is the result of three basic ingredients. One is the selection of a specific alloy; the second is the anodizing time; and the third is the special electrolyte used in the anodizing tank.

The alloys used in this new process

are generally the same as those used in existing alloys. However, to insure uniformity of finished product, the alloying elements are more carefully selected and rigidly controlled in the production of the alloy. In addition, where extrusions and sheet materials are required to be adjacent to one another in the finished design, and where similar colors are desired, the selection of both the extruded alloy and the sheet alloy must be based on the manufacturer's recommendations that are the result of his extensive research in this area. To insure uniformity of color in sheet materials, clad aluminum sheets are used. This cladding process is accomplished by rolling a layer of controlled aluminum alloy onto a sheet of aluminum at high temperatures and pressures, virtually fusing the two into a single member. Because the cladding is relatively thin, these controlled sheets cannot be subjected to certain mechanical finishes, since mechanical finishes might cut through the cladding and expose the core material, which is usually of an inferior anodizing quality.

The other ingredient in color anodizing is time. By utilizing the same sheet or extrusion, varying colors can be obtained by changing the time spent in the electrolytic bath.

The third ingredient, the electrolyte, is the same for all anodizing operations. Both Alcoa and Kaiser have developed their own electrolytes, which are used to obtain the various ranges of color, varying only the alloy selected and the anodizing time.

Generally, all forming operations and chemical and mechanical finishes must precede the anodizing process. Forming or bending the metal after anodizing will crack the brittle coating and expose the base metal, which would contrast vividly with the color-anodized metal.

Chemical finishes are essentially an alkali etch in a bath that imparts a dull, matte-like finish, and the extent of dulling depends upon the length of time in the alkali or caustic soda bath. Mechanical finishes include grinding, sanding, polishing, or rubbing (to produce highly lustrous surfaces), scratch brushing, grit or shot blasting. These pre-anodic treatments affect the final appearance of the color-anodized finishes, since they produce surfaces with different specular reflectivity. Mechanical finishes on clad sheet should be limited to polishing or buffing because of the thickness of the cladding.

The actual color-anodizing process consists of immersing the pretreated, fabricated, controlled alloy in the special electrolyte and subjecting it to specific conditions of amperage, voltage, electrolyte concentration, and temperature for designated periods of time. The electrochemical action converts the surface of the alloy to a tough, dense oxide of the metal, which provides a protective coat. The thickness of the coating, depending upon the color required, can range from .0007" to .0015".

After anodizing, the anodic coating is sealed by immersion in boiling water containing special reagents, which makes the oxide coating chemically more stable.

Because of the nature of the finishing process, minor shade variations can occur from one colored element to another particularly between sheet and extrusion. This characteristic need not be a problem if understood by the architect and specifications writer, and if proper allowance is made in the design. On narrow members such as sash, sills, mullions, and frames, color variations will not be noticeable. With large expanses of metal such as panels, it is best not to butt adjacent members, but to interrupt them with divider strips, shadow lines, or changes in plane or texture.

Color range samples should be submitted by the finisher for the architect's approval before proceeding with production, and the amount of permissible variation should be agreed upon by the architect and finisher.

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IT'S THE LAW



Need for Improved Public Relations

BY JUDGE BERNARD TOMSON AND NORMAN COPLAN

Using the Seagram Building decision as a case in point, P/A's legal team discusses the need for improved public relations as a means of stimulating the layman's awareness of distinctive architecture.

One of the greatest handicaps under which the architectural profession labors is the apathetic attitude of the public at large toward promoting the physical beauty of its environment, or in resisting efforts to achieve certain ends at the expense, or to the detriment of, that goal. As might be expected, this seeming lack of concern is accompanied by an inadequate understanding of the architect's role and function in preserving and creating aesthetic values as reflected in our architecture. One of the factors contributing to this apathy and lack of understanding has been the absence of an adequate public relations approach by the architectural profession. Under these circumstances, it is therefore particularly important for the profession to recognize and acknowledge efforts by nonprofessionals to interest the public in the promotion of distinctive and superior architecture, and thereby encourage continuance of these efforts.

A hopeful sign is that, in the last few years, there has been evident a greater recognition of the architect's role in newspaper and magazine editorials and feature stories. For example, a few months ago the New York newspapers objected strongly to a decision of a New York court, which, it was thought, would discourage the construction of new buildings of unusual and distinctive aesthetic features (see IT'S THE LAW, OCTOBER/ NOVEMBER 1963 P/A). In this decision, the Court upheld an unusual theory of taxation applied against a new building of outstanding aesthetic attainment (Seagram Building), which would substantially increase the amount of taxes payable by the owner of such a building, in contrast to the normal rate of taxation applied to a "run of the mill" building. The anxiety with which this decision was greeted, not only by architects but by newspapers and knowledgeable laymen, may reflect a trend of growing awareness, which, if carefully nurtured and encouraged, could bring fruitful results.

An example of a fine newspaper that has reflected a significant understanding of these problems is *The Long Island Sunday Press*, a New York newspaper whose managing editor is David Starr. Typical of its reaction was an editorial it published on the appointment of an architect, William F. R. Ballard, as chairman of the New York City Planning Commission. In commending this appointment, the editorial pointed out that "even more than a plan, the city needs a man who will remember that land is more than an economic entity: it is where people live, work, and play."

The editorial emphasized the pressures to which city planners are subject, and that inferior results are achieved in planning when human values are ignored and cost is the only factor considered:

".... planners are in a crucial position in the tangle of processes that get things done—and undone—in the city. They are, thus, the constant targets of the forces contending for power, privilege, and favor. Pressure is constantly exerted from all sides from politicians, from businessmen, from civic groups, from individuals, from the press. ... Then multiply this a thousandfold and the difficulty of getting things done—good or bad —becomes clear. Add to this, of course, the city's chronic financial sickness. ...

"For two years, the let-the-dollar-determine-what-it-is-to-be-built boys have dominated the scene. What is good for the town as a whole, what is beautiful, what is livewith-able has been ignored so that much of the city is a triumph of technology and money-making and a defeat for the humanity who live and work there."

The editorial continued by articulating the appropriate goals and standards for city planning in a civilized society, stating:

"Planners must be concerned not just with what is profitable, realizable, and functional; there should always be a sense of beauty and a concern for humanity. The tranquility of a London park, the spaciousness of a Paris boulevard or square, are as essential to a city as a 60-story office building and a 30-story apartment. Ironically, beauty doesn't cost any more than ugliness; sometimes it costs less."

Another example of a newspaper that has articulated a constant interest in architectural improvement is *The New York Times.* For example, in a recent editorial it protested against plans for alteration of Gracie Mansion, the official residence of the Mayor of the City of New York, stating:

"It is time that a city with unparalleled resources in architectural expertise stopped ignoring these resources with such studied consistency. The new wing is appallingly unattractive and unsuitable for a building of prime civic importance. The Committee to Preserve Gracie Mansion... is long on civicminded citizens but regrettably short on architectural historians or experts in landmark preservation....

"In a city that too often confuses progress with size, Gracie Mansion is an intimate civilized delight, as well as an architectural treasure. Let us respect it, preserve it, and, in recognition of expanding needs, enlarge it. But let us not ruin it in the process."

In the continuing process of public education, editorials of the type quoted are of unquestionable value. The architectural profession can assist in this process by encouraging influential nonprofessionals to speak out in those areas where, because of training and interest, the architect is particularly involved. One concrete and specific way of expressing such encouragement is to have architects' professional societies make honorary awards in recognition of such contributions as were made by *The New York Times* and *The Long Island Sunday Press*.

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BOOK REVIEWS



Breuer: True to Himself and His Principles

BY WOLF VON ECKARDT

MARCEL BREUER: BUILDINGS AND PROJ-ECTS 1921–1961. Captions and Introduction by Cranston Jones. Published by Frederick A. Praeger, 64 University Place, New York 3, N.Y. (1963, 262 pp., illus. \$17.50). Reviewer is an architectural writer and critic, honorary member of the AIA, and contributor to various national publications.

Marcel Breuer began his remarkably versatile and prolific work on the sets and props of the world stage when, a precocious lad of eighteen with a talent for sculpture and a yen for architecture, he enrolled at the Bauhaus in Weimar. That was in 1920. He had come from Hungary and-so Cranston Jones tells us in the introduction to this book-had flown in an airplane before he ever rode in an automobile and done both before he ever used a telephone. For technology in those days was not an ever-accelerating evolution as it is today, but entered a young man's life in bewildering fits and starts, at once titillating and menacing. The Bauhaus promised to call it to order. Walter Gropius' clarion call was "art and technology, the new unity."

In the early Weimar days, however, when the painter Johannes Itten dominated the curriculum and Breuer apprenticed in the carpentry shop, the clarion call remained largely unanswered. In the first few years, the Bauhaus was little more than another arts and crafts school with a strong experimental and expressionist bent. It differed mainly because of the unusual talent and unusual strife in its midst.

It was only when Breuer and the other

young turks-such as Laszlo Moholy-Nagy, Josef Albers, and Herbert Bayerbegan to assert themselves, that the Bauhaus came to grips with new materials, new engineering and design for machine production. By the time it moved from Weimar to Gropius' revolutionary new building at Dessau in 1926, Breuer had advanced from student to master and from his still rather Art Nouveau wood furniture to his famous steel-tube chairs inspired by bicycle handlebars. There remains a glimmer of those feuds of 40 years ago in Cranston Jones' remark that the chromed chairs were bent and welded not in a Bauhaus workshop but in some pipefitter's shop downtown.

The design was entirely Breuer's, of course, just as Paul Klee's and Wassilv Kandinsky's paintings were entirely their own. But it does not detract from Breuer's accomplishments to assume that, more than the paintings, his early design concepts emerged out of the ferment and collective striving that the Bauhaus represented. Nor does it detract from Gropius' accomplishment to note that it was primarily Breuer and his friends who prompted technology into the arena only to submerge the beast to their artistic intent. Gropius had staged and called the show and remained the ringmaster. There was room for many individual and virtuoso feats. And Breuer has remained a technological lion tamer ever since.

This book, of course, is about Breuer and not about the Bauhaus, which he helped make and which helped make him. There are some interesting flashbacks, but the bulk of the superb illustrations and Cranston Jones' straightforward and rather technical account emphasize Breuer's current work and philosophy and mention his formative years only in passing. Yet, even these scant references, augmented by excerpts of Breuer's own writings (including a delightfully warm and revealing description of Paul Klee), imply much that should help clear up some of the current misconceptions about the Bauhaus and, with it, about the architecture we call modern.

The gist of these misconceptions is that the naughty old Bauhaus threatened all architecture into monotonous glass curtain-wall boxes that are hot to live in and cold to look at. Only the heroes of the most recent architectural fashions, we are now earnestly told, the innovators of grilles and San Gimignano servant stacks and sculptured concrete, saved us from the evils of Bauhaus "functionalism" and a total sell-out to inhuman technology. Now that some architects are noisily going to bat for beauty and going in for fanciful neo-Baroque, neo-Venetian Gothic and neo-just-about-everything, the basic tenet that form should follow function is denounced as hopelessly passé. Luckily, no one has yet denounced the theory of relativity just to acknowledge the genius of Newton.

It is true, of course, that the Bauhaus, along with all consciously modern avantgarde art and architecture, was so intent on surging forward that it did not bother to look back. The Victorians had done more than their share of that. "Wir haben keine Zeit Griechen zu sein!"—We have no time to be Greeks—Jones quotes the Breuer of the Bauhaus days. It is also true that now that modern architecture travels on a comfortable expressway, it *Continued on page 158*

Castell answers a pointed question about "Slide Rule" accuracy



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JANUARY 1964 P/A

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JANUARY 1964 P/A

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THAT KINNEAR Rolling Doors are tops in FIRE PROTECTION

The top photo (note arrow) shows the location of the Kinnear Rolling Doors at the R. L. Henry Lumber Company, Mansfield, Ohio, a firm which was partially destroyed by fire in August, 1963.

The middle photo shows where the fire was stopped in its tracks — with the Kinnear Rolling Door still very much in place, giving evidence of its reliable fire protection.

Photo three is further "proof of the pudding". It shows how the Kinnear Door protected the lumber stock behind it.

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1900-20 Fields Avenue, Columbus, 16, Ohio 1742 Yosemite Avenue, San Francisco 24, Calif. 3683 Dundas Street West, Toronto, Ont., Canada Offices and Representatives in All Principal Cities Continued from page 154 seems a good idea to keep an eye on the rear-view mirror. There is a clear need to meet man's desire for visual continuity.

But whether they studied and taught the classic orders or not, there is nothing in Gropius' or Mies' or Breuer's pioneering work that heralds the shoddy, illproportioned, and artless by-products of the so-called "international style" that rightly disturb us today. There are no bland glass boxes in this collection of Breuer's early work. There is no rigidly dogmatic machine production in the designs which the Germans once called "Neue Sachlichkeit," for which "functionalism" is not an entirely adequate translation. What this book reaffirms, rather, is that the Bauhaus helped assert the freedom to seek the design solution inherent in each problem. And it is in large part the initial momentum of this freedom, as Breuer points out in his introduction, which has given rise to the more recent tendencies in modern architecture-inventiveness, structure, plastic modulation, preoccupation with scale, and, regrettably, the all-is-permissible-tothe-genius tendency.

The last is one tendency the disciplined Breuer has shunned like the plague. In all others, he has remained among the most significant leaders. He is relentlessly striving for an ever-expanding architectural vocabulary.

Jones has neatly organized this simultaneous striving into four major categories-structure, adherence to basic geometric form, texture, and an expressive facade-and he analyzes each with almost scientific detachment. The technological lion taming is foremost. Breuer's creative preoccupation with structure has led him, earlier than most, to recognize the shift from compression to tension structures and their potential for plastic expression in reinforced concrete. His "Civic Center of the Future" project of 1936-built first in 1947 as the Mar del Plata beach restaurant in Argentina and again, in 1954, as a temporary office over the sidewalks of Rotterdam's De Bijenkorf department store-represent this turning point.

His own experiment in this area made him all the more receptive to the new world of Pier Luigi Nervi, which he entered when he worked with the Italian engineer on the UNESCO building. What followed were the daring structures—the sculptures with a function, as Jones calls them—at St. John's Abbey, the Charles Center project for downtown Baltimore, and the IBM-France Re-*Continued on page* 162 Wahconah Regional High School, Dalton, Mass., serving towns of Dalton, Hinsdale, Becket and Windsor. Architects: Freeman, French, Freeman, Burlington, Vt., in association with Architect Prentice Bradley, Pittsfield, Mass. Photo by Joseph W. Molitor, Ossining, N.Y.



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5/16"	43	39	32	26	19	18	15	14	11	8
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Continued from page 158

search Center at La Gaude, France.

Yet for all his organic sculptural forms, Breuer has never abandoned the basic geometric forms, particularly his clear slab, which has become something of a trademark of his work. He has put it, in Jones' words, to perhaps its most triumphant use in the magnificent bell tower for the St. John's Abbey Church, "a demonstration of form that creates a new symbol, vibrant, monumental, representative not only of the technology but also of the aspirations of the modern age."

Many architects are concerned with texture, but few emphasize it as daringly as Breuer, who delights in intense and dramatic contrasts. This, too, is a typical Breuerism: the gleaming chrome of his early steel furniture contrasts with the colorful, textured webbing; smooth concrete walls contrast with tile grilles; the shimmer of glass contrasts with rough fieldstone.

And last, but perhaps most significant for the future, is Breuer's search for a new façade. As he explains it:

"The glass and panel façades of our buildings, some of them quite beautiful and some of them technically advanced, have, as a rule, no structural supports in the plane of the façade. The actual weight of the building is supported by a skeleton structure some distance behind the façade. All well and good if the office building needs only open spaces with no partitions. But if it must be subdivided by partitions, these interior columns are very much in the way. From many points of view, the solution would then be in designing a building in which the supporting structure would lie in the plane of the façade itself."

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The well reproduced black-and-white and color photographs, which comprehensively illustrate all this, are arranged in reverse order, beginning with the most recent buildings and projects and ending with a "retrospective" of Breuer's work from 1921 to 1945. But whether



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Breuer welcomes individual adventures and has engaged in many of them. But he also cherishes discipline, which is a vital ingredient of excellence. He sees architecture as the Bauhaus saw it, not as a school or a style, but as a development. And he has advanced our architecture all the more boldly, perhaps, because from the day he enrolled at Weimar he has remained true to himself and his basic principles.

OTHER BOOKS TO BE NOTED

Alvar Aalto. Alvar Aalto, with the assistance of Karl Fleig. George Wittenborn, Inc., 1018 Madison Ave., New York 21, N.Y. 1963. 269 pp., illus, \$16.75. Text in English, French, and German.

To be reviewed.

An Analysis of Urban Travel Demands. Walter Y. Oi and Paul Shuldiner. The Transportation Center, Northwestern University, 1818 Hinman Ave., Evanston, Ill., 1962. 281 pp., tables. \$12.50

Results of home interview surveys on travel demands and expenditures of urban residents are presented along with an evaluation of current "origin-and-destination" study procedures. Data on expenditures was drawn from 30 cities; more general information was drawn from Chicago, Ill., and Modesto, Calif.

Architectural Physics: Lighting. R. G. Hopkinson. Her Majesty's Stationery Office, London. Distributed by British Information Services, 845 Third Ave., New York 22, N. Y., 1963. 360 pp., illus. \$10 To be reviewed.

Architecture in the Soviet Union. Paul Willen. Institute of International Education, 800 Second Ave., New York 17, N. Y., 1963. 14 pp., mimeographed, no charge.

One of a series of papers commissioned by the IIE, prepared by "experts with recent experience within the USSR" to help other specialists who will be visiting the Soviet Union. This well-written discussion of Soviet architecture summarizes the historical background (from the 1920's), the organization of architectural practice, construction techniques, and the status of planning and housing. The article includes a bibliography of work in English. Author is with the office of Marcel Breuer; his unpublished master's thesis at Columbia University (1953) was "Soviet Architecture in Transformation."

Buildings, Plans and Designs. Frank Lloyd Wright. Horizon Press, 156 Fifth Ave., New York 10, N.Y., 1963. Portfolio of 100 drawings, plus borchure of 32 pp. \$75 To be reviewed.

Cities. Lawrence Halprin. Reinhold Publishing Corp., 430 Park Ave., New York 22,

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N.Y., 1963. 224 pp., illus. \$15 To be reviewed.

Cities and Space: The Future Use of Urban Land. Edited by Lowdon Wingo, Jr. The Johns Hopkins Press, Baltimore 18, Md., 1963. 262 pp. \$5.50 To be reviewed.

The City, Form and Intent: being a collection of the plans of fifty significant towns and cities all to the scale of 1:14400. Richard Saul Wurman and 61 students of the School of Design. Student Publication of the School of Design, Volume 13: Numbers 1 and 2, North Carolina State College, Raleigh, N.C., 1963. 51 plates, folded and boxed, plus booklet of supplementary drawings. \$4

To be reviewed.

The Historian and the City. Edited by Oscar Handlin and John Burchard. M.I.T. Press, Cambridge 42, Mass., 1963. 298 pp. \$7.50

To be reviewed.

Library Buildings of Britain and Europe. Anthony Thompson. Butterworth & Co., Ltd., London, 1963. Distributed by Butterworth, Inc., 7235 Wisconsin Ave., Washington 14, D.C. 326 pp., illus. \$21

To be reviewed.

Manual of Principles and Performance. Consulting Engineers Council, 918 16 St., N.W., Washington 6, D.C., 1963. \$7.50 to CEC members; \$15.00 to nonmembers.

Updated professional management guide for the engineer covers client relations, professional services, transmittal of information, criteria of performance, organization and operation of a consulting practice. CEC working documents, and a recently published Chart of Accounts. Purchase price includes future supplements to the loose-leaf manual.

Mastery of the Metropolis. Webb S. Fiser. Prentice-Hall, Inc., Englewood Cliffs, N.J., 1963. 168 pp., paperbound: \$1.95; clothbound: \$3.95

To be reviewed.

Noise in Hospitals. (Public Health Service Publication No. 930 D-11). United States Government Printing Office, Washington 25, D.C., 1963. 142 pp. 70¢ paperbound Results of a study of noise in eight hospi-

tals made by Lewis S. Goodfriend & Associates, acoustical engineers. Booklet is directed toward architects, engineers, manufacturers of equipment, and hospital administrators. Of interest are analyses of hospital layouts, classification of interior and exterior noises, and a checklist for considering noise generators during planning and construction.

Realms of Gold. Leonard Cottrell. New York Graphic Society, Greenwich, Conn., 1963. 278 pp., illus. \$5.95 To be reviewed.

The Roots of Japanese Architecture. Yukio Futagawa. Harper & Row, Inc., 49 East 33 St., New York 16, N.Y., 1963. 208 pp., illus. \$25 To be reviewed.

Scandinavia. Compiled by Martin Hürlimann. Introduction by Count Oxenstierna. The Viking Press, 625 Madison Ave., New York 22, N.Y., 1963. 256 pp., illus. \$12.50 Scandinavia—its landscapes, waterscapes, arts, history, and people-is seen in an ex-Continued on page 170



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Continued from page 167

cellent selection of photographs. Familiar and remote churches, homes, and other interesting buildings are scattered throughout, representing not an architectural survey but -in the context of the entire book-the rustic-urban texture of Scandinavia. Photos are well annotated; text sketches historical relationships and diversities of Scandinavian nations.

The Urban Pattern (2nd Edition). Arthur H. Gallion and Simon Eisner. D. Van Nostrand Co., Inc., 120 Alexander St., Princeton, N.J., 1963. 435 pp., illus. \$14 To be reviewed.

NOTICES

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CHARLES W. LANE, ALEX W. RIEBE, Continued on page 174



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ROBERT DEAN LARAMEY and KEN WHITE are principals in firm of LARAMEY/WHITE, Architects, Aurora Bldg., 9000 E. Colfax Ave., Aurora, Col.

WALTER STEPHEN LINCOLN, who is with the Chicago office of Perkins & Will, Architects, will also practice privately at 1190^{1/2} Westmoor Road, Winnetka, Illinois. JOHN W. MALONEY, ARTHUR HERRING-TON, TIBOR FREESZ and RALPH O. LUND are principals in firm of MALONEY, HER-RINGTON, FREESZ & LUND, Architects, 754 Central Bldg., Seattle, Wash.

JOSEPH J. OSHIVER, Architect, Lathrop Bldg., 1005 Grand Ave., Kansas City, Mo.

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MALCOM G. DUNCAN, Architect, has joined the staff of J. RUSSELL BAILEY, Architect, Orange, Va.

The GEORGE M. EWING COMPANY, Architects and Engineers, Washington D.C., announces the following staff changes: Elevated to Partners are Paul BROTT, HARRY FOX, WILLIAM C. JOYCE and ROBERTSON H. SHORT, JR. Named as Associates are EDGAR G. CROSS, III, FRANK DAVOLOS, ROBERT H. DAY, AN-THONY DILENNO, EDGAR H. HENDLER, IRVING ISAACS, JR., JOSEPH P. KEARNEY, EDWARD J. PORTKA, FRANCIS RIORDAN, RAYMOND A. STANLEY, JAMES B. SUL-LIVAN and DIMITRI J. VERVERELLI.

ALAN L. FRIEDLAND is newly associated with the firm of HENRY J. CAMPBELL, Garden City, N.Y., in the capacity of Chief Engineer.

RONALD M. GLAISTER is new partner in firm to be known as FISHER, TEDMAN, FISHER & GLAISTER, Architects, Toronto, Ont.

ROLF N. IRGENS, Architect, has become a principal in the firm of DARBY, BOCNER & ASSOCIATES, INC., W. Allis, Wisc.

ABRAHAM D. LEVITT, Architect, has

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FRANK G. LOPEZ, Architect, has joined

BALLARD TODD ASSOCIATES, New York.

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JOHN T. ROBERTS and RICARDO SCOFIDIO

have become Associates in the firm of

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SIGMUND F. BLUM has been appointed

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ment of PETER W. SZAROWSKI to its staff

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ANTHONY J. FARANDA has been named

Executive Director in charge of planning, design and construction for ALCOA

PHILIP W. FAULCONER has been appointed Consulting Architect to the

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ratories.

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Upper Left, NEW YORK HILTON HOTEL, New York, N. Y. Architect: William B. Tabler, New York, N. Y. Gen. Contractor: Uris Building Corp., New York, N. Y. Panels by: Precast Building Sections Inc., Long Island, N. Y. Upper Right, MODERN MEDICINE PUB-LICATIONS, INC., Minneapolis, Minn. Architect: Thorsen & Thorshov, Minneapolis, Minn. Gen. Contractor: Gunnar I. Johnson. Panels by: Midwest Concrete Industries, West Des Moines, Iowa Lower Left, McGRAW-HILL OFFICE BUILDING, Highstown, N. J. Architect: Alfred E. Poor. Gen. Contractor: Irwin & Leighton, Inc. Panels by: Formigli Corporation, Berlin, New Jersey.

Lower Right, HOLY CROSS HOSPITAL, Silver Spring, Md. Architect: Faulkner, Kingsbury & Stenhouse, Washington, D. C. Gen. Contractor: John A. Voipe Construction Co., Washington, D. C. Panels by: Tecfab, Inc., Beltsville, Md.

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178 Notices

Continued from page 174

Newly appointed in firm of GIFFELS & ROSSETTI, INC., Mich., are CARL A. GIF-FELS, President, MERRILL M. BUSH, Executive Vice-President and BERTRAM GIF-FELS, Treasurer.

ROBERT A. HELLER has been appointed to the staff of SCHUPACK & ZOLLMAN, Structural Engineers, Conn. and Pa.

Newly appointed are THOMAS C. HALLI-DAY as administrative assistant, FRITZ KRAMRISCH as technical assistant for foundations and ALFRED ZWEIG as techninical assistant for superstructures in firm of ALBERT KAHN ASSOCIATED ARCHITECTS & ENGINEERS, Mich.

OTTO H. KILIAN has been made Vice-President and Assistant General Manager of CHARLES LUCKMAN ASSOCIATES, Los Angeles, Calif.

SMITH, HINCHMAN AND GRYLLS, ASSO-CIATES, INC., has appointed Ross W. PURSIFULL as head of its architectural and research department.

EUGENE T. TADSEN has been appointed Controls Specialist in the Onan Division of STUDEBAKER CORPORATION.

ROY S. TANAKA has been named Vice-President of IRVING D. SHAPIRO & Asso-CIATES, Calif.

GEORGE D. WECHSLER has been made Treasurer in firm of MORRIS LAPIDUS, LIEBMAN & ASSOCIATES, N. Y.

Name Changes

BERENSON-GLENNY, ARCHITECTS-NANCY PORTER HEYM, ASSOCIATE. Formerly BERENSON-GLENNY, ARCHITECTS. Baton Rouge, La.

The firm of Cochran & Stephenson has announced the partnership of Richard C. Donkervoet; its new name is Cochran, Stephenson & Donkervoet, Architects, Baltimore, Md.

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McClurg, McClurg, Paxton & Mikle, Inc. of Bay City, Mich. Formerly R. H. McClurg Associates, Inc.

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