ESSIVE ARCHITECTURE

department store

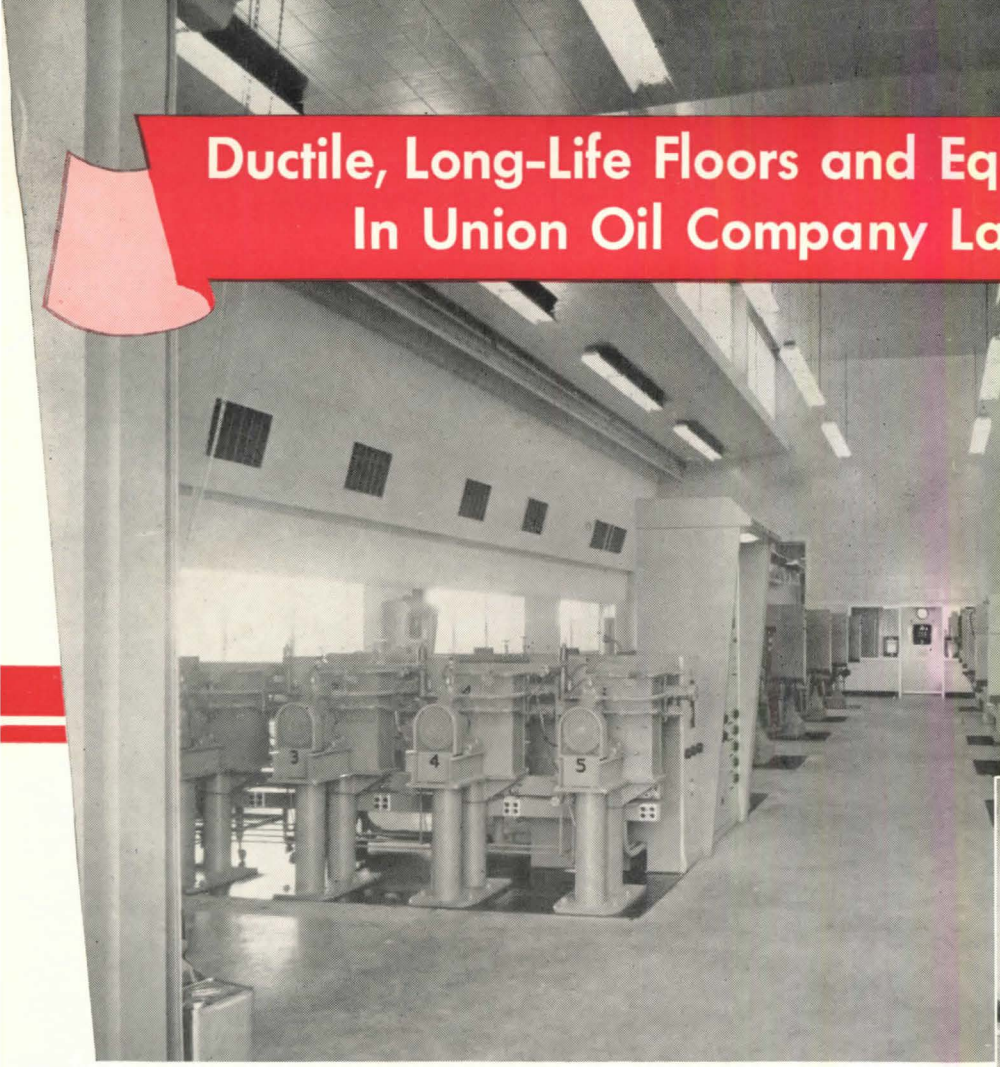
8

august 1952

aluminum building

largest architectural circulation in the world

Ductile, Long-Life Floors and Equipment Grout In Union Oil Company Laboratory



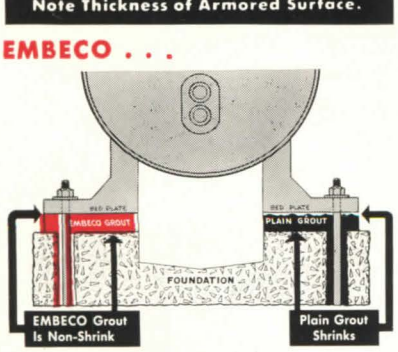
Union Oil Co. Laboratory, Brea, California. Archt.—Austin, Field and Fry; Contr.—P. J. Walker Co.; Cement Contr.—R.. J. Hiller Co.—all companies of Los Angeles, California. Masterplate "Iron-Clad" Concrete Floors—non-colored and colored. Equipment grouted with Embeco Non-Shrink Mortar.

CEMENT DISPERSION IS KEY TO SUPERIORITY OF THESE MASTER BUILDERS PRODUCTS

MASTERPLATE . . .

Section of Masterplate Floor. Note Thickness of Armored Surface.

EMBECO . . .



MASTERPLATE "IRON-CLAD" CONCRETE FLOOR
EMBECO Non-Shrink GROU

More and more builders and owners are taking the position that the f and grout *are part of the machine . . .*

That is why in many carefully planned structures such as this Union Oil laboratory, long-life Masterplate Floors and Embeco Grout are spec and used.

MASTERPLATE . . . produces a thick, armored surface that has 4-6 ti greater wear-resistance than the best plain concrete floor. This "iron-cl surface, produced when floor is installed or resurfaced, also makes the f spark-resistant, non-dusting, corrosion-resistant, easy-to-clean, non- economical. Non-colored and eleven colors.

EMBECO . . . counteracts shrinkage — principal cause of failure in eq ment grouts. Produces easy placeability, early strength to avoid long, co shutdowns. Provides full, level bedplate contact, plus ductility to withst impact, vibration and pounding action.

Full information on Masterplate and Embeco and "see-for-yours demonstration kits supplied on request . . . without cost or obligat

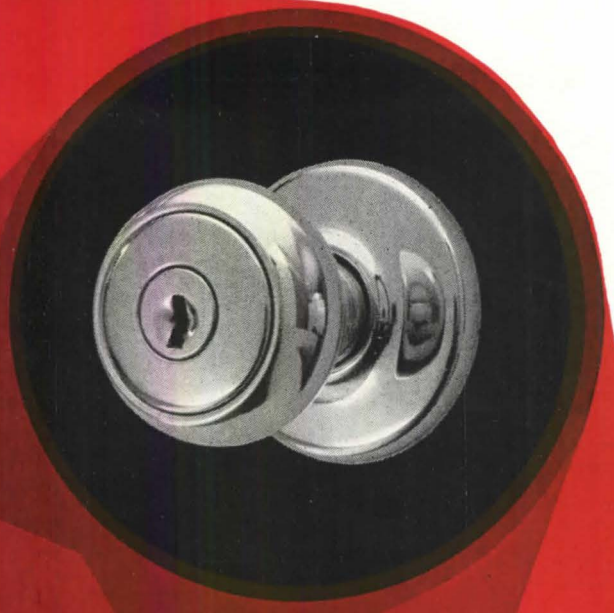
the MASTER BUILDERS

CLEVELAND 3, OHIO — Subsidiary of American-Marietta Company — TORONTO, C

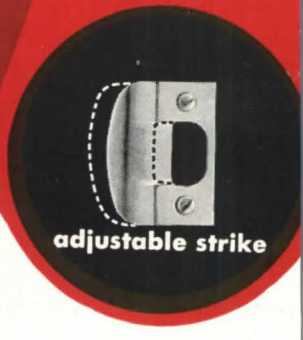
PROGRESSIVE ARCHITECTURE

August 1952

the kwikset jig



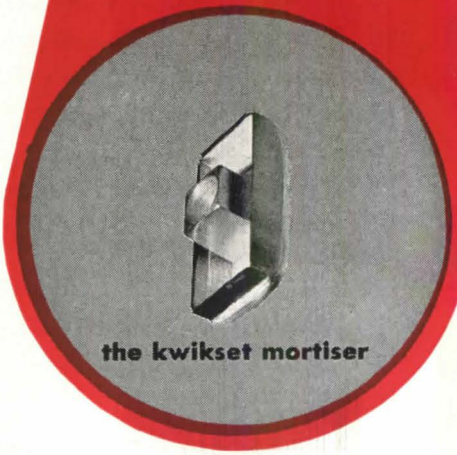
the kwikset bit



adjustable strike

kwikset LOCKSETS

teamwork!



the kwikset mortiser

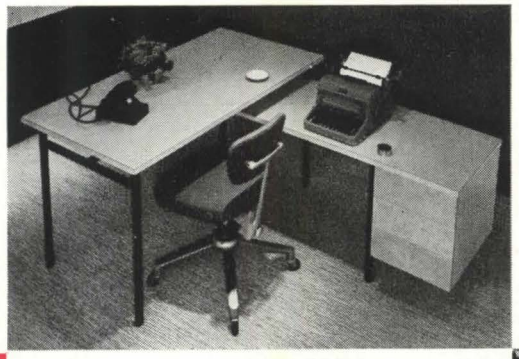
kwikset's team of time saving installation aids cuts costs, saves money.
every kwikset lock is **precision manufactured** and **unconditionally guarantee**

kwikset sales and service company | **anaheim, californi**

Knoll Furniture

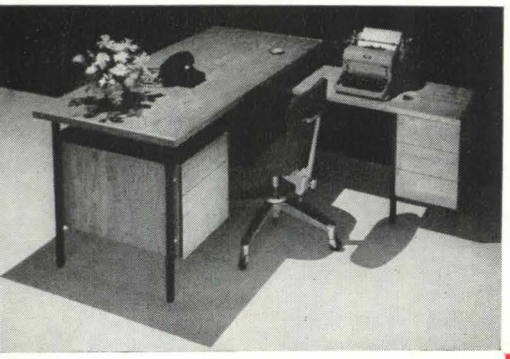
Knoll Fabrics

Knoll Planning Unit

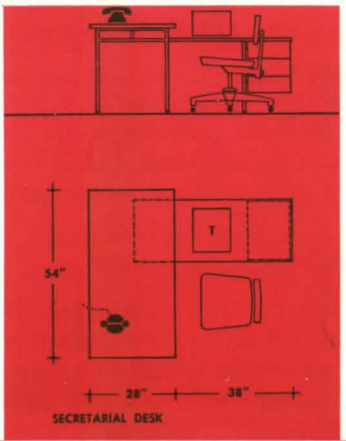


KNOLL

KNOLL ASSOCIATES, INC., 575 MADISON AVENUE, NEW YORK 22, N.Y.

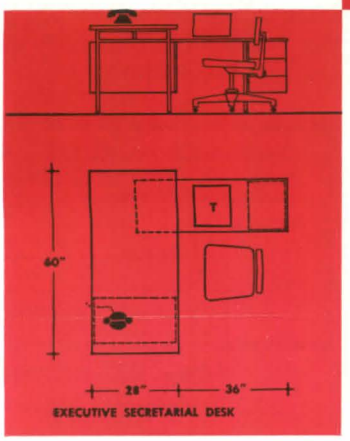


SECRETARIAL DESKS from the Knoll Office Planned Furniture Group. The new L-shape design provides maximum work area per square foot of space and brings wider flexibility to the planning of contemporary offices. Structural base of black metal supports a burn and stain-proof, high pressure laminate top of linen or birch, with stepped-down typewriter extension left or right. Grouped in multiples of two or more, these desks form working units of great efficiency in compact space. Knoll Office Planned Furniture is available in integrated groups of desks, tables, cabinets and chairs for executives and secretaries. Information on request.

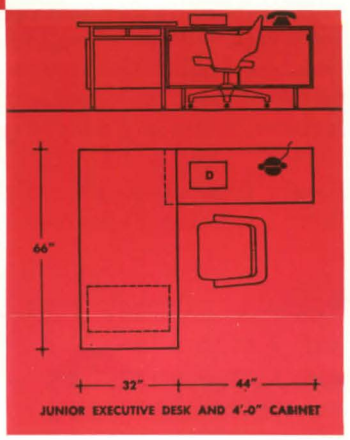


SECRETARIAL DESK

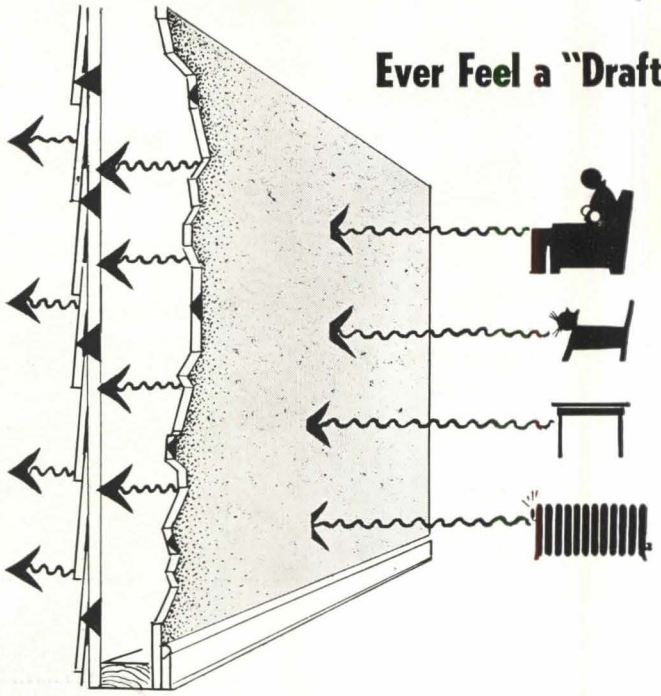
T-TYPEWRITER
D-DICTAPHONE



EXECUTIVE SECRETARIAL DESK



JUNIOR EXECUTIVE DESK AND 4'-0" CABINET



Ever Feel a "Draft" in a Warm, Closed Room?

(RADIATION is the transmission of rays through space. Infra-red heat rays travel at the speed of light, are invisible, have no temperature, only energy. But when absorbed by a surface, they are transformed to HEAT. The surface of any object warmer than absolute zero – the Sun, You, Clothing, Wood, Plaster, an Iceberg, a Stove, a Chair, Paper, an Animal, will RADIATE to a colder surface.)

(CONDUCTION is the process by which warmth flows from a warmer object or particle by direct physical CONTACT, to a cooler one.)

People often complain of "drafts" in a room with air-tight walls and windows. Why? To a large extent because, by Nature's law, warmth *flows* to cold by RADIATION as well as by CONDUCTION. Cold walls, too, draw heat out of contacting air by conduction, causing a downward current of cold air.

The exposed skin of people and the outer surfaces of their clothing lose heat as infra red heat rays flow from them, at a 90% rate, to a cooler wall plaster surface, which absorbs the rays at a 93% rate and transforms them again to heat. If insulation is lacking or has packed down, most of this heat is transmitted by radiation to the colder outer wall at a 93% rate, absorbed, and then dissipated to the colder, outer air. Ordinary insulation in the wall space, or a solid wall, augments heat flow by direct conduction.

So people are uncomfortable, perhaps only in spots. More fuel is burned to obtain greater comfort. Unnecessarily high, less wholesome temperatures result.

Multiple sheets of accordion aluminum in the wall space would block convection and reflect back 97% of heat rays to re-heat the plaster by their absorption. With plaster sufficiently warm, no heat radiates from bodies to walls. There is no current of cold air on the surface of the wall. Comfort is maintained without unduly high temperatures or fuel costs.

In summer, the process is identical except for direction. Heat by radiation, conduction and convection is retarded by the multiple sheets of aluminum in the outer wall space. The interiors of rooms stay cooler. Their plaster surfaces are cooler than the body. So, by Nature's law that warm radiates to cold, some heat *leaves* the body for the colder wall surfaces, increasing body coolness and comfort.

The commercial form of multiple accordion aluminum is Infra Insulation, Types 6, 4, and 4 Jr.

INFRA THERMAL FACTORS. TYPE 6

Up-Heat	**C.089, R 11.23**	**= 4 3/5"**	**dry rockwool**
Wall-Heat	**C.073, R 13.69**	**= 5 5/8"**	**dry rockwool**
Down-Heat	**C.044, R 22.72**	**= 9"**	**dry rockwool**

This discussion is amplified in Schwartz's "Simplified Physics of Vapor and Thermal Insulation."

Infra Insulation, Inc., 525 Bway., N.Y.C. Dept. (P-8)
Please send FREE "Simplified Physics of Vapor and Thermal Insulation."
Name_____
Firm_____
Address_____
☐ Send Prices of Infra Insulations ☐ Send Sample

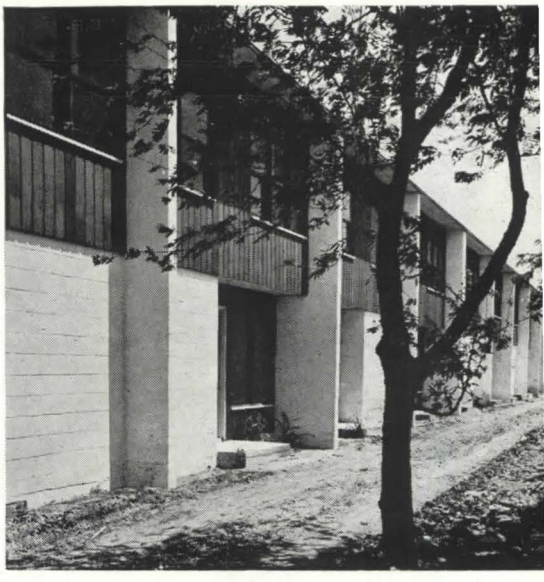
INFRA INSULATION, INC.
525 Broadway, New York, N. Y.

n Antonio public housing

San Antonio, Texas, some remarkable rdinated public housing projects are ing completion. They are remarkable design, for comfort, for the considera- they give the tenant as a human being, for the way they have been designed constructed with full co-operation ng the architects of the community and local Housing Authority—if not always understanding from regional and Wash- on PHA offices. Finally, they are re- kable for the use of techniques which e brought costs to figures under the ap- ed development program estimates, even though lift-slab concrete construction (desired by the architects and proven more economical*) was not permitted.

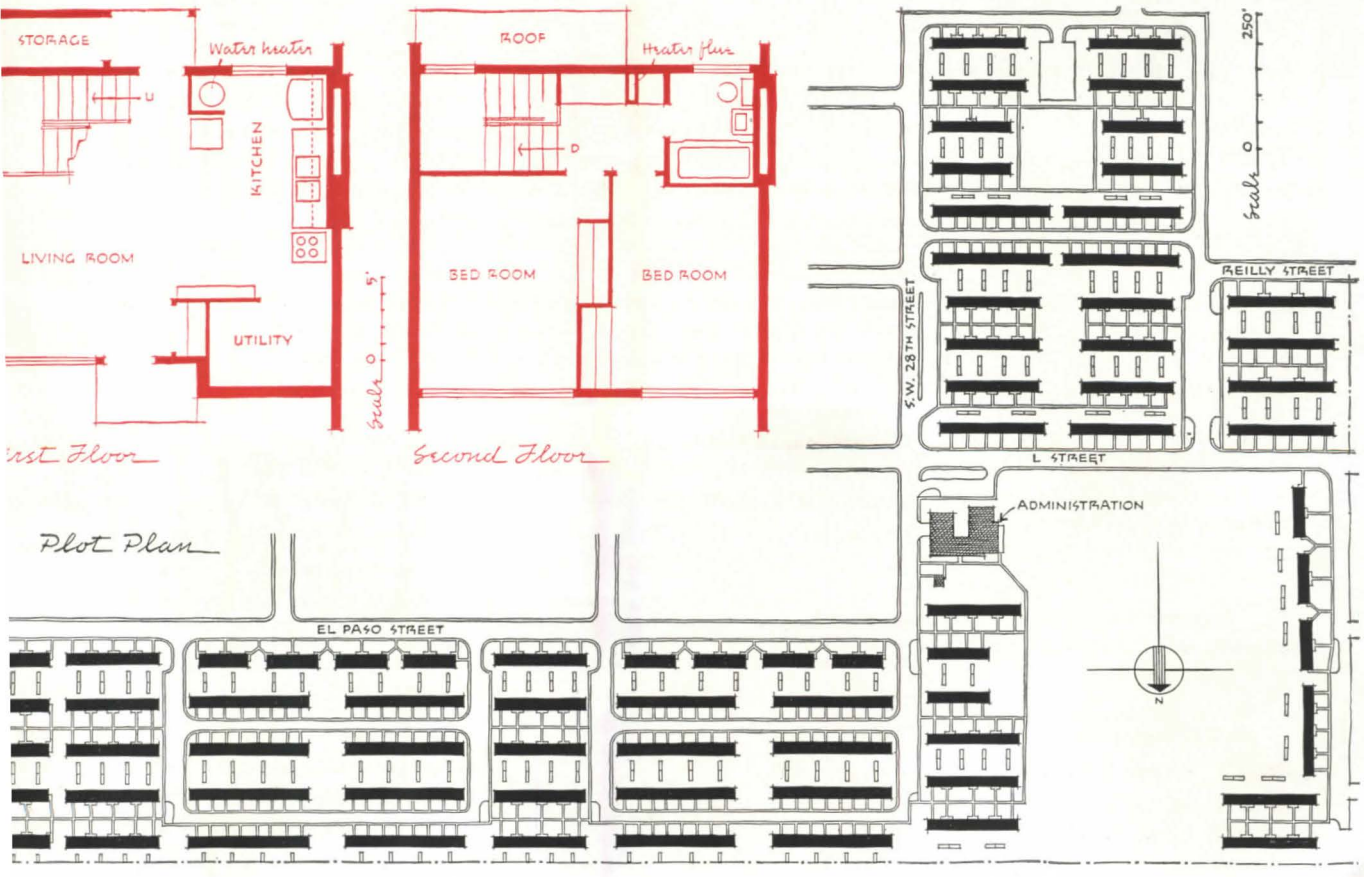
The smooth co-operation results from the fact that architects Ford & Rogers, with Sam Zisman, have been co-ordinating architects for the entire program to date, and have been able to work in "amazing harmony" with 14 other firms, associated for specific jobs on an equal-fee basis. O'Neil Ford, Jerry Rogers, and Sam Zisman have done most of the site work—even much of the site selection—and a great deal of the unit planning. Yet each project has a character of its own, within the design criteria that govern all of the plans.

*hily more costly in original construction, much more mical when insurance and maintenance costs are lered.

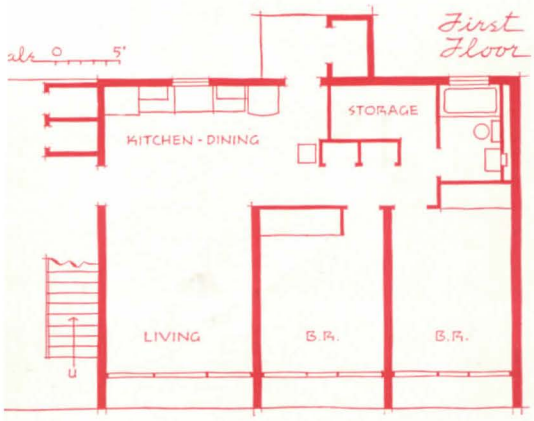


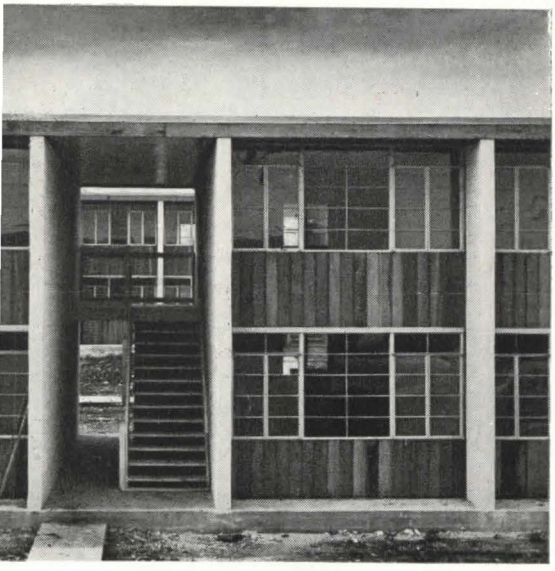
sol Homes, pictured on this page, were designed by Ford & Rogers, architects, ssociation with Sam B. Zisman, and Charles Weidner & Henry Walther. olds Andricks was civil engineer; George Rhine, mechanical engineer; Charles eynolds, Jr., structural engineer. The project is designed as a series of row es and is open to an unusual degree to the southern prevailing breeze because erlooks a large open field, part of which may be future park space, in addition e present seven-acre park and local play areas. Unit plans face living rooms bed rooms to the south; open planning allows through ventilation.

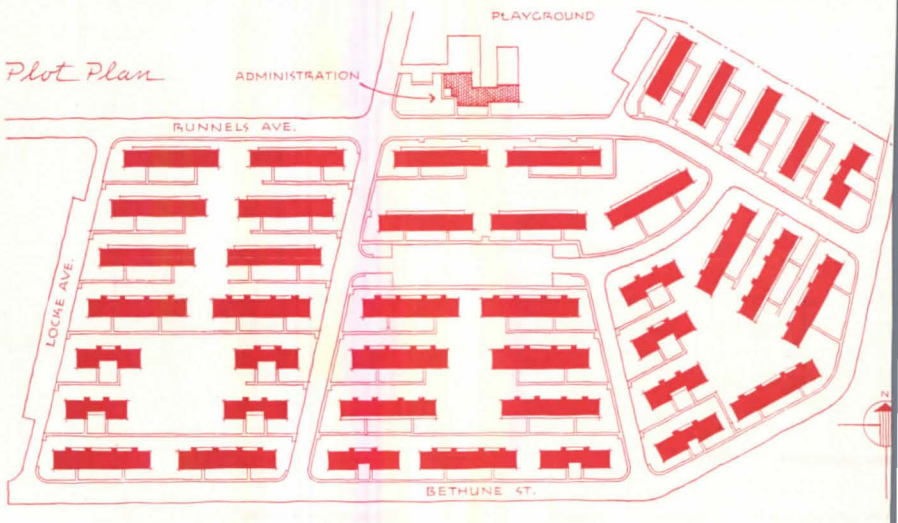
Photos: Ulric Meisel



(Continued from page 15)



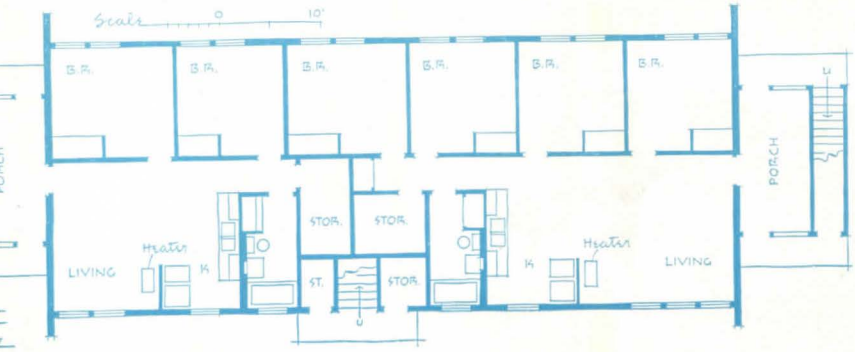


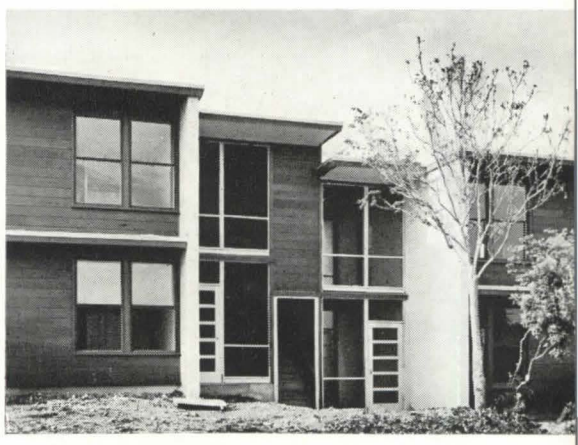


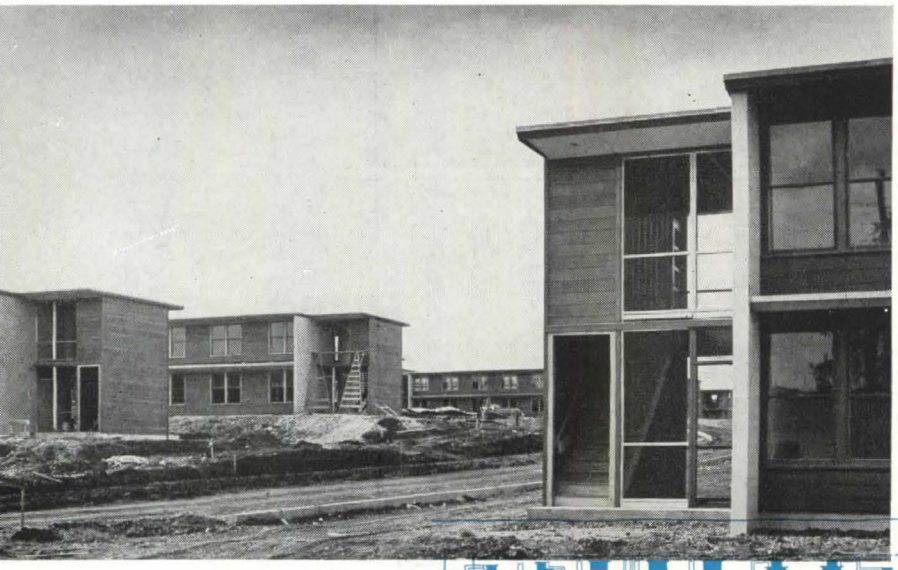
Sutton Homes, another of the San Antonio public housing projects, had Ford & Rogers and Malcolm G. Simons as associated architects. H. E. Nicholson was structural engineer, Halsey & Royer handled mechanical engineering, and Reynolds Andricks was civil engineer. The project is on a hillside falling away south and east, and the buildings are so arranged (with one-story units low on the hill) that almost all have a view of the city to the south. Breezeways are planned between pairs of apartments. The construction system here is unique: masonry-bearing walls form room partitions and are tied together by a concrete beam poured between wood joists (only form needed was a plywood piece closing the bottom of joist space). Recreation area is at west, adjoining future school playground.

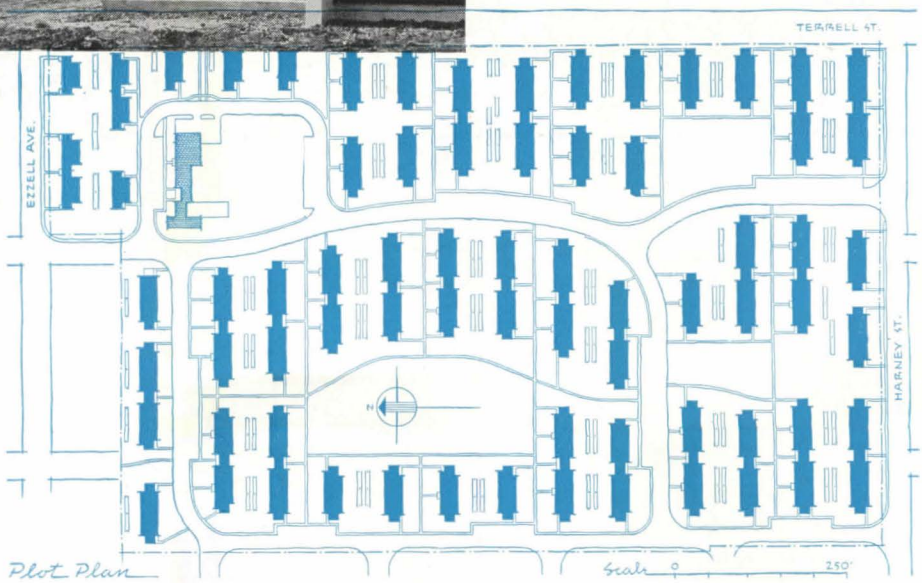
Orientation, "thin" plans that allow through-ventilation, fins and overhangs, balconies and porches, and room spaces decently large, are the principal means used to suit the buildings to the climate. Many of these design features became controversial: the standard "quadrangle" site plan was reluctantly given up by authorities in favor of south sun-breeze-catching orientation for all buildings; sun-control devices were officially considered extravagant, even though they gave a bonus of privacy and noise-barrier; porches and balconies were looked on as luxuries. Densities are high
er than Ford & Rogers would have liked–
following a fluctuating PHA standar
Room sizes are somewhat over the minimu
standard, but they "should have been lar
er." There is a high percentage of 4- ar
5-bedroom apartments, because that w
the local need; this fact, of course, hel
reduce the unit cost. The first three projec
were designed as flats (one- or two-story
but apparent economies were found sma
and all later projects are row houses. The
are as many one-story buildings as possib

East Terrace Homes were planned by Ford & Rogers, the co-ordinating architects for all projects, associated with Addis E. Noonan Associates, Thomas B. Thompson, and Allison B. Peery. William Orrison and George R. Rhine were engineers. Unit plan (below) *shows screened porches provided for all units. The project has a number of well-planned one-story structures. In two-story buildings, stairs are enclosed.*



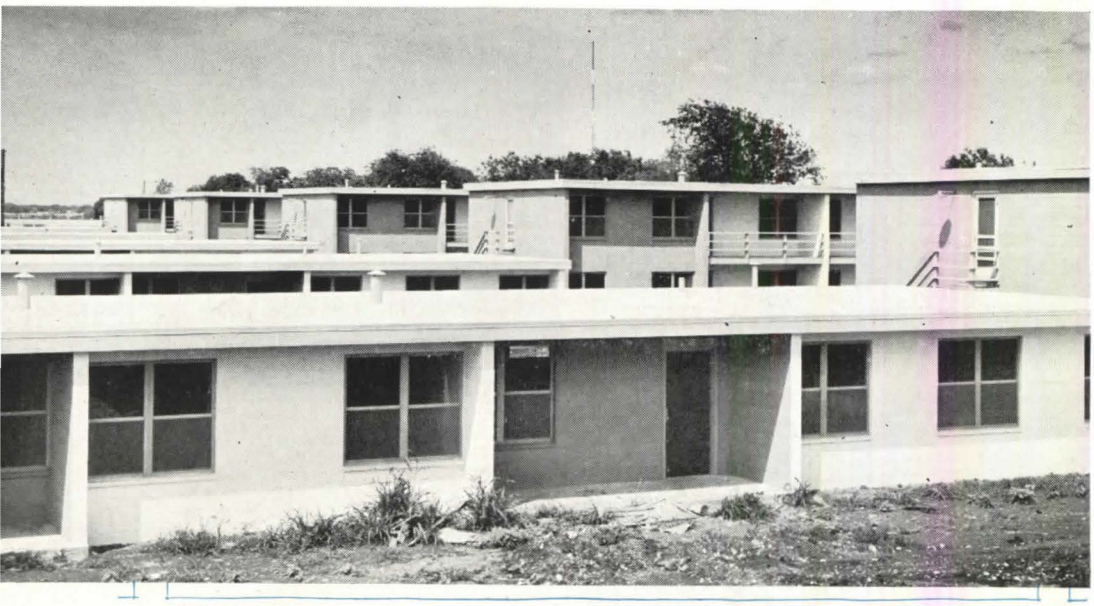


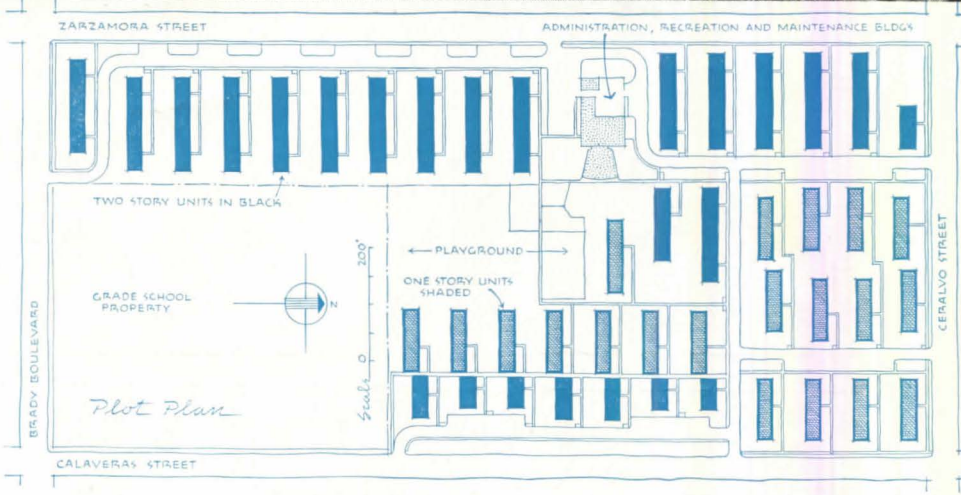


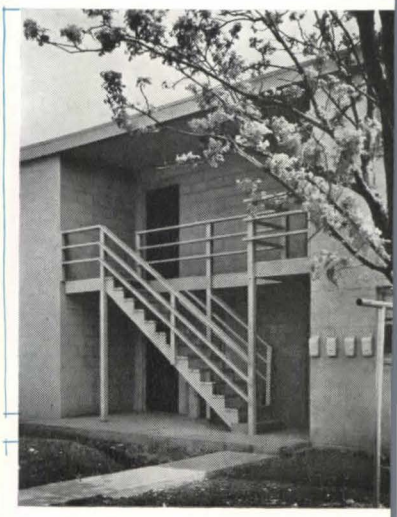


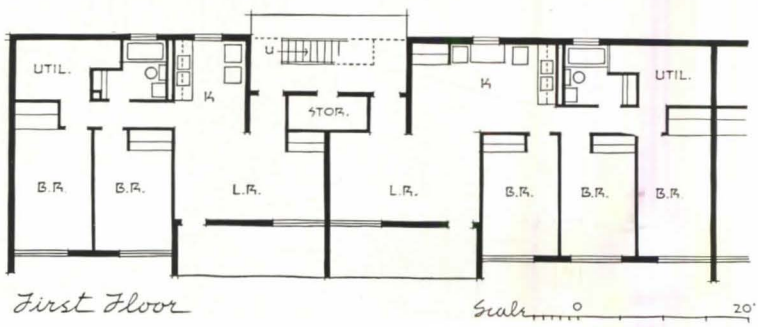
Site plan of East Terrace Homes shows how buildings (with all living rooms oriented to the south) have been so arranged that open areas and pleasant vistas are gained without sacrificing economy in street layout. The project is a medium-sized one, and the loop street through the center serves all parts of it well. Play areas within the development are supplemented by an adjacent city park.

(Continued from page 17)







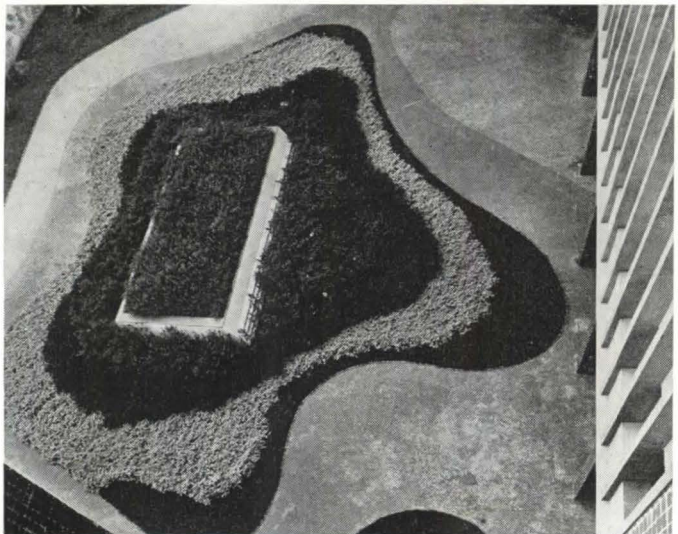


San Juan Homes, shown on this page, (designed by Architects Ford & Rogers; Nayfach, Richey & Kermacy; R. H. H. Hugman and John Marriott; Frank T. Drought, engineer) illustrate a number of unusual features of the San Antonio projects. The central play area adjoins the play yard of a school, to the advantage of both (in every housing project there is a relation to other community facilities such as schools, parks, playgrounds); like the others, it has a clinic staffed by the city Public Health personnel, serving the entire neighborhood. There is a planned relationship of one-story (four- and five-bedroom) and two-story units. Balconies and porches are provided

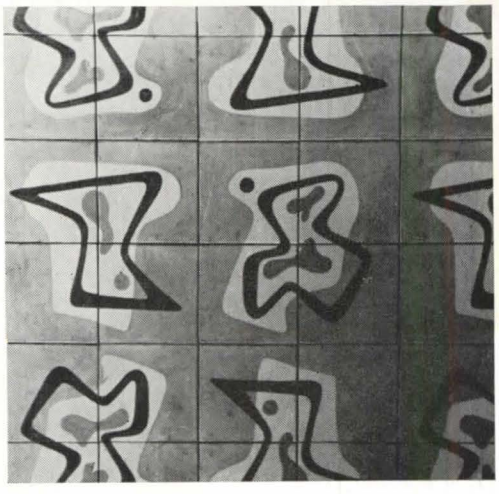
(Continued on page 20)

apartment house

the street, ramps for both pedes- and cars lead up to the main- ce level (right). *At the rear of vel is a garden in abstract pattern ed by Roberto Burle Marx. The shown* (below) *is around a t-ventilator of the garage roof h.* Photos: Peter Scheier



location	São Paulo, Brazil
architect	Rino Levi
collaborating architect	Roberto Cerqueira Cesar



General view of the north front (above). *Walls around the elevator lobbies* (two photos, left) *are surfaced with yellow, blue, and brown ceramic tile. Pedestrians reach the entrance level by ramps that curve up from the sidewalk* (below).

ed in one of the most beautiful resi-
ıl areas of São Paulo, this twelve-
apartment house has a number of
ıal elements in plan and design that
careful study by North American
ects.

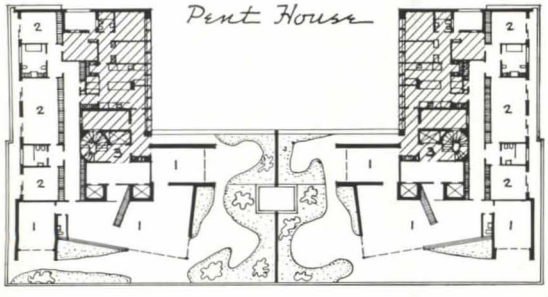
ause of soil conditions there is no
ıasement. Instead, the first floor is
a level below grade. Hence, the
entrance level, children's play-
ıd, and garden occur half a level
grade—the so-called second floor.
d from the ground on *pilotis*, this
is reached from the street by ramps.
resultant open-gallery effect gives a
ıess of appearance not found in
ings with walls to the ground.

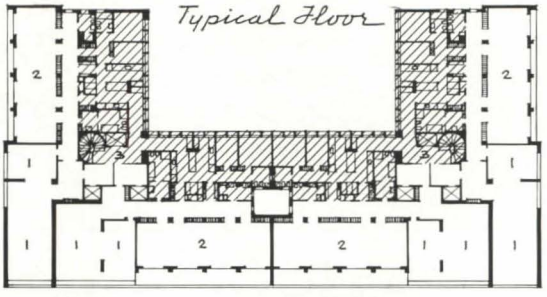
ch of the floors from the third
gh the eleventh contains four lux-
partments, while at the rooftop level
wo elaborate penthouses. On each typical apartment floor, the two apartments with the main living areas facing the favored north (street-front side) have ample living balconies, separated from each other by a solid wall. The penthouse apartments, set back from the building line, have spacious garden areas that command dramatic views over the city.

At the rear of the building, on the entrance level, is a colorful garden enclosed by the wings of the U-shaped plan. Designed by Roberto Burle Marx in the manner of an abstract painting, it consists of masses of plants of different colors and textures. Exterior walls of the entire building are surfaced with small ceramic tiles in blue, brown, and intense yellow. "The combined colors of building and garden give the whole a vivid and gay appearance," the architect comments. As to the façade broken by balcony recesses and the see-through main floor, "it has always been my opinion that in architecture one should try to avoid the rigidity that usually derives from huge unbroken wall masses."

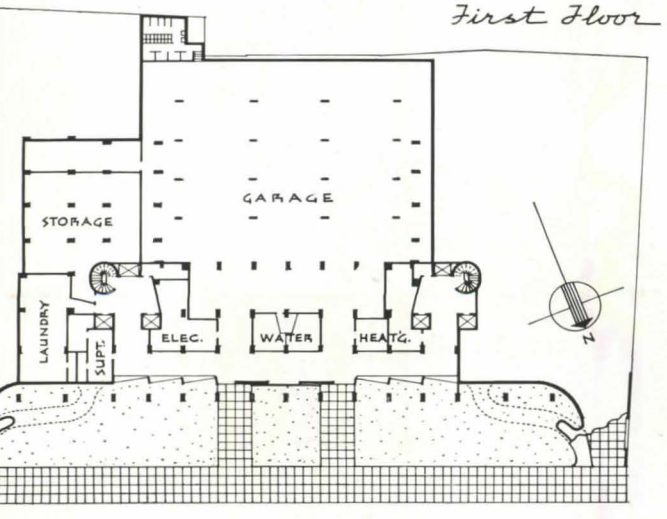
An important point in plan flexibility (shown in greater detail on pages following) is the provision in each apartment of a large unsubdivided space, adjacent to the living-dining area, allowing each tenant to erect partitions as he desires for bed rooms or suites.

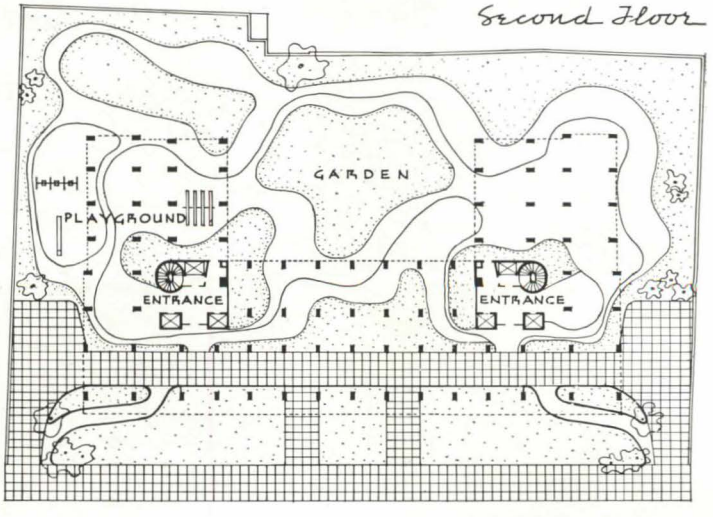
Of reinforced concrete construction, the building is supported on pile foundations. A layer of asbestos and mineral wool applied directly to the floor slabs provides sound-insulation between apartments. The building is year-round air conditioned, with individual controls in each apartment.

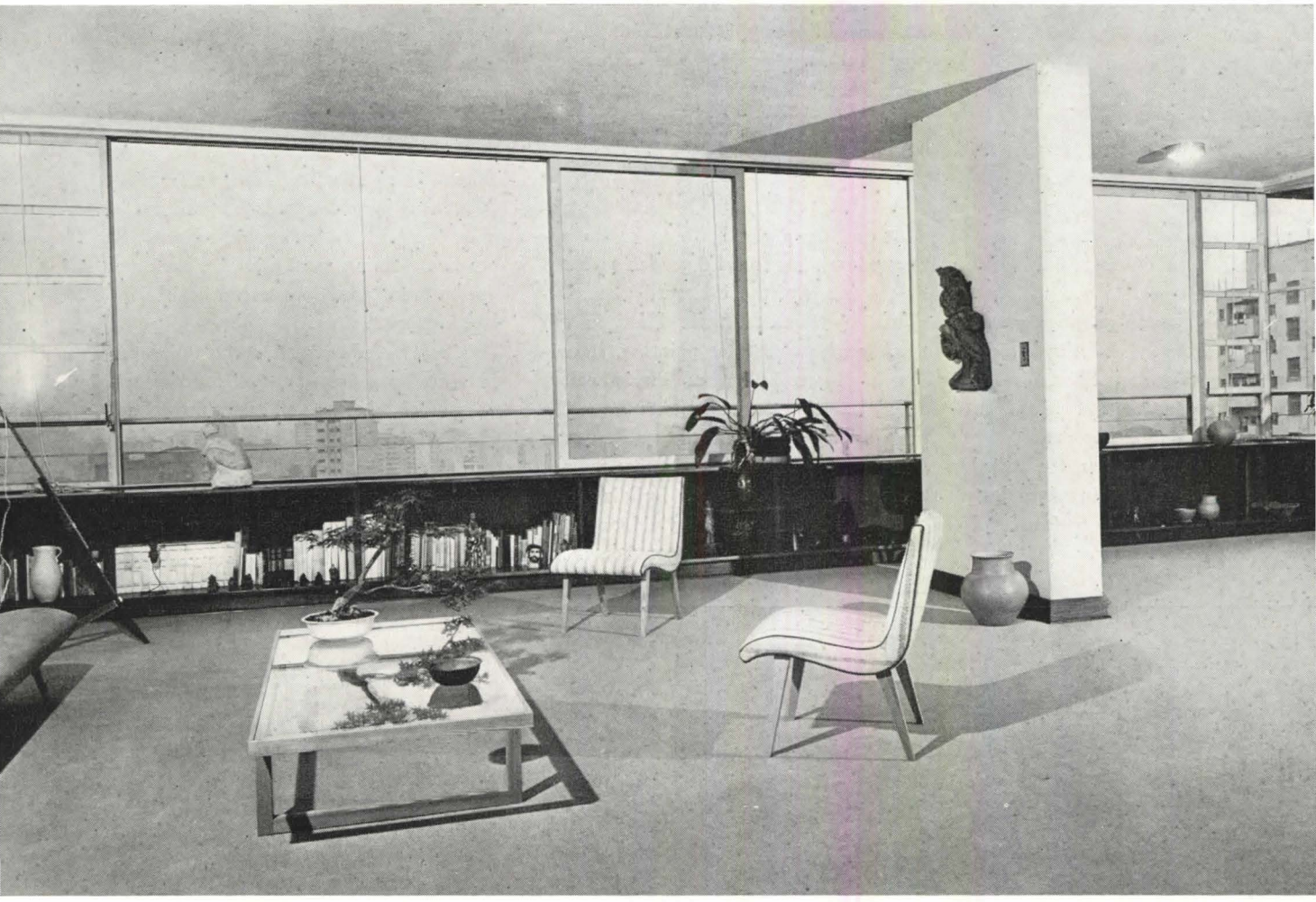


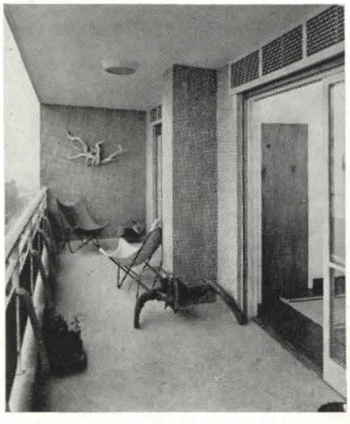


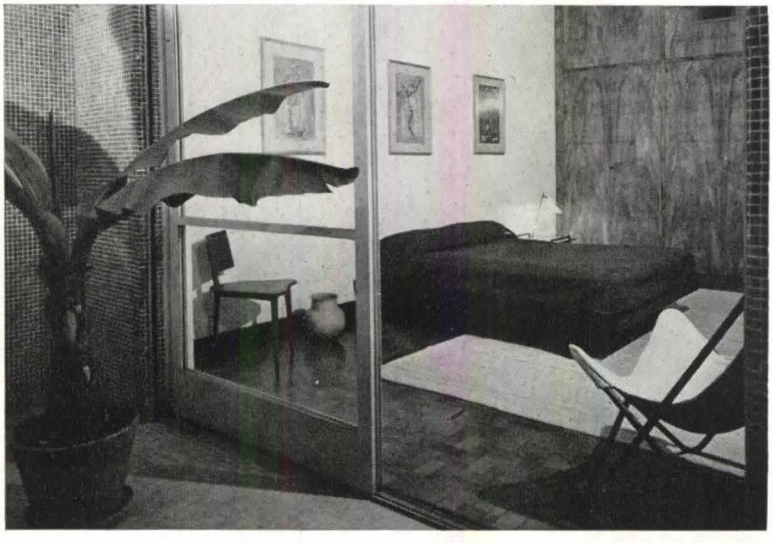
1. LIVING-DINING AREA 2. SLEEPING AREA 3. BATHS, SERVICE AREA

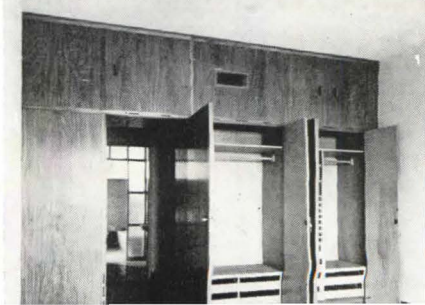






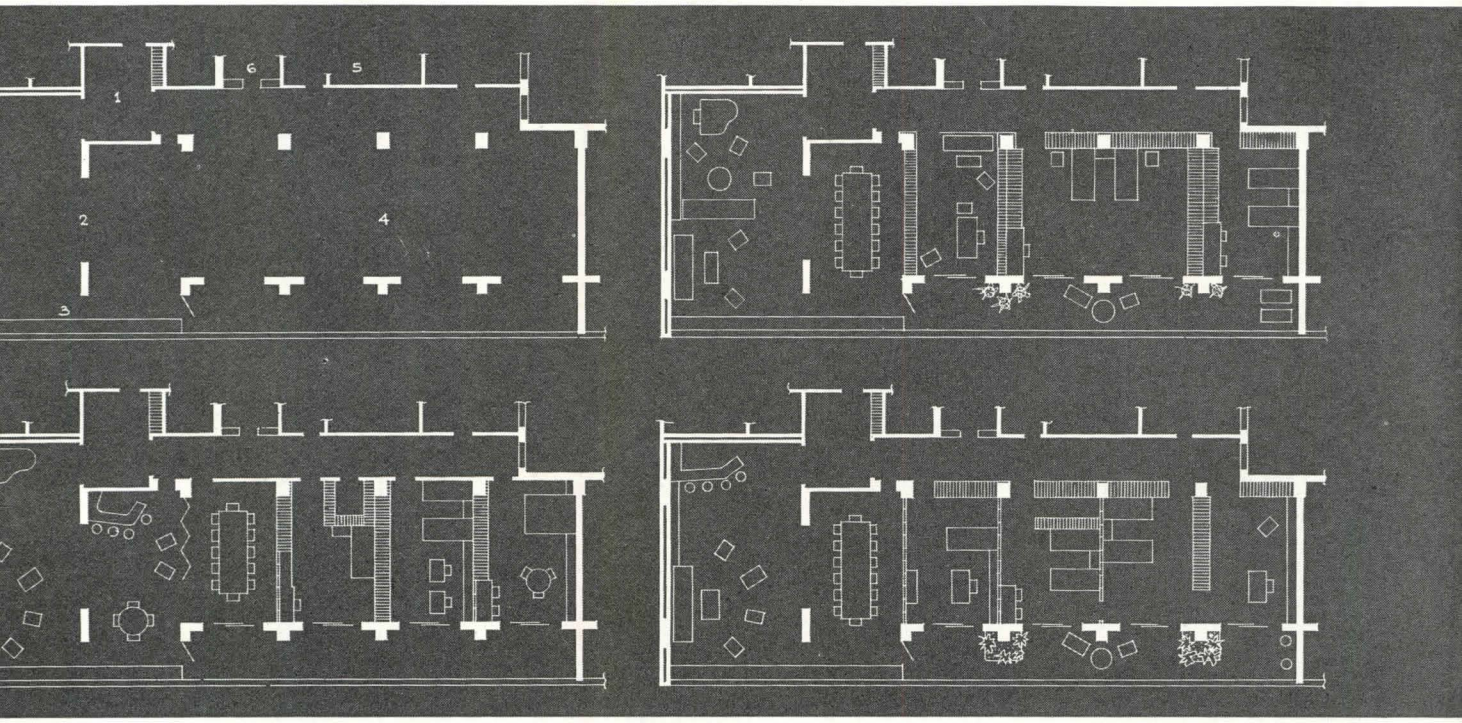


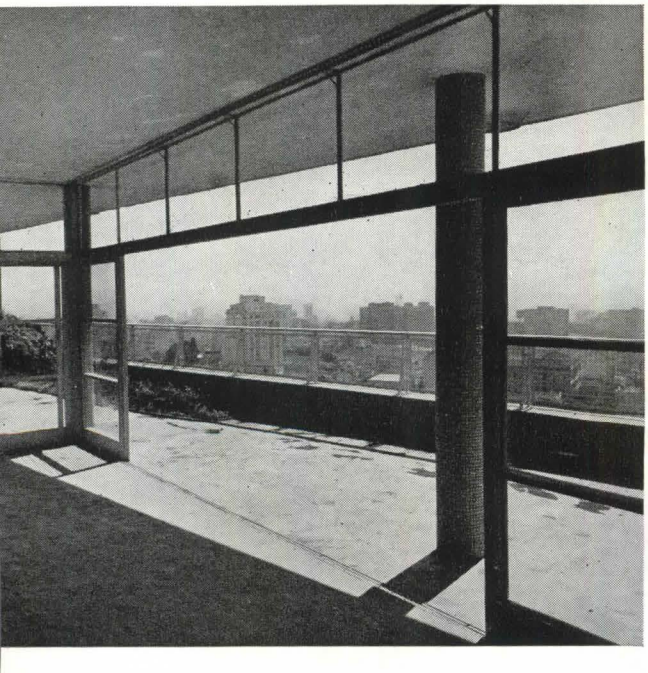


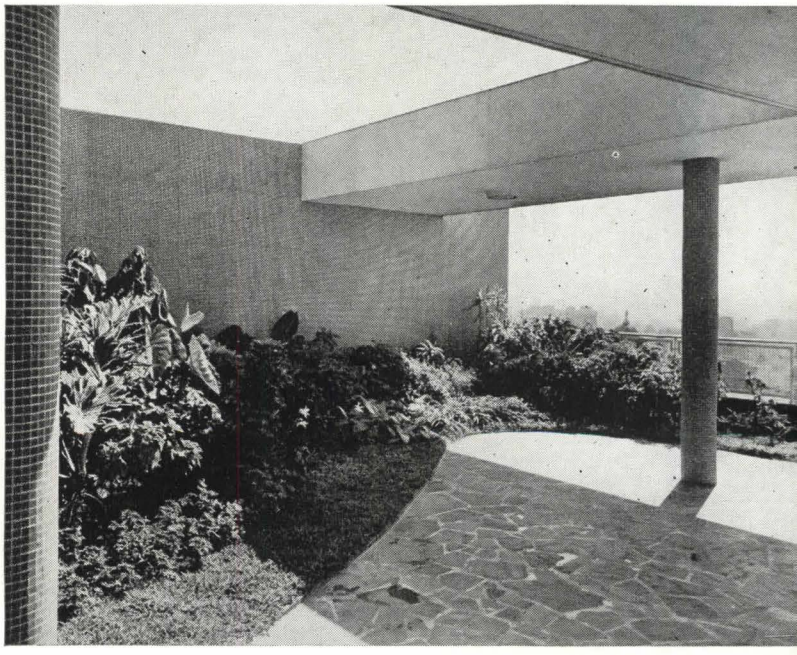


RANCE
NG-DINING AREA
RED BALCONY
ROOM AREA
CE-KITCHEN
ROOM

The big space allotted for family living in each apartment (photo acrosspage, top) *may be divided in a number of ways* (sample variations below) *depending on the particular tenant's needs.*



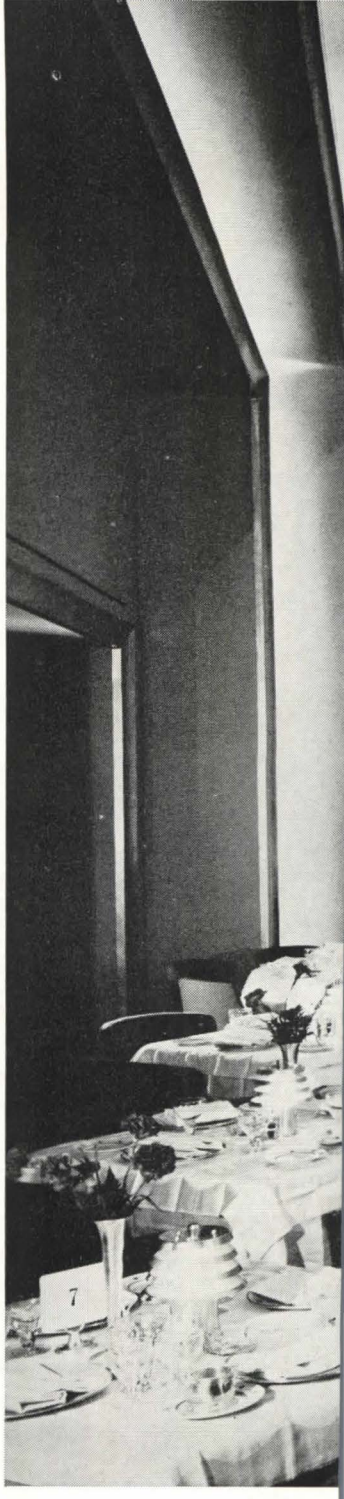




Details of balconies and rooms of a typical apartment (acrosspage, below *and* two photos above) *indicate the spaciousness of a penthouse suite.*

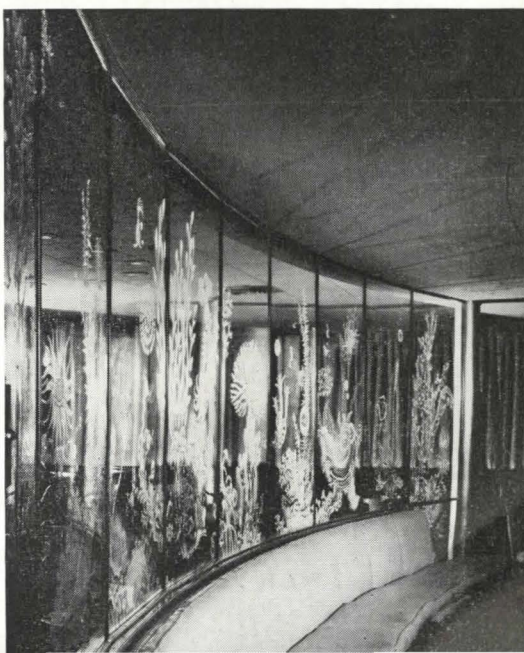
ship decoration

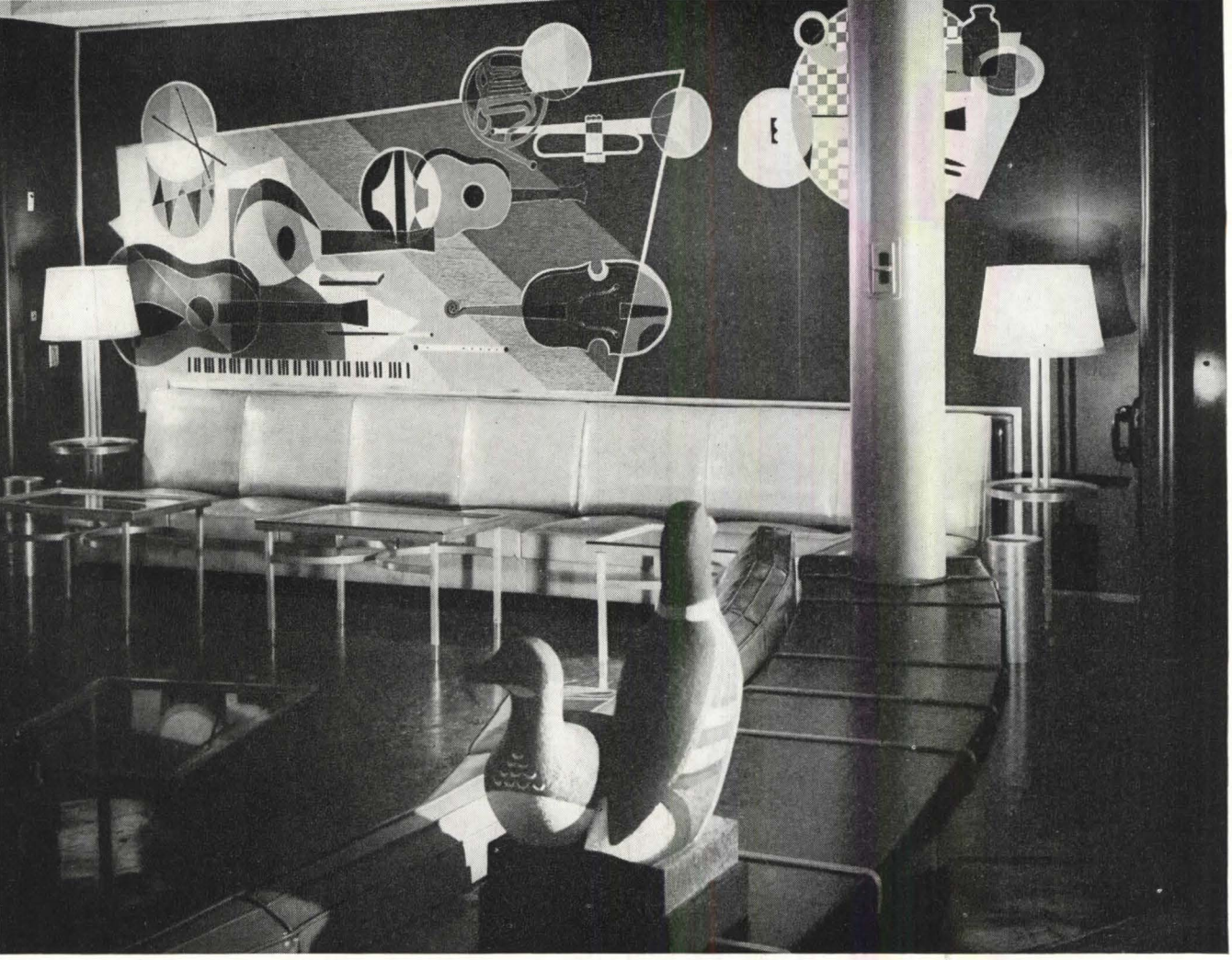
Last month on her maiden voyage from New York, the new United States liner, *S.S. United States,* set a new record for an Atlantic crossing. This is not the sole record that the owners, the United States Lines, claim. Speed and comfort are attained not only by sleek over-all design (Gibbs & Cox were naval architects) but also by major use of light metals—in particular, aluminum. The emphasis on lightness and fire-resistance meant that the interior architects (Eggers & Higgins) and the interior decorators (Smyth, Urquhart & Marckwald) had also to use light, noninflammable materials. And when Hildreth Meiere and Austin Purves were asked to serve as "art consulants" to help select and co-ordinate the work of 14 painters and sculptors in the public spaces, they also discovered that lightness and resistance to fire were essential.



Gwen Lux, sculptor, created the five-foot figures symbolizing Expressions of Freedom, *and the other motives on side walls, representing sea, earth, and sky forms, for the first-class dining room* (above and at left). *Searching for a sympathetic material which would be light and fireproof and would not be harmed by the ship's vibration, Miss Lux hit upon Foamglas, cellular glass insulating material. Gluing together blocks of it, she worked with files and knives rather than chisels. Texture of the Foamglas shows through the light-beige paint sprayed on the completed work, which is accented with gold and silver. Thus the material is not denied—and the sculpture enhances and unifies the dining space with its quiet color scheme.*

At right is shown a portion of Charles Gilbert's sand-blasted, edge-lighted glass panels in the ballroom. The undersea theme is enlivened with gold accents. Photos: J. Alex Langley

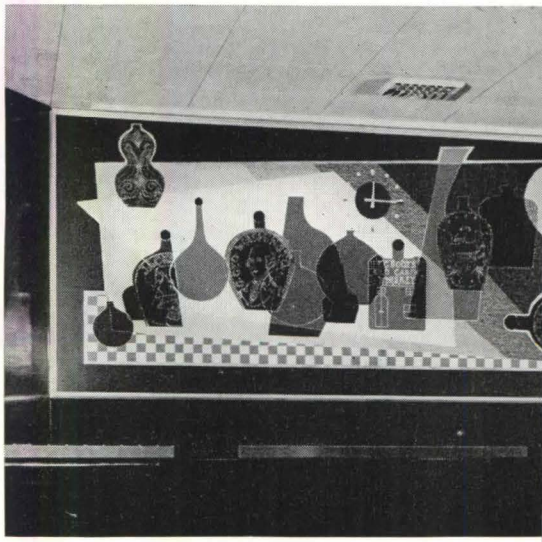




ship decoration

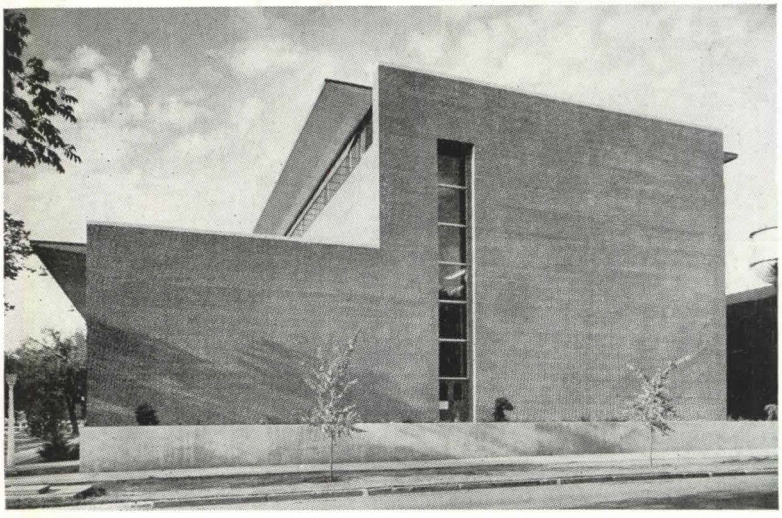
Lewis E. York's murals—based on symbols of Americ —are in the cabin-class smoking room. Above are repre tations of musical instruments; below, 18th Century and whiskey flasks. Abstract background represents U dynamism.

Peter Ostuni based his murals for the first-class cock lounge (left) *on Indian sand paintings, using Navaho s bolism. His modern technique was to apply vitreous-enam copper to sand-coated aluminum.*

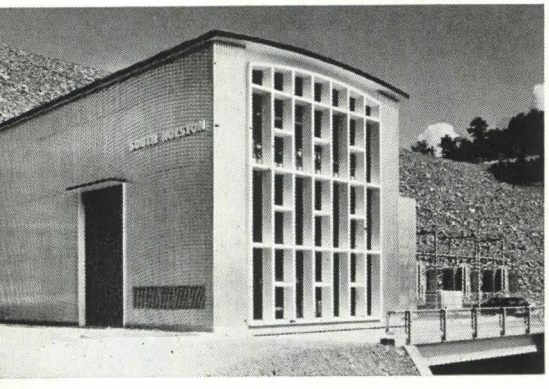


vo power plants

Steam Power Plant for the Rural Cooperative Power Association at Elk River, Minnesota. Thorshov & Cerny, Inc., Architects.
Photos: Allen Downs

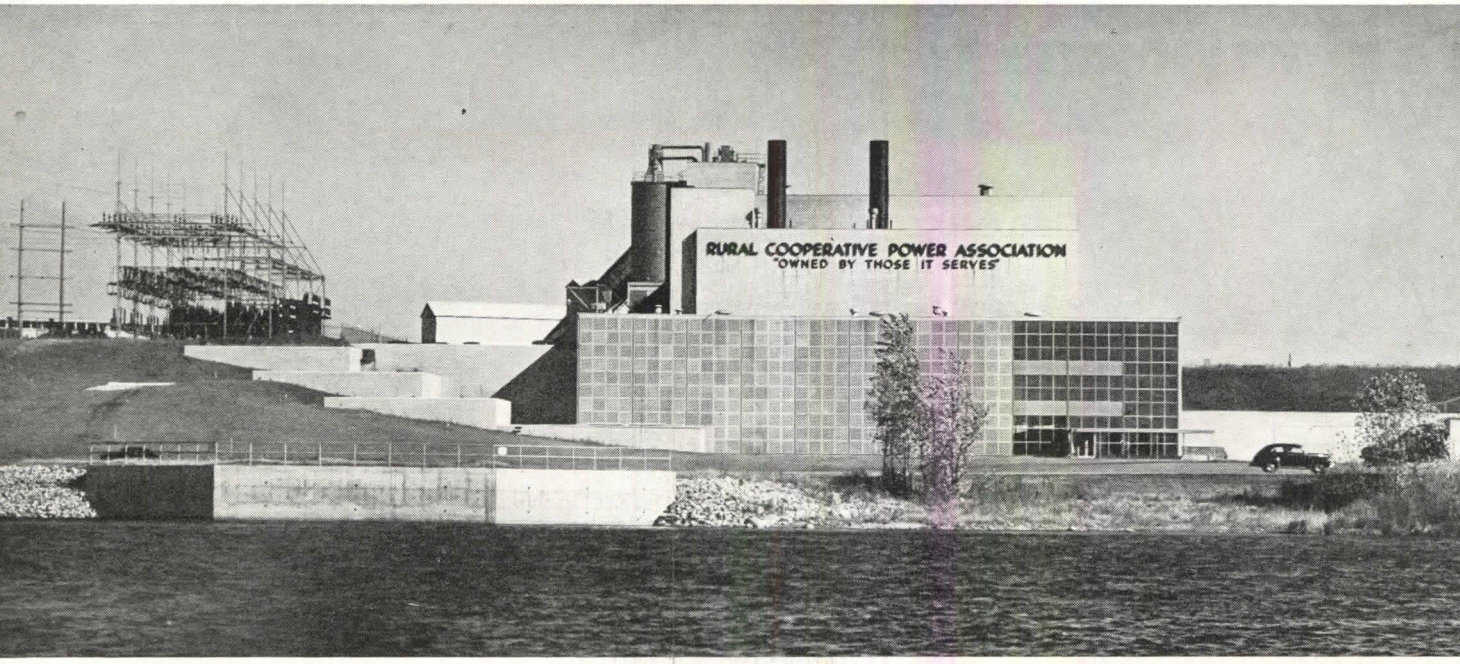


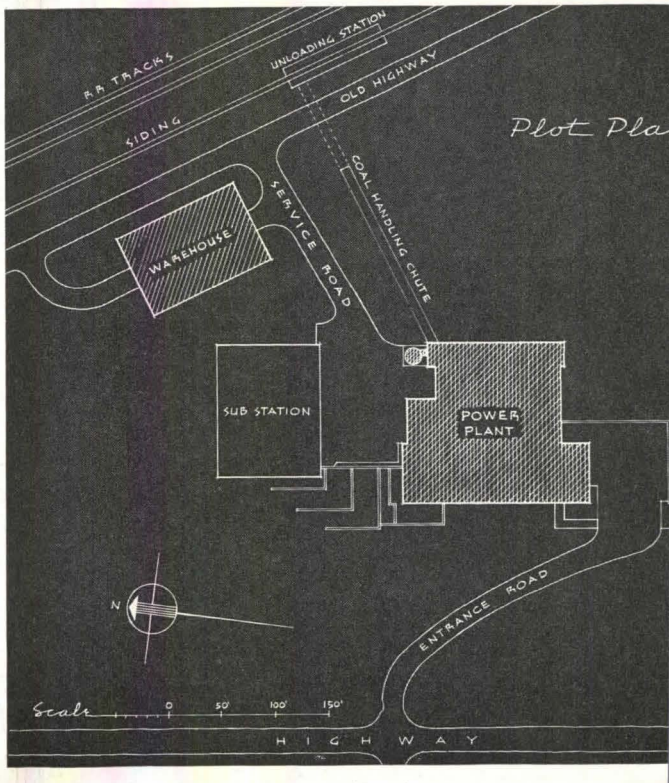
Power Plant for the University of Oklahoma, Norman, Oklahoma. Coston & Frankfurt, Architects and Engineers.
Photos: Ray Jacoby



On the following pages, we present two new power plants—one, a steam plant serving Rural Cooperative Power Association distribution cooperatives in the State of Minnesota; the other, a plant for the University of Oklahoma. In considering the current general excellence of power-plant architecture, one cannot but recognize a debt of gratitude to the Tennessee Valley Authority for the forward-looking work it has done in this field over the years. To indicate that the high standards set by this agency are still thriving, we show (inset photograph) *one of the most recent of TVA accomplishments—the South Holston generating station that is operated from the Wautauga Control Building (November 1951 P/A). Its exterior walls are of prefabricated insulated panels, with fluted-aluminum exterior surface and flat steel within.*

In this age of power, it is not surprising that a power plant is one of the architectural types that provokes considerably more than average curiosity. To satisfy this public interest, the REA building has a separate gallery level for visitors; while the campus plant has special catwalks to enable engineering students at the University to use the facility for laboratory classes and field trips.





client	Rural Cooperative Power Association
location	Elk River, Minnesota
architects	Thorshov & Cerny, Inc.
project architects	Cecil Tammen; Richard Whiteman; Leroy Binckley
engineers	Ralph D. Thomas & Associates, Inc.
general contractor	Steenberg Construction Company

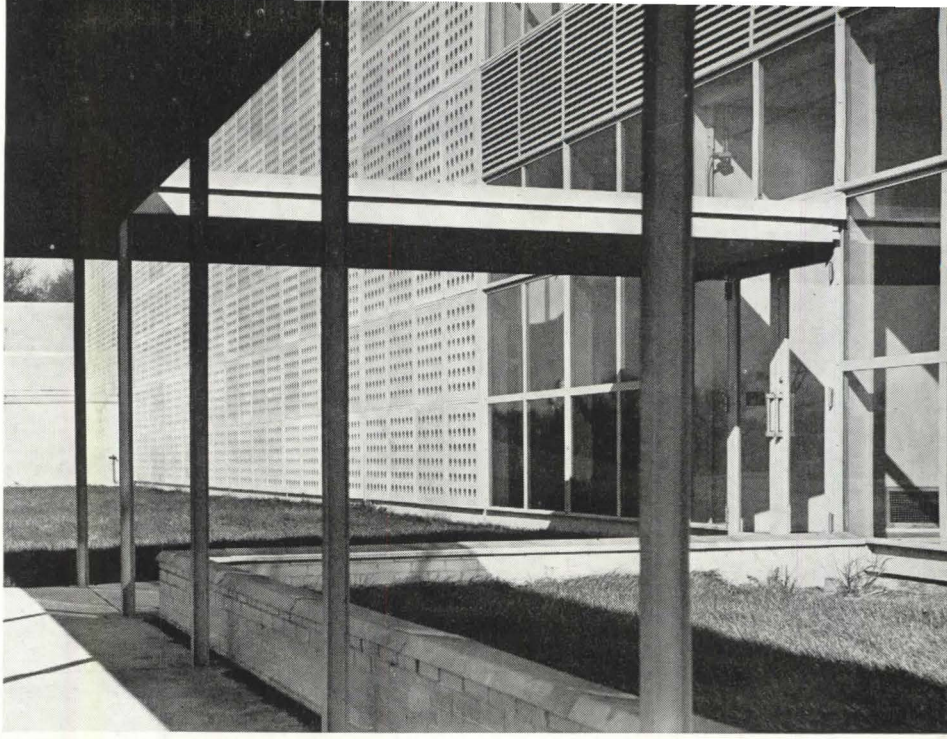
REA power plant

The Elk River Steam Power Plant of the Rural Cooperative Power Association is located on the east bank of the Mississippi, a half mile south of Elk River and 30 miles upstream from Minneapolis. The plant draws its cooling water from the river.

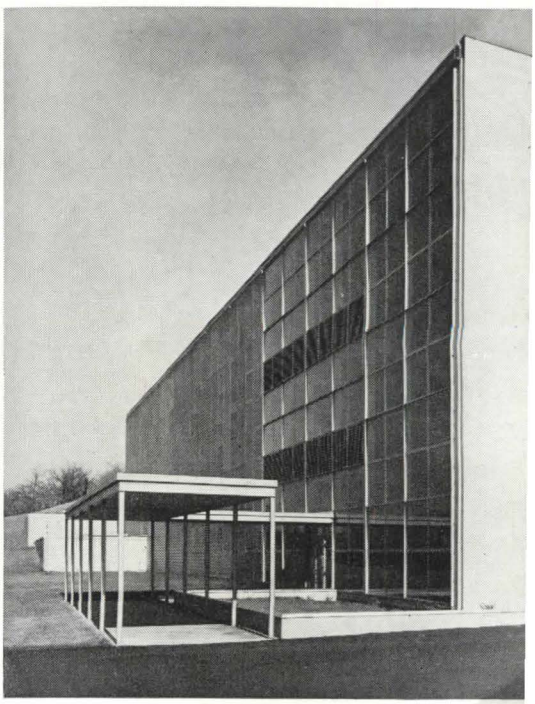
Designed to serve nine distribution cooperatives, with a membership of some 25,000, it also supplies six near-by towns. The capacity of the present two steam-turbine generators is 23,000 KW. When a third generator is installed, this will be upped to 38,000 KW.

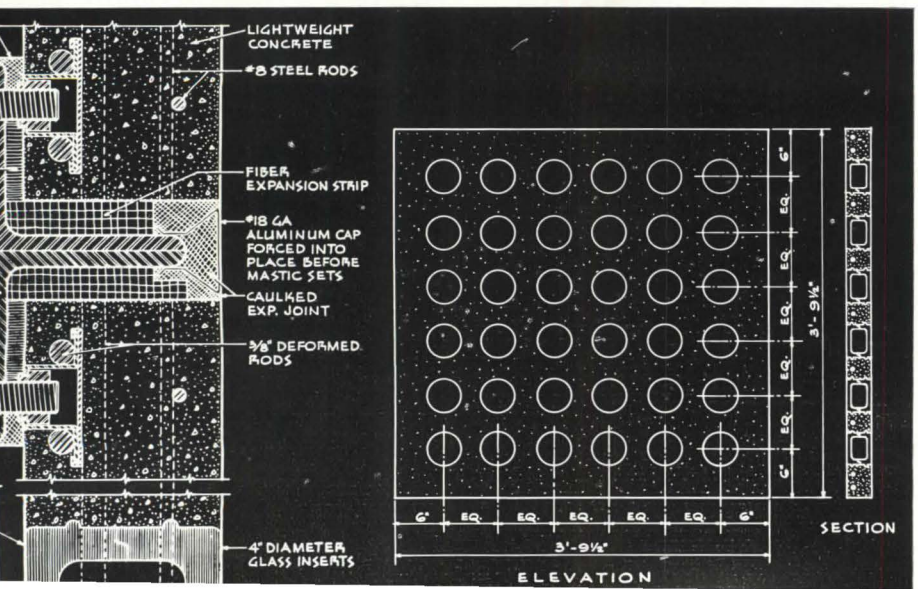
The hillside site offered several advantages. Two 54″ concrete conduits bring water from the river to be used for the boilers, circulating water, and other plant uses. A rail spur on top of the bank behind the building delivers coal to the stockpile, effectively masked from the front by the building itself. This placement also simplifies movement of coal into the plant.

Dominating feature of the building is the turbine-generator room that fronts on the highway. This room, a simple rectangle in form, contains generators and control panels on the main floor and steam tu on the lower level. An early decisio to expose to exterior view one entire ator unit, accomplished by a full- glass wall at the entrance corner. glass is a green-colored heat-abs type. The other front bays are fille precast insulating concrete panels, wi cular glass-prism insets, identical those used in city sidewalks for bas lighting. This daytime light source (problems of window maintenance) gl night in a dramatic pattern.

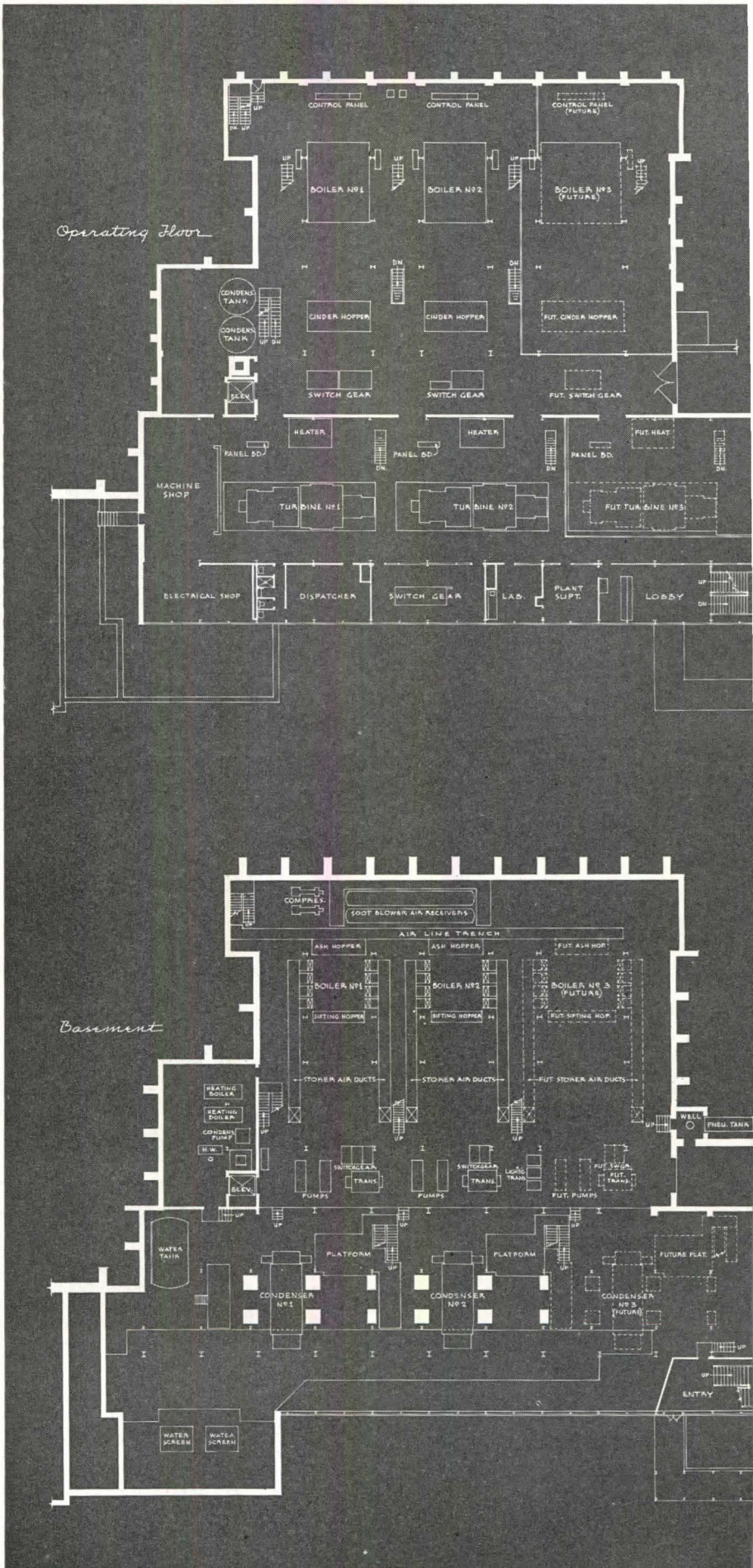


Structural frame is steel; exterior walls are brick, tile, or precast prism-studded concrete panels; concrete floor slabs were used to provide vibrationless bases for equipment and support the heavy loads. The roof is of precast lightweight concrete panels, with spun-glass block insulation.

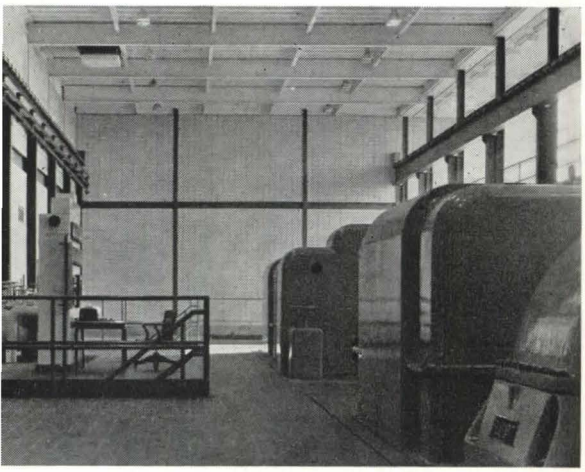




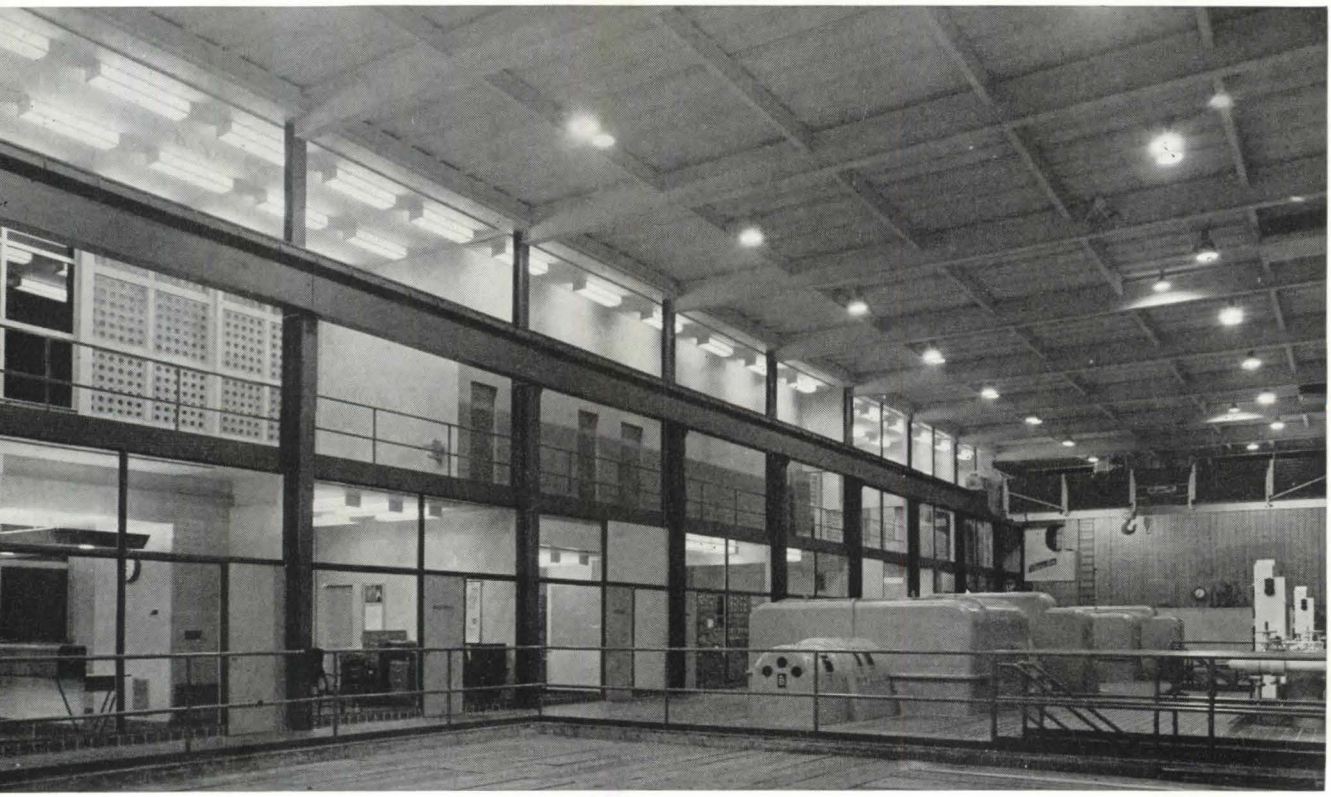
REA power plant

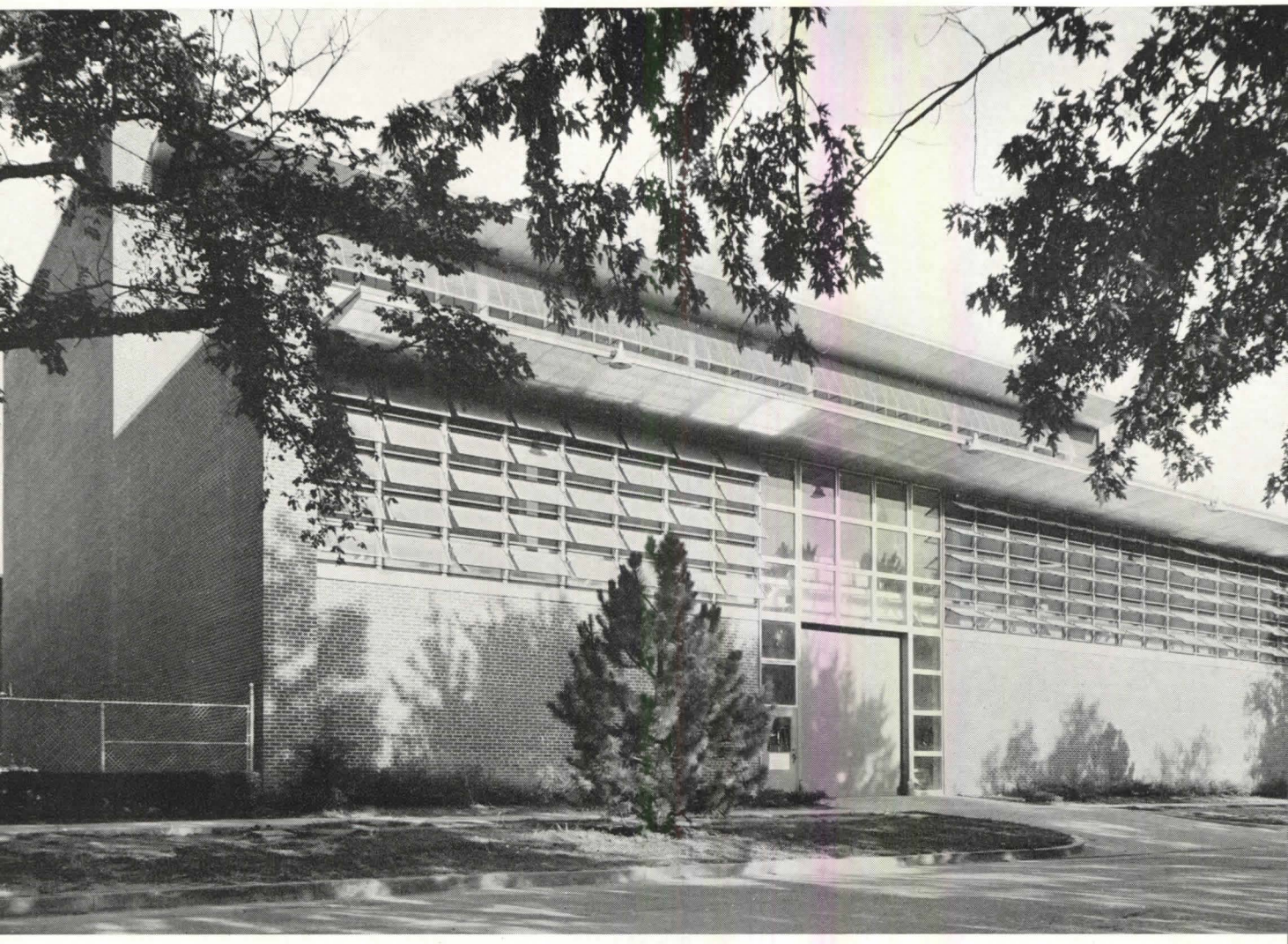


A program requirement was that the building be accessible to the owner-members and the general public. Hence, there is a visitors' gallery, reached by the main stairway, on a mezzanine above the office-lab area of the operating floor. The process involves powdering and blowing of coal dust for the huge industrial boilers, which provide steam to power the turbines.



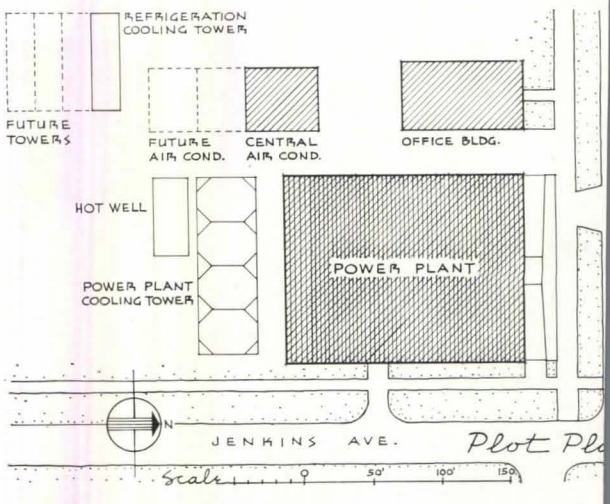
Daylighting effectiveness of the glass-inset wall panels is apparent in the view of the turbine room looking toward the front of the building (right). *The completely air-conditioned offices and public areas, separated from the operating floor by a screen wall of brick and glass, have acoustic ceilings and fluorescent lighting. Walls of the turbine room are light blue-gray glazed brick; the ceiling structure is exposed. Flooring is red quarry tile; the lighting, incandescent.*





university power plant

client	University of Oklahoma
location	Norman, Oklahoma
architects and engineers	Coston & Frankfurt
general construction contractor	Harmon Construction Company

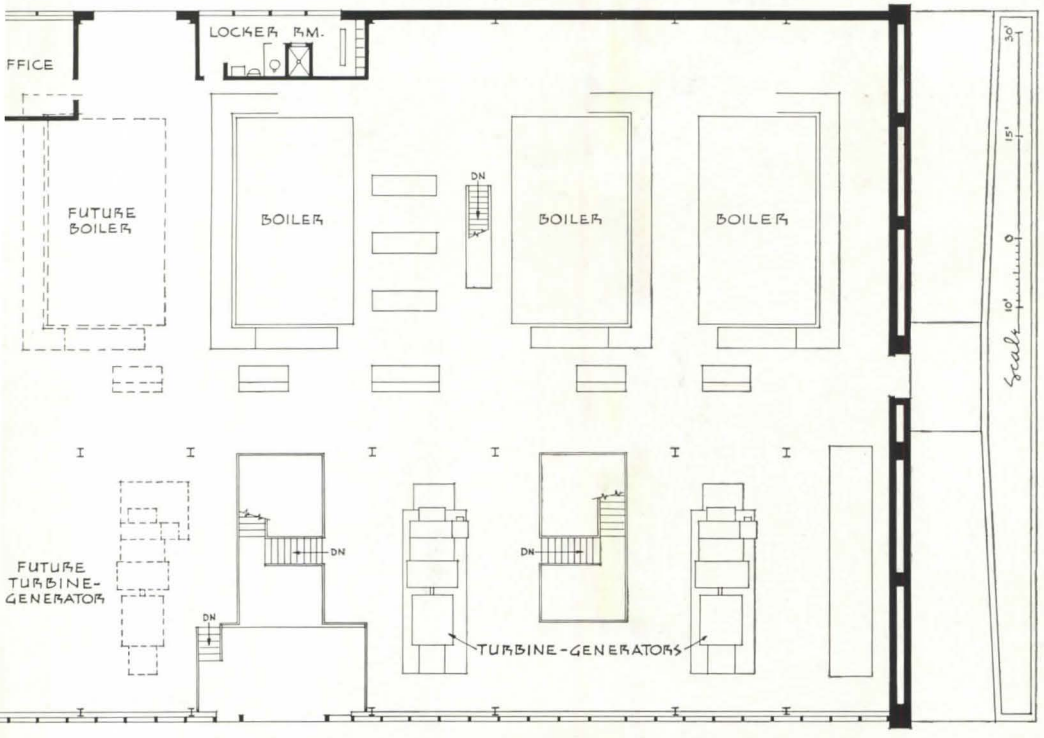


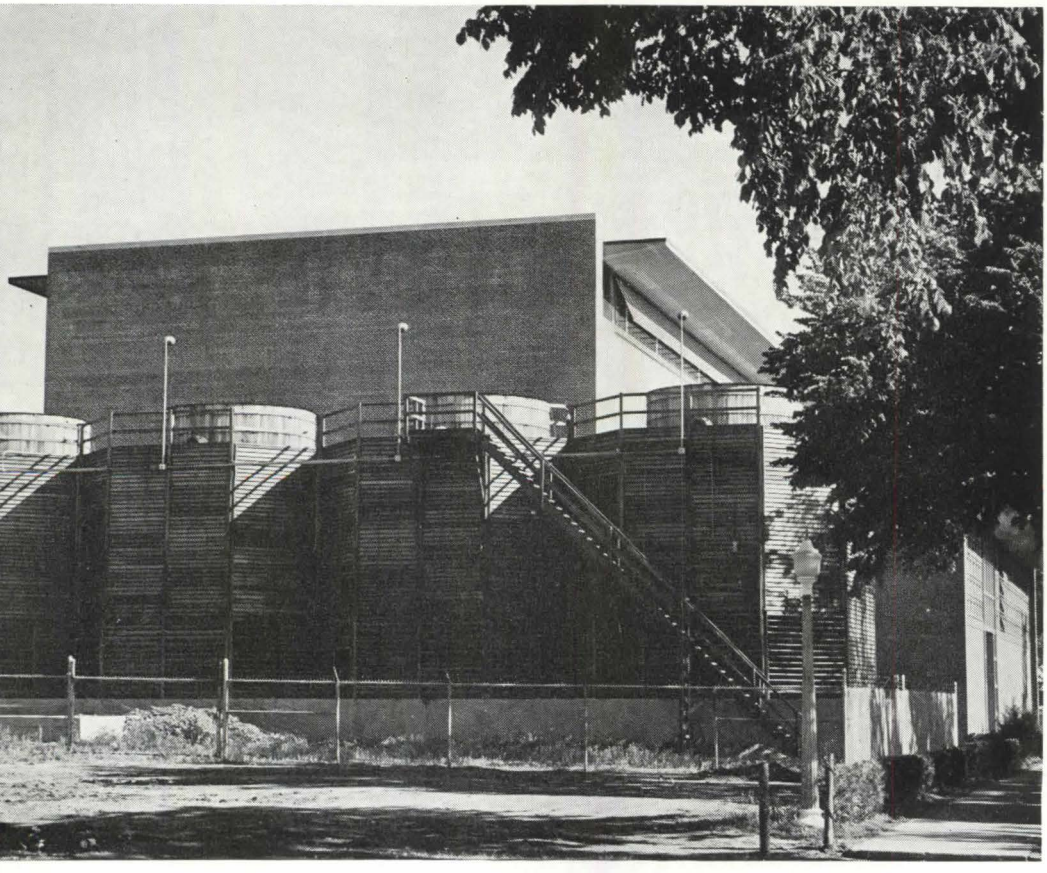
During the preliminary study for this plant that serves the entire University of Oklahoma campus, the architects made extensive inquiries into present and future requirements for electrical energy, for process steam, and for heating steam. Having in mind the University's contemplated future building program, the installed capacity of the plant was established, the power-plant equipment purchased, and the building designed around the equipmen room allowed for future expansion.

Proximity of the flat site to the e power plant simplified tie-in to ste tribution and chilled-water system per-level catwalks were included t engineering classes for first-hand s power production and distribution.

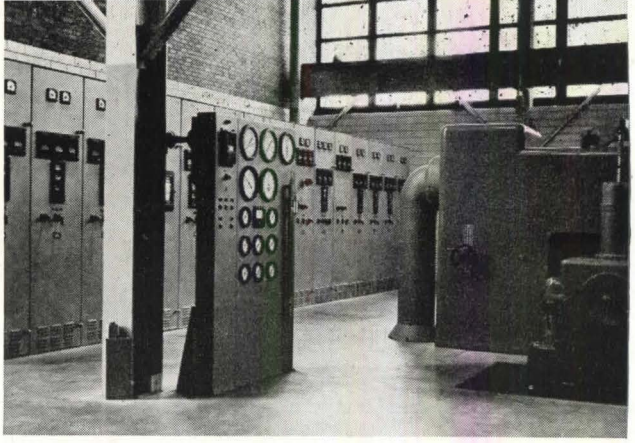
Foundations are of a bored-be forced-concrete type, with reinforc

crete basement walls, floor framing, and turbine and boiler foundations. Above the first floor, the north and south end walls are three-foot cavity-type brick construction, carrying a portion of the roof loads. The balance of the system is structural steel to carry roof, boilers, catwalks, and other loads. No air-conditioning or heating system was required, and general, natural illumination is supplemented by ample, incandescent, artificial lighting. "We especially like the simplicity and functional design of this plant," the architects say. "An architect infrequently has the opportunity to work so closely with so complex a mechanical building."

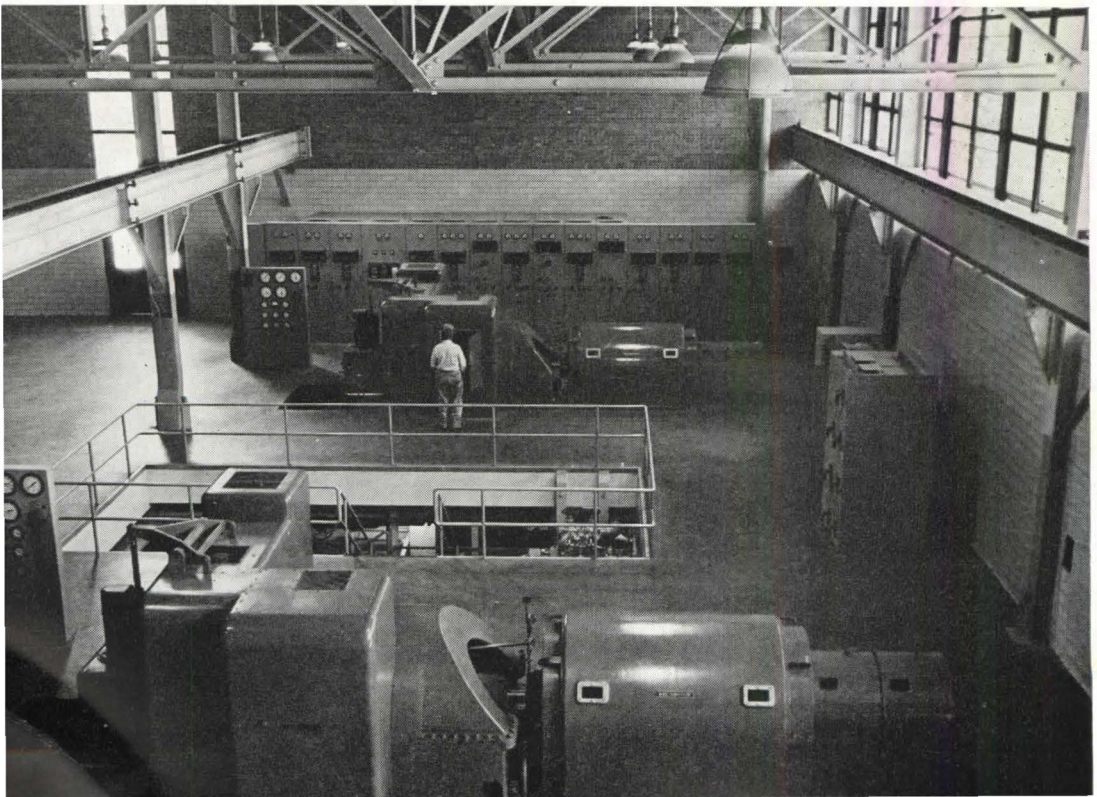




university power plant



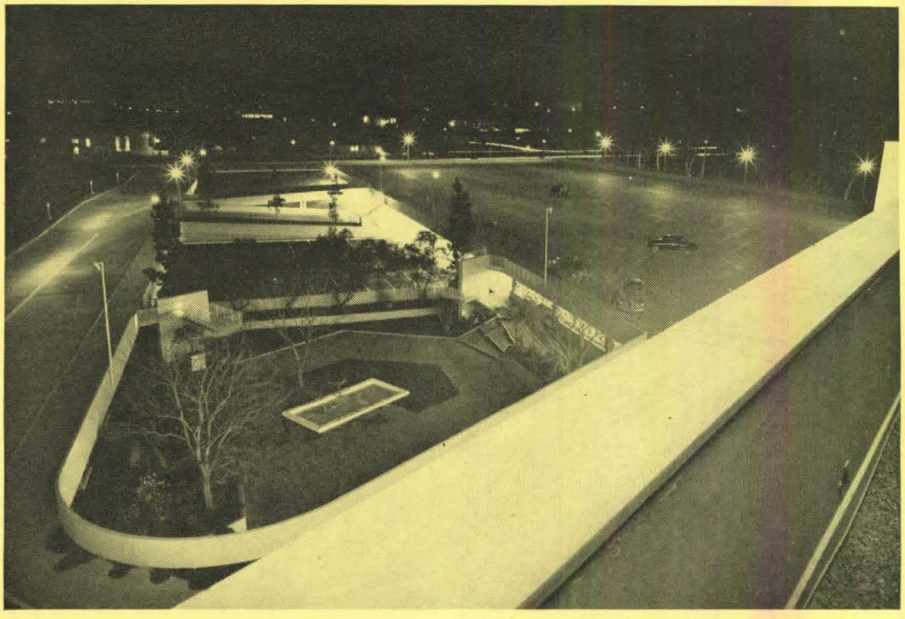
The main room has floors of inte colored concrete, and the cavity wa brick are surfaced inside with a 10 high wainscot of glazed tile. Stee trusses and deck are left exposed.



Sheet- and plate-glass windows mounted in aluminum settings; are hollow metal. Piping is painte color code, for ready identificati high-pressure steam, condensate, and hot water, etc.

DEPARTMENT STORE

architects	Pereira & Luckman; Charles O. Matcham
project director	Max R. Horwitz
store designers and planners	The Raymond Loewy Corporation William T. Snaith, President
client	J. W. Robinson Company
location	Beverly Hills, California
structural engineer	Paul E. Jeffers
chief engineer	Robert M. Wilder
mechanical engineer	Samuel L. Kaye
electrical engineer	Chauncey E. Mauk
landscape architects	Florence Yoch and Lucile Council
sculptor	Bernard Rosenthal
general contractor	The William Simpson Construction Company

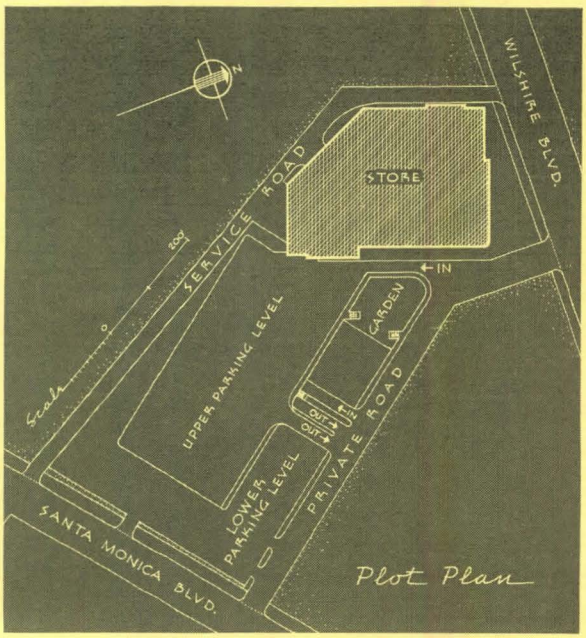


Seen from Santa Monica Boulevard (top photo), *the two-level parking deck is at left and the store is in the background. From the lower deck, one can enter the "garden level" of the store under cover. Seen at night from the roof of the store* (above, left) *the private drive is at left; the sunken garden, center foreground; and the parking decks, right. Ramps connect the two parking levels* (above, right). Photos: Julius Shulman

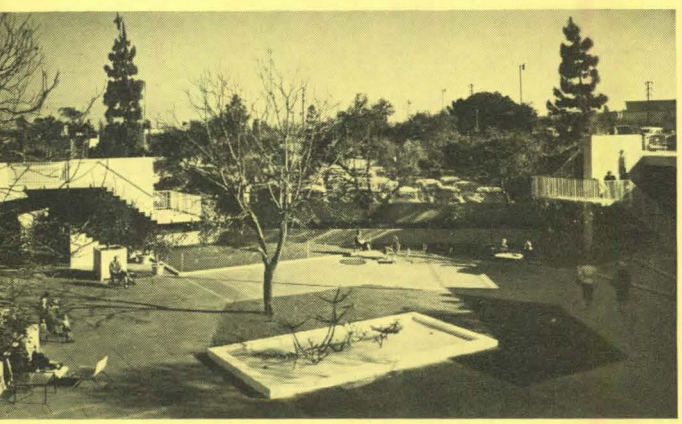
When Joseph Winchester Robinson left Massachusetts and in 1883 opened "The Boston Dry Goods Store" in modest rented quarters in downtown Los Angeles (he and two clerks constituted the personnel), he could hardly have dreamed of the huge downtown J. W. Robinson Co. store that was to become a landmark of the local mercantile scene. Much less would he have imagined that 69 years later, on a 7½-acre site out in open fields 9 miles northwest of City Hall, a gleaming marble-and-granite branch store bearing the company name would be built at a cost of $6 millions. But Los Angeles has come along since 1883, the City of Beverly Hills has mushroomed, and "Robinson's Beverly" is very much a fact.

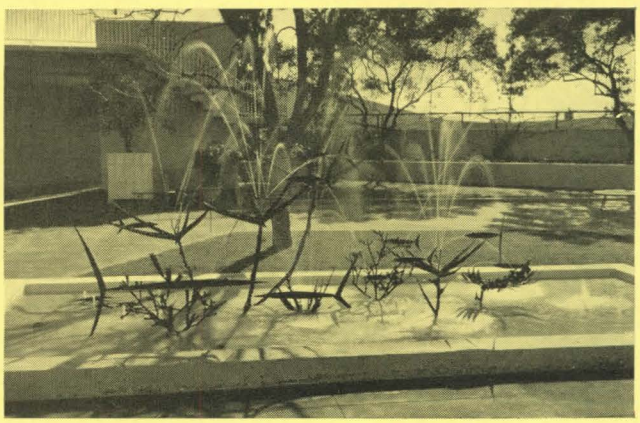
The site, west of the intersection of important Wilshire and Santa Monica Boulevards, extends between the two at the base of a triangular acreage, the apex of which is formed by the boulevards' crossing. A new private drive that serves for traffic access to the store joins the two bou and separates the store site from maining triangle, which is destine the location of a hotel and other c cial developments.

Since the Wilshire Boulevard was considered the most import store is placed at that side of the though angled from the street to an 80-foot-deep planting area i Toward Santa Monica Boulevard i level parking deck, with space f cars. Because of the slight slope site, the upper parking deck is on with the store's main floor; the lo joins the "garden level"—so-called of the landscaped sunken gard makes a daylighted selling level what would usually be a basemen pleting the building are a second sa a penthouse with employee faciliti public tea room—with space fo vertical expansion.



Stairs also join the two parking levels (two photos, right). *A side of the parking-deck structure becomes a wall of the sunken garden* (two photos below). *The bronze-and-brass fountain-sculpture is by Bernard Rosenthal. The garden is used for outdoor display and for fashion shows.*

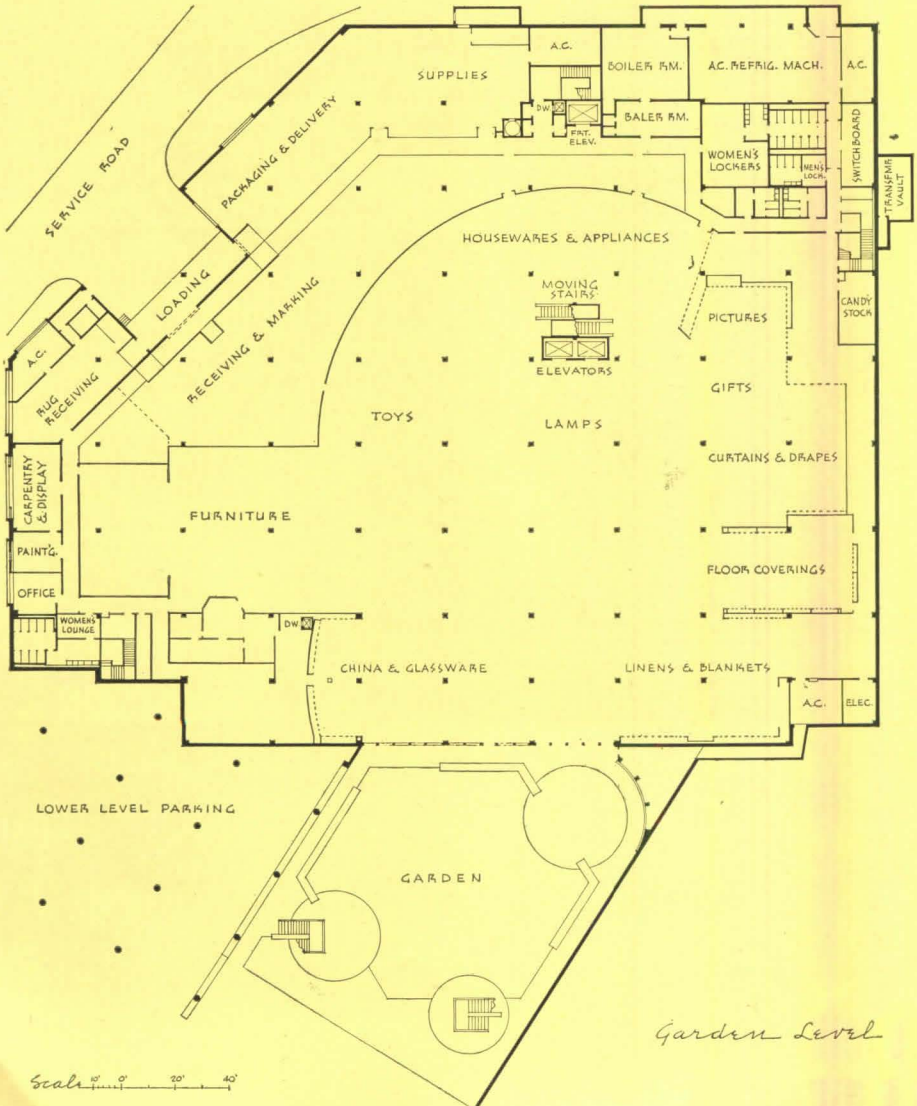




ed from the upper-level parking (right), *the main automobile-cus- entrance is marked by the canopy he setback above the garden level. walls are surfaced with white mar- black granite, and concrete.*

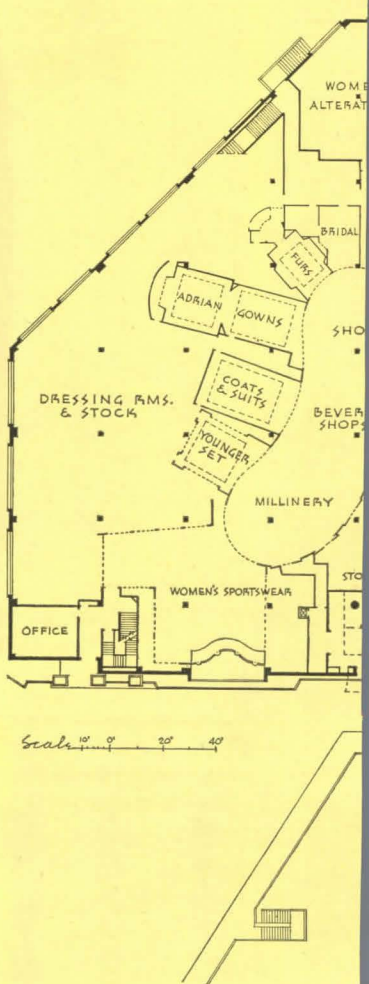
The welded-steel frame is laid out in 32-foot-square bays. On the main floor, omission of one row of columns and introduction of deep overhead girders creates an uninterrupted "open vista" selling area 64 feet wide and 180 feet long. This provides an exceptionally open plan and also simplifies any rearrangement of departments. Similarly, lighting and sprinkler installations are so located that they will not have to be moved to accommodate future shifts.

For convenience of the rather special type of clientele, department arrangement is the reverse of standard procedure—higher priced shops are on the main floor; budget shops, on the floor above. "garden level" handles furniture, a ances, china, radio and television, coverings, toys, and draperies. At the ter of each floor are banked two elev and two moving stairways, the latter a capacity of 8000 persons per hour. mination is by a combined incandes



Garden Level

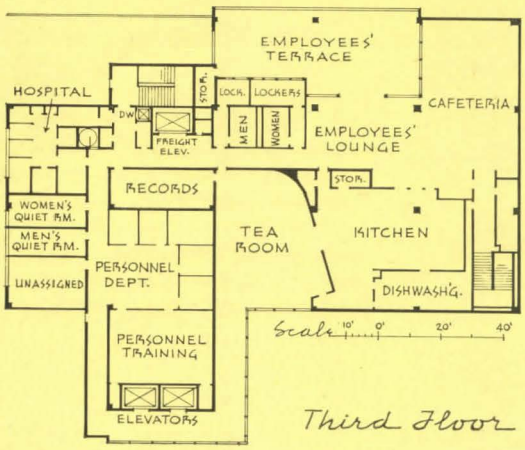
Scale 10' 0' 20' 40'

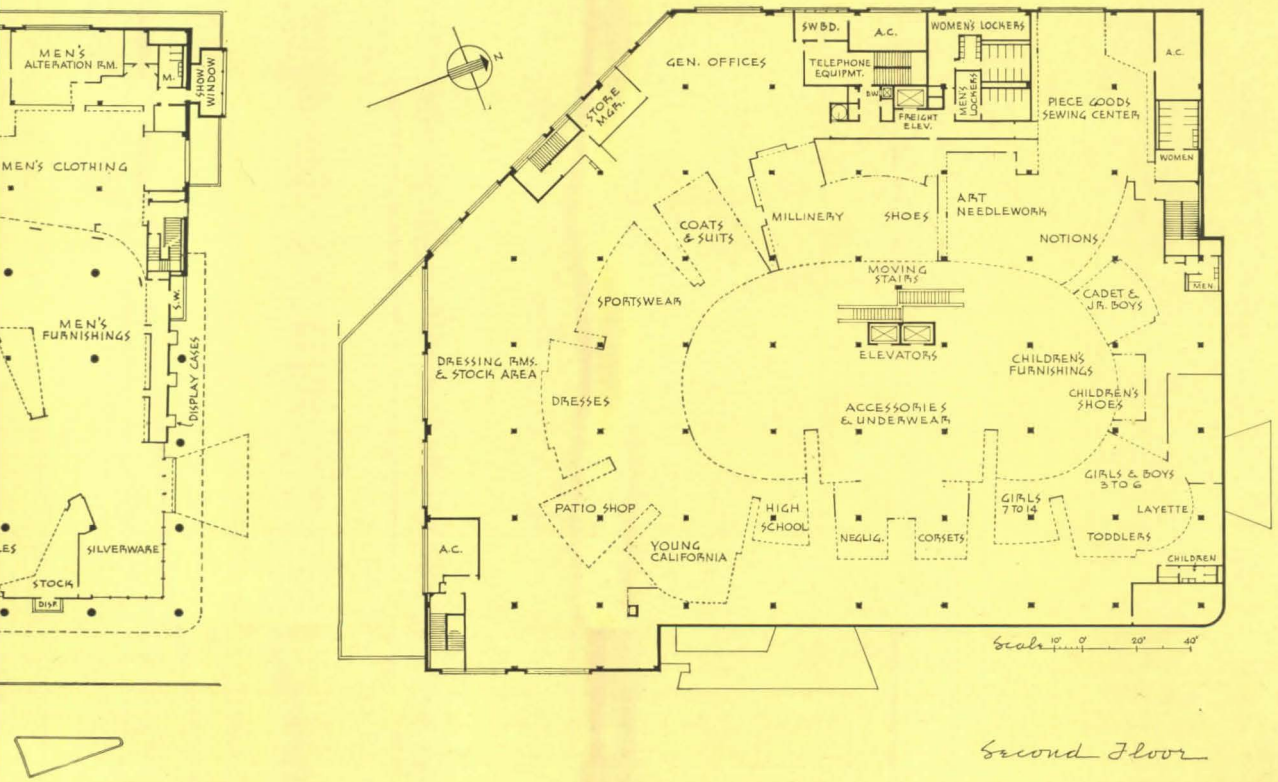


Scale 10' 0' 20' 40'

General view from Wilshire Boulevard (across-page) *shows the automobile entrance at left; pedestrian entrance, right. The 80-foot setback from the boulevard* (left) *provides a landscaped setting for the store. A secondary entrance leads directly into the men's store. Pavement is black-and-white terrazzo.*

fluorescent installation, designed to ide the light levels desired yet not e too great a heat load on the air-con-ning system. Three 125-horsepower re-ocating compressors serve the latter, two gas-fired boilers furnishing steam heating coils. Evaporative condensers e used in lieu of a cooling tower.



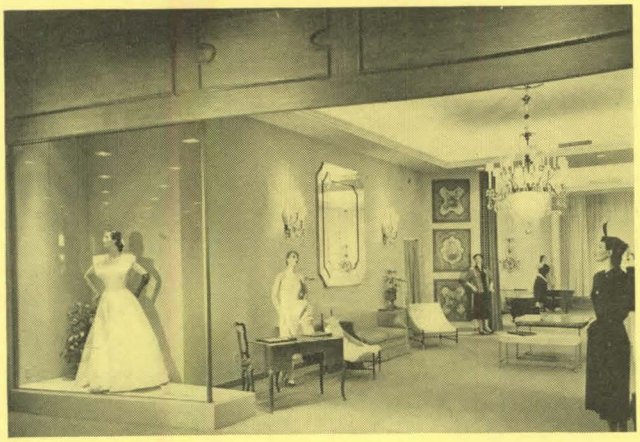


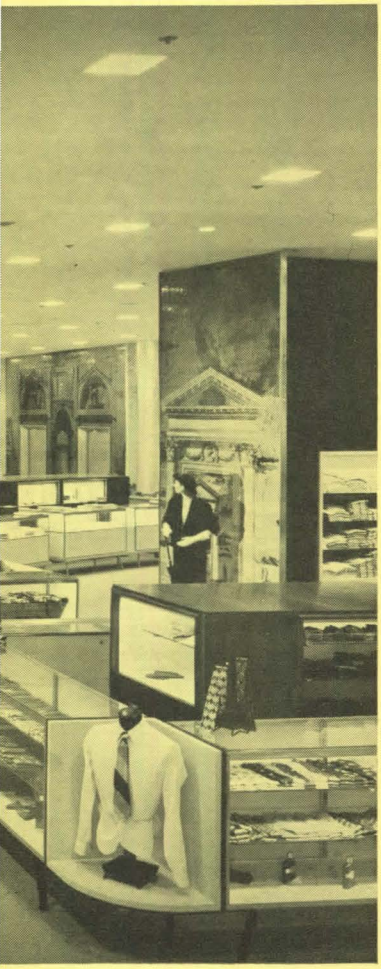
From the auto drive, tempered-plate-glass doors (above) *give access to the uninterrupted 64-foot-wide, 180-foot-long main sales "theater"* (right). *To the right is the men's department* (below). *In addition to the chandeliers, the ceiling is studded with a modular arrangement of both incandescent and fluorescent fixtures, air diffusers, and sprinkler heads.*

This is the first complete department store in Beverly Hills, a community that has burgeoned with specialty shops in recent years. But, as already pointed out, the sophisticated nature of the community dictated an unusual plan solution, with the higher-priced departments placed where "impulse merchandise" usually occurs—on the main floor. Furthermore, while the store carries a complete line, including a furniture department, it is organized more as a series of quality shops than as a merchandise warehouse. These shops are arranged around "wide-vision sales theaters." One can see at a glance the entire range of departments, which are reached directly by gently flowing aisles without interrupting mazes of sales lures.

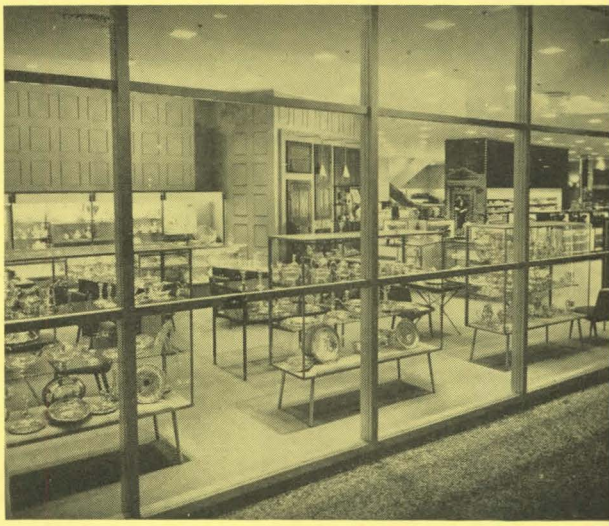
The main floor is illustrated on these two pages. This floor is carpeted throughout, said to be unique in department-store design. The central elevator-moving-stairway unit is lavishly treated with planting areas, columns surfaced with gold leaf, murals, polished Portuguese St. Victor Rose ble, and applied bronze decorative lights; elevator doors are satin b Other wall areas are of cast, off-white ter in a diamond pattern set in l frames; rosewood paneling, and p screens. Each of the quality sp shops, organized at the far end "theater" around a kidney-shaped c tion area, has its individualized dec treatment.

Silverware, accessories, and toilet a





The Adrian Shop (above) *is at the rear of the main floor. Color scheme: off-white, brown and black, with accents in crystal and silver. At the far end is a stage for fashion shows. The silverware department* (right), *has windows on Wilshire Boulevard and also facing the auto drive. The other walls are of ice-blue felt, welted in rectangular patterns. Display cases are bronze framed.*



The blouse department (below) *adjoins the automobile-customer entrance. As elsewhere, counter units are composed of two parts—bronze-legged platforms covered with plastic-impregnated grass cloth, and sectional showcases framed in bronze that may be arranged in numerous combinations.*

und near the Wilshire Boulevard
ce. To the right is the men's clothing
rnishings department, directly ac-
e from the sidewalk by a separate
ce. Stock rooms and dressing rooms
most of the remainder of the space.
rpeting is burnt-sand in tone. Punc-
the ceiling of the main "theater"
ree specially designed chandeliers
mbine crystal, polished brass, and
reflector elements.

department store

The merest sampling from the second-floor shops where budget and medium-priced merchandise is handled. In the shoe department, a curved background wall, beige in tone, is painted with a repeated, elongated diamond motif in gold, brown, and white. Interiors of the recessed display cases are gold.

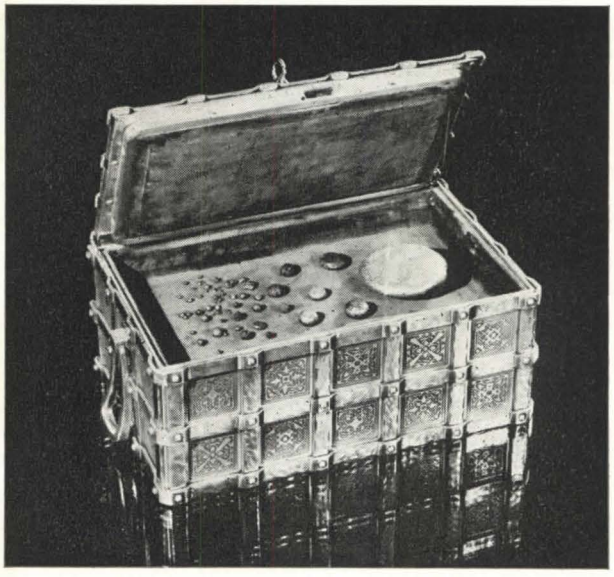
In the art needlework department, gold-beige is the wall color; the colorful skeins of yarn are displayed in blue-green-lacquered honeycomb cases that rest on pipe supports extending above the cases as frames for the stylized "cat's cradle" in brilliant colors.

construction

Foundation: reinforced concrete; cement—Colton Cement Company; reinforcing steel—Ceco Steel Products Company. **Frame:** structural steel—Bethlehem Steel Company. **Walls:** reinforced concrete curtain walls. **Floors:** reinforced concrete slab. **Roof:** reinforced concrete slab and composition roof—Pioneer-Flintkote Company. **Wall surfacing:** exterior: marble—Vermont Marble Company; granite, concrete, cement plaster; interior: wood paneling—McCloskey-Grant Company; plaster; marble; rest rooms, toilets: ceramic tile—Gladding McBean & Company; plaster. **Floor surfacing:** asphalt tile—Armstrong Cork Company; carpeting—James H. Lees & Sons Company, Mohawk Carpet Company; terrazzo. **Ceiling surfacing:** plaster, smooth finished—U. S. Gypsum Company. **Roof surfacing:** asphalt, felt, gravel, membrane and liquid types of waterproofing, cane fiber insulation under roof slab—Pioneer-Flintkote Company. **Insulation:** sprayed-on asbestos in refrigeration room—Acoustics, Incorporated. **Roof drainage:** steel pipe downspouts; drains—Josam Manufacturing Company. **Partitions:** steel studs, plaster—Penn Metal Company, U. S. Gypsum Company. **Windows:** steel sash—Ceco Steel Products Company; heavy sheet and plate glass—Pittsburgh Plate Glass Company; aluminum store fronts—Kawneer Company. **Doors:** flush-wood and mineral-core—Los Angeles Millwork Company, California Fire-Proof Door Company; horizontal-sliding glass doors—Glide Windows, Incorporated; rolling steel and aluminum overhead—J. G. Wilson Company; bronze and steel elevator—Otis Elevator Company; tempered-glass entrance—Pittsburgh Plate Glass Company. **Hardware:** locksets—Sargent & Company; recessed-in-floor door closers—Schlage Lock Company; casement and rolling-door hardware—Pittsburgh Plate Glass Company, Oscar C. Rixson Company. **Paint:** exterior—Paramount Paint Company; interior—W. P. Fuller & Company.

equipment

Kitchen: Dohrmann Hotel Supply Company. **Moving stairways:** electric—Westinghouse Electric Corporation. **Lighting fixtures:** recessed and fluorescent in office and sales areas—Century Lighting Company. **Electrical distribution:** service entrance switch, panelboards, multibreaker—Zinsco Manufacturing Company. **Plumbing and sanitation:** water closets—Crane Company; sprinklers, both flush and pendant heads—Viking Sprinkler Company. **Heating:** combined heating and air conditioning; hot water boiler—Birchfield Boiler Manufacturing Company; controls—Johnson Service Company. **Air conditioning:** evaporative condenser; refrigerant—*E. I. du Pont de Nemours & Company, Incorporated*; compressor—Worthington Pump & Machinery Corporation; diffusors—Tuttle & Bailey, Incorporated; blowers—Utility Fan Company; cooling coils—Recold Manufacturing Company; chillers, heat exchangers—Acme Manufacturing Company.



When Charles Martin Hall first produced his aluminum buttons at Oberlin College in 1886 (a few revered ones have now become the "Crown Jewels of Alcoa," right), *the approximate price of this metal was $8.00 per pound. With a 1,350,000 ton volume of production contemplated by the entire U.S. industry for 1952, aluminum pig sells today for about 18 cents per pound.*

ALCOA BUILDING: LIGHTWEIGHT CONSTRUCTION

by Burton H. Holmes

can be little doubt that the Alumi- Company of America's new office g, now nearing completion in Pitts- weighs less for its size than any kyscraper yet erected. Many of the significant postwar building tech- that make lightweight construction e have been skillfully integrated into sign of this 30-story (410′ high) re containing 300,000 square feet of e floor area above the first level. The al weight-saving elements will be n the magnificently engineered cur- ll, in the dual-purpose type of floor ction, and in the component parts nique heating and cooling system. large number of its building prod- e indigenous, is a tribute to the en- of Pittsburgh's manufacturers of ctural materials.

ne curtain wall

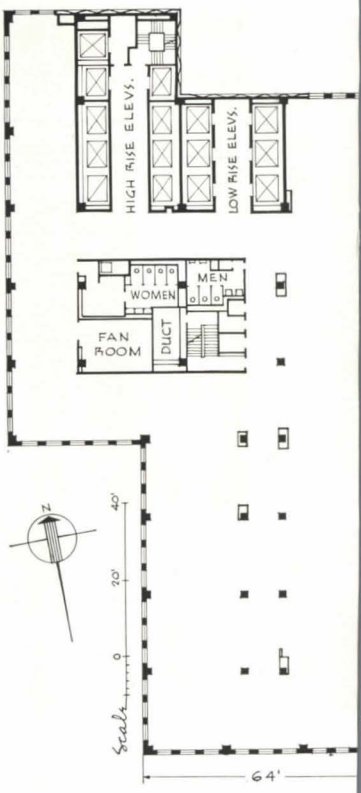
than containing lighter members, ted and bolted skeleton frame for ilding is not unlike that found in her contemporary, tall office build- Lightweight, foamed concrete was ed to fireproof the columns, span- ams, and was used, as well, in the the service-core area on each typi- or. Heavily galvanized steel-angle s, bolted to anchors welded to span- el, receive the all-aluminum panels.

The exterior facing is made up of pressed panels that are 6′ wide, 12′ high (story height), and of ⅛″ thick aluminum sheet. Stacked and stored on each floor until installation, panels were erected from within the structure, thus eliminating the need for exterior scaffolding. After the panels were shimmed and bolted to the brackets, the joints required no additional taping or calking: the exterior is entirely maintenance-free. Flanges of adjoining panels are so designed that a labyrinth excludes all penetration of rain; infiltrating air must change directions four times before being arrested at the secondary return flange. Smaller panels, extending from floor to floor and 27″ wide, cover the fireproofed structural columns that occur generally at 20′ intervals around the periphery of the structure. The metal panel is totally separated from its back-up, the dimension of the intervening space varying from 8″ at the panel edge to 1½″ at the apex of the pyramidal impression; through this space, circulating air helps to evaporate any condensation that may form.

Once the skin was properly anchored, a slotted aluminum lath was installed to serve as a catcher-screen for a sprayed-on perlite-concrete back-up; a maximum of five passes of the plastering machine was required to build up a 4″ thickness. When the concrete had cured (it was designed to develop 1650 psi in 28 days and actually developed 2000), 1″ plaster was applied to metal lath furred ¾″ from the wall.

All exterior panels were anodized and a 5 percent silicon-bearing, aluminum-alloy liner material gives them an iridescent, gray appearance without the use of pigment or dye. The inverted pyramidal pattern contributes a certain amount of rigidity to the skin; however, this design was developed principally for esthetic reasons. The aluminum skin alone will successfully resist a wind load of 30 psf with a safety factor of two. The total weight of the curtain wall is approximately 34 psf; the skin weighing 2¼ psf, the 4″ perlite-concrete back-up 22 psf, and the furring and plaster about 10 psf. Other than the perlite aggregate in the back-up and the two air spaces, there is no other thermal insulation in the wall. Tests have shown that the curtain wall has a U-factor of 0.14; it is believed that this factor will be even lower after the walls have been completely cured. Although the Pittsburgh Building Code requires only a two-hour fire rating for exterior walls of commercial buildings, this curtain wall has satisfactorily passed a four-hour test.

Experience has shown that two erection crews of five men each would be able to enclose the 30-story structure with the aluminum skin in one month's time. Each



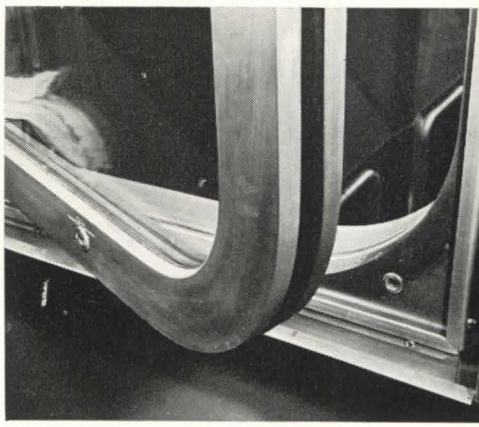
Alcoa's new home office building in Pittsburgh as it neared completion (above). *This 410'-high skyscraper is supported on open-caisson concrete piers that reach a depth of 90' below street level. Its main tower is 64' wide and 193' deep* (typical floor plan, above right). Photo: Jack Holmes

spray crew for the perlite-concre
cluded four men; three such crew
able to erect the back-up walls at t
of 2½ stories per week. Compare
conventional curtain wall constructi
type of wall permitted a savings
3000 tons of structural steel in the
work.

At the time of erection, each pan
tained a vertical-pivoted, aluminum
window measuring 4'-2" x 4'-7"; sa

After panels were anchored and glazed, slotted-aluminum lath was installed to catch sprayed-on perlite-concrete back-up (right); *wood forms protect windows while back-up is sprayed to depth of 4"* (center); *completed perlite-concrete walls after removal of wood forms* (far right). *The wood forms were used only at window jambs because of their great projection. Lastly, walls were plastered over metal lath. Note grid for heating-cooling system at ceiling.*

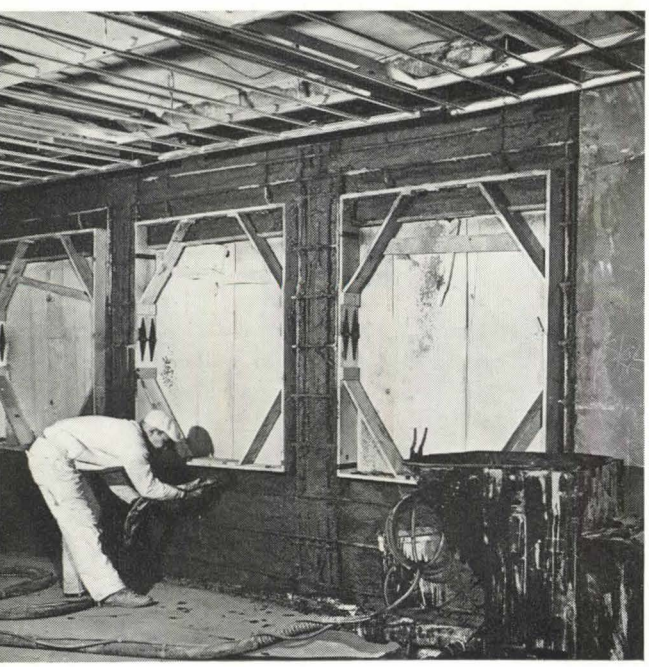
Typical aluminum panel (6′ x 12′) and column cover (2′-3 x 12′) being hoisted into position (far left). *Workmen align panel flanges with steel-angle brackets bolted to anchors welded to spandrel steel* (left). *Vertically pivoted, double-glazed windows are made air tight by rubber tube inflated by air pressure* (below).

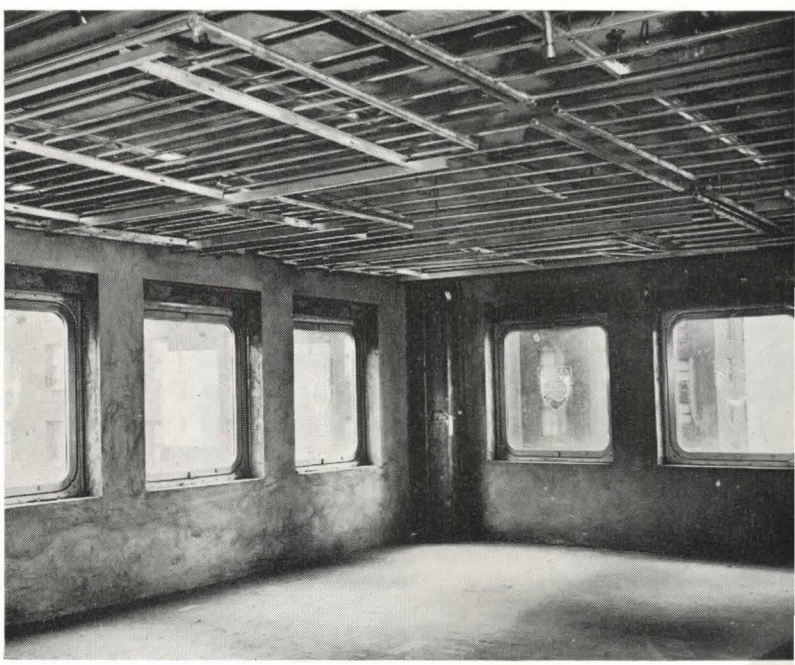


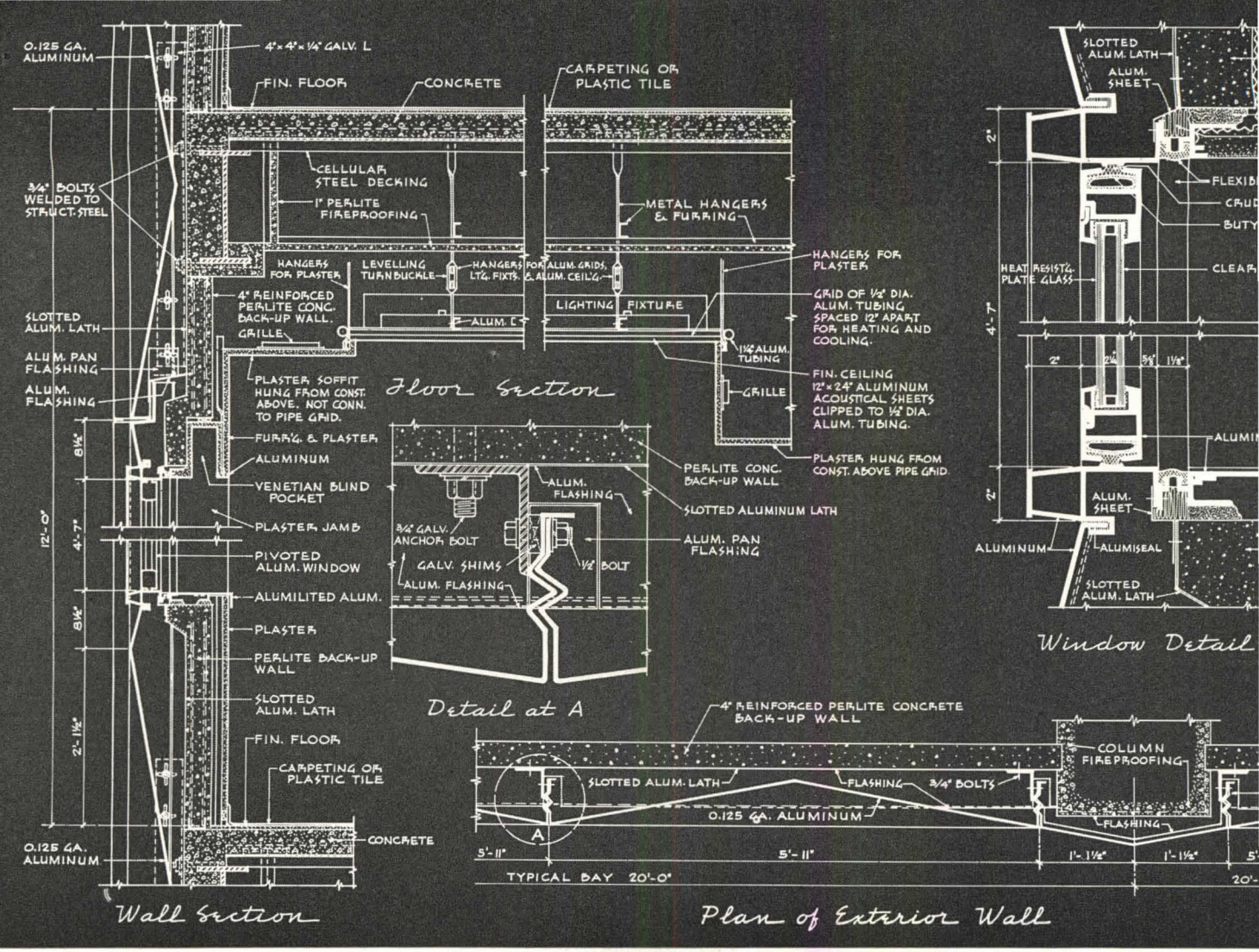
-glazed after each panel was in place. window pivots through 360 degrees, be washed from within the building t night), thereby removing window ng from the hazardous occupation o simplify further the cleaning task, ners are rounded. A butyl-rubber hich completely surrounds the win- inflated by air pressure to insure r tightness. The exterior light of the -glazing is ¼″ heat-absorbing plate glass. Although the green-tinted glass reduces glare from the sun's rays on the inside of the building—it is not particularly helpful in reducing the summer cooling load when combined with venetian blinds —it was also selected for its compatible appearance with the surrounding gray aluminum. Standing at the first interior column line and looking out of a typical window, the observer is unaware of any green color in the glass; there is, however, a small, tinted area on the ceiling near the exterior wall.

the floor system

Following the structural steel erection by about three stories, light-gage, cellular-steel Q-floors were easily and rapidly laid in office areas surrounding the service core. As the floor cells were installed so that they lay perpendicular to the corridors, the flexibility of the electrical distri-







bution system was greatly increased. Over the 3″ cellular steel, a 2½″ stone-concrete fill of 2000 psi was poured. Carpeting was selected as the floor finish for the corridors, elevator lobbies, and will be laid in most of the offices. For some areas, such as special-purpose rooms and service areas, vinyl-plastic tile was specified. The light-gage flooring was fireproofed from below by a 1″ perlite-plaster ceiling suspended at a distance of 13″ to 16″, depending upon the depth of the wind beams.

The design load included: 50 psf live load; 7.5 psf stone-concrete fill; 7.4 psf cellular steel; 5 psf perlite plaster; and 1.8 psf combined panel ceiling and mechanical grid (dry).

the heating-cooling system

Practically all areas of the building are heated, and partially cooled, by the aluminum-panel, radiant ceiling. Below the 1″ perlite-plaster fireproofing for the cellular steel floor, 6′ x 12′ grids of aluminum tubing (through which hot or cold water circulates) are supported by a turnbuckle-leveling system. The welded grids are composed of ½″ IPS aluminum tubes, spaced 12″ on center, extending between 1¼″ IPS headers; all connections are fitted with flared-type joints. Radiant panels, 12″ x 24″ and .040″ gage, are clipped to the ½″ tubes by means of integral, continuous-type grips. For acoustical reasons, 9 percent of each panel area is perforated and a ¾″ semi-rigid blanket of glass fibers rests on top of the aluminum tubing. Seventy percent of the ceiling area is covered by the radiant panels while the remainder is occupied by lighting fixtures, diffusers, and plaster soffits containing access panels. Lighting fixtures and diffusers actually form part of the radiant surface, as they are in direct contact with the grid tubes. Such an arrangement permits the removal of a considerable portion of the heat created by the lighting fixtures before it enters the room. A mill finish on the top of each panel in situ produces only a five percent emissivity and resists radiation upwards; to the underside, however, two coats of paint were applied—one a wash coat primer and the other a baked-alkyd type—and a surface with high resistance to crazing and a 92 percent emissivity is obtained to direct radiation downward. Water distribution is through horizontal mains, located in the corridor ceili through branches which extend to dividual grids.

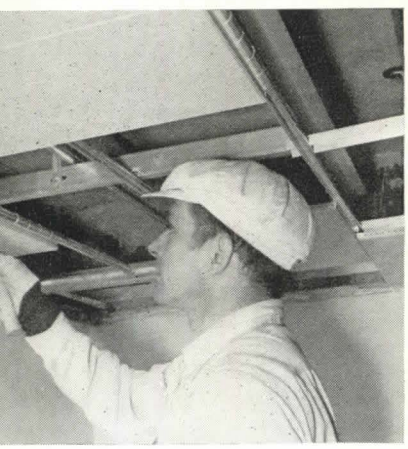
As there are no radiators, pipi other types of peripheral air-condit units along the exterior wall, approxi 15,000 square feet of rentable floo were gained by this system.

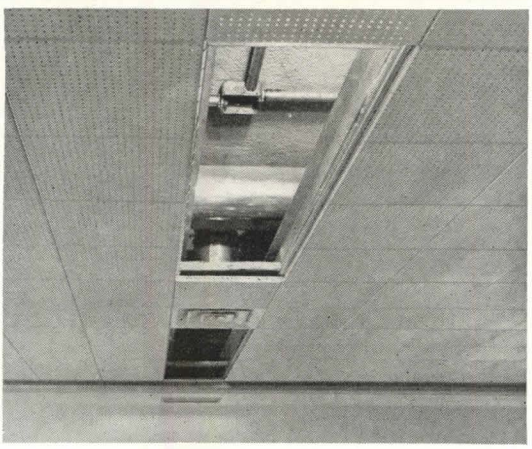
The principal source of cooling a humidification is two electric, motor-c centrifugal refrigerating machines ing with condensing water supplied minum cooling towers located on t level. This central refrigeration pla erates chilled water that is then p to the central station primary air-con ing units as well as to local interch serving the panel systems.

The basic source of heat, pur steam, is distributed to all blast c the central station air-conditioning and is also used to generate prima water which is pumped to the loca exchangers.

Primary air is conditioned in fou tral air-conditioning systems (one basement, two on the 14th floor, a on the penthouse level) which pr 54F air all year round. This air, pr

Close-up of aluminum ducts and ceiling-piping grid on upper floor (right). *Workman installs 12" x 24" individual panel which is held to grid by integral, continuous-type grips* (far right).





Where a suspended channel or other obstruction interferes with a segment of the continuous-type grip (far left), *that segment may be readily removed by bending back and forth until breakage occurs. Lighting fixtures (not yet in place) and diffusers, in direct contact with grid tubes, form part of the radiant surface* (left). Upper right and lower photos: Jack Holmes

fied in the winter or dehumidified in nmer, is circulated through a cenaft to the secondary fan units lon each floor. Primary air (50 per- which is outdoor air and the other ent return air regenerated by means ivated carbon) is electrostatically .

ı floor is served by one secondary it which mixes the 54F primary air n equal amount of return air and elivers it to the floor. As the room atures vary between 70 and 80F, deg on the prevailing outdoor tempera- he air discharged by the secondary ill vary from 62 to 67F—thereby ng a cooling effect at all times. The ribution system for an individual s not zoned except for the corner local booster coils and air-volume ation permit individual temperature l in these locations.

ı floor is divided into four panel —three exterior (facing south, east, est) and one interior. Each has ı heat exchanger, circulating pump, stribution piping system. Zone ther-s, which are located in a typical room h zone and reset from 70 to 80F as the outdoor temperature rises from 70 to 95F, control the temperature of the panel water. This is accomplished by admitting either primary chilled or primary hot water to the zone heat exchangers. To prevent condensation, a safety control prevents chilling of the panel water temperature below the dew point of the conditioned areas.

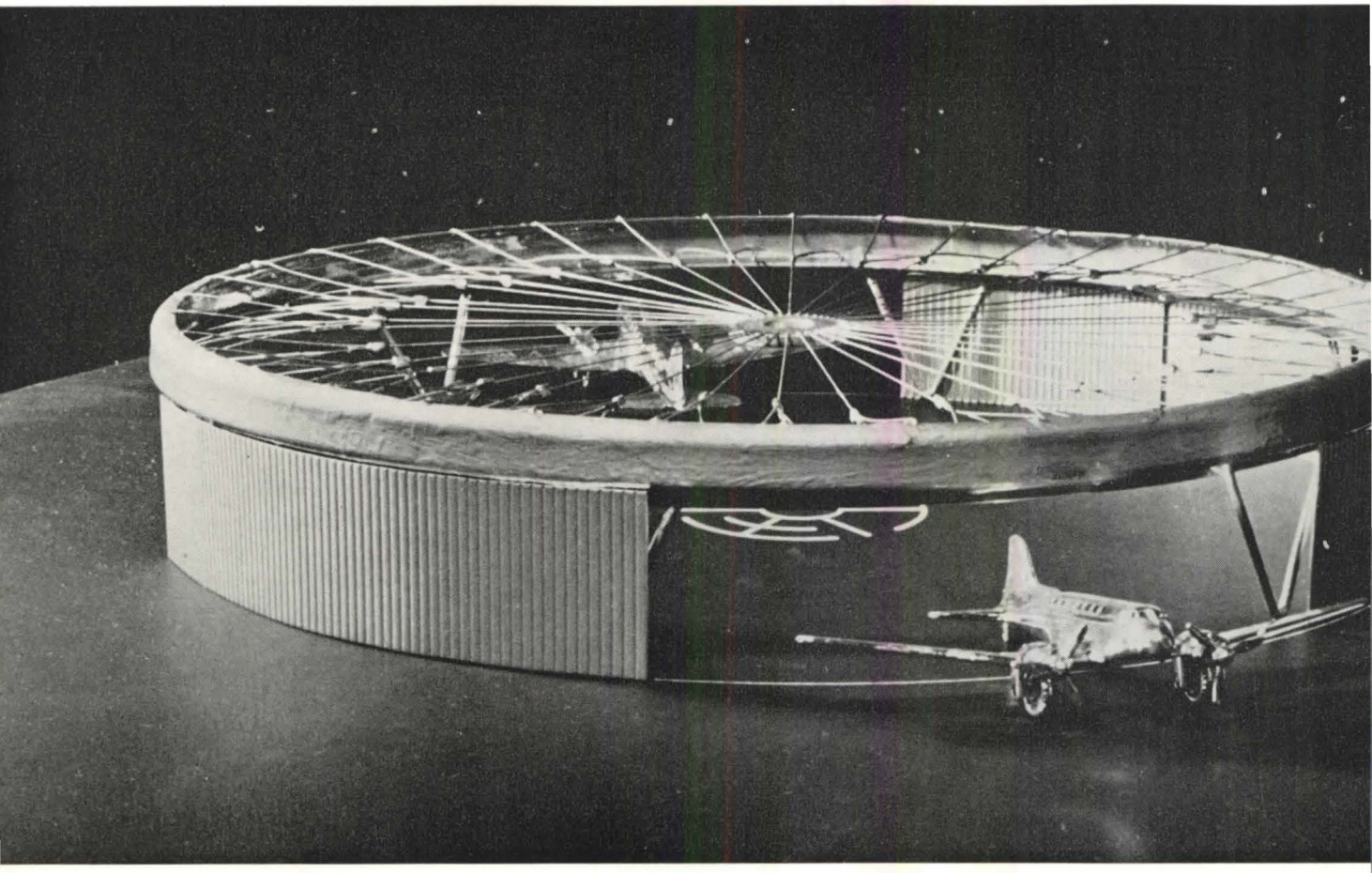
Panel temperature is under full automatic control and varies from approximately 60F at full cooling load to approximately 100F for full heating load. For quick heat up, however, panel temperatures may be raised as high as 140F. Due to the favorable heat transfer characteristics of the aluminum ceiling, water temperatures will be only a few degrees higher or lower than the actual surface temperature of the panel. The small mass and the good conductance of the aluminum ceiling also result in an immediate response of the panel temperature to the call of the thermostat. (Overcoming lag is one of the greatest weaknesses of the more conventional radiant systems—particularly floor systems.) Room temperatures which vary from 70 to 80F correspond to somewhat higher temperatures during the heating cycle and to somewhat lower temperatures during the cooling cycle, when compared with nonradiant systems.

In general, no individual room control has been provided except for the corner rooms; however, on the upper two floors, where the top executives are located, individual room control is provided by modulation of water flow through the coils. It should be recognized that in a radiant system, sensation of comfort may be obtained within a considerably wider range of temperatures.

architects and engineers

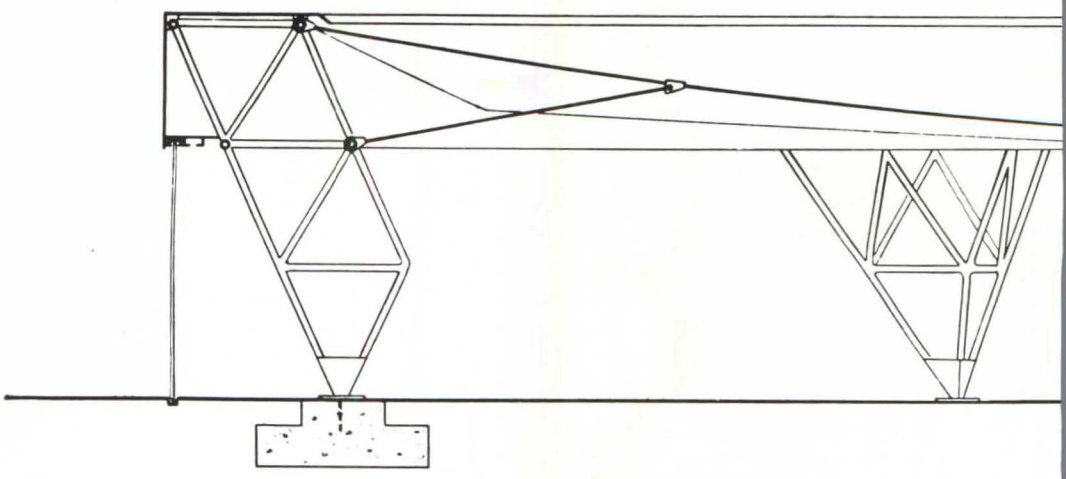
Architects: Harrison & Abramovitz, New York; associated architects: Mitchell & Ritchey and Altenhof & Brown, Pittsburgh. Structural engineers: Edwards & Hjorth, New York; mechanical engineers: Jaros, Baum & Bolles, New York; electrical engineers, Edward E. Ashley, New York. The General Contractor was George A. Fuller Company. Personnel of Alcoa's Aluminum Research Laboratories and Development Division worked co-operatively with the architects, engineers, and individual fabricators in the development and testing of the aluminum components of this structure.

ring-airplane-hangar design



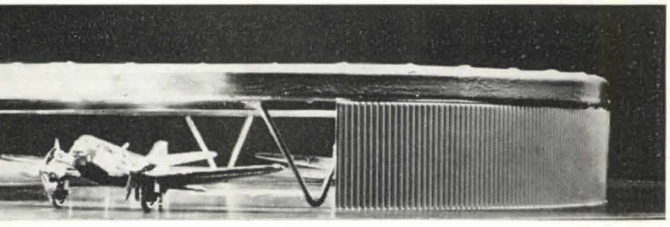
Aladar Olgyay, talented young professor of architecture at M.I.T., has schemed a lightweight, portable airplane hangar and has recently proposed its use to the Air Materiel Command of the United States Air Force. His proposal is for "Ring-Airplane-Hangar" construction (called RAH for brevity) which consists principally of an outer ring (formed of steel-pipe units) from which a small inner ring is suspended by cables. The construction system cl parallels that of a horizontal bicycle w —the outside ring being in compre while the cables and the inside ring a tension. When elevated and placed on ports, this assembly becomes the roof f ing for the proposed hangar. Extre lightweight construction is characteris this system, as all structural member utilized to take maximum advantage of

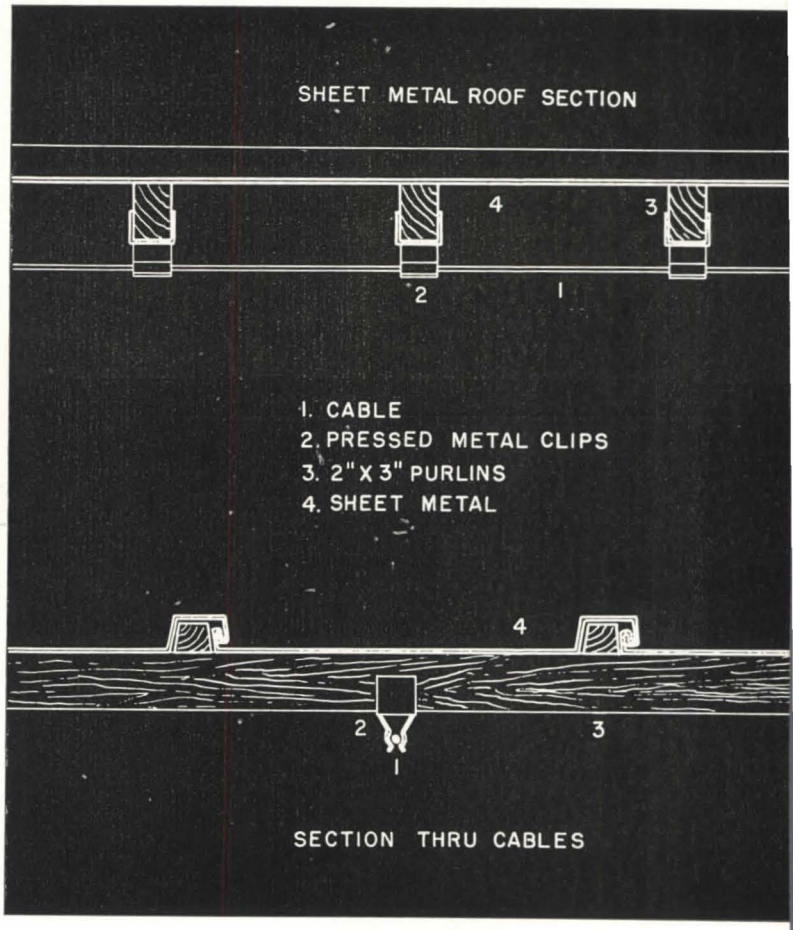
SCALE 1" = 15' 0"



SECTION THROUGH CONSTRUCTION

Aerial perspective of hangar (acrosspage) *and view into hangar at ground level* (below). *Construction details* (right) *show method of supporting sheet-metal roof on steel cables.*



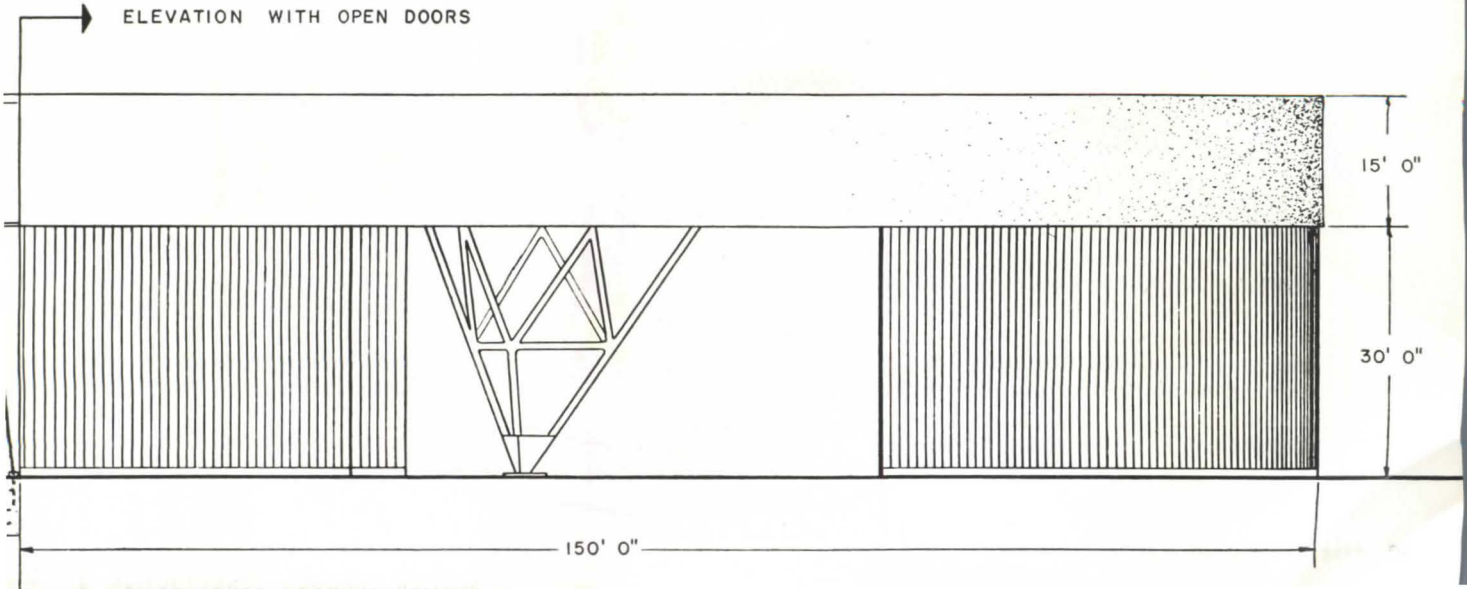


statical properties. In this develop- Olgyay was associated with General eering Associates of New York, head- Paul Weidlinger, engineer.

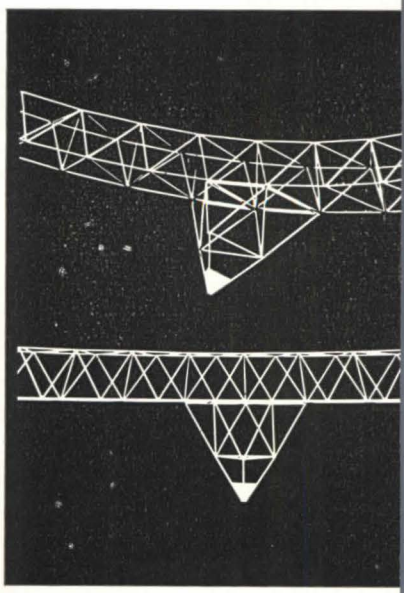
ause of the flexibility of this struc- method—the outer-ring diameter can idily changed and the number of sup- easily increased or decreased—a y of triangular shapes can be created ıse many types and quantities of air- craft. According to the type and size of the aircraft to be housed, RAH can be adapted from a single-plane hangar to one accommodating 36 planes or more.

Compared with conventional types of hangars, it is believed that great savings in material and weight are possible because of RAH's inherent structural lightness. Lower costs and portability are direct results of these characteristics. The round space-saving configuration produces less outside wall area, while the doors slide over each other under the outer ring.

Olgyay has requested that the Air Force approve a research and development project for the RAH method. The scope of the early research would include the development of Type A-RAH construction—for a single F-89 aircraft—and Type B-RAH construction—for five or six F-89 aircraft.



ring-airplane-hangar design



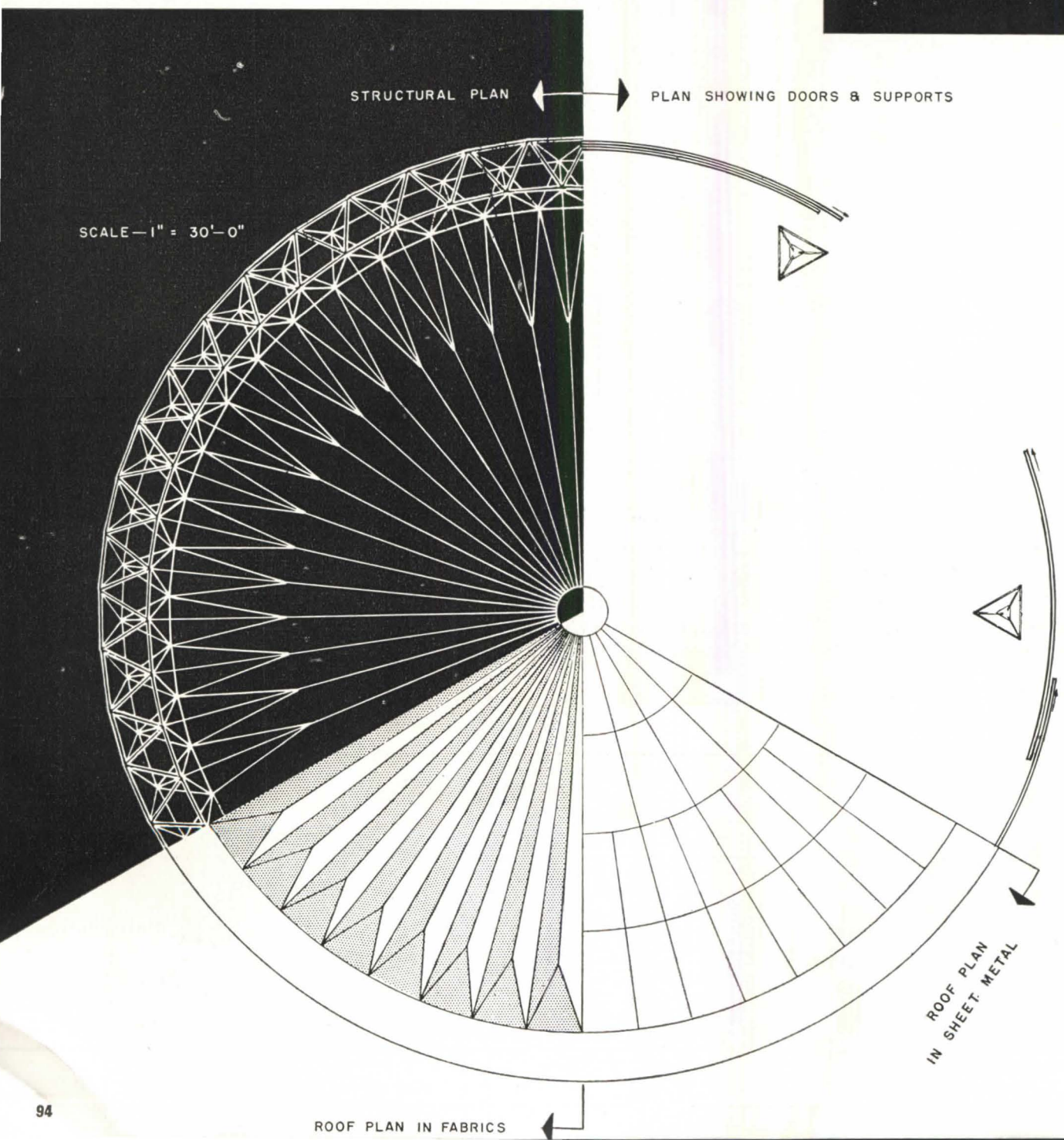
Outer ring and supports viewed from different heights (right).

technical data for 300' diameter RAH

Structural data: Cables, 2½" dia., are spaced 18′ o.c. The outer ring, which is composed of steel-pipe members, has 42 sq in of steel in compression and 32 sq in of steel in tension.

Packing: All structural elements are modular, to permit maximum interchangeability. The length of the steel piping is about 18′ and the total number of units required is 768; these could be fitted into an 18′ x 18′ x 18′ cube. Total length of needed cables (which could be rolled) is 10,000′. If coated-glass cloth is specified for roofing, 100,000 sq ft of folded material should be packed (total covered area is 70,000 sq ft). There are 24 door units, and 700 fittings and smaller pieces.

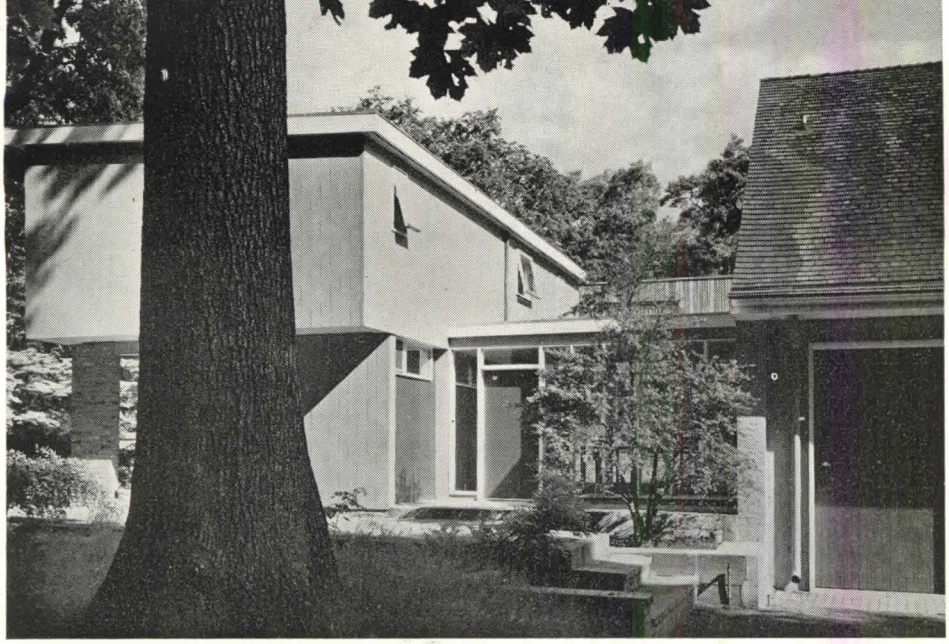
Erection: Ring cables and cover are assembled at ground level and jacked up into position; then supports are placed beneath.



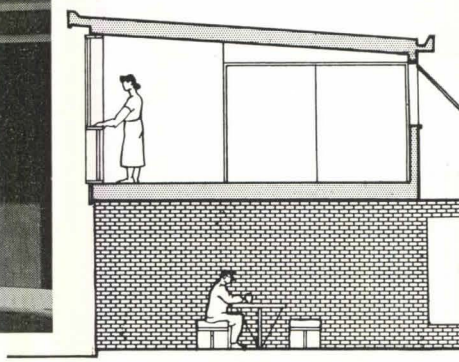
studio-house

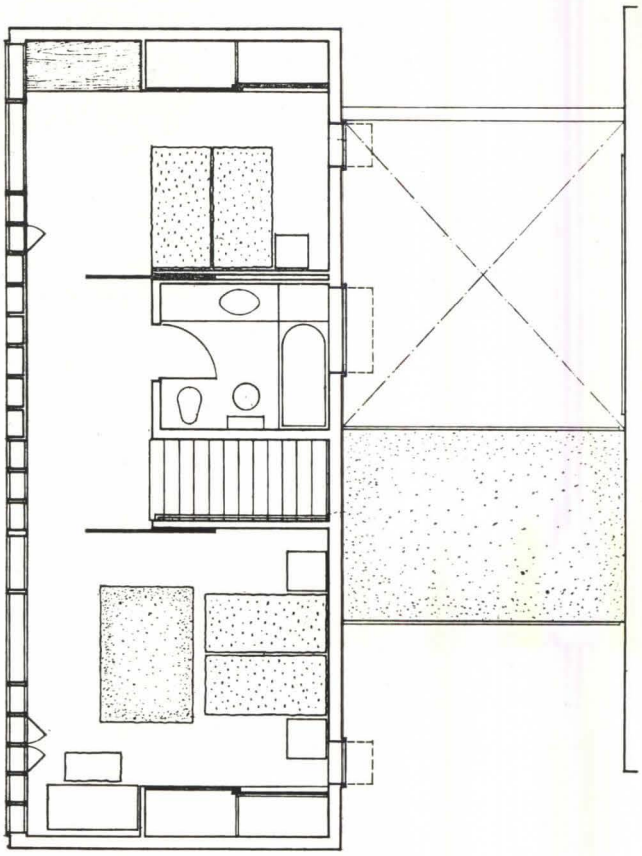
location | Locust Valley, New York

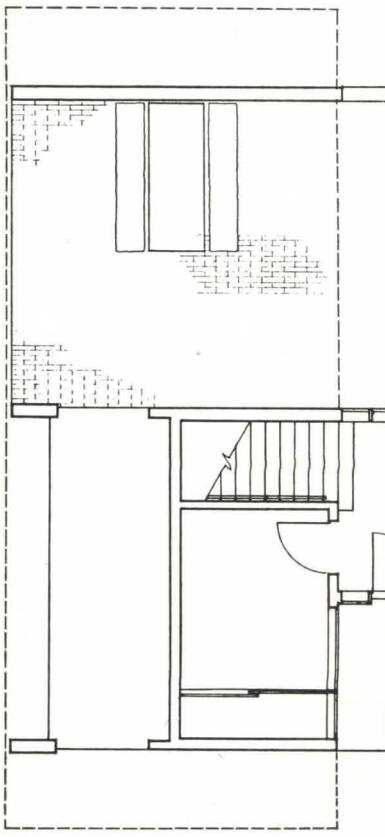
architect | José Luis Sert



studio-hou

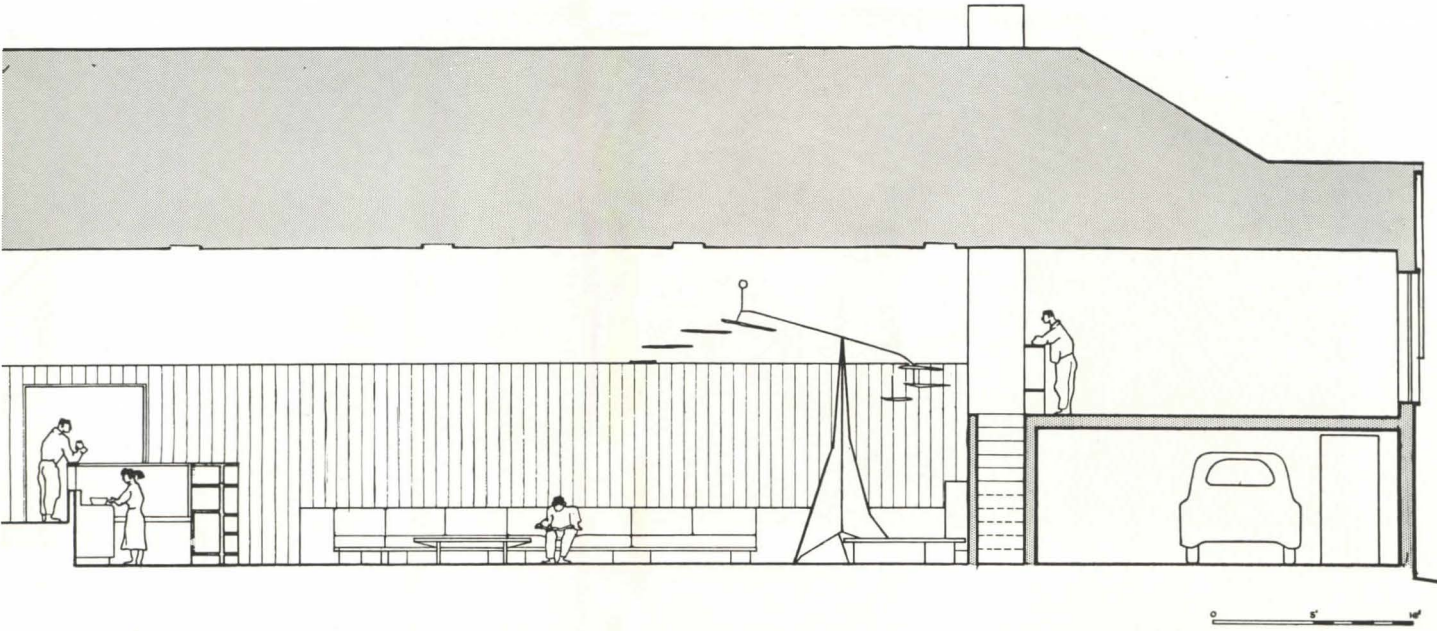


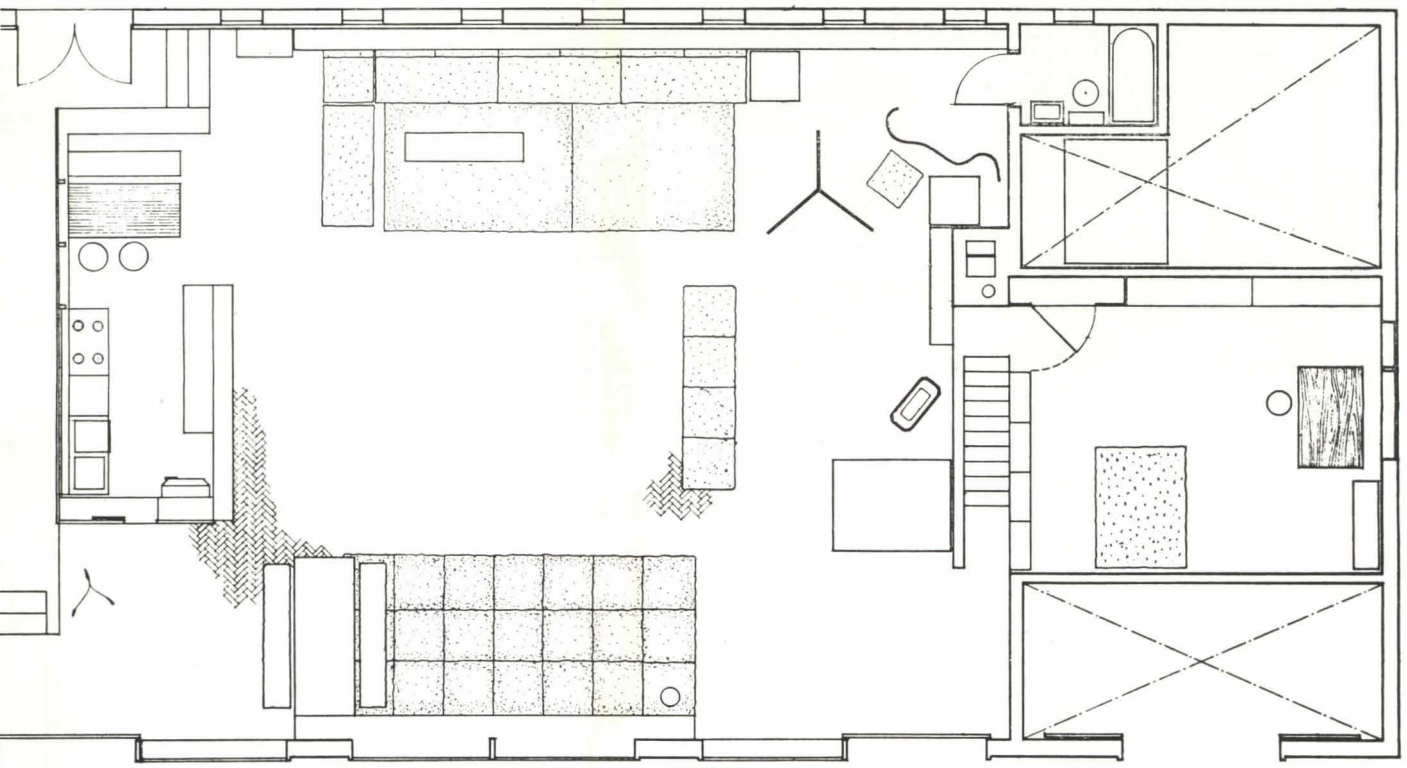




This remarkable house, that serves as both home and studio for the architect and his wife, is a notable experiment in space use. Existing was a fine old stable, 36′ x 75′ in area. As the plans explain, this great hall became the living-dining-kitchen room and —by using an open balcony at one end (above the garage)—the architect's studio as well. A new wing consists of a connecting entrance link and a two-level structure, placed at right angles to the stable "to establish a contrast of forms." This new element, with bedrooms upstairs and outdoor terraces below, is two feet above the stable level, "making for better balance with the existing high building."

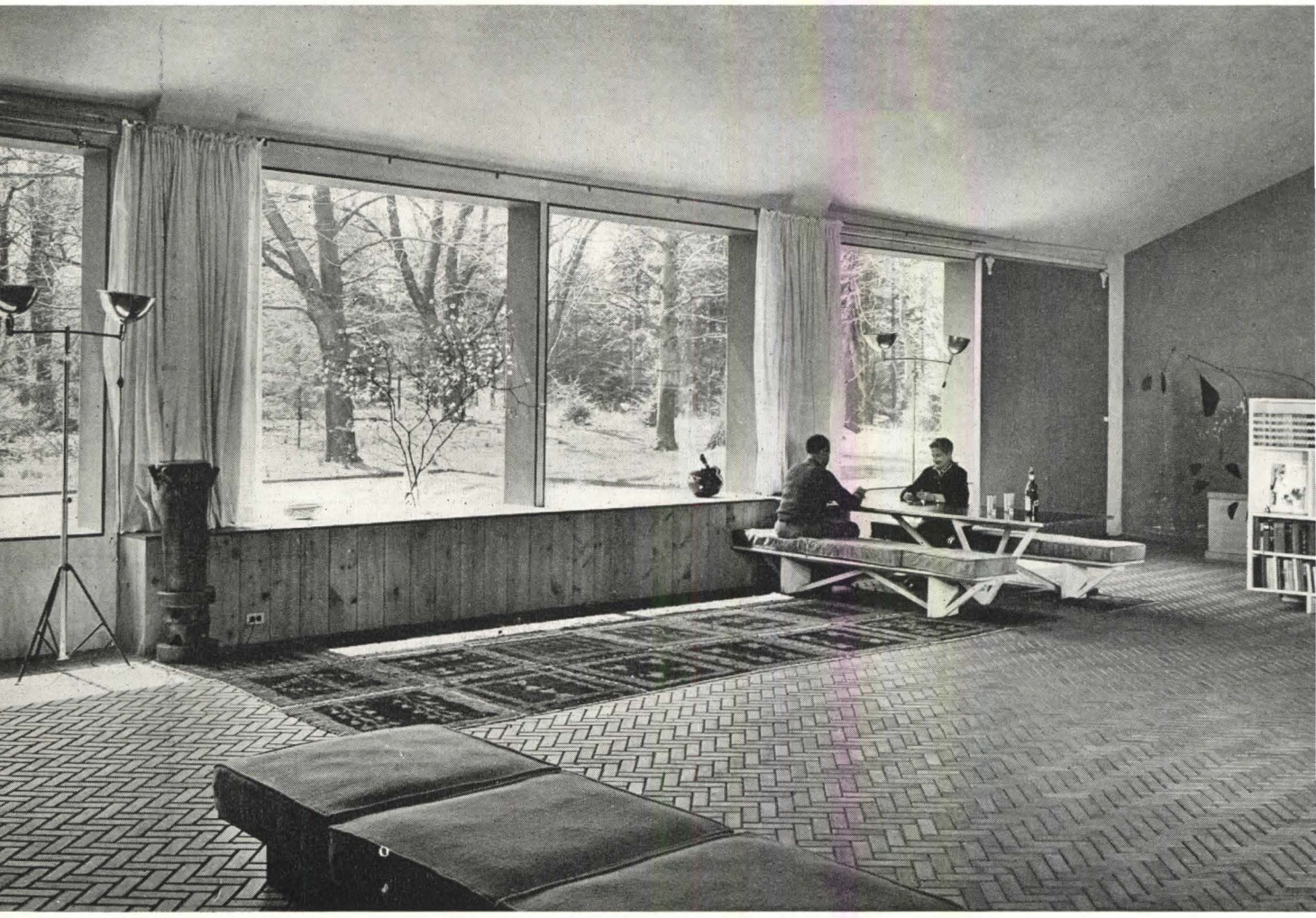
"The design makes use of the square as a basic shape," the architect comments, "and Golden Mean relationships were established wherever possible, so as to unify the whole. Le Corbusier's Modulor was applied in the dimensions of the new wing." Exterior colors accentuate the stud construction, which is left exposed in portions.





photographs emphasize the relation
een the old stable and the new two-
wing. A brick end-wall protects
porch from view of neighboring
es. Prevailing exterior colors are
e and gray, "traditional in this part
ong Island;" barn red, yellow, and
n were used on ventilating panels
doors. Photos: Martin Helfer

o on Page 95: Gottscho-Schleisner



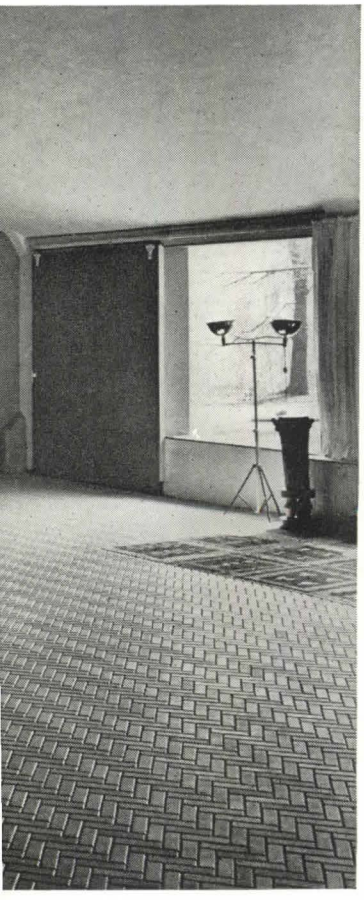
The space organization of the huge room, with its beautiful old brick floor, is best described in the architect's own words. "The room had to be brought together and the furniture scaled to form part of the architecture," he says. "The different pieces of furniture were designed to establish bridges or visual stepping stones between distant walls . . . The impression of big, uncluttered space had to be kept. . ."

"An important point is that such a big room is not livable unless used for several purposes, virtually subdivided by functions in different sections of the room. Introducing the kitchen into the room helped to classify the space without subtracting from the size." The rest is given over to conversation groupings of furniture and to the big table on the window side that is one of the three eating places (the others are in the kitchen area and on the porch). Furniture is consciously kept simple, with accents on paintings and sculpture.

studio-house

"The kitchen (left) *is the center of the house," the architect explains, "and other areas extend from it." The large dining table and benches* (acrosspage) *are placed near one end of the window wall, adjoining the kitchen enclosure.*

Kitchen photo: Martin Helfer
Other photos: Gottscho-Schleisner



A conversation group is organized around the fireplace (left) ; *the balcony studio looks out over the main room. Music, lounging, and cooking-eating area are in the opposite corner* (above). *A forced warm-air system heats the big room, with ducts installed between roof and ceiling, and outlets in the ceiling. The brick floor is waxed, and the rugs and furniture are in bright colors.*

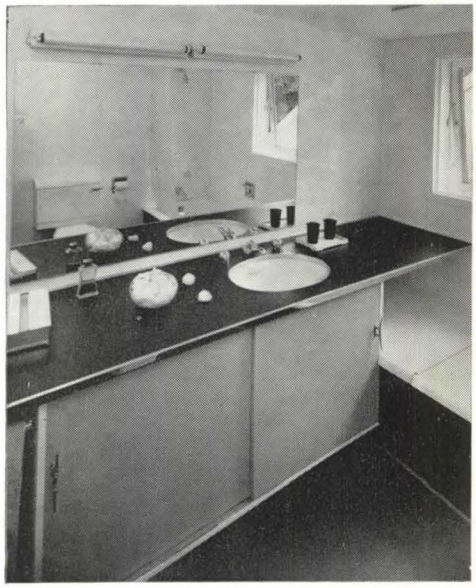
With the linoleum-lined sliding doors of the bedrooms pushed back, the entire window side becomes a gallery. Note flush-mounted electric radiant-glass heating units in walls at right end in background. Photos: Martin Helfer

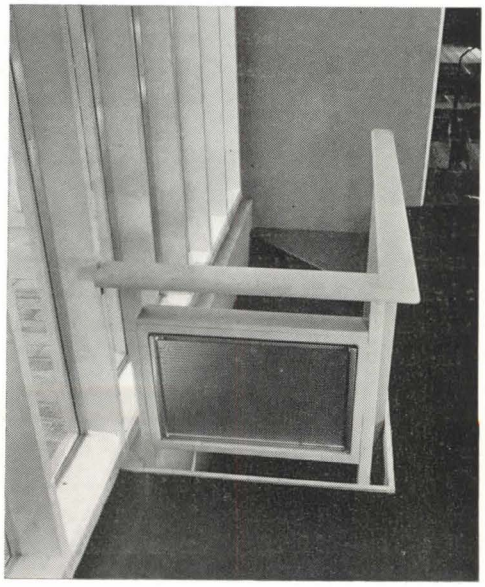
The downstairs portion of the new two-level wing contains only the coat-storage closet, stair to the upper level, and outdoor covered porches, used for both dining and lounging. The wing is built on existing foundations of an earlier building.

The upstairs plan is simplicity itself, with bedrooms at either end, and a bathroom and the staircase between. Wide, sliding doors lined with linoleum close off the bedrooms for privacy. Framing is of wood studs and beams. Exterior walls are of vertical boards, with the studding exposed on the lawn front; interior walls are plywood, painted white. Both wool-type and reflective aluminum-foil insulation are used. All glass is fixed and ventilation is handled through doors, or out-opening, solid, hinged panels. "This system proved very economical," the architect reports. Heating of the new wing—which, incidentally, is used only weekends in winter—is accomplished by electric radiant-glass heating panels, some mounted flush with the wall surface, others mounted in freestanding frames.

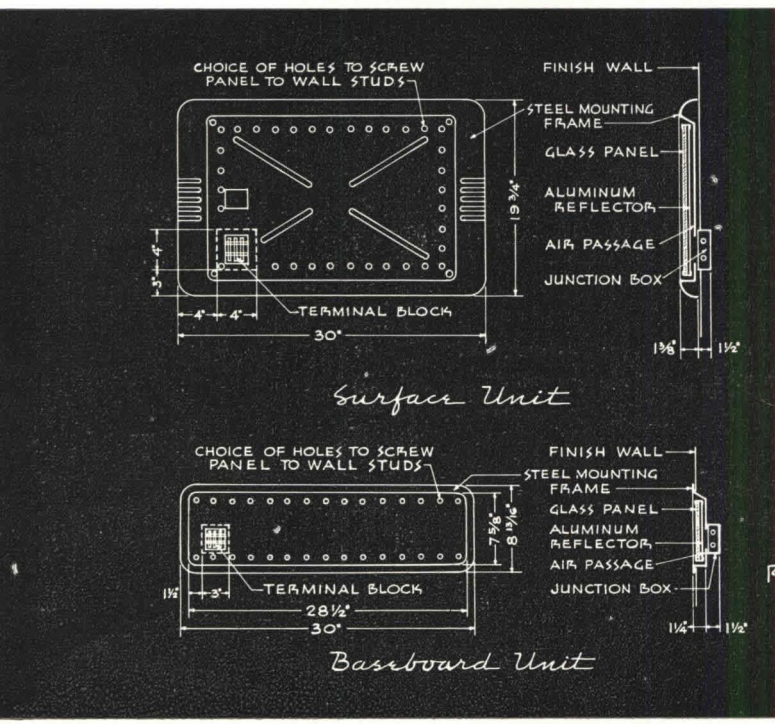
As in the studio, general background colors are white or gray, with areas of color restricted to door panels, upholstery, rugs and the ventilating panels, which occur in the rear wall of each of the bedrooms.

Bedroom detail (right) *shows one of the out-opening ventilating panels. Walls of the bathroom* (below) *are surfaced with waterproof, plastic-surfaced wallboard.*





This ventilating door panel (left) *is in upper hall of the bedroom wing. In the cellar stair rail* (above) *a radiant heat panel occurs in the balustrade space.*



CONSTRUCTION AND INSTALLATION DETAILS FOR CONTINENTAL RADIANT GLASS HEATING PANELS

design data for radiant glass-panel heati

by William Anderson*

Electricity not only provides the cleanest form of heat with the least effort, but also permits an efficiency obtainable by no other means. An architect or engineer must know, however, when to recommend electric heat and when not to. Although his clients may request this form of heating, many of their homes are unsuitable for such a system. If electric heating is installed in such a house, high operating costs may tend to jeopardize the architect's or engineer's reputation.

Of the many types of electric heaters now available, none is more efficient or more economical than the radiant-glass panel. Although widely used in France prior to World War II, this type of heating equipment was not introduced in the United States until 1948—when the Continental Radiant Glass Heating Corporation produced its first units.

The feasibility of installing radiant-glass heat in a home[1] will be influenced by the amount of heat loss. The method of computing the heat loss is like that for any other type of heating system, except for that part of the loss due to air infiltration. If the crack method is used, standard figuring is permissible. If the air-change method is used, however, only one air change should be allotted instead of the customary larger amounts. It is possible to use this smaller volume, as excess air is not required for combustion and as radiant-glass heating does not dry out the air. The higher humidities that are obtained contribute substantially to the high degree of comfort that is possible.

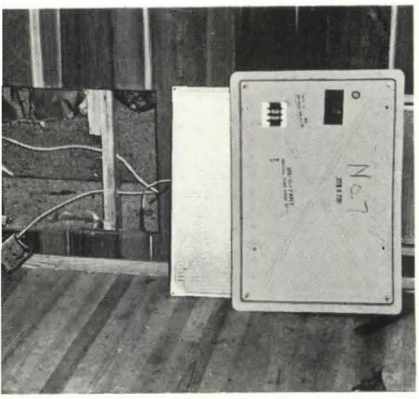
The total heat loss for an individual room should be divided by 3415 in order to determine the number of kilowatts required for that area. Storm windows should not be considered when determining the installed kilowatt capacity; they should, however, be considered when computing the kilowatt-hour consumption. As a rule of thumb, a properly designed house will have about one panel per thousand cubic feet, plus one. A 7000 cubic-foot resi for example, will usually require eigh watt units.

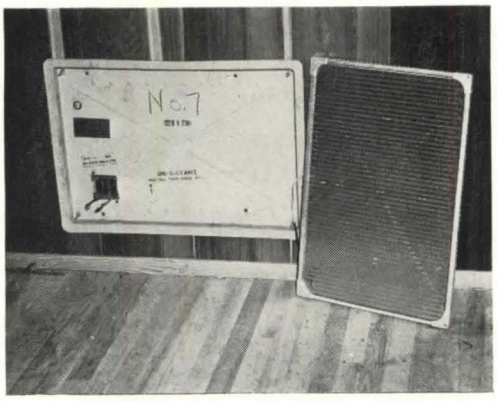
Each of the Continental panels is posed of three primary components: tempered-lime-glass sheet with a fus aluminum element; (2) a reflector p behind the glass plate; and (3) a f The reflector reduces the reverse hea of the panel so that all possible h emitted into the room. Holding the reflector assembly, the frame can b face-mounted or recessed in the wal

Panels should be located under win and on exterior walls wherever possi *recessed panels* are desired, the op should be braced during constructi surface-mounted panel requires a 4' opening for the junction box locat hind the reflector. Panel sizes vary lows: baseboard units are rated a watts and wall units are of both 62 1000-watt capacities. All are availa recessed or surface-mounted frames a range of 115, 208, 220, 230, and 245

* *Consulting Engineer, New York, N. Y.*

[1] *Note Sert house, previous spread.*





Component parts of recessed, radiant-glass panel (far left) *before installation in wood-frame wall. Space must be provided for junction box located behind reflector. Steel mounting frame ready to receive glass panel* (left).

Workman placing glass panel of 230-volt, 1000-watt unit (far left). *Panels should be located under windows, and on exterior walls wherever possible* (left).

15-volt unit is primarily used where ne panel is desired for auxiliary heat-therwise, the complete home should red for 230 volts. For ceiling in-ion, combination heating and light-nits are available in 750-watt capa- Maintenance is not required for ra-glass panels. Tests have shown that verse heat loss is about 15 Btu per or about 0.45% of a panel's output. room must have its own thermostat to t overheating and to provide individ-om control.

heat loss for the average house not exceed 3 Btu per cubic foot per To insure that this rate of loss is not led, the following quantities of min-wool insulation (or equal) are rec-nded: 4″ in the ceiling, 3⅝″ in the walls, and 2″ under the floor. If a te floor slab is used, perimeter in-n is mandatory and a water-repellent rane must be used under the slab. regoing specifications greatly reduce both the installed kilowatt capacity and the kilowatt-hour consumption.

To obtain the kilowatt-hour consumption, the FHA has devised a formula specifically for glass heating:

$$\text{KWH} = \frac{\text{Btu loss} \times \text{Degree days}}{\text{Temp. diff.} \times 200}$$

About 90% of the country enjoys electric rates that are economical for a properly installed electric heating system; utility rates of 2 cents per KWH are competitive with operating costs of other heating systems. The designer should consider the plus factors of lower building costs, interest and amortization charges, absence of maintenance, etc.

A typical home can be analyzed, to determine whether glass heat is feasible. Assume that a 20′ x 30′ bungalow with basement is located in New York City. The heat loss without insulation is about 63,700 Btu/hour and approximately 18½ kilowatts of electric heat are required. The yearly KWH is:

$$\text{KWH} = \frac{63{,}700 \times 5280 \text{ (Degree days)}}{70 \text{ (Temp. diff.)} \times 200} = 24{,}000$$

At 2 cents per KWH the cost amounts to $480.

With 4″ mineral wool insulation in the ceiling, the heat loss is reduced to about 37,240 Btu/hour so that 11 kilowatts (37,-240/3415) of heat are needed. The total KWH will be 14,100 and at 2 cents per kilowatt hour will cost $282 per year. If 2″ insulation is placed under the floor and 3⅝″ insulation installed in the walls, the resulting heat loss is 24,000. The required number of panels is 7 kilowatts and the KWH estimate is 9000 which, at 2 cents, costs $180. This was computed without consideration of storm windows; if storm windows are to be used, 7 kilowatts should be installed. The KWH estimate now becomes 6800 which, at 2 cents, would cost $136. In this example, basement heat was not considered and only the 4800 cubic feet of living area was examined; 160 sq ft of window area was assumed.

The Heritage of Cézanne

by Sibyl Moholy-Nagy*

Painting and architecture shape the visual landscape of an era. We recognize ourselv steel, concrete, and glass because the best contemporary architecture has achieved freedom of ex sion within the discipline of service to the community. But what about the painted image o museum wall? Too many painters of today have abandoned responsibility and asceticism to exte ize their agonized egos.

The story goes that the Bolshevik leader Radek, after his execution, persuaded a f victim with a more acceptable moral rating, to smuggle him inside a suitcase into that twilight r where the souls of social reformers dwell.

"I want to see Karl Marx," demanded the intermediary at the Pearly Gates.

"What do you want from him?" asked St. Peter, looking suspiciously at the heavy in the caller's hand.

"Just tell him," said Radek's fellow-traveller, "I'm bringing him the interest fron CAPITAL."

If there is a similar region where the artists of yesterday rejoice, we may assume tha day Paul Cézanne will be handed—in carefully separated packages—the souls of Le Corbusier Jackson Pollack, as the accrued interest from the capital he left on this earth.

Two large painting shows, presented this summer in New York, offer a unique op tunity to relive fifty years of visual development that are the basis of our little anecdote. The M politan Museum has assembled 128 paintings by Paul Cézanne, the Frenchman who achieved a s one-man show during his life-time and had more than 300 books written about himself, afte death, in 1906. The Museum of Modern Art shows 97 paintings and sculptures by "Fifteen temporary Americans"; and between the two museums, quite accidentally and without the slig intention at being historically significant, stretch 30 city blocks of New York architecture, pr ing the three-dimensional background for the story of 20th Century vision.

When Paul Cézanne severed his connection with the Impressionist School after 187 set out to reveal the substructure of the earth. "For us men," he wrote in 1904, "there is mo nature below than above the surface." In a gigantic struggle, he created an art that did not re nature but interpreted her. He devaluated the mere optical sensation that had been the inspir of the Impressionists. His creed was compositional relationships. In a thoroughly architectural cedure, he dissected the "motif," chosen from nature, into structural units. Then he rebuilt he had perceived in a composition, dependent on weight and tension. With a magical knowledg color and light, he distributed the load of heavy colors to form a structural core, clothed in a rounding aura of light-transparent color elements. The superficial realism of the impressio "record of reality" was replaced by the much more basic realism of the three visual fundamen light, color, and form.

In less than two decades Cézanne forced a new terminology on art criticism. The fam adjectives: "life-like," "illustrative," "poetic," relating painting to the narrative standards o photographic or literary world, became obsolete. The paintings of Cézanne demanded a new ori tion toward values that were exclusively painterly. These values were related only to color, light compositional form, and not to generally accepted academic standards. The responsibility fo quality of the work rested exclusively with the painter himself. From Cézanne onwards, the grea of an artist would be measured by his power to sublimate his personal intuitive experience int objective form language of painting, instead of by the affinity of the painted motif to literary alle

(Continued on pa

* *Lecturer on History of Architecture, Pratt Institute, Brooklyn, N. Y.; author, "Moholy-Nagy: Experiment in Totality" (Harper Brothers, 1950).*

DISPLACEMENT CAISSONS

Figure 1—falling inside the steel casing, the 7000-pound ram can develop 200,000 foot pounds per blow to pull the tube into the ground.

ally speaking, it would be quite in o assume that pile foundations could mpetitive with spread footings as or- y designed; however, a method of ing displacement caissons, recently uced in the United States, is just Starting in Belgium over 40 years d after successful installation in 36 ies throughout the world (over 000 of these caissons have been since 1910), Franki Foundations w available to builders in this coun- n American organization, the Franki ation Company of Pittsburgh and York, has behind it the full benefit technical knowledge and experience Belgian associate.

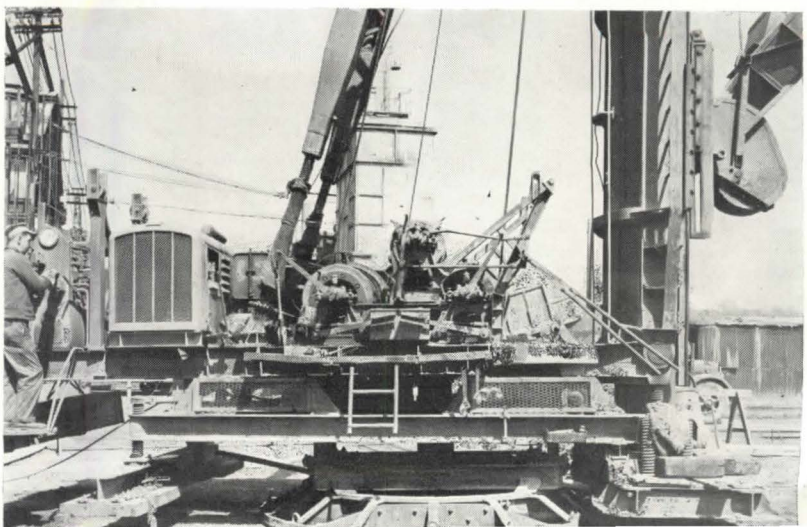
unique method can be described as ess of injecting spread footings into l to obtain the advantages of depth, imination of excavation, and the shment of a highly compressed shell surrounding the footing. Essentially, mponent parts of the required equip- comprise a rig, a heavy-gage tube of nsile-alloy steel, and a ram (*Figure* he rig consists of a chassis which ts an engine, hoist, and leads; it is opelled by a hydraulic walking me- n which also permits rotation (*Fig-* Both portability and good maneuv- erability are characteristic of the rig. It can be set up and put into operation the same day that it arrives at the job site; a caisson can be easily located within ¼″ of a given center point.

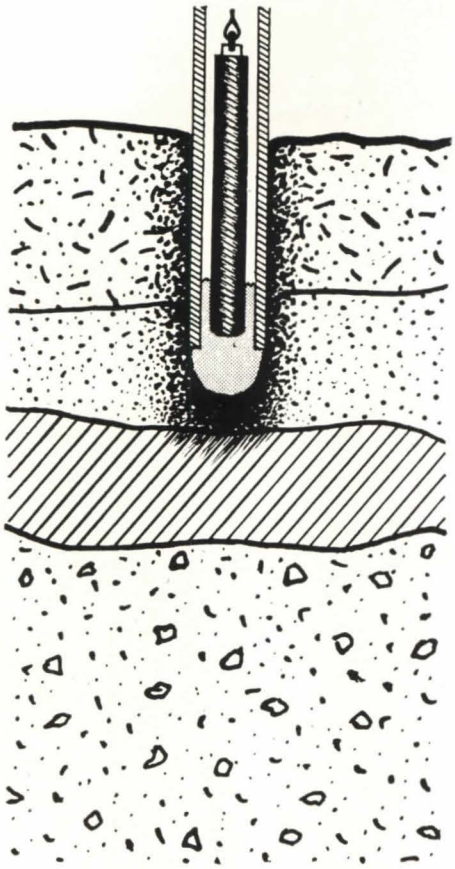
The steel tube has an outside diameter of 20½″ and a wall thickness of 1⅜″; any length required by site conditions can be provided. After the tube is set up in the leads of the driving machine, it is held in position by a guiding head.

A 7000-pound ram, 13″ diameter, may be raised or dropped inside the steel casing. As the ram may fall from heights as great as 30′, it can develop 200,000 foot pounds per blow (by comparison, the heaviest type of steam hammer produces about 50,000 foot pounds).

In operation, the rig moves itself so that the geometric center of the steel casing is placed over the stake indicating the surveyed location of the caisson. While the tube rests on the ground, three to five cubic feet of extremely dry concrete (a core taken from a 60-day old specimen showed a crushing strength of 5600 psi) is fed into its top by means of an easily hoisted skip and bucket (*Figure 2*). The dry concrete falls to the bottom of the tube and is tamped by the ram to form a driving plug. As the falling ram strikes the plug, arch action

Figure 2—good maneuverability is gained by the hydraulic walking mechanism beneath the rig. Easily hoisted skip and bucket (upper right) *delivers concrete to top of casing.*





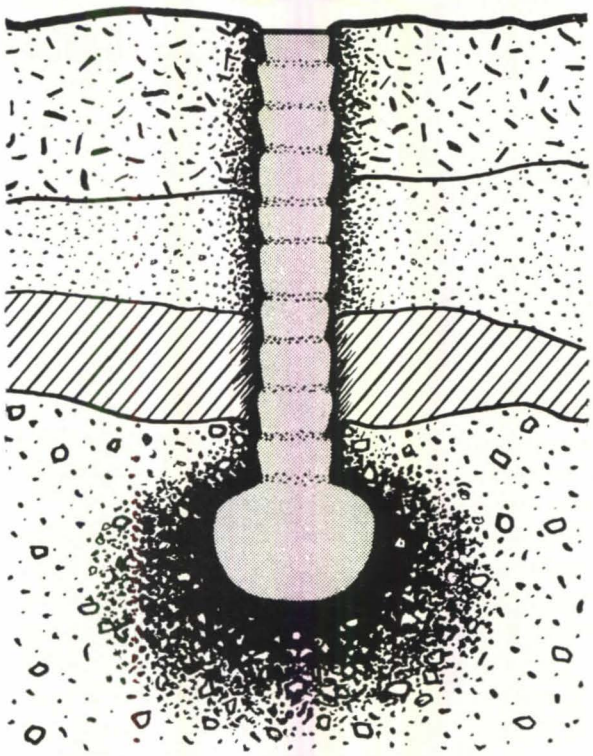


Figure 3—cross section of displacement caisson (above). *Falling ram drives concrete plug into ground and plug pulls down caisson at same time.*

Figure 4—typical caisson installed (above right). *Good compaction exists all around the shaft and particularly around the bulb.*

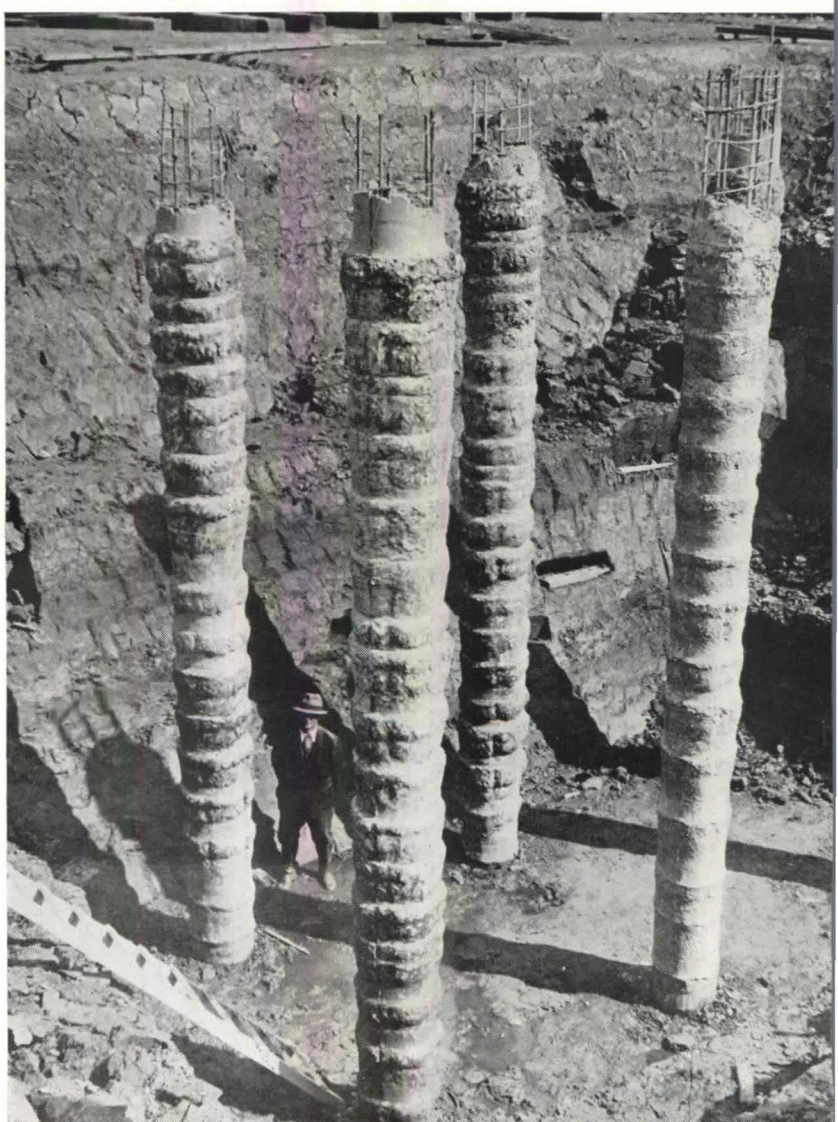


Figure 5—four caissons that have been exposed by excavation. Regularity in shape of shaft, formed of successive rammed batches, increases hold of pile in ground; note compaction and rough surface of concrete. Reinforcement is visible at top of caissons.

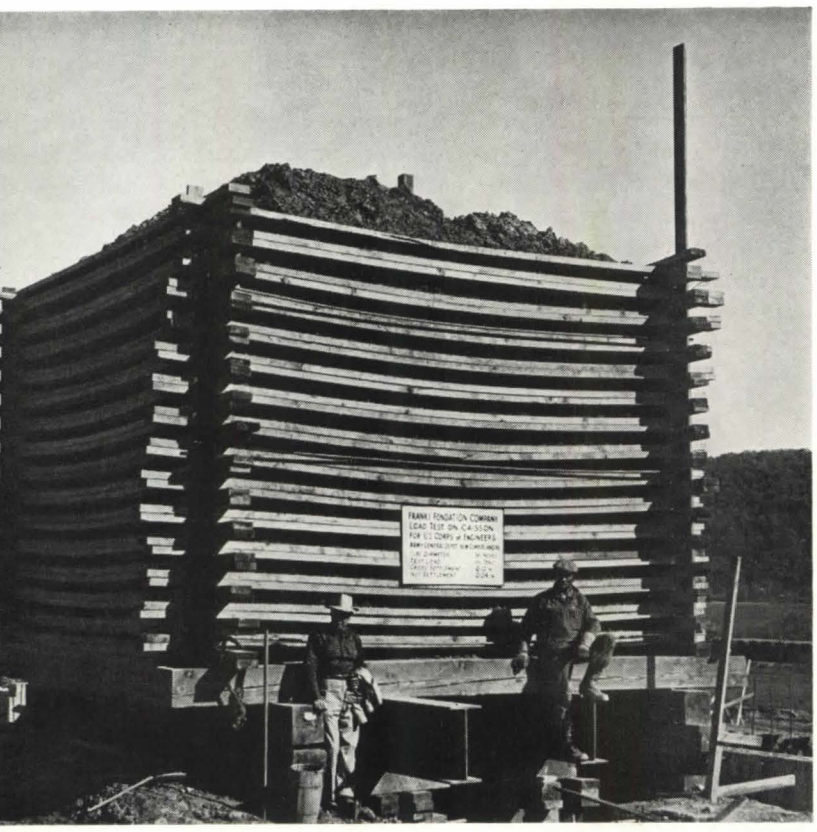


Figure 6—recorded net settlement of a 20′-deep foundation, tested for 150 percent of its 110-ton design load, was 0.04″.

es the concrete to seize the sides of casing. Contrary to what might be ex-ed, the concrete is not forced out of tube, but, rather, the plug pulls the ıg into the ground (*Figure 3*). As the s fall is actuated by gravity and as the is pulled into the ground rather than g driven from the top, it is virtually ɔssible for the tube to take any course r than a straight one. Intervening ders or obstructions are demolished, or ıed aside, by the terrific impact of the so that the tube is not deflected from rtical course.

fter the casing has been driven to a ting soil stratum or to sufficient depth determined by boring tests and soil ɔles), the casing is raised slightly and ɔlug is partially expelled. Small quan-ɜ of dry concrete (not more than 3½ ɔns of water per bag of cement), ɹped into the annular space between ram and the casing, are heavily rammed the soil by blows of at least 140,000 pounds. A spherical bulb of concrete ɾrmed—the required volume being de-lent on the density and other character-s of the soil. For example, in loose sand ravel, the volume may amount to 30-35 c feet.

As the shape of the bulb is determined by the reaction forces of the soil against the expansion of the concrete under impact of the ram, a highly efficient shape results without points of stress concentration in the soil which might develop if some arbitrary geometric shape were used (*Figure 4*). Experiment has shown that the soil is highly compacted for a distance of one foot surrounding the concrete bulb.

After the bulb has been completed, small amounts of concrete dropped in the casing are rammed by blows of approximately 30,000 foot pounds. At successive intervals, the tubing is withdrawn, leaving a dense, highly compacted concrete in the shaft which will measure 21″ to 24″ in diameter. If required, reinforcement can be placed in the annular space to provide additional compressive strength, to resist bending, to resist tension in the case of uplift, or to resist lateral expansion of the concrete under impact of the ram (*Figure 5*). As a mark on the cable supporting the ram represents the distance between the bottom of the ram and bottom of the casing, the operator can tell at once the amount of closure existing at the bottom of the tube.

Test loads of 150 percent of the design load can be made (on a finished caisson) without undue settlement and tests of twice the design load are common. Individual caissons have stood up under test loads of over 500 tons.

Last spring, Franki caissons were used for three government warehouses at the New Cumberland General Depot, New Cumberland, Pa. The contract drawings originally specified spread footings (resting on virgin soil), pedestals, and deep spandrel beams for the substructure construction. While the design was being prepared, the Government proceeded to grade the site under another contract. The fill over part of the immediate building site averaged 14′ in depth and was thoroughly compacted to support heavy floor loads. Upon being awarded the contract for this job, Hughes-Foulkrod (Philadelphia Building Construction Company) made a thorough study of the most practical method of installing the building foundations. Not wishing to disturb the compacted fill any more than necessary, they sought a method of construction that would be advantageous to the Government in cost and to themselves in reducing construction time and the amount of critical materials—such as the steel reinforcement—that would be required. As the Franki method requires neither permanent shells nor reinforcement, displacement caissons were substituted for the deep spread footings and pedestals, with the approval of the United States Corps of Engineers. This method of construction, under the conditions which governed at the building site, allowed Hughes-Foulkrod to return to the Government a substantial credit.

One of the 20′-deep foundations at New Cumberland was tested for 150 percent of its 110-ton design load by the Corps of Engineers. The gross settlement of the caisson was 0.12″; the recorded net settlement after removal of the load was but 0.04″ (*Figure 6*).

four west coast developments contain sliding glass doors

Sliding glass doors, once limited largely to residences in the luxury class, were recently installed in four small-home tract developments on the West Coast. These homes were designed by Architects Anshen & Allen, of San Francisco, and Jones & Emmons, of Los Angeles. Both firms were honored for their designs by the architectural review board of the Housing Research Foundation, in San Francisco, last spring. The living room and one of the bedrooms of these low-cost houses are divided from the patio by an entire glass wall with sliding doors. The optical illusion created by the wall of glass permits appreciable savings in square footage of rooms because they appear to be larger than they really are. As a result, there is a saving to t home owner in heating bills and in t extra pieces of furniture that would oth wise be required for a large room.

The sliding glass doors are a packag unit, constructed of narrow but sturdy st sections specially processed to withstand weather elements in both cold and hot mates. Stock sizes are 6′-10″ high, a vary in width from 6′ to 16′. Custom-ma doors, though more expensive than st sizes, have been reduced in price over 1 figures, according to the manufactu Schools, churches, hospitals, and comm cial installations should also find th doors both functional and economical. cadia Metal Products Co., Arcadia, Ca

air and temperature control

G6-65 Gas-Fired Furnace: measures 17″ wide x 26″ deep, with 65,000 Btu input, developed especially for small, basementless houses. Built-in operating controls; cast-iron, single-port burner; interlocking steel cabinet finished in two-toned blue baked-on enamel. Armstrong Furnace Co., 851 W. Third Ave., Columbus, Ohio.

Ozone Air Conditioner: one- and two-bulb ozone generators, will deodorize rooms of 1000 cu ft and 1800 sq ft respectively. Odors completely destroyed by oxidation; especially suited for living areas, kitchens, bathrooms, closets, hospitals, offices, etc. Outer case constructed of heavy-gage steel; extra-length 8 ft cord permits convenient mounting anywhere. Bretford Manufacturing, Inc., Franklin Park, Ill.

UF-1 Highboy and AF-1 Lowboy: two oil-fired, space-saving heating units, each with output of 80,000 Btu, featuring insulated combustion chamber for cleaner burning flame and greater heat retention. Both models furnished with controls. Heil Co., 3000 W. Montana St., Milwaukee 1, Wis.

Flor-Line Radiator Unit: baseboard heating element consists of six flattened tubes, with fins hydrogen-brazed to each tube; flattened tube construction claimed to bring 90% of metal in contact with air, in contrast with 33-1/3% in round tube design. Units range from 2′ to 10′ in length; can be finished in colors to match surroundings. Hooper Engineering Co., Detroit, Mich.

Ceiling-Suspended Gas-Fired Heaters: five new models, with input range of from 55,000 to 200,000 Btu, designed for commercial and industrial installations, where low first-cost, economically maintained heating system is required. Overlapping-blade type electric fan inside cabinet may be used in warm weather to provide cooled-air circulation by shutting off gas and only operating fan. Automatic controls furnished with units. National Radiator Co., Johnstown, Pa.

Airfoil Centrifugal Fan: nonoverloading type, made for industry, power, and commercial needs, in sizes from 40¼″ to 108¾″ diameter, delivers volumes of air up to 600,000 cfm. Airfoil blade design, plus improvements in inlet and casing, said to boost mechanical efficiency over 90%, with only 1/3 of noise intensity of previous models. Low operating costs. Westinghouse Electric Corp., Sturtevant Div., 200 Readville St., Hyde Park, Boston 36, Mass.

doors and windows

Series 1257 Screen Door Lock: line of heavy-duty service and security locks for exterior screen doors, as well as for wood or metal storm and combination doors. Lock supplied with strong handles which retract bolt when operated; both bolt and handles positively deadlocked by ¾″-diameter, 5-disc cylinder furnished with unit. Steel construction. Adams-Rite Mfg. Co., 540 W. Chevy Chase Dr., Glendale 4, Calif.

Curvopane: convex glass window panes provide greater strength of an arch, let in more light because of increased glass area, are simpler to install than conventional flat panes. Available in rectangular or square sizes for standard and nonstandard metal or wood sash. American Crown Glass Corp., Francis Ave., Hartford, Conn.

One-Way Door Viewer: imported, all-plastic viewer fits into any door up to 2″ thick, allows full observation of anyone on opposite side of door. Shatterproof lens is designed to provide magnified and wide angle vision. May also be use nursery doors, for observation of chi without need of opening door. Price $3.95. Sales Associates, 11 Hill St., Ne N. J.

Donovan-Universal Aluminum Case Windows: new line of completely a bled units for all residential constru available in all standard sizes, with or out muntins, in any desired combinati operating and fixed sash. Universal Wi Co., 950 Parker St., Berkeley 10, Calif

electrical equipment, lighting

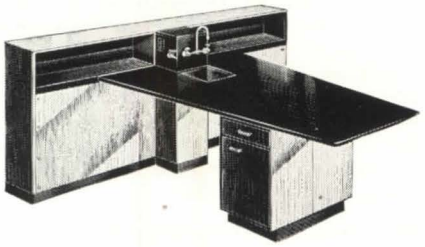
Recessed Incandescent Lights: espe constructed to permit usage in we moisture-laden locations, such as bathr showers, porches, marquees, etc. White amic glass bowl has high light transmis is contoured for uniformly white su brightness and spread light on ceiling trim and insert housing made of corr proof aluminum. Units are styled for 60w or 100w I.F. lamp. Art Metal Co., E. 40 St., Cleveland, Ohio.

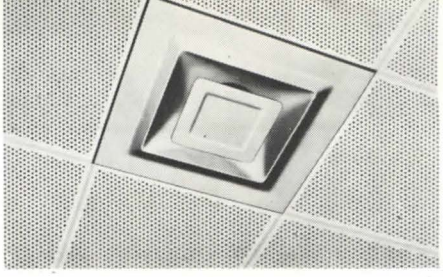
Taskmaster Fluorescent System: pletely prewired fluorescent fixtures f dustrial use directs 25% light upward provide 35° lamp shielding for imp control of brightness contrasts and incr seeing comfort. Available as contin line systems or individual units for 40 pin, and 48″ and 96″ T12 slimline l Benjamin Electric Mfg. Co., Des Pl Ill.

Explosion-Proof Slimline Fluore Fixtures: new series, Type EVF, c essentially of 2, 3, or 4 lamp-enclosing of explosion-resisting Pyrex glass seale cast aluminum end fittings containing ets. Cast aluminum ballast housing,

ipurpose laboratory units for secondary schools

efficient utilization of classroom floor is possible with the new, multipur- Unaflex laboratory units, developed manufacturer to meet the require- of secondary school laboratories. The may be lined along the walls of a oom to form a combination science tory and classroom, leaving the cen- the room available for student seat- ince plumbing and fixtures run along alls, installation costs are held at a um; furthermore, no service lines gent racks obstruct the instructor's permitting greater supervisory con- ver students, reducing distracting , and promoting efficiency in general. flex units are equally satisfactory for installations in new schools or for remodeling classrooms into science laboratories; they may also be used in schools with small enrollments where several science courses are taught in the same classroom. John E. Sjöström Co., Dept. LA, 1715 N. Tenth St., Philadelphia 22, Pa.





acoustical-ceiling diffuser

Two new types of square diffusers, designed for acoustical ceilings, are reported to be the first such devices to discharge supply air in the effective, single-stream, circular pattern which produces rapid entrainment or mixing with room air. The two units are made in neck sizes from 4″ to 14″; Model KP features overlap tile construction, while Model KPT is designed for T-bar installation into an individual tile. At constant neck velocity, the resistance or static pressure required for either a 4″ or 14″ unit will not vary. W. B. Connor Engineering Corp., Shelter Rock Lane, Danbury, Conn.

um reflectors. Crouse-Hinds Co., & Seventh St. N., Syracuse, N. Y.

Strip: prewired, shallow steel channel, ed with inbuilt swivel sockets 12″ on manufactured in lengths of 2′, 3′, 5′ (one strip with 8 sockets can be in- in same time as single ordinary). For use in window lighting, rug s, stock bins, counters, wall cases, , floor displays, etc. Three models le for ordinary installations, corner ng, and with reflectors to shield Neo-Ray Products, Inc., 315 E. 22 w York 10, N. Y.

ype Transformers: new line of Class insulated, air-cooled transformers -phase, 50 or 60 cycle) for general nd power service. Sizes range from kva; units incased in louvered steel s, ready for easy installation. Pre- Welder Mfg. Co., Transformer Div., Grand Ave., Chicago 10, Ill.

inishers and protectors

t: line of chromate, anti-rust paints, ended for use on any kind of metal, or interior. Can be *applied over* surfaces without need for wire brush- sandblasting. Available in red, gray, black, aluminum, and clear. Chem ial Co., 3784 Ridge Rd., Brooklyn 9,

clear, interior varnish forms ex- tough, protective finish which may d on floors or furniture; resists boiling water, alcohol, etc. E. I. du Nemours & Co., Inc., Finishes Div., gton, Del.

ll Turquoise: light-reflecting and g paint for application on clerestory s, skylights, and clear glass fenestration in factories, to screen out bright sunlight and reduce glare in working areas. National Chemical & Mfg. Co., Luminall Paints Div., 3617 S. May St., Chicago 9, Ill.

Dam-Tite: transparent, silicone resin-based water repellent; provides invisible coating on all masonry surfaces which prevents entrance of water, at same time permitting passage of air. Also prevents such damage as chipping, flaking, staining, and efflorescence. Speco, Inc., 7308 Associate Ave., Cleveland 9, Ohio.

Sprayway: quick-drying (less than a minute), clear, acrylic-plastic coating for protection of blueprints, photos, documents, paintings, etc., against dust, dirt, moisture, and smudges. Flexible, durable finish; product is packaged in self-spraying container. Tru-Pine Co., 7638 Vincennes Ave., Chicago, Ill.

insulation (thermal, acoustic)

Acousti-Rail: 5-piece, high-strength, direct-to-metal suspension system for kerfed acoustical tile; adaptable to variety of ceiling requirements, permitting use of 12″ x 12″, 12″ x 24″ acoustical tile, and 24″ x 36″, 24″ x 48″ insulation board. All-steel construction; may be used for installations where local codes specify incombustible materials. Mid-West Acoustical & Supply Co., 20001 West Lake Rd., Cleveland 16, Ohio.

sanitation, drainage, water supply

Midway Kitchen Sink: rectangular in shape, accessible from all four sides, sink unit is constructed for installation in center of kitchen, providing advantages of step-saving, convenience to variety of kitchen tasks, and greater freedom in kitchen planning and layout. Unit measures 44″ long by 37½″ wide; two full-sized sink wells; especially designed faucet is set in center for easy accessibility from any point around sink. Enameled-steel cabinet; sink top made of rigid cast iron coated with acid-resisting enamel. American Radiator & Standard Sanitary Corp., Bessemer Bldg., Pittsburgh 30, Pa.

Drain-Master: drainage unit, consisting of receptacle, top grating, and 2 end pieces, for ready installation in driveways, roads, basements in homes, factories, institutions, barns, etc. Parts made of heavy-duty iron, easily assembled, fitting together in slip-joint manner to allow for any desired length of drainage installation. Available in 3 standard sizes. Standard Foundry Products, 220 W. 42 St., New York 36, N. Y.

specialized equipment

Type EGA Spray Gun: lightweight aluminum spray gun, designed for small refinishing jobs, stenciling, blending, high-lighting, and decorative work. Spray pattern is medium-sized and can be adjusted to practically pin-point size for touch-up work. For use with glass jar containers of 2, 4, 6, or 16 oz. capacity. DeVilbiss Co., 300 Phillips Ave., Toledo 1, Ohio.

surfacing materials

Chroma-Tex Siding: asbestos-cement shingles, in two-toned "weathered" colors; easily applied over any sidewall surface, equally suited to exterior remodeling and to new construction. Fireproof, rot- and termite-proof, requires no painting or preservative treatment. Asbestone Corp., 5300 Tchoupitoulas St., New Orleans, La.

MASK: liquid deodorant, stirred into any enamel, oil, water, and rubber-based paints, masks out all offensive, fresh paint odors. Duncan-West Corp., 624 S. Michigan Ave., Chicago 5, Ill.

pa MANUFACTURERS' LITERATURE

★ *Editors' Note: Items starred are particularly noteworthy, due to immediate and widespread interest in their contents, to the conciseness and clarity with which information is presented, to announcement of a new, important product, or to some other factor which makes them especially valuable.*

air and temperature control

1-184. Baseboard Radiation by Bush (565), 4-p. bulletin on baseboard heating system, available in two styles to meet varying demands of output and size. Selection and size data, method of installation, accessories, ordering instructions, photos, drawings. Bush Mfg. Co., West Hartford 10, Conn.

1-185. Electrol (RF 3290), 8-p. booklet showing full line of oil-fired equipment—burners, water heaters, warm-air conditioners, boilers—for every heating requirement. Types, specifications, illustrations. Electrol Mfg. Co., Inc., 22 Union Ave., Rutherford, N.J.

1-186. Kritzer Fin-Pipe Coils, AIA 30-C-4 (675), 8-p. catalog describing fin-pipe, baseboard coils and covers for industrial, commercial, and institutional heating. Design, selection, and installation data; photos, general information. Kritzer Radiant Coils, Inc., 2901 W. Lawrence Ave., Chicago 25, Ill.

1-187. Small-Pipe Warm-Air Perimeter Heating (10), 23-p. manual serving as guide for design and installation of low-velocity, forced warm-air heating systems using 4" diameter pipes; includes data on small pipe systems in houses built over crawl spaces and those having basements. Installation photos and drawings, illustrations of system applications, charts, worksheet. National Warm Air Heating & Air Conditioning Assn., 145 Public Sq., Cleveland 14, Ohio. (75¢ per copy; send directly to National Warm-Air Heating & Air Conditioning Assn.)

1-188. Windoline Radiation (268), 4-p. folder describing high-capacity heating unit combining convection, radiant, and perimetric heating; designed for large areas with high percentage of glassed-in surface, low window sills, or exposed walls. Advantages, construction details, capacities, cross-section, photos. John J. Nesbitt, Inc., Holmesburg, Philadelphia, Pa.

1-189. Air Filtration and the Dust-Stop Filter (AR6.A2), 8-p. bulletin on throwaway type of air filter, composed of fibrous glass, for use in domestic warm air heaters, air conditioners, and central station systems. Classes of air contaminants, construction, advantages, dimensions, ratings, manufacturing tolerances. Owens-Corning Fiberglas Corp., Nicholas Bldg., Toledo, Ohio.

1-190. Trade-Wind Clipper Blowers, AIA 30-D-1 (620F), 8-p. catalog illustrating four types of centrifugal blowers, incorporating scientifically designed blower wheel which moves air through ducts under pressure, for maximum ventilation in kitchens and small rooms. Advantages, types of application, construction data, accessories, specifications, installation drawings. Trade-Wind Motorfans, Inc., 5725 S. Main St., Los Angeles 37, Calif.

construction

3-154. Stainless Steel Curtain Walls, AIA 15-H-1 (SS19), 22-p. booklet. Progress report on use of stainless steel for exterior walls of steel-frame buildings, and proposed methods of construction, developed by manufacturer, for consideration by designers, architects, contractors, and builders. Detail drawings, stainless-steel shapes and textures for curtain walls, codes and tests. Allegheny Ludlum Steel Corp., Oliver Bldg., Pittsburgh 22, Pa.

Two booklets describing: 1) special purpose steels and other metal products; chart listing grades or finishes, characteristics, applications, and fabricating properties; 2) availability of two types of all-steel buildings (shed roof and gable roof), adaptable to many uses such as schools, warehouses, shops, utility buildings, etc.; types, data on sizes, accessories, erection, and finishing, photos, drawings. Armco Steel Corp., Middletown, Ohio:

3-155. Special Purpose Steels (2451)

3-156. Armco Steelox Buildings (SX-2051

3-157. Seismic Building Design, AIA 17A (BP-10), 10-p. brochure. Design methods for use of Fenestra D and AD steel building panels in construction of wind- and earthquake-resistant buildings; outline given of history and findings of testing program carried out in Southern California under supervision of California Institute of Technology. Formulas and details of building panel diaphragm designs. Detroit Steel Products Co., 3209 Griffin St., Detroit 11, Mich.

Booklet giving specifications for batten-type aluminum roofing, metal coping, and aluminum window sills; advantages, drawings, typical applications. Second booklet outlines 20 advantages of "lifetime" metal coping; drawings. Overly Mfg. Co., Greensburg, Pa.:

3-158. Architectural Sheet Metal (1952 issue)

3-159. Lifetime Metal Coping

3-160. Reynolds Architectural Aluminum, AIA 15 (AD 213), 12-p. brochure listing advantages of aluminum in architectural applications. Recommended fabrication methods, approved finishes, specifications, design factors, drawings. Reynolds Metals Co., 2500 S. Third St., Louisville 1, Ky.

3-161. Timber for Recreational Buildings, 22-p. booklet portraying wide variety of designs for recreational facilities by use of three systems of timber construc Teco connector, glued laminated, an mella. Photos of typical examples. T Engineering Co., 1319 18 St., N.W., ington 6, D.C.

doors and windows

4-189. Specialized Locks and Bu Hardware, AIA 27-B, 4-p. pamphlet. trations of locks, latches, flush pulls bolts for sliding and other types of Descriptions of construction, operatio finishes. Adams-Rite Mfg. Co., 540 W. Chase Dr., Glendale 4, Calif.

4-190. Sterling Aluminum Wi (6003), 12-p. folder on aluminum, d hung residential windows with bu stainless steel weather-stripping. Chart three complete sets of dimensions: rough opening, outside opening, and dow dimensions; advantages, mullio tails, section drawing. Ceco Steel Pr Corp., 5601 W. 26 St., Chicago 50, I

4-191. Pacemaker Precision Built ers Hardware, 6-p. folder describin of preassembled, tubular latch and loc for bathroom, bedroom, and interio sage doors, in choice of knob styles. ponent parts, method of installing, tages, illustrations. Harloc Products 25 Fox, New Haven, Conn.

★ **4-192. A B C's of Rolled** AIA 26a-3-5-6, 19-p. booklet disc three functions of rolled glas fusion, decoration, and protection rolled wire glass is used). Types of and pattern, heat absorption data, lig tribution chart, photos of actual-siz terns and typical installations. Missi Glass Co., 88 Angelica St., St. Louis

4-193. Magnalite, AIA 12J (M-52 brochure illustrating several types of ing glass sheets for use where wide distribution with great obscurity is d Patterns, types of applications, adva thicknesses and weights, photos. J. Richards, 25 Huntington Ave., Bost Mass.

4-194. New Pella Wood Folding AIA 16M (231), 4-p. folder describi cordion-type door that folds con against door jamb; suitable for use b dining room and kitchen, in bedroo tween living and dining areas, and as doors. Advantages, photos. Rolscree Pella, Iowa.

electrical equipment, lightin

★ **5-127. Lighting for Industr** 31F2, 96-p. handbook, based on trially proven lighting equipm troductory engineering data on pri and economics of industrial lightir lowed by listing of specific *industria* grouped into Outdoor and Indoor a that reader may quickly find pa phase of lighting with which he cerned. Each lighting problem co

d in terms of fundamental princi- uipment needed, and most advan- applications. Technical diagrams, , charts, installation photos, table ents, index. Holophane Co., 342 Ave., New York 17, N.Y.

Calculite, AIA 31-F-23, 16-p. bro- llustrating several types of square nd recessed ceiling fixtures. Con- , installation and application data, information. Lightolier, Inc., 11 E. New York, N.Y.

Uni-Flow Fluorescent Troffers, -F-23 (605), 28-p. catalog covering e stock line of recessed, fluorescent r schools, institutions, offices, stores er commercial installations. Models, specifications, dimensional dia- nstallation and lighting data, illus- Mitchell Mfg. Co., 2525 Clybourn, 14, Ill.

oklets on switchgear for all general al and electrical utility require- Advantages, construction and opera- cessories, design features, applica- ta, specifications, photos, drawings, Westinghouse Electric Corp., Switch- v., East Pittsburgh, Pa.:

Heavy-Duty Metal-Clad Switch- -5306)

Low - Voltage Metal - Enclosed ear (B-5282)

nishers and protectors

Floors Without Flaws, 12-p. bro- Recommendations for economical ient care of floors in office build- stitutions, factories, schools, and plus list and descriptions of man- r's maintenance products. Repair intenance methods explained for riety of flooring materials—asphalt k, linoleum, wood, etc. A. C. Horn ., 10 St. & 44 Ave., Long Island Y.

-76. Painting Specifications, AIA (PA-148), 20-p. booklet. Discus- on of specific requirements for paint us residential, commercial, and in- applications. Characteristics, uses, gested finishes for application on tural materials, recommendations ace preparation, color cards. Sher- iams Co., 101 Prospect Ave., Cleve- io.

nitation, water supply, drainage

Drinking Water Coolers, AIA (52), 20-p. catalog describing dif- nodels of pressure- and bottle-type coolers. Selection of proper unit, tion data, capacities, features, illus- Cordley & Hayes, 443 Fifth Ave., rk 16, N.Y.

Aluminum Shower Doors, AIA S-A1), 4-p. folder. Illustrations of doors, tub enclosures, and stall en- , glazed with clear, hammered, or smooth-rough obscure glass fitted into extruded aluminum channel frames. Specifications, construction details. Keystone Shower Door Co., Second St. Pike, Southampton, Pa.

19-263. Sperzel Toilet Seats, AIA 29-H-22 (500), 16-p. booklet. Description of full line of toilet seats composed of solid plastic throughout, especially contoured for maximum sanitation. Models, dimensional drawings. Sperzel Co., 123 14 Ave. S., Minneapolis 4, Minn.

★ **19-264. You Can Build It And Maintain It for Less,** 30-p. booklet. Practical suggestions for planning and and equipping public rest rooms, pointing out savings in material and time-cost when decisions on sanitary facilities, including type of plumbing fixtures to be installed, precede final approval of structural design of building. Types of toilet partitions, illustrations of wall constructions that can be used with wall-type closets, rest room layouts, installing of wall-type closets and fittings, construction details. J. A. Zurn Mfg. Co., 1801 Pittsburgh Ave., Erie, Pa.

specialized equipment

19-265. Modern Kitchen Equipment (AD 1826-R), 16-p. booklet. Color plates of cabinet sinks, matching wall and base cabinets, electric ranges, dishwashers, garbage disposers, laundry tubs, water heaters, and continuous counter tops. Sizes, colors, features. Crane Co., 836 S. Michigan Ave., Chicago 5, Ill.

19-266. Electric-Aire, AIA 31-L, portfolio containing bulletins and other descriptive literature on electric hand dryers and hair dryers. Specifications, installation directions, advantages. Electric-Aire Engineering Corp., 209 W. Jackson Blvd., Chicago 6, Ill.

19-267. Draw-In-Dex Cabinet. 4-p. pamphlet. Description of upright filing cabinet, steel construction, 20″ deep x 30″ wide x 48″ high, for filing of blueprints, drawings, tracings, X-rays, maps, etc. (will accommodate up to 1250 blueprints). Detailed specifications, price list, photos. Empire Development Corp., 15 Park Row, New York 38, N.Y.

19-268. Leavitt Bleachers, 8-p. booklet on portable wood bleachers, portable steel grandstands and permanent steel stadiums. Seating capacities and dimensions, specifications, construction details, general data, photos. Leavitt Bleacher Co., 206-230 Griggs St., Urbana, Ill.

surfacing materials

19-269. How to Create Your Own Floor Designs (Design Book No. 1), 44-p. hardbound booklet illustrated with color samples of asphalt tile flooring. Typical installations in residences, offices, stores shown in color photos. Kentile, Inc., 58 Second Ave., Brooklyn 15, N.Y.

(To obtain literature, coupon must be used by 10/1/52)
(We request students to send their inquiries directly to the manufacturers.)

PROGRESSIVE ARCHITECTURE, 330 West 42nd Street, New York 36, N. Y.
I should like a copy of each piece of Manufacturers' Literature circled below.

1-184	1-185	1-186	1-187	1-188	1-189	1-190	3-154
3-155	3-156	3-157	3-158	3-159	3-160	3-161	4-189
4-190	4-191	4-192	4-193	4-194	5-127	5-128	5-129
5-130	5-131	6-75	6-76	19-261	19-262	19-263	19-264
19-265	19-266	19-267	19-268	19-269			

Name _____

Position _____

Firm _____

Mailing Address _____ ☐ *Home* ☐ *Business*

City _____ *State* _____

please print **8/52**

Above: Crowell-Collier Building, New York City. Architects: Leonard Schultze and Associates. Elevator corridor walls in Coral Kalistron, Blue Kalistron covers corridor chairs.

UNBELIEVABLE DURABILITY

on our walls and furniture...

That's the comment frequently heard about *Kalistron* installations. When walls, doors, columns or furniture are covered with Kalistron, they literally defy the wear and tear of "heavy duty" service. Years after installation, the Kalistron is still in excellent condition . . . unmarred, unscratched, with practically no sign of wear.

Kalistron is different because its color is fused to *underside* of clear sheet of wear-resistant Vinylite. Since nothing can touch this under-surface, Kalistron's beauty stays fresh and new-looking.

Kalistron cannot chip, crack or peel; minimizes maintenance costs. Cleans easily with a damp cloth. In 28 standard colors: special colors matched.

SEND COUPON BELOW for sample of Kalistron and nail-file. Test Kalistron yourself . . . prove its unbelievable durability.

Kalistron† PAT. APPLIED FOR

←COLOR FUSED TO UNDERSIDE PLASTIC COVERING MATERIAL

U. S. Plywood Corp., Dept. F-6
55 West 44th St., New York 36

Please send me FREE Nail-File Test (swatch of Kalistron plus actual nail-file) and folder "Facts About Kalistron."

NAME_____

ADDRESS_____

_____

Distributed by: UNITED STATES PLYWOOD CORP., N. Y. C.
and by: DECO SALES, 408 Freylinghuysen Ave., Newark, N. J.
In Canada: PAUL COLLET & CO., LTD., MONTREAL

†TRADEMARK

Color fused to underside of transparent vinyl sheet . . . backed by flocking

bath-dressing areas

by Suzanne Sekey

The molded bathroom designed some years ago by Buckminster Fuller suggested the sibility of complete, prefabricated units at low cost. Theoretically, a bathroom designed as a duct could, by its relative inexpensiveness, be available in sufficient numbers for individual use house. In lieu of such low-cost factory bathrooms, or budgets that allow multiple baths, archi- s have been arranging standard units to suit the family needs. By separating one fixture or ther, simultaneous use is made convenient for the family sharing a bathroom. It seems that it is so much the size of the bath area as the way it is compartmented, that increases usability. If lavatory is isolated and provided with counter and storage space, the bathroom develops into a -dressing space and, in so doing, considerably enlarges the pleasure and comfort of use.

The combination of lavatory, counter, and wardrobe in one space is logical and conven- . It simplifies the bedroom, as well, and makes it possible to reduce the size of this room when s must be balanced. Also favoring the compartmented bath-dressing space is the way that erials can be suited to specific parts. In the example by A. L. Aydelott that follows, wood walls are urally shared by the bedroom and dressing area, while tile is the better choice for the bathroom.

The ideal bathroom would be completely surfaced with hard, washable materials, coved ll corners so that (theoretically) a hose could clean the whole room. Glazed, plastic, or sealed erials are naturals for bathroom surfaces: J. R. Davidson's bath-dressing space is a crisp example heir use. An imaginative use of ceramic tile, one of the oldest and most serviceable materials, is . Herbert Bayer's mural for Harvard's Graduate Center demonstrated the handsomeness of com- floor tile, but perhaps one should not talk of Art and bathrooms in the same paragraph.

The architects contributing to this section this month have showed admirable resistance "Hollywood" colors. In no instance, where standard fixtures were used, is the porcelain anything pure white. The "glamour approach" of the consumer advertisements is ignored here and ead, for special effects, architectural ingredients are used—texture, scale, appropriate materials, vell as color. We cite the Stone example, for its lacy lighted ceiling, and the Stousland room its airy arrangement and rather special point of view.

Bathrooms, unhaunted by tradition or requirements for individuality, are the most matter- act rooms in the house. If the lighting shows one's true pallor, that is as it should be (enough ndescent light is important). The judicious arrangement of space is perhaps the most valuable sideration: storage requirements so under-estimated by stock installations are much improved by itect planning. Choice of materials and colors adds much to the pleasant results that follow— hout a single decalcomania or even mother-of-pearl.

p/a interior design data

bath-dressing areas

data

Chair: 72 USB/ Saarinen design/ molded plastic covered in foam rubber/ steel legs in choice of brushed-chrome or dull-black enamel/ net: $51.00/ Knoll Associates, 575 Madison Ave., New York, N.Y.

Chair Fabric: K 140/3 "Devil"/ wool and cotton/ 53" wide/ white-and-black, beige-and-black, brown-and-black, blue-and-black, yellow-and-black, red-and-black, and green-and-black/ net: $7.00 per yd./ Knoll.

Counter: architect-designed/ oak with laminated-plastic top/ National Showcase Co., Columbus, Ga.

Counter Top: "Formica"/ Formica Co., 4633 Spring Grove Ave., Cincinnati 32, Ohio.

Curtain Track and Hardware: Grant Pulley & Hardware Co., 31-85 Whitestone Pkwy., Flushing, N.Y.

Door Hardware: Russell & Erwin Div. of American Hardware, 285 Madison Ave., New York, N.Y.

Floor Covering: (bathroom) ceramic tile/ Mosaic Tile Co., Zanesville, Ohio.

Floor Covering: (dressing room) asphalt tile/ Kentile, 58 Second Ave., Brooklyn, N.Y.

Lighting Fixtures: "Formlites" #602 A and #628 B/ universal joint/ satin-finish aluminum/ list: $12.00 and $13.45/ Gotham Lighting Corp., 37-01 31 St., L.I.C., N.Y.

Mirror: Pittsburgh Plate Glass Co., 632 Duquesne Way, Pittsburgh 22, Pa.

Paints: Sherwin-Williams Co., 101 Prospect Ave., Cleveland, Ohio.

Sink: "Elayne"/ 27" x 20"/ Crane Co., 836 S. Michigan Ave., Chicago 5, Ill.

Towel Rods: Hall-Mack Co., 7455 Exchange Ave., Chicago 49, Ill. and 1344 W. Washington Blvd., Los Angeles 7, Calif.

W.C.: elongated "Drexel"/ Crane Co.

Wall Covering: (bathroom) glazed tile/ 4" x 4"/ Mosaic Tile Co.

Walls: (dressing room) 1/4" oak plywood/ Welsh Plywood Corp., Memphis, Tenn.

Window Glass: DSB/ Pittsburgh Plate Glass Co.

Window Sash: painted (residence) steel casements/ Detroit Steel Products, 2250 E. Grand Blvd., Detroit, Mich.

Wood Finish: "Satinlac"/ Breinig Bros., 95 Harrison St., Hoboken, N.J.

This dressing room and bath are in the architect's own house. Although connecting, the two are separate rooms, each enclosed for privacy and quiet. Integration here is between dressing room and adjacent bedroom, which share black asphalt tile and oak plywood. At the bathroom threshold, materials change to the more standard tile and plaster. The sink in the laminated plastic counter is an extra one for added convenience, the bathroom being complete with the three usual fixtures. Ceramic tile in the bathroom is black, to match the other flooring. Wall tile is light green, plaster walls above and ceiling throughout are white. In the dressing room, counter top is medium red and chair cover is a mixture of brown and black. *Photo: Lionel Freedman*

location	Memphis, Tennessee
architect	A. L. Aydelott
contractor	A. L. Aydelott

data

Blind: matchstick bamboo/ Fong Bros., 935 Stockton St., San Francisco, Calif.

Floor Covering: asphalt tile/ black/ Tile-Tex Division of the Flintkote Co., Chicago Heights, Ill.

Lighting Fixture: #1606/ oyster white/ list: $12.60/ General Lighting Co., 1527 Charlotte St., New York 60, N.Y.

Shower: Speakman Co., Wilmington, Del.

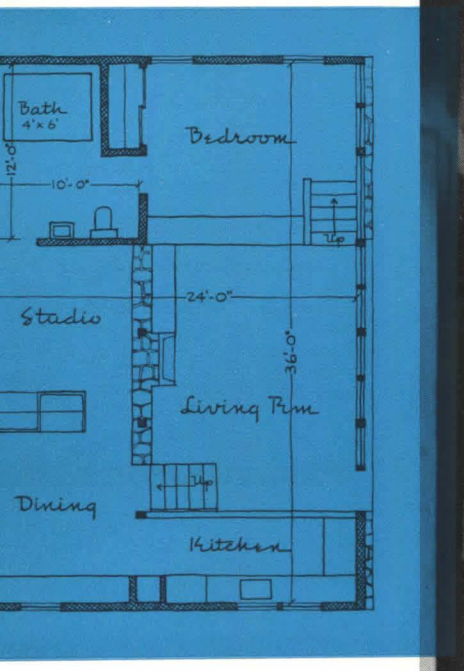
Tub: 4' x 6' x 20"/ concrete/ finished with plastic paint.

Tub Floor: ceramic tile/ 2" x 2"/ blue-green/ The Mosaic Tile Co., Zanesville, Ohio.

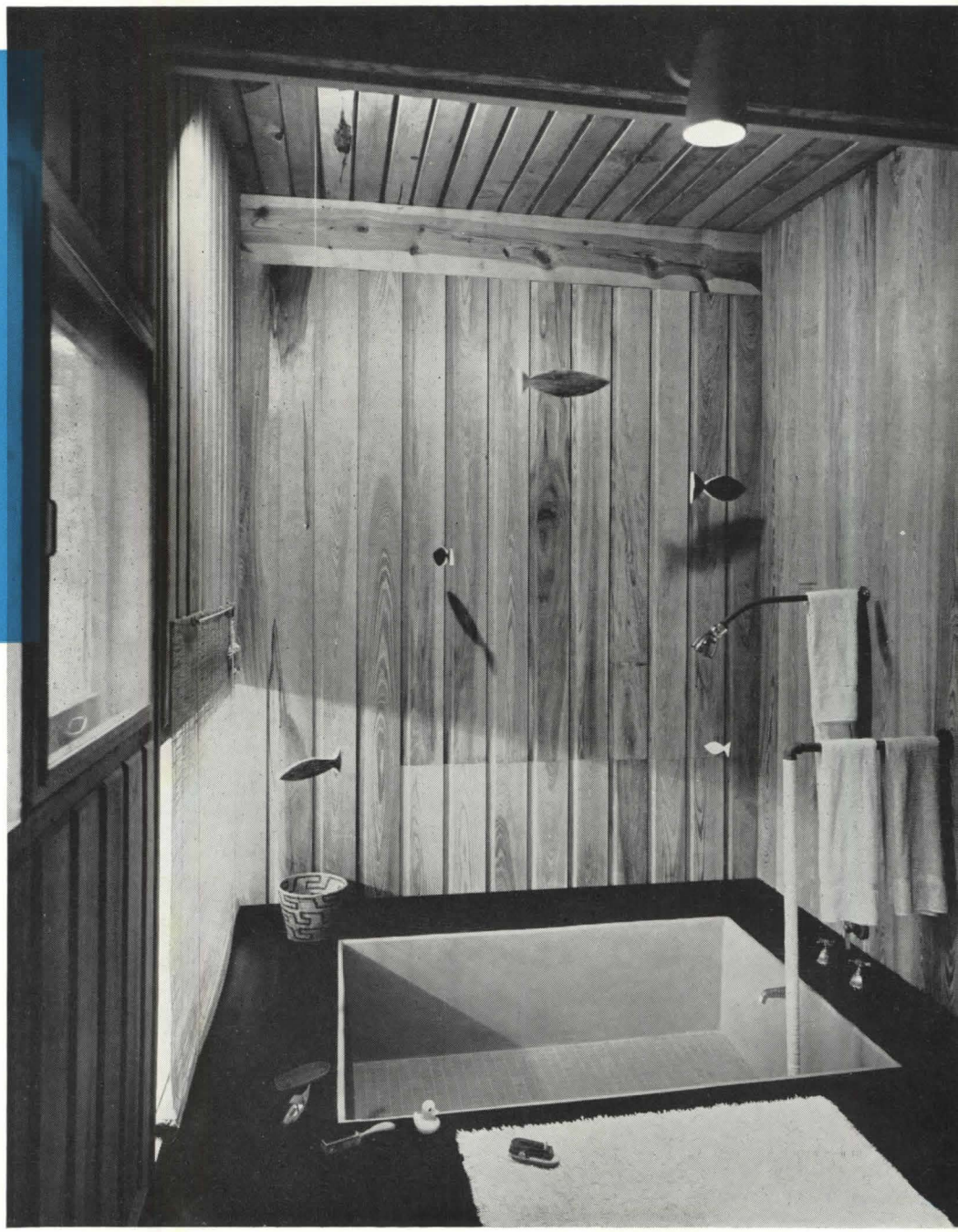
Window Operators: "Whitco"/ Vincent Whitney Co., P.O.Box 335, Sausalito, Calif.

Window Sash: Wood/ job-built.

Walls: tidewater cypress.



ocation	Fayetteville, Arkansas
rchitect	C. E. Stousland
ntractor	C. E. Stousland



This is the only fully enclosed room in a $6000 house that the architect built for his own use. A two-level scheme is artfully divided by storage units, low partitions, and fireplace—to provide living, kitchen-dining, bedroom, work area, and this bathroom, in a total space of 24′ x 36′. The 10′ x 12′ bathroom is no stingy portion. (It is the architect's reaction to a few years of living with "minimum" baths.) This is a room with a view, a place to relax and, also, we understand, an outpost for local children on the hot days. The 4′ x 6′ tub was poured with the floor. Its concrete sides are finished with plastic paint, its floor is blue-green ceramic tile. Bathroom flooring is black asphalt tile and walls are cypress. Yacht cord wraps the hand rail. *Photo: Lionel Freedman*

bath-dressing areas

data

Counter Top: Jaspe linoleum/ Armstrong Cork Co., Lancaster, Pa.

Door: "Modernfold"/ plastic-covered accordian/ New Castle Products, New Castle, Ind.

Floor: waxed concrete.

Lighting Fixtures: Leviton Mfg. Co., 236 Greenpoint Ave., Brooklyn, N.Y.

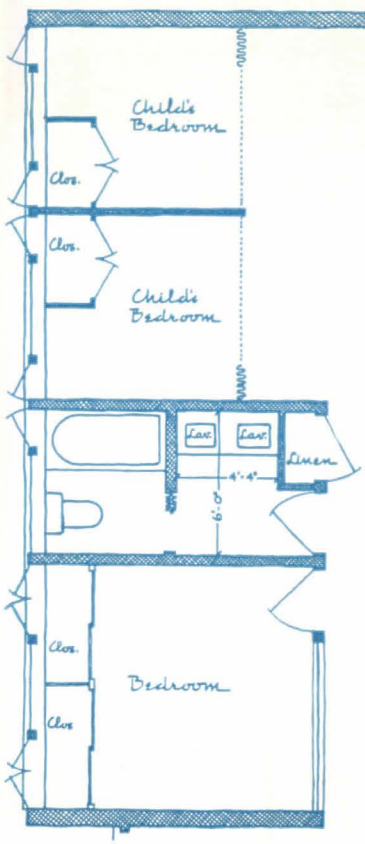
Sinks: American Radiator & Standard Sanitary Co., Bessemer Bldg., Pittsburgh, Pa.

Towel Rod: Hall-Mack Co., 1344 W. Washington Blvd., Los Angeles, Calif./ 7455 Exchange Ave., Chicago 49, Ill.

W.C.: American Radiator & Standard Sanitary.

Window: Hope's Windows Inc., 86 Hopkins Ave., Jamestown, N.Y.

Walls: plaster, painted.

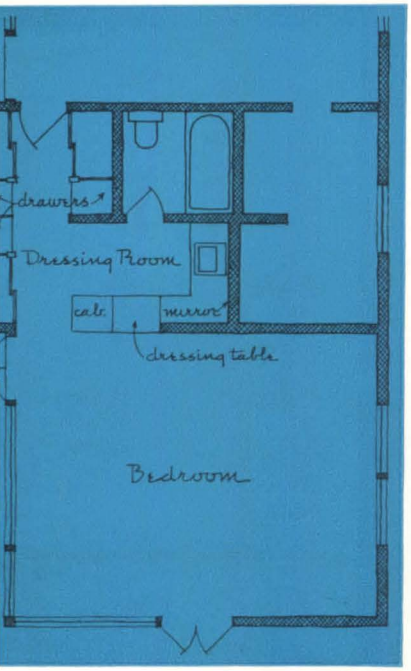


This is the family bathroom in a small house. Although not much larger than minimum, its plan is an improvement over the standard arrangement. Compartmented and provided with two lavatories, it easily allows for simultaneous use. In such a busy place, the accordian room divider is safer than a door swing, and a space saver too. Simple detailing and materials make this bathroom no chore to clean. Plaster walls and ceiling are finished in yellow enamel. Floor is waxed concrete, counter top is gray linoleum, and door is gray-plastic covered.

Photo: Lionel Freedman

location	Foxboro, Massachuse
architects	Architects Collabora
contractor	Walter H. Barker Inc

location	Fayetteville, Arkansas
architect	Edward D. Stone
associate	Karl J. Holzinger, Jr.
building supervisor	Frank Smiley



data

Cabinets: architect designed/ birch.

Ceiling: birch slats 1/8" x 3" x 11/2" o.c.

Counter: ceramic tile/ medium green/ The Mosaic Tile Co., Zanesville, Ohio.

Door Hardware: Skillman Hardware Mfg. Co., 533 Edgewood Ave., Trenton, N.J.

Finish for Wood: "Satinlac"/ Breinig Bros., 95 Harrison St., Hoboken, N.J.

Floor: tile/ light and medium green/ The Mosaic Tile Co.

Lighting: frosted incandescent lamps above ceiling/ lumiline over mirror.

Mirror: Pittsburgh Plate Glass Co., 632 Duquesne Way, Pittsburgh 22, Pa.

Paint: Pittsburgh Plate Glass Co.

Sink: Crane Co., 836 S. Michigan Ave., Chicago 5, Ill.

Towel Rods: The Mosaic Tile Co.

Tub: Crane Co.

Walls: tile/ medium green/ The Mosaic Tile Co./ plaster above painted light green.

The dressing table is the divide between these areas, for good ventilation and an enlarged vista. Open to hall and bedroom, circulation is completely easy and the isolation of lavatory a convenience. In scale, the dressing area is intimate as an arbor. The slatted ceiling is dropped to low vertical dimension and has incandescent lamps above for gentle diffused illumination. A special coved lamp lights the mirrored section. Tile is medium green for walls and counter top, light and medium for floor. Painted plaster is light green and all wood is birch.

Photo: Lionel Freedman

bath-dressing areas

data

Cabinets: architect-designed/ job-built.

Cabinet Top: dark blue linoleum/ Armstrong Cork Co., Lancaster, Pa.

Curtain Track: Kirsch Co., Sturgis, Mich.

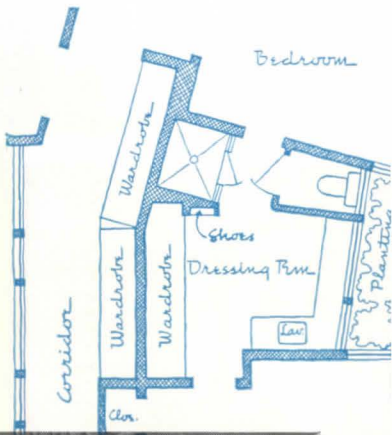
Door Hardware: Sargent & Co., New Haven, Conn.

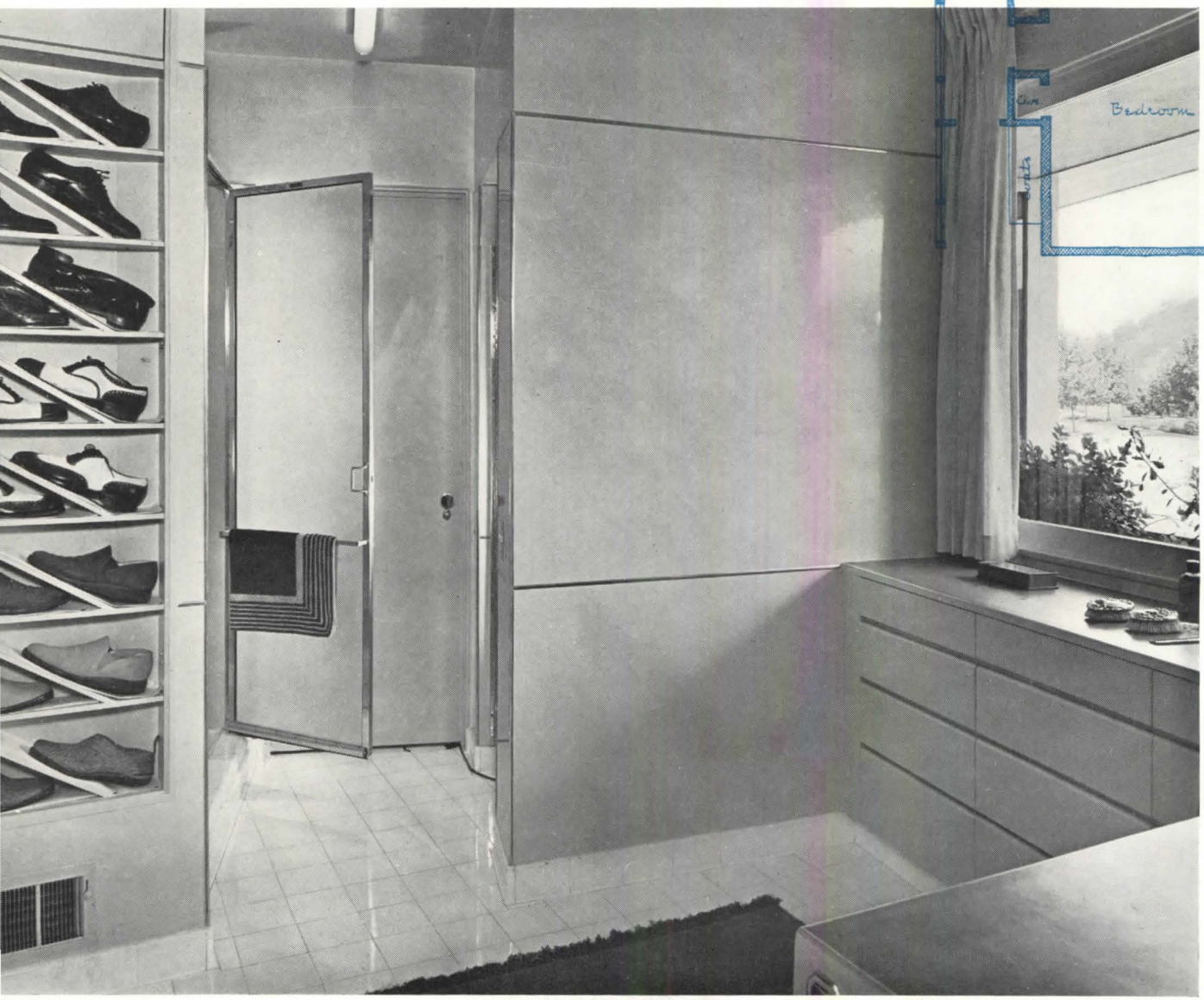
Floor Covering: ceramic tile/ 6" x 6"/ white/ Pomona Tile Mfg. Co., 629 La Brea Ave., Los Angeles, Calif.

Shower Door: aluminum frame/ Aluminum Co. of America, Frick Bldg., Pittsburgh, Pa.

Shower Door Glass: "Factrolite"/ cross ribbed glass/ Mississippi Glass Co., 88 Angelica St., St. Louis 7, Mo.

Wall Covering: "Marlite"/ plastic-finished panels and aluminum moldings/ Marsh Wall Products, Inc., Dover, Ohio.

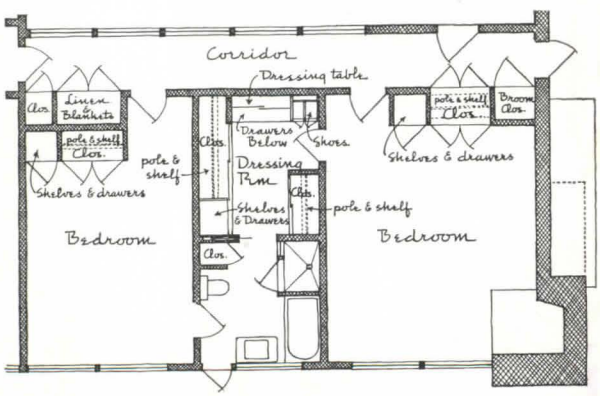




This dressing-bath belongs to the man in the house. (Her's is connected to the bedroom next door.) There should be no trouble keeping neat here, for everything can be conveniently stored—even a ration of 18 shoes. The commodious wardrobe opposite windows takes care of riding boots and much more. Tile floor, plastic wall panels, enameled cabinets with linoleum top, and glass compartment doors all are easily washed. Colors are white for floor and ceiling; light blue for walls, cabinets, and curtains; and dark blue for counter top. *Photo: Julius Shulman*

location	Encino, California
designer	J. R. Davidson
contractor	La Brea Construction

location	Warm Springs, Oregon
architect	Pietro Belluschi
contractor	Henry Nelson



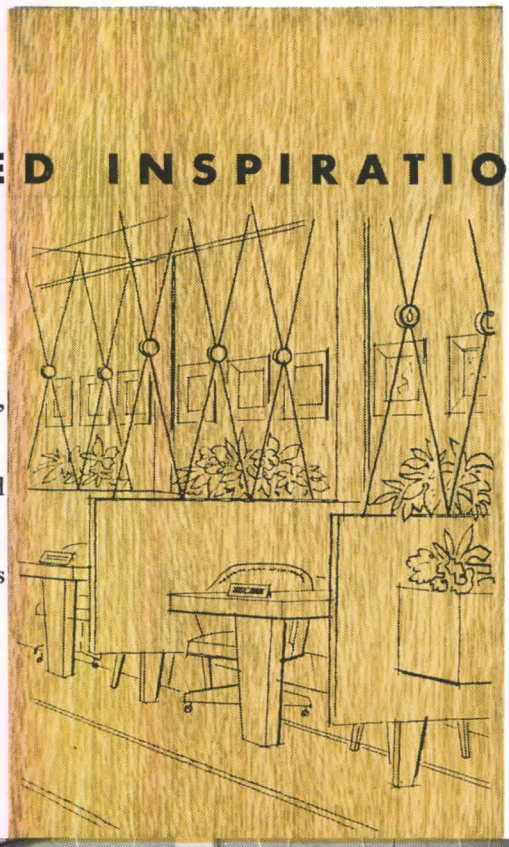
This dressing area was selected for its handsome custom storage facilities. Designed to accommodate a bulk of assorted matter, cabinets are exactingly fitted and the whole made serene by simple detailing. A full-length mirror is mounted on the entrance door, and in the back of the open box there are additional narrow shelves behind sliding doors. Our architect is a busy Dean at M.I.T. and so this is not accompanied by the usual data on sources and materials. Floors are cork, of course, and wood in bedroom is pine. All cabinet work is lacquered—choose your color.

Photos: Dearborn-Massar

WHEN INTERIORS NEED INSPIRATION

TURN TO micarta®

PLASTIC SURFACE



Design ideas seem to spring naturally from the versatility of lovely, lasting MICARTA® plastic surfaces. The smart, efficient appearance of the United Fuel Gas Company installation, shown below, was made possible by MICARTA's combination of long-lasting beauty and year-after-year utility... MICARTA's ability to handle daily dealings with the public without showing the effects of wear and tear.

MICARTA colors, patterns and wood grains make for fine interiors and practical interiors. This amazing surface will resist grease, alcohol, burns, scuffing and denting. It can be flicked clean with a damp cloth... never needs refinishing, waxing or polishing.

MICARTA has proved itself in prominent installations from hard-working bar tops to discreetly styled wall paneling and wainscoting. Investigate the many-sided possibilities of this modern material. Just fill out the coupon below.

INTERIOR DESIGNED BY G. R. S. & W., PITTSBURGH, PA.

Westinghouse micarta®

distributed by | UNITED STATES PLYWOOD CORPORATION
largest plywood organization in the world
and U S—MENGEL PLYWOODS · INC

J-06493

UNITED STATES PLYWOOD CORPORATION
55 West 44th Street, New York 36, N. Y.

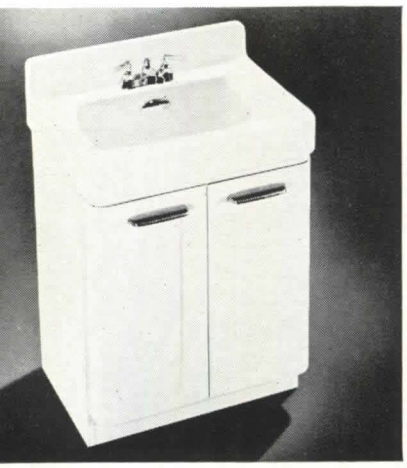
Please send MICARTA application booklet, Form No. 1118.

NAME_____

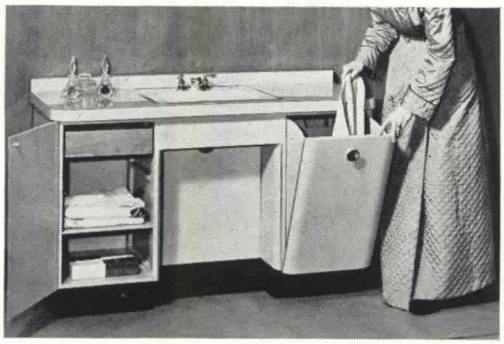
ADDRESS_____

CITY_____ ZONE____ STATE_____

PA-

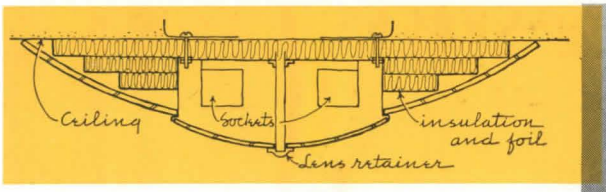


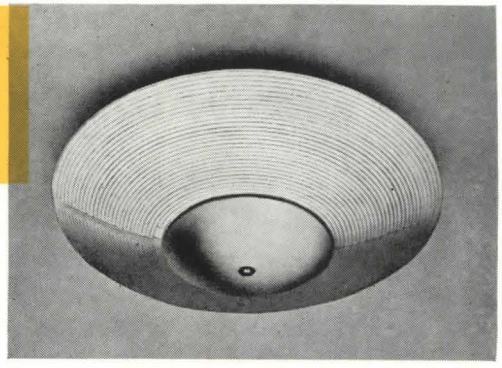
Lavatory Cabinet: 22-gage welded-steel finished in baked-white enamel/ 18¾" x 23" x 28⅝" high/ **lavatory:** LA-24/ stain- and acid-resistant porcelain enamel/ 3½" backguard/ white (to match cabinet) or tan, green, blue, and ivory/ **approx. retail:** $50.00 for cabinet and lavatory unit but no fittings/ **The Murray Corp. of America, Home Appliance Div., 1900 S. Washington Ave., Scranton, Pa.**



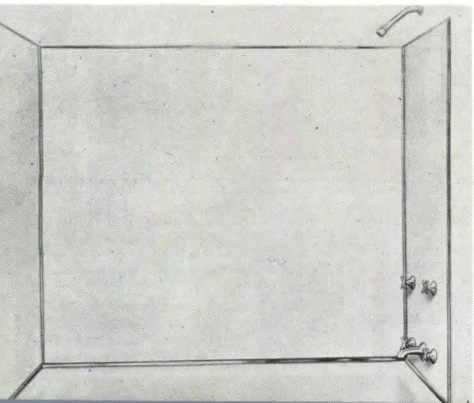
"Dresslyn," introduced two years ago, is now offered in smaller sizes with improved features. Available in a number of styles with center cabinet or kneehole/ 16" w. x 31" h. x 42", 46", 58", or 62" long/ **counter and 3½" splashback:** enameled-steel resistant to burns and stains/ mother-of-pearl pattern/ **cabinet:** "Prestwood" doors and hardwood drawers, sides, and shelves/ hard resinous-base enamel finish/ **matching colors for tops and cabinets:** blue, peach, gray, or white/ **lavatory:** vitreous china with roll rim and front overflow/ six American-Standard colors/ **prices on request/ American Radiator & Standard Sanitary Corp., Bessemer Bldg., Pittsburgh, Pa.**

"Dress-atory," an arrangement of lavatory-counter-cabinet available in four different styles and sizes/ exposed surfaces faced with "Parkwood"—high-pressure laminate/ **colors:** field green, azure blue, lemon yellow, pearl gray, and coral pink/ doors plastic backed and metal edged/ piano hinges/ hardwood dovetailed drawers/ chrome pulls/ **lavatory:** 20" x 18"/ vitreous china/ one-piece polished-metal frame/ anti-splash rim and concealed overflow/ renewable brass fittings/ **colors:** "twilight" blue, coral blush, pastel green, "colonial" yellow, and white/ **shown: "Princess"** 22" x 52" x 31" high/ factory assembled/ **approx. retail:** $250.00/ **Eljer Co., Ford City, Pa.**



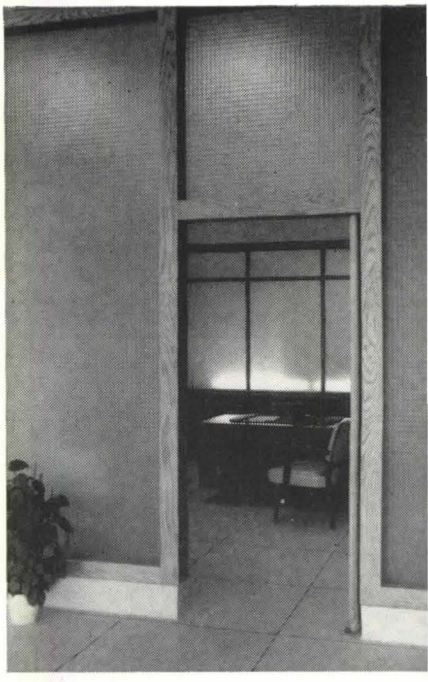


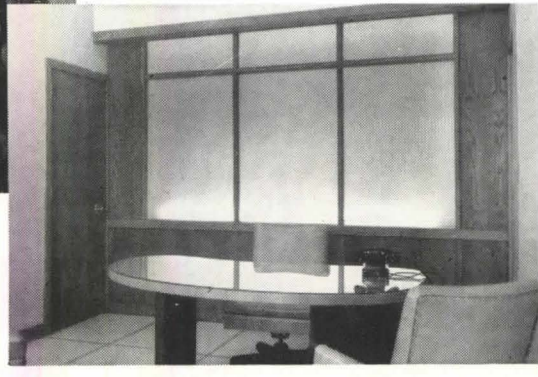
"Electriglas Thermolite" combines radiant heat and light in a ceiling fixture. Designed for bathroom use, it is also recommended for kitchens, nurseries, halls etc. Outer portion of 20" dia. fixture consists of shatterproof glass to which a heating element is fused/ opal center lens for light diffusion/ can be installed with thermostat for automatic operation, with two wall-switches for separate light and heat, or with three-way pull switch/ **list:** $57.65 plus installation/ **Appleman Glass Works, Bergenfield, N. J.**



Bathtub Alcove Remodeling Unit: three pre-cut panels of M-67 "Monowall" along with metal channels and waterproofing channel filler are contained in a single package for facing the sides of an alcove around a five-foot tub/ **panels:** fiberboard plastic finished (2) 2'-6" x 4' high and (1) 5' x 4' high/ channels cut to length and corners mitered for installation with ordinary hand tools/ **colors:** "porcelain" white, "Wedgwood" blue, "primrose" yellow, and "cascade" green/ **approx. retail:** $30.00/ **Armstrong Cork Co., Lancaster, Pa.**

Architect: Jacob Shteir, Newark, N.J.





How to ISOLATE SPACE —without cutting off light!

Privacy was achieved for these auto showroom offices without shutting them off from the cheerful brightness of the display room.

That's one of the delightful things about working with Blue Ridge *Patterned Glass*. It lets light pass from room to room. And it decorates both sides of a wall with a truly modern touch. The beauty of translucent glass is easily maintained. The wipe of a damp cloth keeps it sparkling!

Your imagination gets free play with Blue Ridge *Patterned Glass*—you can choose from a wide variety of linear, checkered or overall designs. You can select plain, textured or *Satinol** finish. Your Libbey · Owens · Ford Glass Distributor or Dealer can show them to you. He's listed in the phone directory of principal cities. Mail the coupon for our two helpful idea books which illustrate many uses of patterned glass. *®

BLUE RIDGE Patterned GLASS LOF GLASS

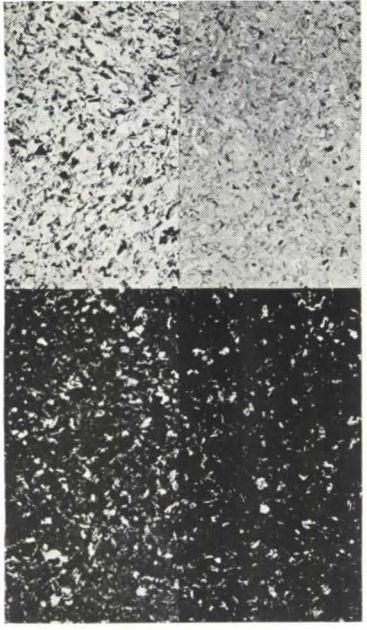
Libbey·Owens·Ford Glass Company
Patterned & Wire Glass Sales
B-982 Nicholas Building, Toledo 3, O.

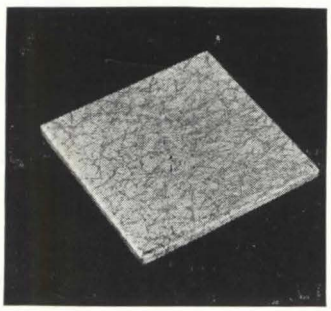
Please send me your two idea books:
Patterned Glass for Modernization in commercial buildings;
New Adventures in Decorating for residences.

Name (please print)_____

Street_____

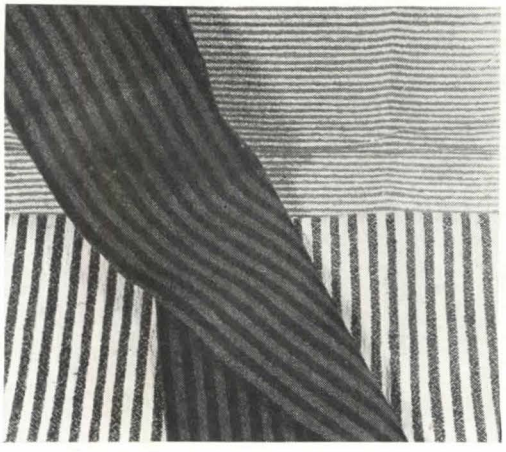
City_____ Zone____ State_____

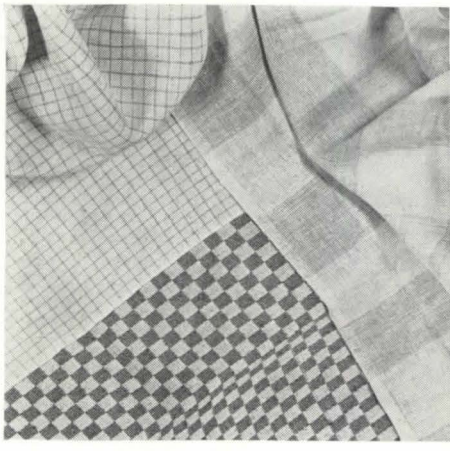




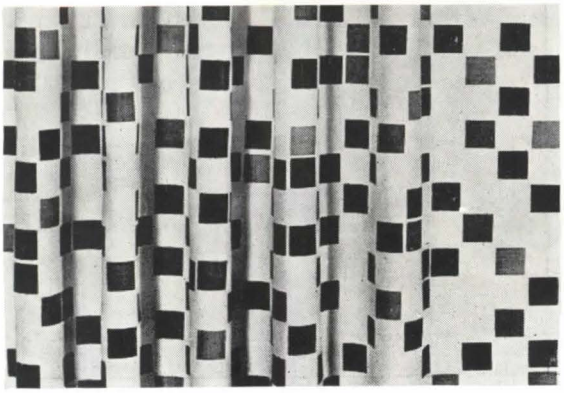
"Sonofaced" Tile: non-combustible acoustical product with a newly designed plastic-film facing. The pattern designed by Walter Dorwin Teague suggests the intertwining fibers of glass which make up the board. Sonofaced Tile reduces sound by diaphragmatic action. The film facing acts as a drumhead, transmitting sound by vibration into millions of tiny Fiberglas cells. Easily cleaned, good light reflection, high acoustical and thermal values/ neutral sand color on off-white background/ film cemented to edges and across face for easy cutting where scribing to walls or special fitting is required/ tile which needs no cutting has film stretched taut and cemented to edges only/ new tile to be offered in a variety of colors/ **Owens-Corning Fiberglas Corp., Toledo 1, Ohio.**

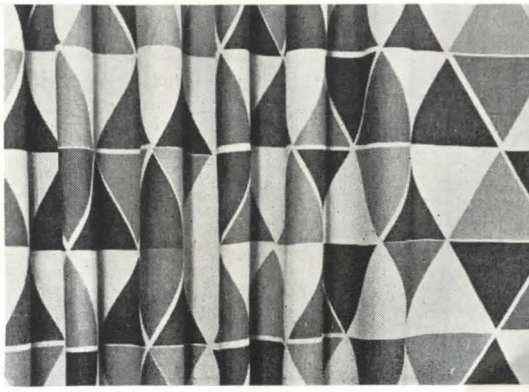
eal "Special": an economy lightweight floor tile ndom chip pattern/ tough non-porous surface phalt saturated back/ said to be unaffected by , oil, alkalis, or strong soaps/ only an occasional oat of wax required for maintenance unless a ustre is desired/ **size:** 9" x 9"/ **colors:** blue, red, gray, and white (with red and black flecks) eam with chocolate flecks/ **approx. retail:** $.14 e/ **"Standard"** slightly lighter in weight is avail- n roll goods or counter-top material/ **sizes:** 6' or e for flooring and 27", 36", or 45" for counter **colors for roll goods:** yellow, white, cream, gray, nd green/ **colors for counter top material:** yel- ed, gray, and green/ **approx. retail:** $1.69 per ./ **Sloane-Blabon Corp., 295 Fifth Ave., New N. Y.**

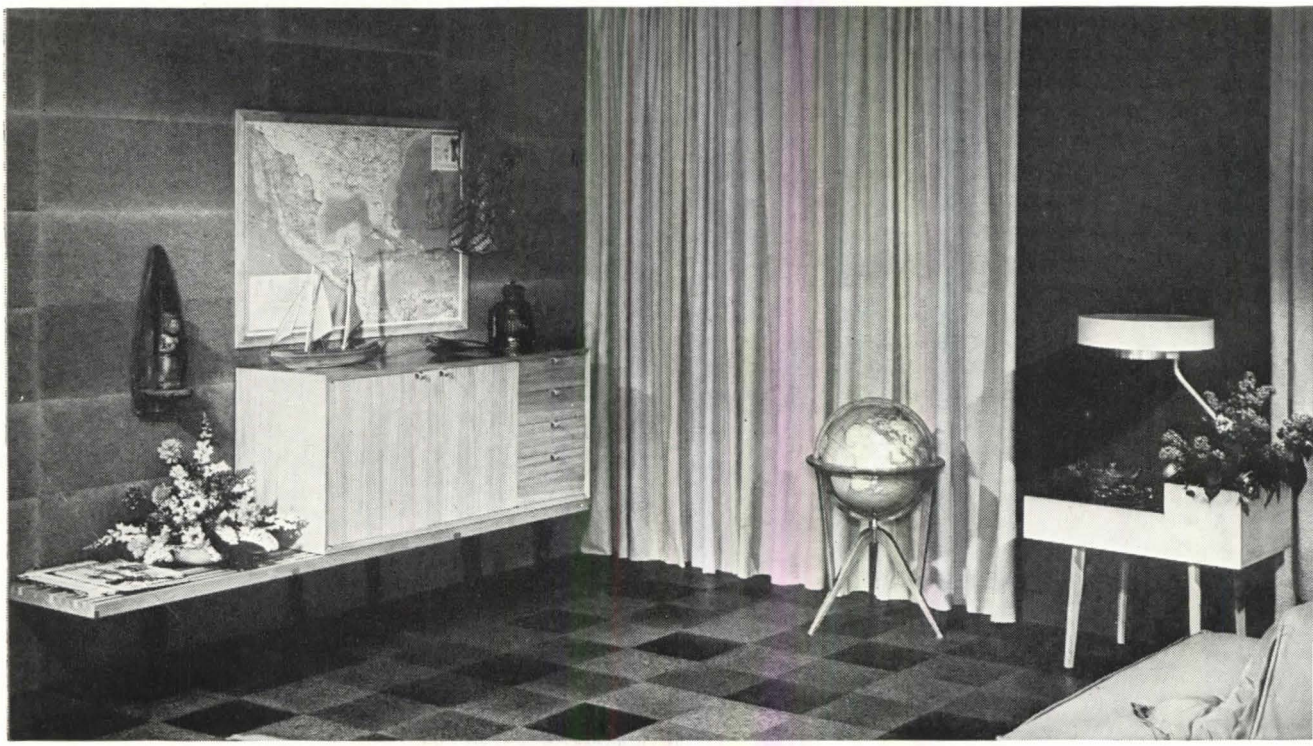




Correlated Upholstery, Drapery, and Curtain Fabrics designed by Alexander Girard, architect-designer and head of Herman Miller Fabric Division. The group consists of more than 30 woven and printed fabrics, all based on geometric shapes handled in a fresh and original way. The basic shapes are judiciously varied and a series of 14 colors is strikingly combined in more than 120 ways. **Woven Fabrics:** weights suitable for upholstery, slipcovers, bedspreads, and curtains as well as several gossamer weaves/ solids, textures, checks, stripes, and diamonds/ **yarns:** wool, linen, cotton, rayon, jute, silk, and metallics/ **widths:** 48" to 57" for most and 36" for two lighter weaves/ **printed fabrics:** squares, triangles, circles, and hexagons/ **fabrics for prints:** natural or bleached linen and sheer silk gauze/ **"spectrum" colors:** violet, magenta, crimson, orange, yellow, emerald green, turquoise blue, and ultramarine blue/ **"neutral" colors:** white, black, dark gray, raw umber, light ochre, sepia/ **approx. retail price range:** $3.15 to $10.50 per yd./ **Shown:** a sampling of printed and woven fabrics/ complete line can be seen at showrooms/ **Herman Miller Furniture Co., Zeeland, Mich.**







Kencork Walls combined with Kencork Floors provide an air of quiet distinction. The initial cost is not high and the years of long wear and minimum maintenance provide real economies.

Consider the Kentile Flooring Contractor as part of your staff

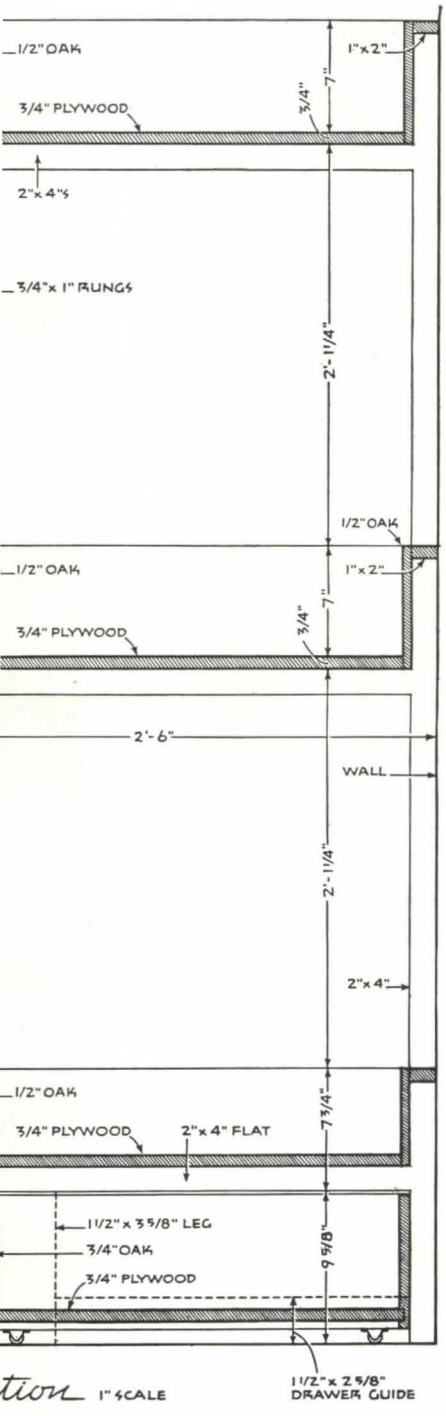
THE FLOOR or wall that is ideal for one installation may be short-lived or uneconomical in another. And, with the countless materials available today, it's a full-time job to keep abreast of just the recent developments. That's why busy specifiers count on their Kentile Flooring Contractor for accurate and up-to-date information . . . his extensive training and wide practical experience is as near as your phone.

KENTILE • SPECIAL *(Greaseproof)* KENTILE • KENRUBBER • KENCORK

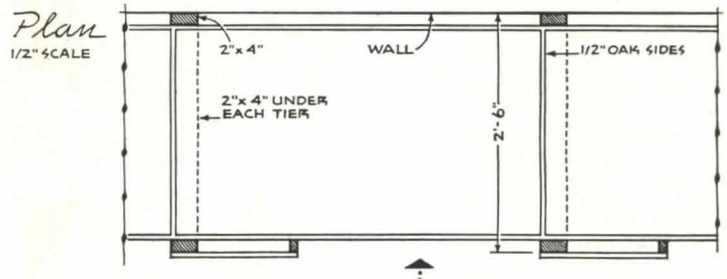
KENTILE INC.

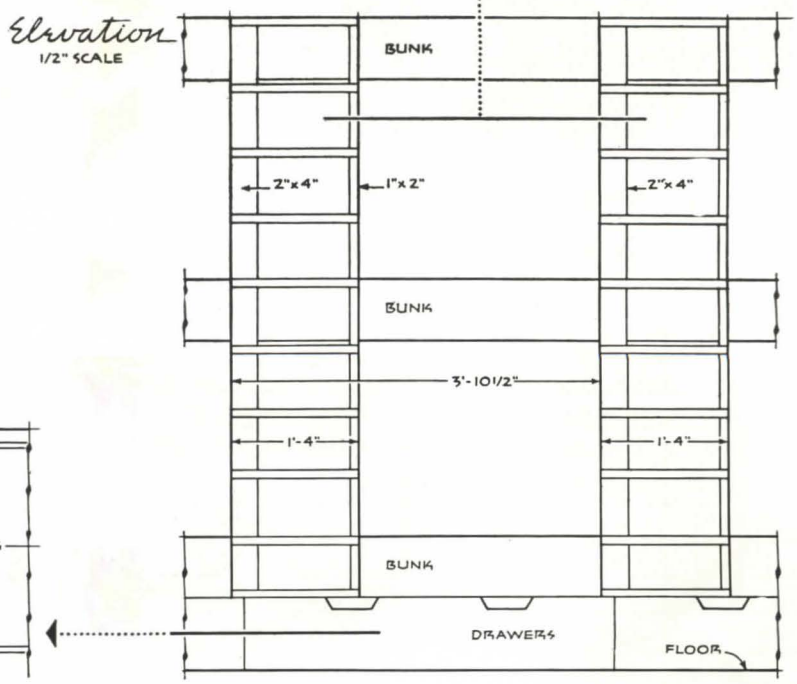
KENTILE, INC., 58 Second Avenue, Brooklyn 15, New York • 350 Fifth Avenue, New York 1, N. Y. • 705 Architects Building, 17th and Sansom Streets, Philadelphia 3, Pennsylvania • 1211 NBC Building, Cleveland 14, Ohio • 900 Peachtree Street N.E., Atlanta 5, Georgia 2020 Walnut Street, Kansas City 8, Missouri • 4532 South Kolin Avenue, Chicago 32, Illinois • 1113 Vine Street, Houston 1, Texas • 4501 Santa Fe Avenue, Los Angeles 58, California • 95 Market Street, Oakland 4, California • 452 Statler Building, Boston 16, Massachusetts

SUZANNE SZASZ

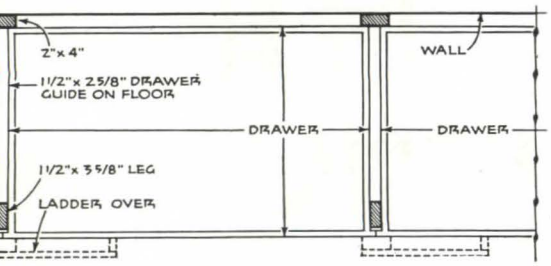


tion 1" SCALE





n 1/2" SCALE



ON SCHOOL, Rye, N.Y.

Hornbostel, Architect

NEW **CURTIS** **"EYE COMFORT" 5000 SERIES**

LUMINOUS INDIRECT FLUORESCENT LUMINAIRES

Curtis "Tong Hangers"* allow unlimited flexibility in placement of hangers and keep installation cost at a minimum.
*Pat. Applied For

Catalog Number	No. and Type of Lamps
5002	Two, 96", T-12, 72W Slimline
5003	Two, 48", T-12, 40W Bi-Pin Instant Start
5004	Two, 48", T-12, 36W Slimline
5005	Two, 60", T-17, 85W Bi-Pin Starter Type
5007	Two, 48", T-12, 40W Bi-Pin Starter Type
5008*	Four, 48", T-12, 40W Bi-Pin Starter Type
5009*	Four, 48", T-12, 40W Bi-Pin Instant Start
5010*	Four, 60", T-17, 85W Bi-Pin Starter Type

*Two Lamps Parallel.

APPROPRIATE BRIGHTNESS CONTRO

. . . quality lighting with comfortable brigh ness ratios providing . . .

EYE COMFORT

. . . in seeing by scientific shielding, diffusin and distribution of the lamp light through . .

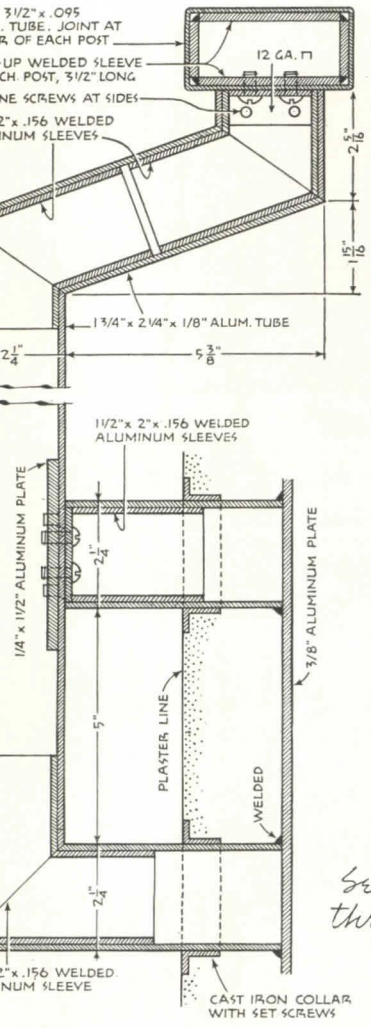
LOW BRIGHTNESS

. . . illumination that gives you lighting com parable to diffused daylight.

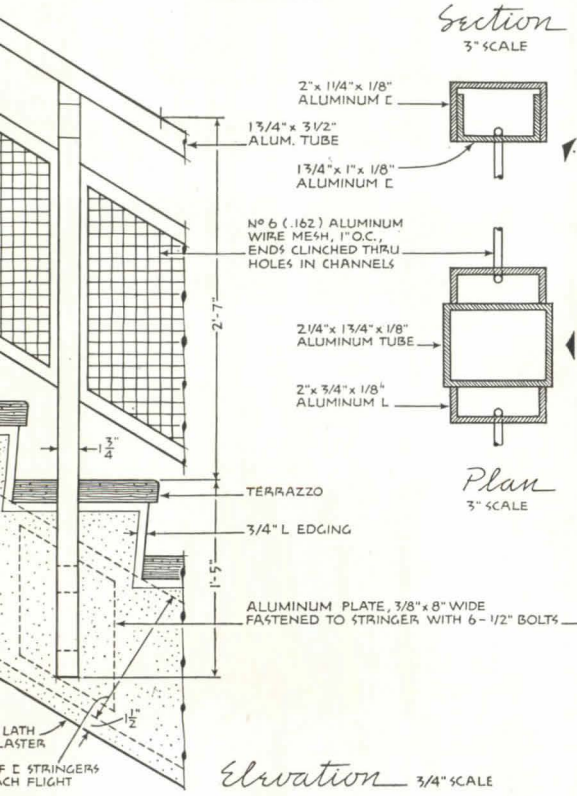
The new luminous indirect "Five Thousand Series has Curtis quality construction an workmanship throughout . . . with wire char nel constructed of heavy gauge steel finishe baked white "Fluracite" enamel. Side panel are fine ribbed durable polystyrene plast to softly diffuse the light and provide low brightness ratios between the ceiling an luminaire. Curtis "Five-Thousand" Seri luminaires are available to accommoda all 4', 5' and 8' fluorescent lamps. Write f descriptive literature.

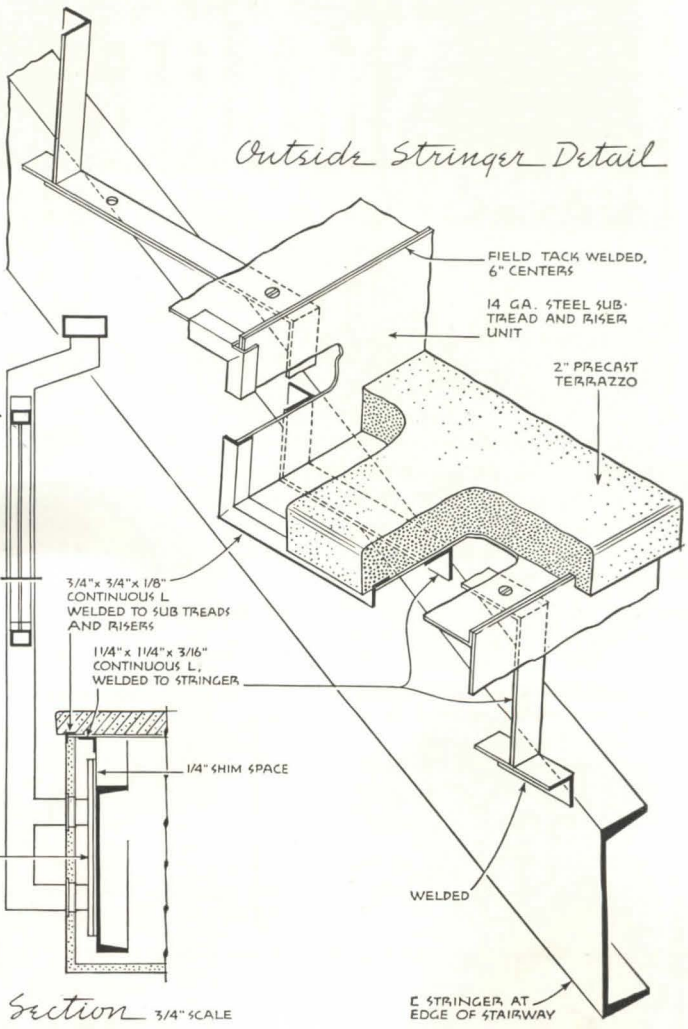
CURTIS LIGHTING, INC.

Dept. H34-20
6135 W. 65th Stree
Chicago 38, Illinois



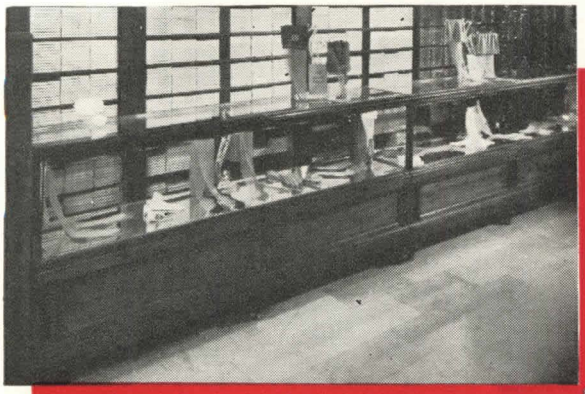
Section thru Post
3" SCALE





DLEY UNIVERSITY LIBRARY, Peoria, Ill.

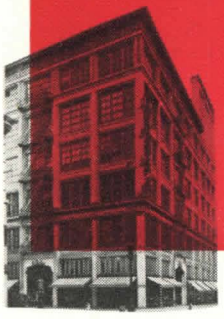
son, Gregg & Briggs, Architects



left: showcases that show their ages

below: the same showcases covered in Vicrtex Madagaska become a striking merchandising success with plenty to offer in the way of eye and buy appeal.

H. Liebes Department Store, San Francisco, makes a . . .



SMART COUNTER MOVE

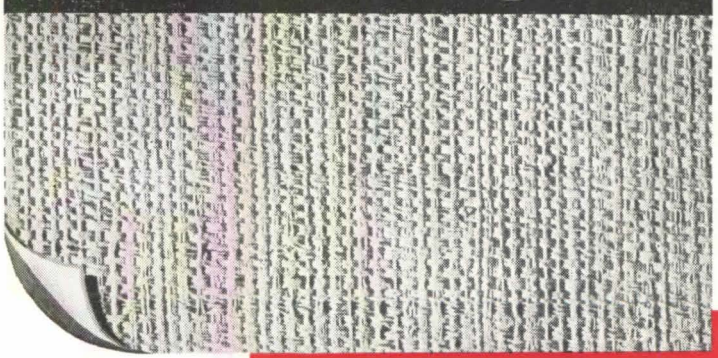
WITH THE YEAR'S BIGGEST DECORATING SUCCES

"Results were striking . . . no sign of any wear . . . very effective . . ." These words from the president of H. Leibes reflect the amazing decorative advantages which Vicrtex offers. The tough wear-resistant textures can be kept bright clean with a damp cloth; light and dark colors are fadeproof; surfaces will not flake, scratch, peel . . . in fact, Vicrtex is practically indestructible!

As the featured decor in any interior . . . as upholstery or wall covering . . . Vicrtex scores an instant success. This remarkable vinyl-fused fabric comes in beautiful deep-molded textures utterly unlike anything you've used before.

SUPPORTED VINYL FILM Needs no backing however used. Always stays soft, supple, pliable.

VICRTEX Madagaska



vicrtex BAMBU

vicrtex TWEED-TONE

Write Today for Swatches, Colors, Prices.

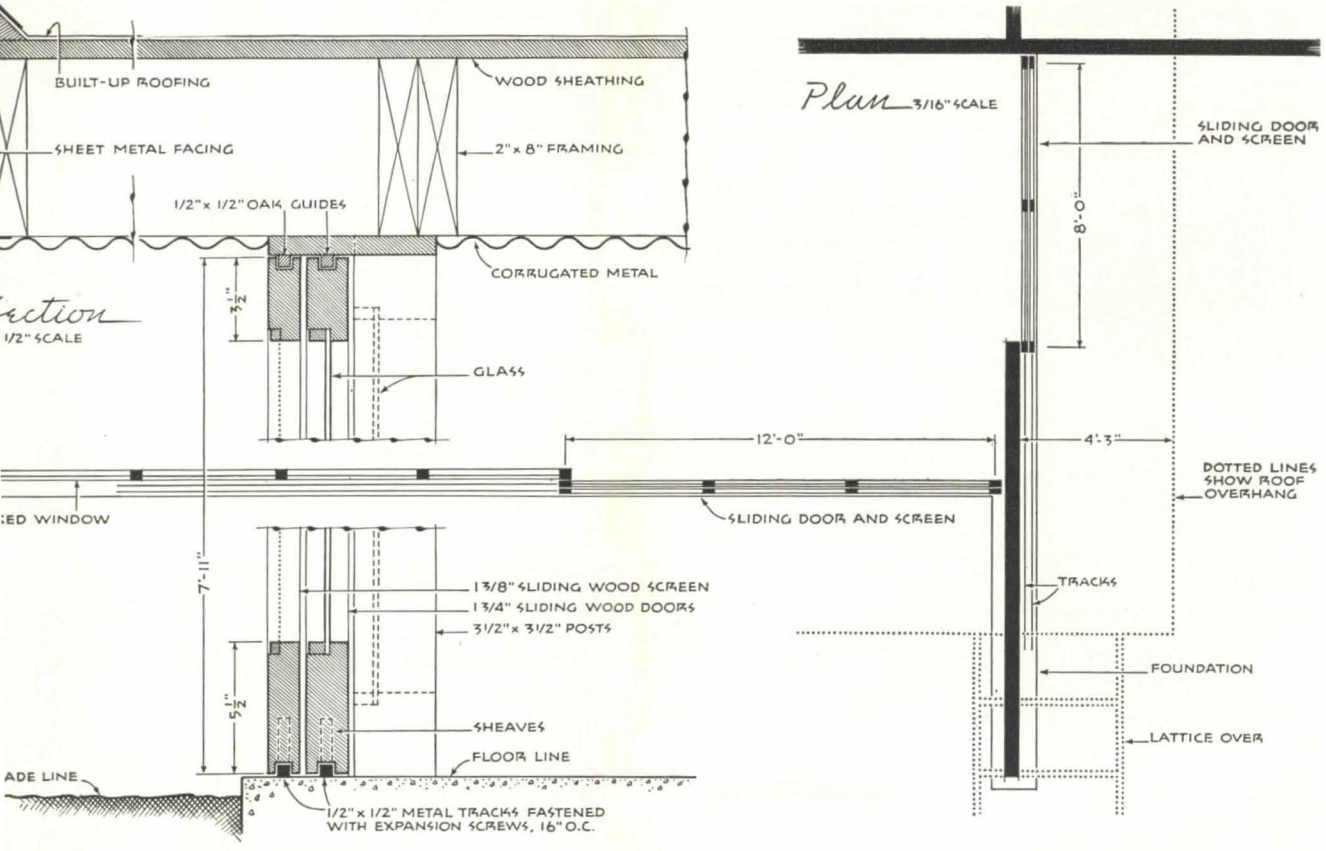
L. E. CARPENTER & COMPANY, INC.

SALES OFFICE: Empire State Building, New York 1 • LOngacre 4-0080

MILLS: Wharton, New Jersey

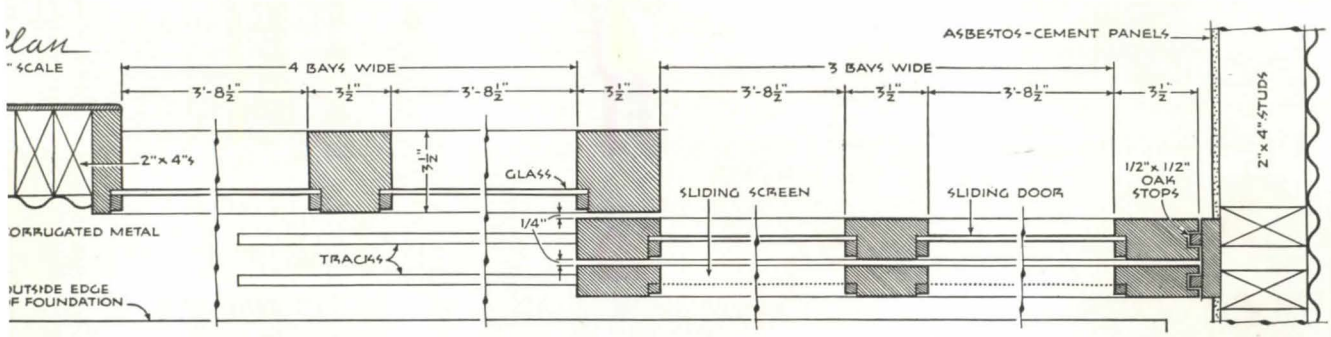
residence: sliding doors

JULIUS SHULMAN



Plan 3/16" SCALE

Section 1/2" SCALE



Plan

" SCALE

ARK RESIDENCE, Palm Springs, Calif.

rk & Frey, Architects

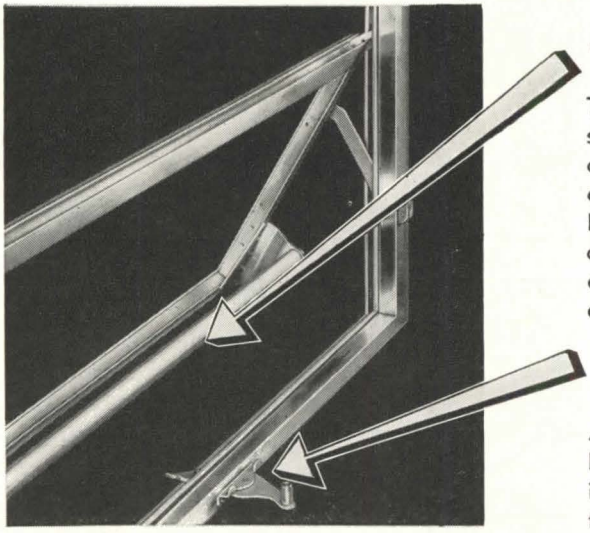
ANOTHER LUDMAN FIRST!

THE NEW LUDMAN Auto-Lok AUTOMATIC LOCKING PATENTED

SCHOOL WINDOW

Designed to meet all school window requirements

Here is a window designed and engineered exclusively to meet all the problems of windows that are operated, regulated and must withstand the abuse in use by school children. Primarily, the advantages of Auto-Lok Windows for schools are better, and more easily controlled ventilation...fresh air *all* the time...even when it's raining...and, positive tight closure to eliminate the "cold zone" around windows. Now, to these outstanding advantages, Ludman Engineering has added a new sturdy control bar for the simplest push-out operation.



New LUDMAN Auto-Lok Control Bar

The simplest operating device ever designed! Quick, safe, effortless opening and closing can be accomplished by the youngest child. Handsome, smooth aluminum alloy bar takes the place of slower turning operator...reduces window operation to absolute minimum. No maintenance, no adjustments ever!

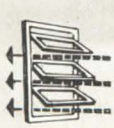
New LUDMAN Auto-Lok Safety-Lock

An improved locking feature that securely locks the bottom vent. Center position makes it handier, more accessible. Extra protection against intruders.

PLUS these famous regular LUDMAN Auto-Lok features . . .

1. FRESH AIR WHILE IT'S RAINING...

No more running to close windows ...rain can't enter through Auto-Lok's scientifically designed slanting vents.



3. COOLER IN SUMMER...

Auto-Lok Windows open widest... almost 90°. The slanting vents help to scoop in even the slightest breeze...always inward and upward thus eliminating drafts.

5. EASIEST, QUICKEST WINDOW TO CLEAN

Nothing to lift out...no sash to remove...no gadgets to disengage. *Simply open wide* and clean all glass from the inside...top vents, too!

2. WARMER IN WINTER...

Auto-Lok Windows are the tightest closing windows ever made by actual laboratory tests. Heat stays in...cold stays out...cutting fuel costs!

4. HANDSOME INTERIORS & EXTERIORS

Narrow horizontal lines and graceful tilt of vents in every open position add distinction to any school building.

6. COMPLETELY CONCEALED HARDWARE

No unsafe, unsightly mechanism exposed to collect dust. Compact roto-type operator handle does not interfere with blinds or other window furnishings.

LUDMAN LEADS THE WORLD

New OPERATIONAL EASE!

Now, windows so simple and easy to close, the youngest child can manage them. Just push-out or pull in. Opened fully or only a fraction vents stay put in any position.

New INSTANTANEOUS WEATHER CONTROL!

All vents can be opened fully or closed as tight as a refrigerator door, *in less than one second.* Nothing to crank...the Control Bar opens and closes all vents.

Absolutely INJURY-PROOF!

Completely concealed and enclosed Ludman Auto-Lok operating mechanism provides "weightless balance" for every vent. Nothing to jam fingers or catch clothing. No straining.

New VANDAL PROTECTION!

Patented, automatic-locking Ludman Auto-Lok hardware locks each vent separately and independently. New Center Latch locks bottom vent after all other vents lock automatically. *Auto-Lok Windows cannot be forced open from the outside!*

New MAINTENANCE ECONOMY!

Now, windows that are positively "student-proof!" No parts to work loose...no operator handles to become bent or broken...no gears to become stripped. No adjustments or replacement of any part of the Ludman Auto-Lok operating mechanism necessary *ever!*

Lifetime TROUBLE-FREE OPERATION!

Auto-Lok Windows are the finest windows ever made for schools. They are the result of years of special research and study of school window problems, and are guaranteed to last a lifetime under the most severe school usage.

MAIL THIS COUPON *today*

ARCHITECTS: Write for complete information and specification before you plan another school!

CONTRACTORS & ENGINEERS: Find out why Ludman Auto-Lok Windows for Schools are easier, quicker to install!

SCHOOL BOARD MEMBERS: You can't afford not to get all the facts about this new Ludman Auto-Lok Window, designed exclusively for schools!

LUDMAN CORPORATION
P. O. Box 4541, Dept. PA8, Miami, Florida

Gentlemen:
Please send me, at once, complete information regarding the new, revolutionary Ludman Auto-Lok Window for Schools.

And, where can I see this new window?

I am:
- ☐ an Architect
- ☐ an Engineer
- ☐ a Contractor
- ☐ School Board Member

NAME _____

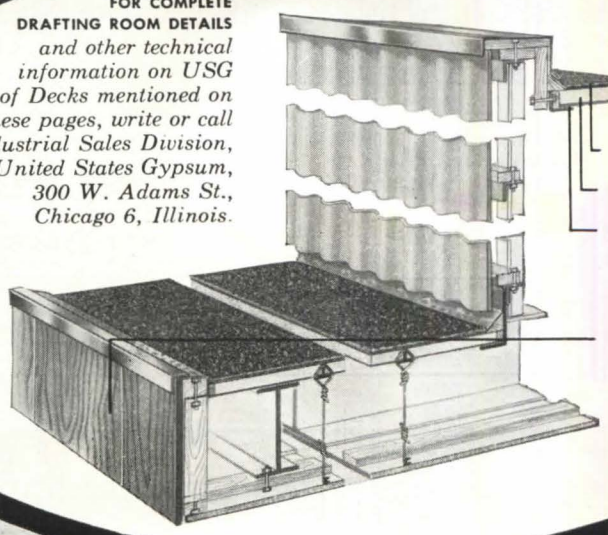
COMPANY OR SCHOOL BD. _____

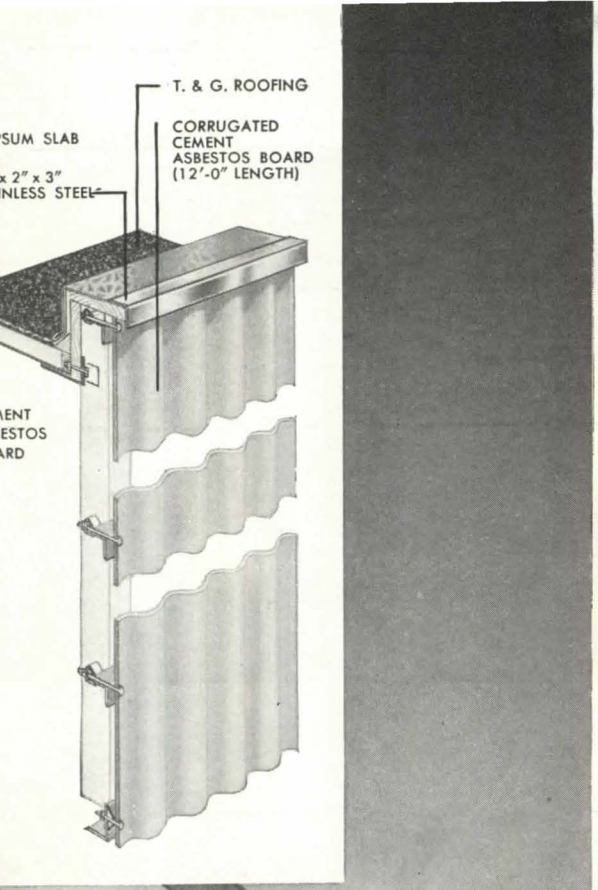
ADDRESS _____

CITY _____ STATE _____

N WINDOW ENGINEERING

FOR COMPLETE DRAFTING ROOM DETAILS
and other technical information on USG Roof Decks mentioned on these pages, write or call Industrial Sales Division, United States Gypsum, 300 W. Adams St., Chicago 6, Illinois.





	Concert Pavilion, Ravinia Park, Ill.
architects	Holabird & Root & Burgee, Chicago
roof deck contractor	Anning-Johnson Co. Inc., Chicago

no question here . . . it's a

PYROFILL* GYPSUM ROOF DECK

Good reason why architects Holabird & Root & Burgee specified a Pyrofill Gypsum Poured-in-Place Roof Deck for the distinguished concert pavilion at Ravinia Park, near Chicago Many good reasons, in fact.

Directors of the famous Ravinia Music Festival had seen their previous structure burn, so they were especially fire-conscious. Economy was a factor—the more money saved in building, the more available to attract top artists. And, of course, the airy, open design called for a *lightweight* roof deck.

So, on every count—*gypsum was the choice:*

IT'S FIREPROOF . . . actually fights fire, through release of inherent moisture.

IT'S ECONOMICAL . . . a crew of 10 to 12 men can pour up to 10,000 sq. ft. per day.

IT'S LIGHTWEIGHT . . . generally lighter than other incombustible roofs. Yet it's strong.

IT'S ADAPTABLE . . . conforms readily to flat, curved or pitched roofs.

Add these facts—and you will readily see why more and more leading architects are specifying USG Pyrofill Poured-in-Place Roof Decks. Why not specify gypsum for *your* next building project?

No Question About Any Roof Deck—When it's Gypsum!

SHEETROCK*-PYROFILL*

WEATHERWOOD*-PYROFILL,
where insulation is a factor.

METAL EDGE PLANK

SHORT-SPAN TILE

*T. M. Reg. U. S. Pat. Off.

USG
Reg. U.S. Pat. Off.
UNITED STATES GYPSUM

UNITED STATES GYPSUM

The Greatest Name in Building

"They never go home! It's Honeywell Controlled"

The *best* way to assure comfort in any building is to insist on Honeywell controls.

If you have a control problem, Honeywell can help provide the proper thermal environment for any client—anywhere—in any kind of structure.

A large staff of well-informed control engineers—in 96 different Honeywell offices across the nation—are experienced in doing just that. Or—there's a lot of literature that's yours for the asking—on the automatic control of heating, ventilating and air conditioning.

So, why not *talk to Honeywell?* Why not *write to Honeywell* about *your* control problem? And why not do it *now?*

H HONEYWELL

For help with any con
problem, talk to Honeyv

Consult your nationwide "Honeywell Staff" for help with any control problem

In planning schools, factories, offices and other large buildings, no doubt you run into this problem:

What's the best way to get coordinated technical help with control systems—for temperatures, ventilation, air conditioning, refrigeration, industrial process?

The answer is simple:

Call in your local Honeywell representative.

He can give you unbiased advice on types of equipment, because he has a complete line of controls—pneumatic, electric, electronic. And to help you meet special problems, he can bring in specialists from any of the 96 Honeywell offices.

And, too, when you *standardize on Honeywell,* all control applications, including air conditioning, radiator, refrigeration, boilers, can be specified as one project. And you'll be designing an integrated system that can be periodically serviced and adjusted, simply by consulting one company. The Honeywell service organization—with its wide scope and flexibility—is positive assurance that your controls will perform at maximum efficiency for a lifetime.

So plan to standardize on Honeywell. See your local Honeywell representative. He's the key man on your nationwide "Honeywell Staff."

MINNEAPOLIS
Honeywell

H HONEYWELL

First in Controls

y never go home—(your firm name)
gned the building.

E! *Personalized cartoon. For 8½" x 9" reproduction of Crockett Johnson cartoon (incorporating your name or the e of your firm), fill out and mail coupon today.*

MINNEAPOLIS-HONEYWELL REGULATOR CO.
Dept. PA-8-190, Minneapolis 8, Minnesota

Gentlemen:

Please send me a free, personalized reproduction of the Crockett Johnson cartoon, inscribed with this name:

_____

Please send me the name and address of my nearest Honeywell representative.

*Name*_____

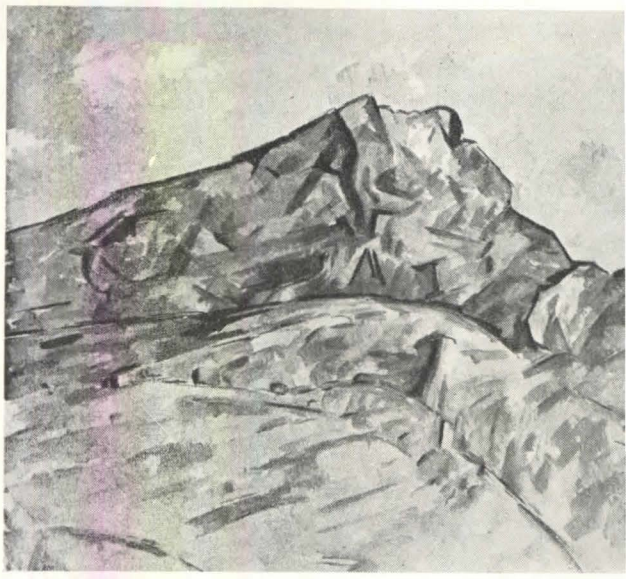
*Firm Name*_____

*Address*_____

*City*_____ *Zone*_____ *State*_____

The Heritage of Cézanne

(Continued from page 104)



The Sainte Victoire at Early Morning—PAUL CÉZANNE, *1898*

Maison Du Peuple—VICTOR HORTA, *Brussels 1898*

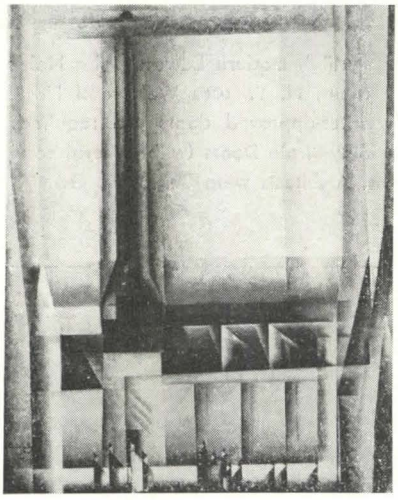
It was as if the spirit of painting had suddenly take from the familiar surface of the earth into unknown s guided only by the principles of *inner* vision and craftsmanship.

The silent brotherhood of geniuses is based on phenomenon that it is given to them to express the ye formed aspiration of their times, visualizing cross cur that are active below the dominant static concept. Wit being aware of it, Cézanne expressed two-dimensio what a handful of revolutionary architects had tried t press in building. After 1880, a new architecture had st in England, Belgium, and France, known as "Art Nouv that protested, in the words of one of its founders, H Berlage, "against sham architecture in which lying i rule, truth is the exception." In 1898, the same ye which Cézanne painted one of the many interpretatio "Mt. Ste. Victoire," Victor Horta gave to this move its most mature form in the "Maison Du Peuple" in Bru

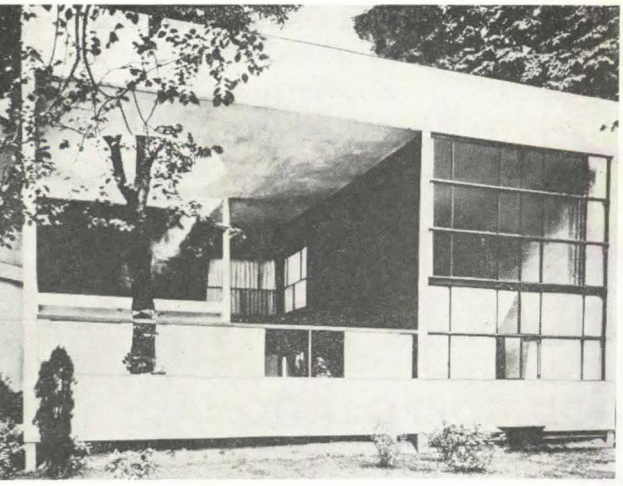
hich a contemporary critic wrote: "No detail derives anything at all in existence. It has the pure charm of , curves, and surfaces . . ." For the first time since , when Brunelleschi decided to put the coffins of Flor- ıe merchants by the name of Pazzi behind the portico Roman prostyle temple, the façade had been swept . In Berlage's buildings the inner structure is revealed, the social purpose had broken through the encircling s.

ıe implications of this revolution were tremendous. ıitecture after 1900 became a contest between academic ns, judging visual creation by didactic rules; and in- ıdual responsibility of the free creator. Today, at the -way mark of the new century, there can be no doubt the battle of Cézanne and Berlage has been won. Indi- al vision has been victorious. At no other time in his- has the dynamic and experimental character of visual ession been so wholly recognized. But, in spite of the rsity of form produced by this revolution, there always

(Continued on page 139)



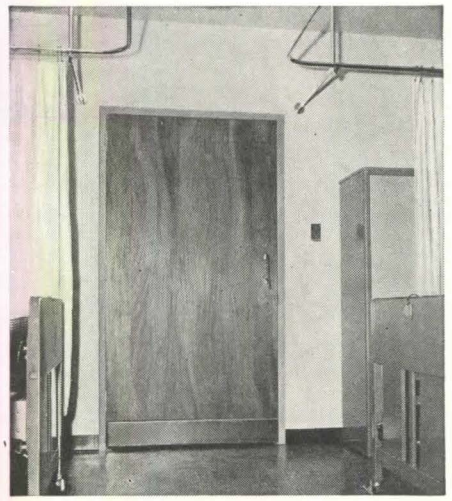
Gelmeroda VIII—L. FEININGER, *1921*



Pavillon Esprit Nouveau—LE CORBUSIER, *Paris 1925*

When you want *Beauty*
and must have *Safety*
specify

WELDWOOD® FIRE DOORS



Here's an absolutely fire-safe door that's also a decorator's delight. It gives you permanent fire protection *plus* the rich beauty of real wood . . . at a moderate price!

The Weldwood Fire Door... with its incombustible mineral core and fireproofed edge bandings . . . carries the Underwriters' Label for class "B" openings. You can specify it with absolute assurance of approval.

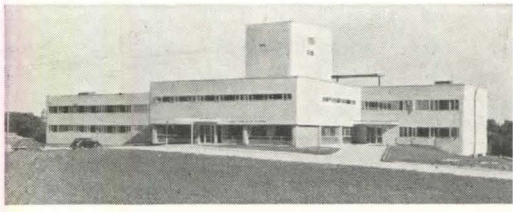
The unique construction of the Weldwood Fire Door also gives you exceptional strength, durability and dimensional stability. These doors are amazingly light in weight and are vermin- and decay-proof.

And the handsome hardwood facings help you to carry your decorative theme throughout an entire building. Standard facings are birch, but a wide variety of other hardwood veneers may be had on special order.

Weldwood Fire Doors are available in a wide range of sizes . . . up to 4 feet wide and 7 feet high. They also have the Underwriters' approval to carry light openings 10 inches square.

• • •

United States Plywood Corporation carries the most complete line of flush doors on the market including the famous Weldwood Fire Doors, Weldwood Stay-Strate Doors, Weldwood Staved Lumber Core Doors, Mengel Hollow-core Doors, Mengel and Algoma Lumber Core Doors, 1⅜" and 1¾" with a variety of both foreign and domestic face veneers.



The beautiful, modern Edward John Noble Hospital Gouverneur, N. Y., uses Weldwood Fire Doors wh Underwriter-approved doors are required, and We wood Stay-Strate Doors (with mineral core) in other cations. Architects were Skidmore, Owings and Mer

WELDWOOD STAY-STRATE DOORS

(with mineral core)

Similar to the Weldwood® Fire Door, but without the fireproofed edge banding. This door does not have the Underwriters' Label, but the incombustible mineral core gives it a high degree of fire protection. The Stay-Strate Door is recommended for use where a labeled door is not specified, but where fire resistance is a desirable extra advantage. Same wide variety of beautiful hardwood facings . . . imported and domestic . . . to choose from.

Weldwood®

WELDWOOD Flush Doors

Manufactured and distributed by

UNITED STATES PLYWOOD CORPORATION

Largest Plywood Organization in the World

55 West 44th Street, New York 36, N. Y.

Branches in Principal Cities • Distributing Units in Chief Trading Areas • Dealers Everywhere

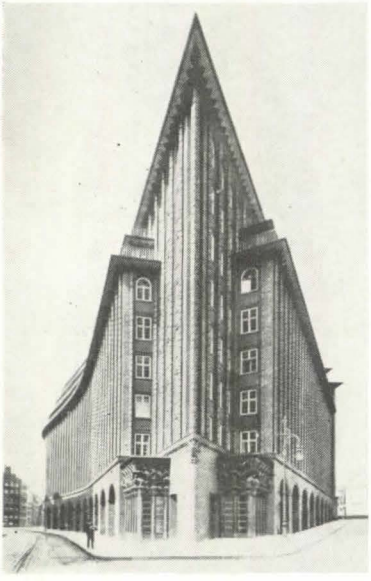
'be Heritage of Cézanne

ıtinued from page 137)

ıained one common denominator: *ıcture as the basis of vision*. Whether was Guimard's overflowing orna-ntation or the regionalism of Frank ›yd Wright's Prairie Houses, the hing curves of Futurist painting or dissections of Cubism; architecture l painting were both conceived as *tonic*, they were form in progress.

Twenty-five years after the initial tement, architects created the re-ional house freed from the cell-›ck concept, and secure in the inter-play of enclosed and natural space. And painters—Mondrian, Delauney, Feininger—translated the same relationships on the two-dimensional canvas. Both architect and painter, owed everything to Cézanne. It was he who had preserved the ancient marriage between building and painting. The same conceptual unity that existed between an Egyptian wall-painting and the severe angularity of the grave chamber, relates Hoger's expressionistic brick architecture to the paintings of Kirchner, Marc, and Kokoschka; or the Gothic of the Chicago Tribune Tower to Grant Wood's streamlined archaism.

(Continued on page 140)



ile House—FRITZ HOGER, *Hamburg 1923*

The Tree—E. L. KIRCHNER, *1920*

The Heritage of Cézanne

(Continued from page 139)

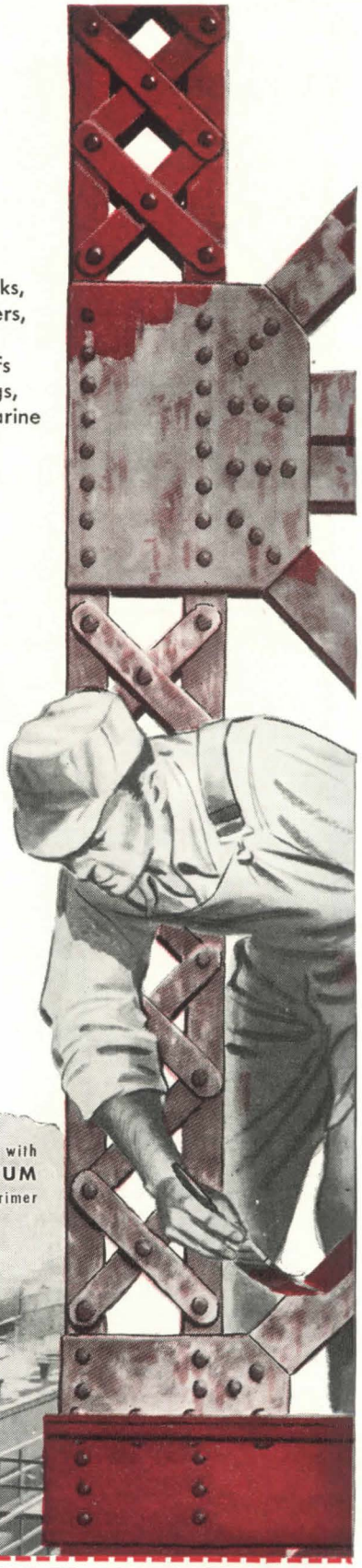
The heritage of this visual interdependence is so old in man that it has become part of his instinctual approach to the optical world. Man needs to relate what he sees: to symbolic content in the past, and to light, color, and form relationships in the present. But the visitor to the "Fifteen Americans" in the Museum of Modern Art, finds himself deprived of this guidance. Room after room, he is confronted with inarticulate outcries of tortured bewildered individuals, splashed on canvases of enormous size. The Representational Expressionism of the early 20th Century has been replaced by a totally unformed color language that serves only one purpose: to project the painter's most intimate emotions. The mechanics of color application, such as the flow of oil paint from a can, in the work of Jackson Pollock; or the meandering path of pigment, mixing with water (according to chance) in the colored chalk and casein pieces of Edward Corbett; or the impasto, squeezed heavily on the canvases of Clifford Still; have become self-purposive. The guiding principles of plan and preconcept are negated, and if there is depth in this passion, it is the deep passion of total abandonment to chance. Sigmund Freud, at the dawn of the psychoanalytical era, had conceived of the subconscious chaos in man as something evil and destructive that had to be brought to the surface to be healed by reason. Abstract expressionist painting, fifty years later, gropes for *glorification* of the subconscious chaos as the only creative and vital substance left in modern man. The subconscious, once it has been declared supreme, absolves man of all rational responsibility. It guarantees, above all, freedom from value judgments.

When Paul Cézanne destroyed the Academy, he put in its place the asceticism of the genius who follows a discipline that is infinitely more severe and binding than any academic stric-

(Continued on page 142)

STOP RUST! with RUST-OLEUM

Protects Tanks, Pipes, Girders, Metal Sash, Fences, Roofs and Buildings, Rail and Marine Facilities



BEAUTIFY AS YOU PROTECT—ALL COLORS, ALUMINUM AND WHITE!

RUST-OLEUM may be applied directly over *rusted surfaces without removing all the rust!* Just remove rust scale and loose particles with wire brush and sharp scrapers . . . then apply by brush, dip, or spray. Costly sandblasting and chemical pre-cleaning are not usually required. Easy as that to cut your maintenance costs. Specify **RUST-OLEUM** to your painting contractor or architect for *every rustable* metal surface! Prompt delivery from Industrial Distributor stocks in principal cities.

RUST-OLEUM CORPORATION
2524 Oakton Street • Evanston, Illinois

FREE SURVEY: A **RUST-OLEUM** specialist will gladly survey your rust problems. He'll make specific tests and recommendations. No cost or obligation. See Sweets for complete catalog and nearest **RUST-OLEUM** distributor, or write for literature on your company letterhead.

Stopping Rust with
RUST-OLEUM
769 D. P. Red Primer

CLIP THIS TO YOUR LETTERHEAD
MAIL TO: RUST-OLEUM CORPORATION
2524 Oakton Street • Evanston, Illinois

- ☐ Have a Qualified Representative Call
- ☐ Full Details on Free Survey
- ☐ Complete Literature
- ☐ Nearest RUST-OLEUM Source

Look for this label — be sure it's genuine RUST-OLEUM

The Heritage of Cézan

(Continued from page 140)

tures. It was the weight of *this* sponsibiliy for "the new way he l taken," the awareness of being pointer whom others will follow" t constitutes the tragic element in zanne's life. The artist of our c time acknowledges nothing by way responsibility, except the right to press himself. The cryptographic p trait of his agonized ego superse all other value judgments that mi come from the public, unless the ar succeeds in blackmailing this pul into consent. Mark Rothko, referr to one of his color deliriums, meas ing sometimes 81 by 66 incl laments in the catalogue of the "*teen Americans*" that "it is therefor risky act to send it out into the wo How often it must be impaired by eyes of the unfeeling and the crue of the impotent, who would exte their afflictions universally!"

Afflicted with cruelty and impoten the helpless museum visitor reme bers, before Rothko's sacrificial of ing, Cézanne who "killed himself, c ering twenty inches of canvas," whose most brutal punishment for labors was a deadly self-criticism. feverish criss-cross strokes of Wal Tomlin, starting and ending nowh in their nervous haste across a muc canvas; the candy-colored amoebae William Baziotes, self-consciously titled "Cat," or "Jungle," or "Dwar as if there were a common denomi tor of recognition; and, above all, pigmentations of Clifford Still, cov ing 10 by 13 feet surfaces with une black, interrupted only by one p cious wavering hairline, leave sick with shock. If painting is mirror of the contemporary soul, w has become of us?

Outside the Museum, against illuminated city sky, rise the mo ments of contemporary architectu With all their inconsistencies and f ings, they are testimony of a concept of individual freedom of pression and communal service purpose. When the painter stop

(Continued on page

Without Compromise Young America's Eyes Deserve the Finest Lighting

eyes come first with new BENJAMIN "Grid-Lite" system

translucent diffuser shields provide more comfortable seeing . . . meet Educators' demand for an atmosphere that inspires attentiveness, eliminates distractive contrasts and promotes voluntary concentration.

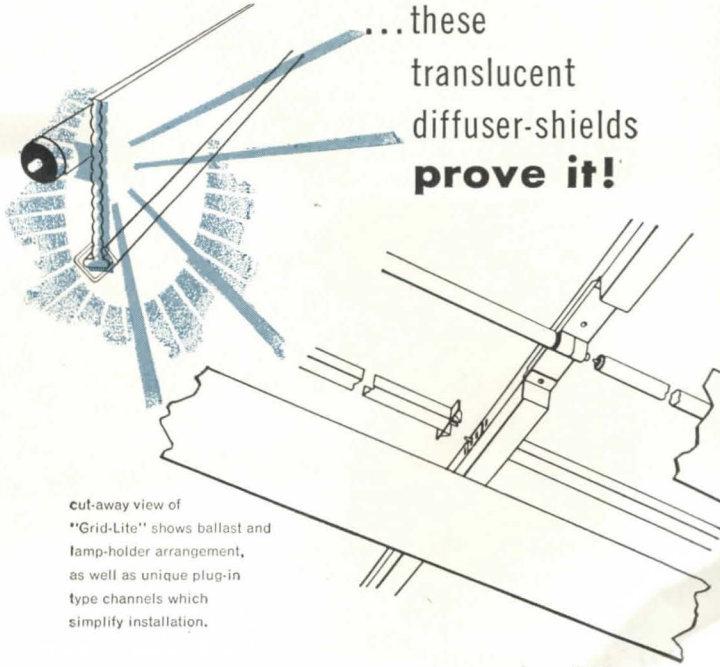
ınslucent diffuser shields are the answer to MORE LIGHT . . . as much as 10% MORE LIGHT than with opaque louvers . . . and, combined with "Grid-Lite" System, up to 50% MORE LIGHT than conventional luminaires!

Benjamin engineers designed "Grid-Lite" with but one objective: better comfort-brightness balance and more light. This is the kind of light educators have long sought . . . there can e no compromise in attaining it. That is why "Grid-Lite" utilizes translucent, ribbed polystyrene diffuser shields, instead of less ficient opaque shields, louvers or other shielding media. Benjamin diffuser-shields actually *raise the total usable light* on the working surface, while providing a new high in comfort-brightness balance through greater light diffusion and 45° lamp shielding.

Young America's eyes deserve this kind of restful, diffused light. It promotes concentration and attention . . . it eliminates disturbing contrasts that develop glare, germinate unrest and carelessness . . . it creates a stimulating atmosphere conducive to better study habits.

It is because SEEING is youth's main gate to knowledge, that EYES COME FIRST with "Grid-Lite"! For further details and lighting data, write for FREE "Grid-Lite" Bulletin, AD 5880, just published. Benjamin Electric Mfg. Co., Dept. P.A., Des Plaines, Ill.

. . . these translucent diffuser-shields **prove it!**



cut-away view of "Grid-Lite" shows ballast and lamp-holder arrangement, as well as unique plug-in type channels which simplify installation.

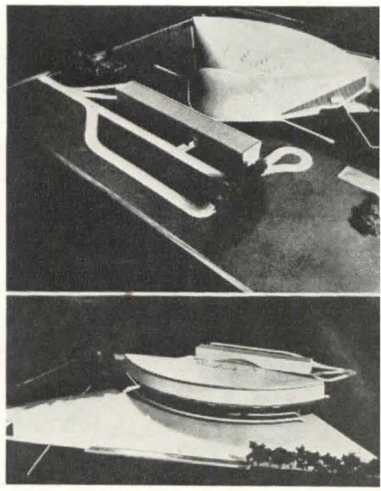
B6027

The Heritage of Cézanne

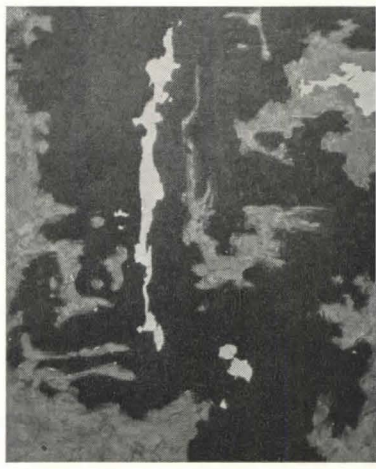
(Continued from page 142)

being "the conscience of his time," the architect remained conscious of his world-binding mission. No matter how short they fell of their intentions, the best architects, here and abroad, were inspired by a vision of the ultimate structure of a better human society.

For the first time in the history of our civilization, painting and architecture feed from different sources and aim at opposite goals. Architecture is proud of its function as a mass medium; the modern painter, on the other hand, is proud of his impenetrable



Auditorium of The City of Buenos A
EDUARDO CATALANO AND ASSOCIATES,



Oil Painting—CLIFFORD STILL, *1949*

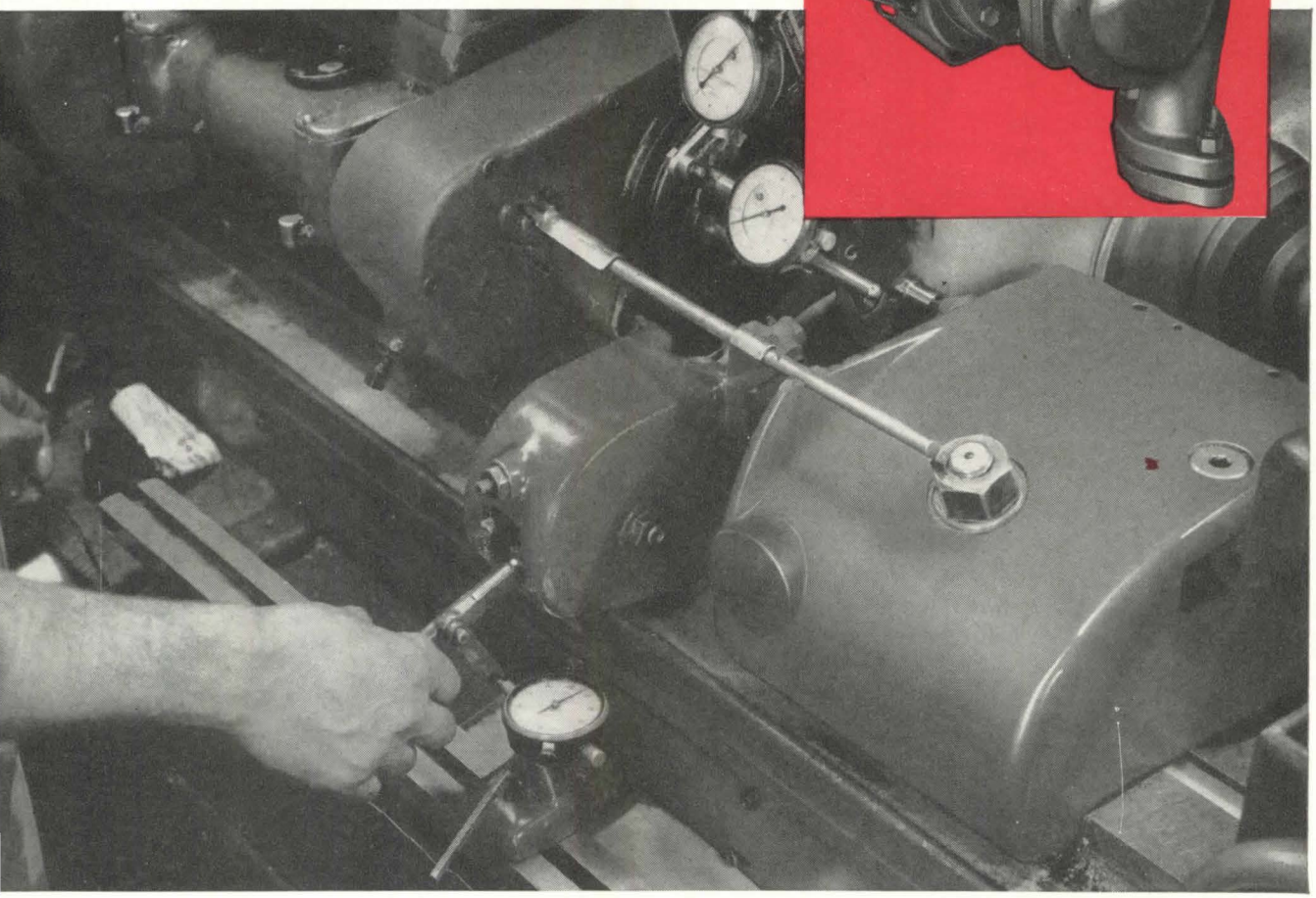
isolation. Like a mad caller, he the telephone line before startin speak or (which is the same th before hanging a picture on a mu wall. And yet both the architect the painter are the direct heirs of Cézanne. When he gave to man the "substructure of things," it given indifferently, for better o worse, like the Apple of Knowled Adam and Eve. Its worth depe entirely on the responsibility o interpreter, or, in Frank L Wright's words, "on the severe pline of a great ideal." It was modern architect who kept faith this command; and it was the m painter who abandoned it. It is him to recover the dedicated obse that surmounts all personal li

(Continued on pag

Why you should specify...

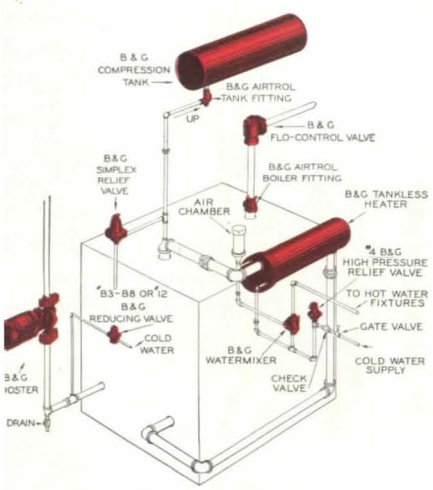
B&G *Hydro-Flo* BOOSTER

Better design . . . fine workmanship make this the *preferred* pump for forced hot water heating systems.



Reg. U. S. Pat. Off

Precise to .0005 of an inch



& G *Hydro-Flo* Products offer everything you need r forced hot water heating systems and domestic water eating. Look for the B & G label—symbol of quality.

Here you see one of the reasons *why more B & G Boosters are sold than all other heating system circulators combined!*

You are looking at the final finishing operation in producing Booster pump shafts. All shaft dimensions are maintained within .0005 inch limits with these extremely accurate grinders. Note the micro-gauges. One indicates the surface flatness of the thrust collar, one the diameter of the shaft and the third is used to position the work in the machine. When finished, Booster pump shafts are mirror smooth and exactly uniform!

All Booster parts are made with similar attention to the quality of workmanship. That's why B & G Boosters are setting records for long, *quiet* and dependable performance. Thousands have been in operation for many years *without need for service of any kind!*

BELL & GOSSETT
COMPANY

Dept. CP-37, Morton Grove, Illinois

Canadian Licensee: S. A. Armstrong, Ltd., 1400 O'Connor Drive, Toronto, Canada

The Heritage of Cézan

(Continued from page 144)

tions, to achieve pure visual relat ships.

"The planes must be seen . . . Cl ly, honestly . . . But to join and weld them! They must revolve interconnect at the same times. I only planes and volumes that matte This is the common denominator art and architecture as stated in 1 by Paul Cézanne. It is our tradit and it must become a new beginnin our civilization is to survive.

NOTICES

change of address

JOHN W. GREINER, Architect, has rem from COLEMAN, GREINER & COLEMAN, L ville, Pa., to his own office, 23 E. Orang Lancaster, Pa.

CHARLES O. MATCHAM, Architect, anno the recent move of his offices to 621 S. St., Los Angeles 17, Calif.

Recent expansion and reorganization in firm of DONALD BEACH KIRBY & THOMA MULVIN, Associated Architects, has result the removal of their office to 109 Steve St., San Francisco, Calif. Also a change o name is announced as follows: DONALD B KIRBY, THOMAS B. MULVIN & ASSOCI Architects & Engineers. Ralph B. Priestly, tect; Ted Moulton, Architect; and Baird He Civil Engineer, are the Associates. All arc members of the firm are members of the

As of April 1, 1952, the office of S. S. E BERG, architects-engineers, will be locat Room 511, 739 Boylston St., Boston, Mass

The office of ROBERT E. ALEXANDER, is now located at 2379 Glendale Blvd Angeles 39, Calif.

NAT S. SACHTER, Engineer, announces t moval of his office to suite 108 Goby 1321 Bannock St., Denver 4, Colo.

BROOKLYN
was "unprintable"

ecently, The Consolidated Edison Company (in ew York City) faced this problem: It had to pro- ce a direct-process print from each one of more an ten thousand Brooklyn Underground Record aps, showing the distribution system of electric rvice.

But satisfactory prints could not be produced rectly from these maps. They were up to 30 years d . . . had been referred to constantly . . . and as a sult were soiled, stained, creased, and "dog-eared."

What to do? Retracing was out of the question, ce it would take a draftsman from two to three ys to trace and check just one of these 17″ x 25″ awings.

Kodagraph Autopositive Paper was the speedy, economical solution

th this revolutionary photographic intermediate paper, proximately 40 sharp and clean "duplicate originals" ild be turned out in an hour. *Yes, 40 in an hour* because

Kodagraph Autopositive Paper produces positive copies directly—without a negative step, without darkroom handling. At the same time, it drops out stains, creases . . . cleans up backgrounds . . . transforms weak detail into dense photographic black lines. Furthermore, Autopositive Paper can be exposed in standard print-making equipment . . . and processed in standard photographic solutions.

Thus, Consolidated Edison obtained—*in record time and at minimum cost*—a complete set of duplicate originals, which were used to produce the required direct-process prints . . . and were then filed away for future reference work and print-making needs.

Kodagraph Autopositive Paper

"THE BIG NEW PLUS" in engineering drawing reproduction

arn in detail all the ways you n save with Kodagraph Auto- sitive Paper—the revolutionary otographic intermediate mate- l which you, or your local blue- nter, can process *quickly* . . . *nomically . . . at low cost.* Mail pon today for free booklet!

EASTMAN KODAK COMPANY
Industrial Photographic Division, Rochester 4, N. Y.

Gentlemen: Please send me a copy of "New Short Cuts and Savings"... describing the many savings Kodagraph Autopositive Paper is bringing to industry.

Name_____ Position_____
(please print)

Company_____

Street_____

City_____ Zone_____ State_____

Kodak
TRADE-MARK

books received

Code Manual for the State Building Construction Code. State Building Code Commission, 1740 Broadway, New York 19, N. Y., 1952. 300 pp., illus. $2

Symmetry. Hermann Weyl, Princeton University Press, Princeton, N. J., 1952. 168 pp., illus. $3.75

Structure in Building. W. Fisher Cassie and J. H. Napper, The Architectural Press, 13, Queen Anne's Gate, S.W. 1, London, England, 1952. 266 pp., illus. 30s

Creating an Industrial Civilization. A Report on the Corning Conference, Edited by Eugene Staley, Harper & Brothers, 49 E. 33 St., New York 16, N. Y., 1952. 368 pp. $4

Sunset Ideas for Cabins and Beach Houses. Lane Publishing Co., Menlo Park, Calif., 1952. 112 pp., illus. $1.50.

Low-Rent Asian Housing. J. W. Dark, Orient Publishing Co., Inc., Printing House, Duddell St., Hong Kong, China, 1952. 121 pp., illus. HK$10.

valuable source

Lettering Art in Modern Use. *Raymond Ballinger. Reinhold Publishing Corp., 330 42 St., New York 36, N.Y., 246 pp., illus.*

Here is an imaginatively conceived and h somely produced volume on the history application of letters and lettering. It is wr by an authority who has taste, breadth view, and an excellent sense of selec Though addressed primarily to designers lettering students, the book contains much can be of inspiration to architects, artists, ty raphers, advertising agency men, and others whose work is related to the gra arts. In content and format, it is worth e penny of its price. In fact, it will be v far more to those specialists or students ease their labors with "swipe" files and aids to plagiarism.

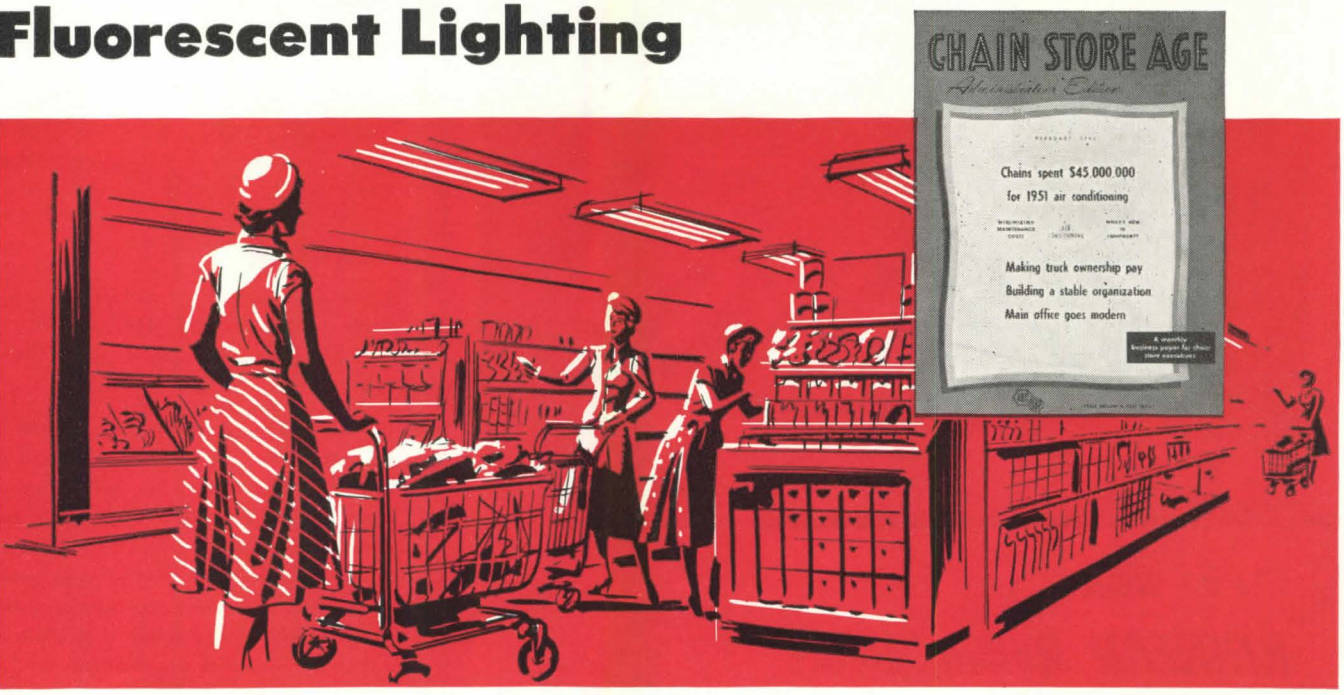
Ballinger, Director, Department of Adv ing Design, Philadelphia Museum Schoo Art, and a well-known designer in his right, covers letters and lettering from ea times to the present. Wisely, he touches briefly on the actual mechanics of letterin there is a number of good manuals on subject. However, he explains in text (ac panied by hundreds of first-rate examples fine points which create letter designs of tinction, strength, subtlety, or combinatio the three, whether the design be an in Roman initial, a medieval manuscript lo case letter, a wood type-block used on theatrical handbills, a modern Stymie chara or flowing script. For the student, there several tissue overlays to show how good de may be arrived at through proper balanc stroke widths, serif treatment, and spacing "color").

The author's text is, for the most part, s clear, and refreshingly free from the obv He has done an admirable job of organiza considering the time-span covered, the n kinds of lettering discussed, and the nume geographical areas which have produced su examples. The captious might remark that inger has covered too much ground at the s fice of more examples in each of the categ covered, such as posters, letterheads, pac labels, and (of particular interest to archi and draftsmen) display lettering on build In any case, Ballinger should be thanked fo delightfully varied illustrations he has prov —after all, he had to draw the line somewh

The publishers have been generous

(Continued on page

Chain Store Age Recommends CERTIFIED BALLASTS for Fluorescent Lighting



CHAIN STORE AGE, in advising chain store operators on their selection of fluorescent lighting equipment, said:

"The ballast is the heart of a fixture. The surest way to choose a ballast is to look for the Certified shield . . . it is the only assurance of long lamp life. Inferior ballasts delivering wrong wattages result in low light output."

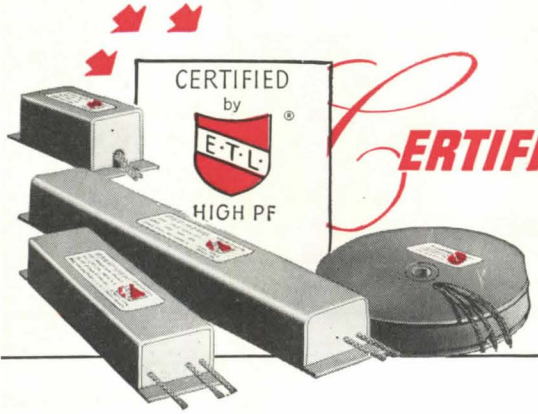
Experience has proved that CERTIFIED BALLASTS assure:

Full Lamp Life **Rated Light Output** **Maximum Ballast Life**

CERTIFIED BALLASTS are made to precise specifications, then tested by Electrical Testing Laboratories, Inc., which certifies they conform to these high standards.

Write for complete information on the types of CERTIFIED BALLASTS available from each participating manufacturer.

Participation in the CERTIFIED BALLAST program is open to any manufacturer who complies with the requirements of CERTIFIED BALLAST MANUFACTURERS.



CERTIFIED BALLAST MANUFACTURERS

Makers of Certified Ballasts for Fluorescent Lighting

2116 KEITH BLDG., CLEVELAND 15, OHIO

REVIEWS

(Continued from page 148)

color, and what must have been their insiste on the best engraving work is evident on e page. This reviewer has only one regret: came to the end of the volume too soon.

HARMON TUR

patio design

Sunset Patio Book. *Lane Publishing Compa Menlo Park, Calif. 1952. 176 pp., 250 ph and drawings. $2.00 (or a library edit $3.00)*

For years, the publishers of *Sunset,* the W Coast home and garden magazine, have b publishing "how to" and "idea" books home owners—on cabins, barbecues, fe and walls, etc. Now added to this exten list is a handsomely illustrated book cove every phase of patio design and construct Also included are planting suggestions instructions; discussions of sun and wind trol; handling of barbecues and pools, outd furniture and paving, and numerous probl regarding the integration of all of the elem that people enjoy in patios with the house garden. While the book is quite obviously signed for the home-owner, designers problems related to outdoor areas might find it a useful source of information. G. A

life of a pioneer

Louis Sullivan. *Hugh Morrison. Peter Sn Gloucester, Mass. 1952. 391 pp., illus. $6*

In a chapter devoted to a critical estimate the subject of this biography, Hugh Morri writes: "The general conception of the imp tance and significance of an architect depe largely, after all, on what has been wri about him by eminent scholars and cri Granting that a serious lack of detailed in mation has impeded the formation of a appraisal, the fact remains that Sullivan's and work have received scant recognition at hands of our scholars and historians."

Perhaps "a just appraisal" of Sullivan mains to be written some day, but there is denying that Morrison's thoughtful and sin biography, first published in 1935 and now pearing in a reprinted edition, gives the re an intimate and accurate picture of the "pro of modern architecture" and the mark of influence on the profession. And that there

(Continued on page

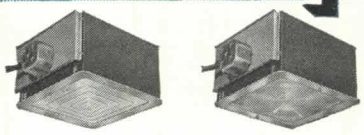
Guth

the complete line of fluorescents and incandescents

When you specify GUTH Luminaires, you get the benefit of more than a half-century's experience in pioneering better lighting. We make good specialized equipment for every lighting need... all *precision-planned* for economical installation and maintenance:

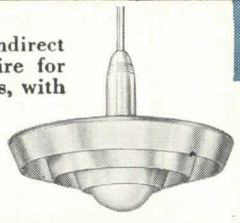
FLUORESCENT: Commercial and Industrial; Glass diffused, Eggcrate shielded, totally indirect, luminous indirect, recessed troffers and exposed lamp types.

INCANDESCENT: Commercial and Industrial; indirect, direct and semi-indirect types; also high bay reflectors, exit and utility lighting units.



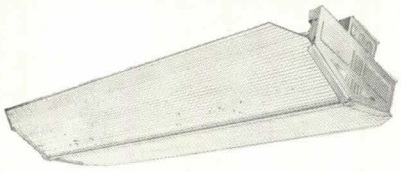
"ALL-SQUARE"... for recessing. One-piece die-cast frame. Light-leakproof. Widespread or concentrating lens... sizes 6½" sq., 8" sq. & 12" sq. PRE-WIRED. Removable top, and drop hinge bottom for servicing from above or below. Catalog 49.

"ALL-SQUARE"



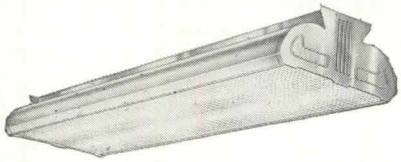
SEELUX ... totally indirect open bottom Luminaire for for Silver Bowl Lamps, with modern ALZAK concentric louvres; for stem suspension or close mounting. Bulletin 864.

SEELUX®



ARISTOLITE ...hinged glass panels swing open for easy cleaning from floor with handy servicing tool. Also with center Eggcrate louvres. For 2, 3 or 4 40-watt or 2 or 4 4-ft. SLIMLINE lamps; ceiling or suspension, unit or continuous mounting. Write for Bulletins 812 and 820.

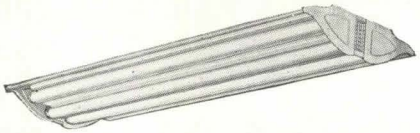
ARISTOLITE®



NEW FUTURLITER ...with GUTH GRATELITE* the 48" long plastic louvre with 45 x 45 cut off for efficient vertical illumination and low brightness diffusion at angles above 45°. GRATELITE is made in sizes up to 48" long. Easy to install on single fixtures or complete ceilings. Available in opaque or transparent densities. Send for information.

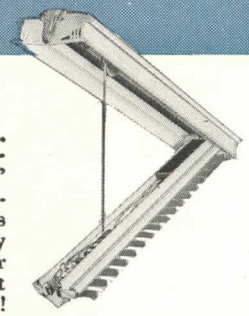
*Patent Pending

NEW FUTURLITER®



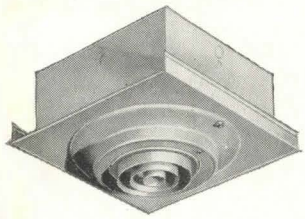
TRUCOLITE ... versatile, highly efficient, semi-direct type; can be used open, with Eggcrate louvres or diffusing glass bottom. For 2, 3 and 4 40-watt lamps... also 2 and 4 4-ft. or 8-ft. SLIMLINE lamps. Ceiling or suspension, unit or continuous mounting. Bulletins 814 and 852.

TRUCOLITE®



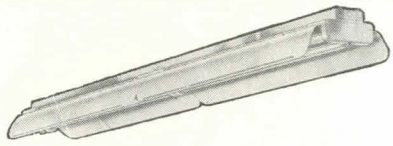
GUTHLITE ... the revolutionary "Jacknife" Hinge Luminaire that swings down for easy relamping or cleaning right from the floor! For 2 40- or 2 85-watt or 2 4-ft. SLIMLINE lamps; ceiling or suspension, unit or continuous mounting. Simplest fixture to install. Bulletin 845.

GUTHLITE®



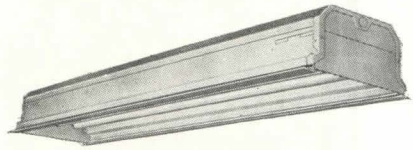
HY-LITERS ...recessed and surface types for PAR 38. Adjustable 45° from vertical in all directions. Can be used as individual units, or in conjunction with our fluorescent types. Bulletin 834.

HY-LITERS



WYTE-LINER ... white inside and outside (takes gloom off ceiling). AIRFLOW channel for longer ballast life. Reflectors 300° Permalux or Porcelain Enamel. Made in 2 and 3 40-watt, 2 85-watt, and 4- and 8-ft. SLIMLINE lamps. Easy to install and clean. Catalog 48.

WYTE-LINER



"LITE-BLOX" RECESSED TROFFERS ... for 1, 2, 3 or 4 lamps: 20-, 40-, 85-watt, or 4-ft., 6-ft., or 8-ft. SLIMLINE. Exclusive end KO's provide exact 48.0"; modular design for unlimited patterns. Wide variety of shielding and diffusing glass panels available; also ALZAK reflectors if desired. Bulletin 869.

"LITE-BLOX" RECESSED TROFFERS

GUTH 4-FT. SLIMLINE available in every GUTH fluorescent fixture

- no starters or starter troubles!
- easy to handle Single-Pin lamps!
- light in two steps almost instantly!

GUTH'S GOLDEN YEAR
19 Guth 52
...leaders in lighting since 1902

THE EDWIN F. GUTH CO. / ST. LOUIS 3, MO.

REVIEWS

(Continued from page 150)

a distinct influence is evidenced by the fact that, twenty-two years after his death in 1924, the American Institute of Architects awarded posthumously to Louis Sullivan its Gold Medal, the highest honor in the architectural profession. An ironic note, perhaps, but curiously in keeping with Sullivan's life for, in the citation (prepared by Morrison), he states: "He fought almost alone in his generation, lived unhappily and died in poverty."

Whatever historians, scholars, and architectural critics may feel about Louis Sullivan as a man, a genius, a philosopher, a writer, or a practicing architect, this biography is a stimulating and highly valuable book, since Sullivan lived and worked in an especially important period as far as architectural development this country is concerned. Morrison, who is professor in the Department of Art and Arch ology at Dartmouth, first became interested Louis Sullivan around 1930 while teaching the University of Chicago. In the course of investigation, he discovered that most of Su van's office records had been destroyed and th there was little else available—photograp lists of buildings designed by him, or perso effects (since Sullivan had no family to prese them)—to aid him in piecing out the story. was from Sullivan's own writings but infinit more from George Grant Elmslie, who work with Sullivan for twenty years, that Morris obtained the most vital part of the material this account.

Of no minor importance in this book is comprehensive bibliography which provid Morrison with source material. Since the f edition in 1935, he has added a supplement bibliography for the years 1935 through 19

FRANK A. WRENS

today's furniture

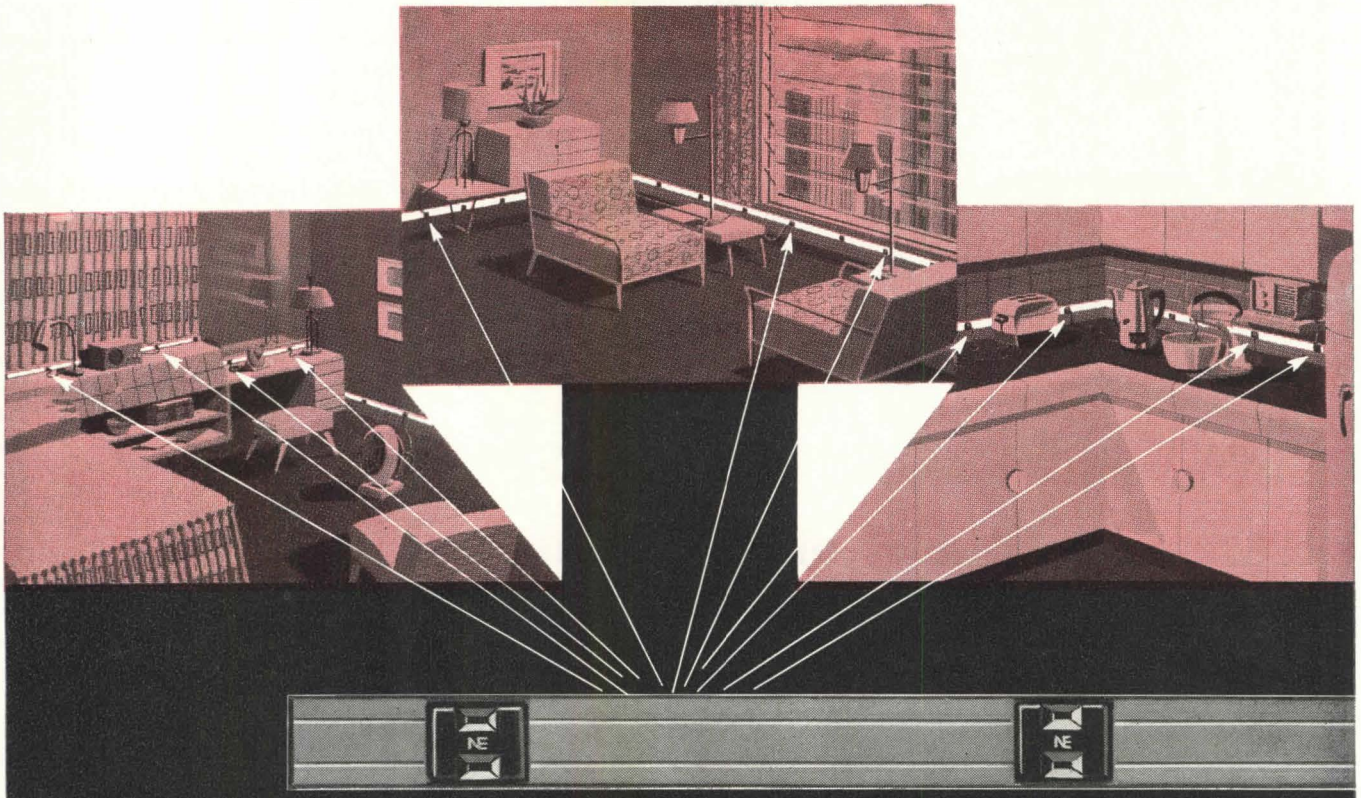
Modern Furnishings for the Home. *William Hennessey. Reinhold Publishing Corp., West 42 St., New York 36, N.Y. 480 illus. pp., $10*

This is a catalog of contemporary furnitu lamps, and fabrics. It is a practical gu since all examples shown are currently ave able. The book is divided into sections, head chairs, tables, storage, sofas and beds, des budget, lighting, and fabrics. Each photogra is accompanied by catalog number, descripti names of designer and manufacturer. An structive introduction traces past and pres forces that shape contemporary design pressions.

Hennessey is well qualified to author t work. Architecturally trained, he has speci ized as interior designer and consultant a number of years. In his introduction, author warns us of possible omissions. Th are attributed to production limitations or the case of foreign manufacture, to a l of guarantee that certain pieces will be av able here for years to come. This reviev misses Aalto furniture (Is it passé?) and Nels cabinets, without which the section on stora is not wholly complete. Exceptions will a be taken to certain examples, dependent how purist the reader is. But this is a cr section and examples are chosen not for fa

(Continued on page

Design with a *Luxury touch...* for pennies more!



specify National Electric **"plug-in" strip**

multi-outlet wiring system

"Plug-In" Strip makes your homes more modern, more livable, *more salable!* The freedom it allows for furniture arrangement, the outlets it provides for electric appliances, lamps, radio, TV—appeals to home buyers—makes any home a more attractive buy.

"Plug-In" Strip provides a spread of electric outlets all around the room—every 18″ (6″ spacing for kitchen work centers). It's neat . . . easily installed . . . permanent . . . architecturally correct. A complete, ready-to-use wiring system.

Write for full information today. Type CF-2 for constant service; Type CF2-G for grounded equipment; Type CF-3 for either constant service or automatic switch control.

Attractive . . . Safe and Strong . . . The only truly efficient wiring system for: HOMES . . . APARTMENTS . . . HOTELS . . . INSTITUTIONS . . . SCHOOLS . . . STORES.

Listed by Underwriters' Laboratories, Inc. Sold through electrical wholesalers.

EVERYTHING IN WIRING POINTS TO

National Electric Products

PITTSBURGH, PA.

3 Plants • 6 Warehouses • 42 Sales Offices

National Electric Products Corporation
1328 Chamber of Commerce Bldg.
Pittsburgh 19, Pa.

Please send me further details on "Plug-In" Strip.

Name.....Title.....

Company.....

Address.....

REVIEWS

(Continued from page 152)

lessness but for being representative of m
trends. To our knowledge, this is the
book to systematically catalog contempo
furnishings. As such, it adds to quite a
prehensive pack of information, a useful re
ence to those interested or involved in int
design.

planning techniques

Bedford by the River. *Max Lock, David Gr and Gerald King. John Murray Publishers 50 Albemarle Street, London W.1, England*

Neither blitzed nor blighted during the
war, the ancient English market town of
ford has gradually developed a wide rang
functions, giving rise to some unusual p
lems. The proposals to be found in this t
planning report make use of the latest su
and planning techniques, which are prese
in clear and graphic manner.

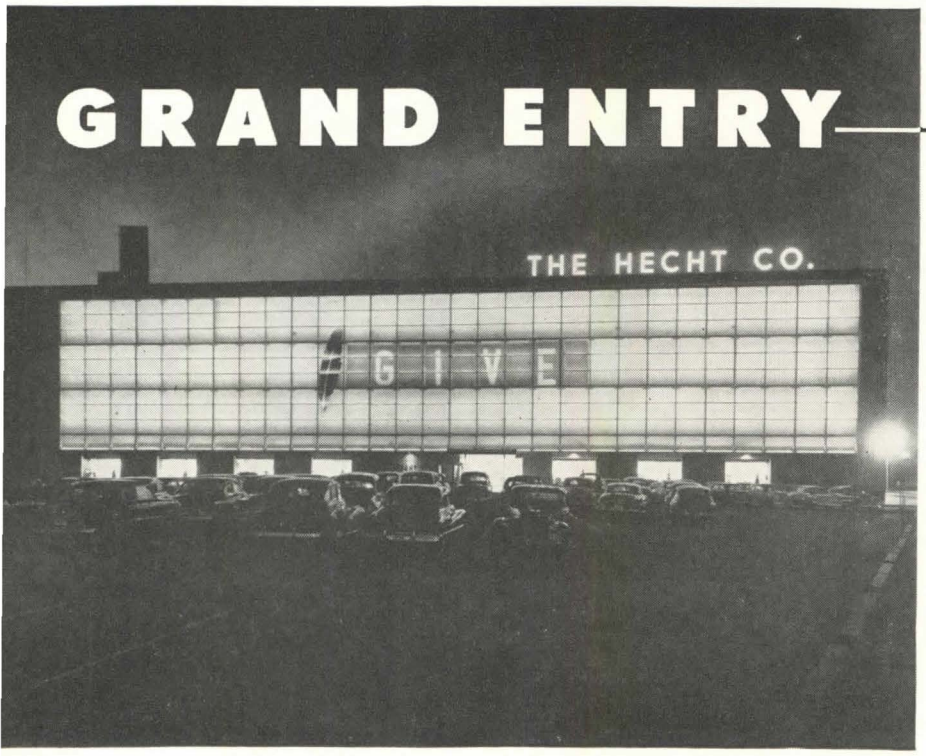
eliminating guesswork

Prestressed Concrete Structures. *August E. K mendant. McGraw-Hill Book Co., 330 W. 42 New York 36, N. Y., 1952. 261 pp. $6*

August E. Kommendant's new book provid
basic understanding of the design and met
of analysis of prestressed concrete struct
and is intended to eliminate generalizat
and guesswork based on inadequate data.
aced by a general explanation of prestres
principles, history, systems, and applic
methods, the book describes the properties
the materials used in this form of construct
and the design theories and methods for
lyzing the carrying capacities of various
stressed systems. Examples of a dozen o
representative structures now in use here
abroad—bridges, reservoirs, tanks, a dam,
craft hangars, an experimental runway
planes—are appraised with critical remarks
suggestions for improvement. An appendix
tains basic tables on materials used in
stressed structures, plus conversion tables
English and metric units.

Internationally known for his contribution
the development of prestressed- and reinfor
concrete theories, Dr. Kommendant served
consulting engineer to Headquarters of
European Command, from 1945 to 1950, to
solve the problems of reconstructing many
portant key-bridges and other structures
aged during World War II. E.

GRAND ENTRY



a half acre of Glass forms gleaming beacon for buyers at The Hecht Co's. modern store

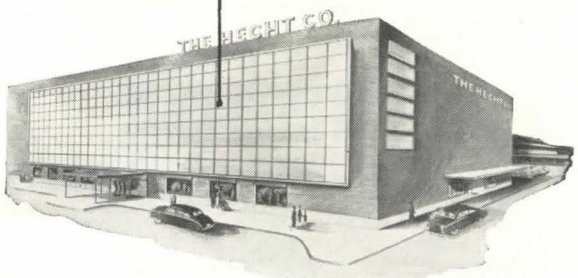
The use of translucent glass, the modern material, in tomorrow's merchandising and manufacturing structures is an established trend. Designers and architects everywhere appreciate the beauty and utility inherent in this versatile, new medium. One of the most recent and attractive indications of this important movement is the facade of the new Hecht Co. department store in Parkington, Arlington, Virginia.

Described as "America's most beautiful suburban department store," this impressive building features an exterior wall gleaming with 15,000 square feet of sturdy Mississippi Hammered Wire Glass. This handsome, fire retardant wall is striking by day and night . . . it is also a giant poster used to publicize community events and store activities.

Figured Glass by Mississippi is the newest thing in design, fast replacing conventional materials for interior partitions as well as exterior walls. Glass offers many distinct advantages . . . is easy to install and maintain . . . never loses its lustrous beauty.

The properties of Mississippi glass can solve many design problems. It is available in a wide variety of patterns and textures wherever quality glass is sold. Listed in Sweet's Catalog. Samples on request.

rite today for free catalog, gured Glass by Mississippi." otographs of actual instal- ions. Many ideas on ways use this exciting new medi- in all types of commercial ildings.



The new Hecht Co. Department Store in Parkington, Arlington, Virginia is an outstanding example of modern design.

MISSISSIPPI *Glass* COMPANY

88 ANGELICA ST. SAINT LOUIS 7, MO.

NEW YORK • CHICAGO • FULLERTON, CALIF.

WORLD'S LARGEST MANUFACTURER OF ROLLED, FIGURED AND WIRED GLASS

it's the law

by Bernard Tomson

This column supplements material in Chapter 23 of Tomson's Architectural and Engineering Law *(Reinhold 1951).*

The necessity for legislation to protect architects is, of course, not confined to registration statutes (See IT'S THE LAW May 1952 P/A). The need for exchanging and pooling information and for a "uniform" statute exists, for example, with respect to the architect's right to a "mechanic's lien" for the drawing of plans and specifications, as well as for supervision. His right to such a lien varies considerably in the forty-eight states. It may extend *only* to his services for supervision; or in some states, where he *also* supervised the construction, to plans and specifications; or in other states, to plans and specifications without the necessity for his having supervised the construction.

The right to any "mechanic's lien" is exclusively granted by way of statutory enact Such right did not exist at common law example of a statute providing for the fili "mechanic's liens" by architect's for their and specifications, as well as their super of construction, is found in *Compiled La Colorado,* Section 6442(15). That statute as follows:

"Mechanics, material men, contractors, contractors, builders, and all persons of class performing labor upon or furnishing terials to be used in the construction, alter addition to, or repair, either in whole part, of any building, mill, bridge, ditch, aqueduct, reservoir, tunnel, fence, rai wagon road, tramway or any other struct improvement, upon land, and *also arch engineers, draughtsmen and artisans who furnished designs, plans, plats, maps, s cations, drawings, estimates of cost, surv superintendence, or who have rendered professional or skilled service, or bestowed in whole or in part, describing or illustr or superintending such structure, or work or to be done, or any part connected ther* shall have a lien upon the property upon they have rendered service or bestowed or for which they have furnished materi mining or milling machinery or other fixtu the value of such services rendered or done or material furnished, whether at t stance of the owner, or of any other acting by his authority or under him, as contractor, or otherwise; for the work or done or services rendered or material nished, by each respectively, whether do furnished or rendered at the instance owner of the building or other improveme his agent; and every contractor, architec gineer, subcontractor, builder, agent or person having charge of the construction, ation, addition to, or repair, either in wh in part, of any building or other improv as aforesaid, shall be held to be the ag the owner for the purposes of this act. *1676-1677*) (*emphasis ours*).

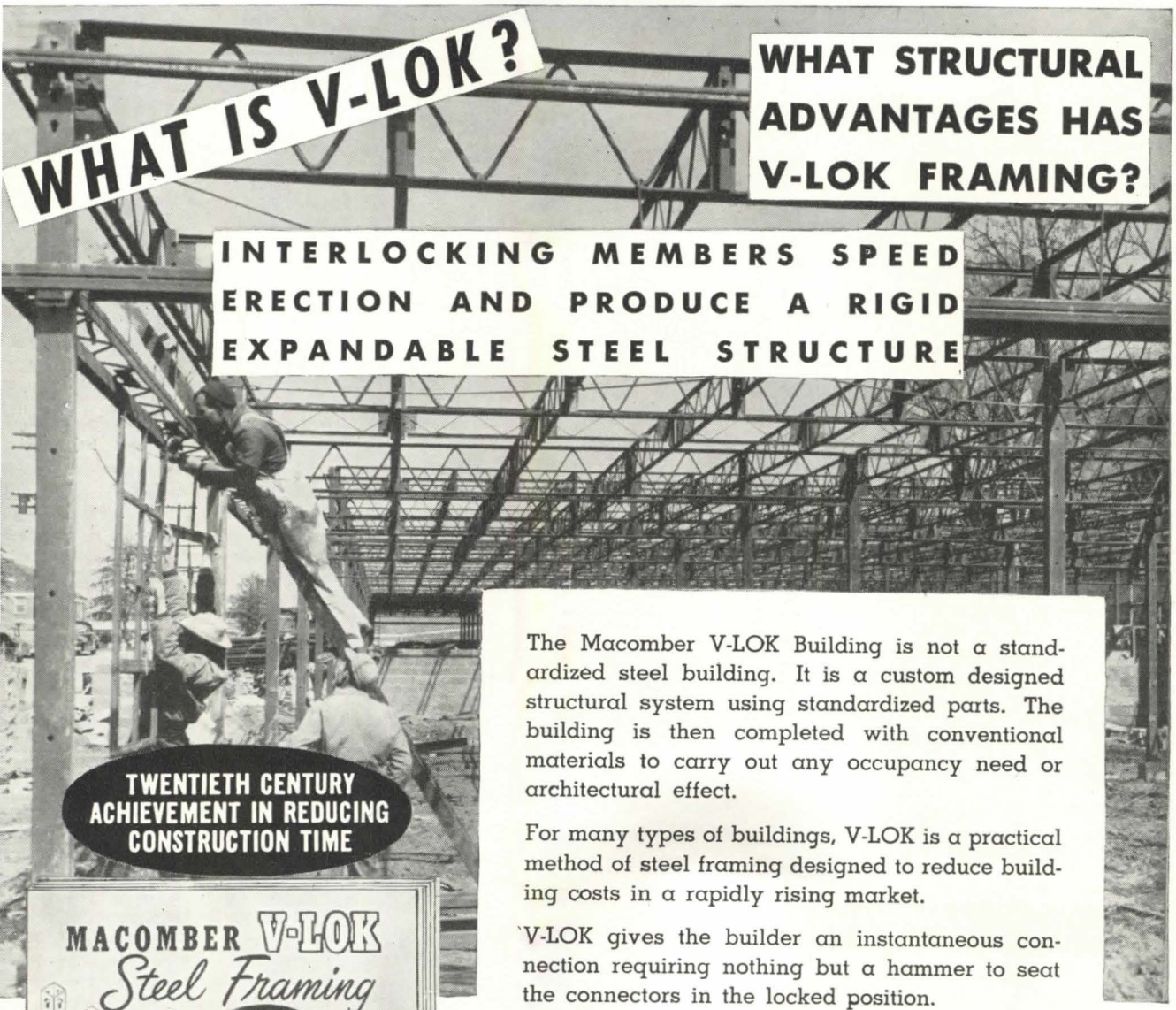
●

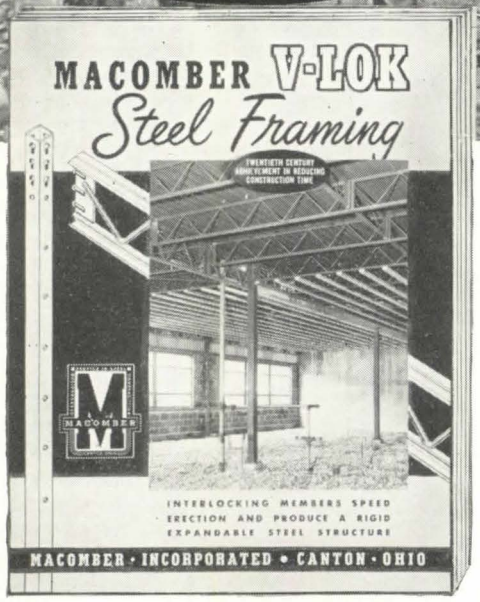
The above-quoted statute is atypical. A ity of the lien laws merely provide fo filing of "mechanic's liens" by "mechanic terial men, contractors, and builders," where architects have not been named s cally as a group protected by the statut courts have held that they do not come its coverage.

The decisions of the courts, in interpreti statutes of the various states, may be cla into three distinct groups:

1. The architect is permitted a lien for plans and specifications, as well as supervision of construction;
2. The architect is permitted a lien for plans and specifications only where he also supervised construction;

(Continued on pag





The Macomber V-LOK Building is not a standardized steel building. It is a custom designed structural system using standardized parts. The building is then completed with conventional materials to carry out any occupancy need or architectural effect.

For many types of buildings, V-LOK is a practical method of steel framing designed to reduce building costs in a rapidly rising market.

V-LOK gives the builder an instantaneous connection requiring nothing but a hammer to seat the connectors in the locked position.

Since V-LOK Framing lends itself to a wide variety of shapes, sizes and topographical conditions, you can design for just about any needs of the owner.

There is no more economical approach to carefully engineered steel construction as a result of these basic economies designed into every square foot of V-LOK Steel Buildings.

This new catalog gives designing information, dimensions, loadings and IDEAS in application of V-LOK to today's needs. Your copy is ready.

V-LOK — THE TRANSPORTABLE PACKAGE

STANDARDIZED STEEL BUILDING PRODUCTS

MACOMBER • INCORPORATED

CANTON, OHIO

V BAR JOISTS • LONGSPANS • BOWSTRING TRUSSES • STEEL DECK

it's the l

(Continued from page 156)

3. The architect is permitted a lien with regard to supervision of construc and has no lien for the furnishing of p and specificati-ns.

Group 1:

Under statutes similar to the Colorado set forth above, the courts have held an tect entitled to a lien for his plans and cations, as well as supervision of constr The Supreme Court of Colorado, in *Par Properties, Inc., et al v. Fisher, et al, 5 577*, set forth the rule as follows:

"If we were to hold that the identical plans must have been used before thei of a lien attached, they would not be giv full protection contemplated and created lien statute. Such ruling would afford tunities for unscrupulous builders to legitimate lien rights of architects. The s of the Fishers continued for over a yea were largely evidenced by the plans, cations, details, and drawings submitt Hooper and Janusch, Chicago architects by them in the preparation of, and po incorporated in, the plans actually pr and used in the construction of the bu Under such circumstances, it would be inequitable and unjust to deny the Fis lien for such services which were prove found to have been rendered upon the and credit of the real property and th provement erected thereon.

A similar question was determined in th of *Home Market Co. v. Fallis*, 72 Colo. 4 P. 641, which is here controlling. There prepared for the lessee plans and specifi for the construction of the Home Public Building in Denver. His employment was nated, but his plans were used in part architect of the assignee under whose pla supervision the building was constructed judgment of the lower court that Fallis w titled to a lien for the value of his servi rendered was affirmed." (p. 579)

It is interesting to note that here the pla specifications were furnished by one gro architects to another, who then prepare final plans which were used in the constr Yet, the court allowed a lien to the o architect for his plans and specifications

Group 2:

The courts of a majority of the States to the rule that an architect is entitled to for his plans and specifications and su tendence of construction only where such vision is present. A typical example of decision adhering to this point of view found in *Beeson v. Overpeck, et al*, 44 N 195, where the Court stated:

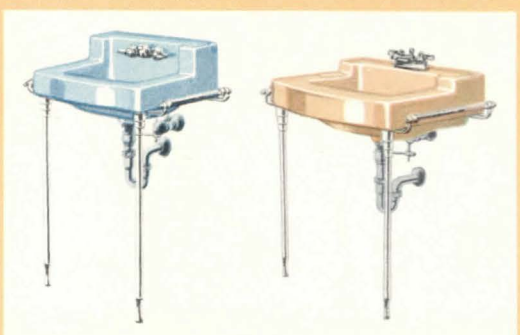
"The court, in reviewing the history

(Continued on pag

BRIGGS FIXTURES OF FORMED STEEL . . . . OR VITREOUS CHINA PUT EXTRA VALUE IN ANY HOME!

it's quality—striking modern beauty combined with proved bility—that sells Briggs Beautyware! Home owners know hey can be proud to have visitors see these luxury-styled bing fixtures in their bathrooms. Briggs Beautyware *looks* asive—recently redesigned and restyled, its smart, new lines mooth, flowing contours give it an unmistakable mark of y. Your customers are finding out that the stain-proof, acid- ant luster of Briggs Beautyware just won't wear off! Depend- Briggs Beautyware fixtures retain that "just like new" look gh the years. That's why they're first choice among discrim- g home owners everywhere. Cash in on the established sales l of Briggs Beautyware!

The high quality of Briggs Beautyware chromium plated brass fittings has long been well known throughout the plumbing ware industry. Like every other feature of nationally advertised Briggs Beauty- ware, these fittings are to- day maintained at the same high level of workmanship which has always dis- tinguished them.



Briggs Beautyware vitreous china lavatories are built to the same exacting specifications that have been traditional with Briggs fixtures from the very start. Briggs is proud that any modifications in its products have always been made with the object of *improving* them. This basic Briggs policy is unchanged today.

Closets, too, are the finest that Briggs has ever manufactured. En- gineered for speedy, efficient installation, these sturdy fixtures have proved themselves trouble-free in thousands of American homes.

MANUFACTURING CO. • 3001 MILLER AVE. • DETROIT 11, MICH.

Why pay bills like this

Industrial Painting Contractors

16712 LAVERNE AVENUE · CLEVELAND 11, OHIO

STATEMENT

June 1			
	For Window Painting for typical factory	Labor	2,100 00
		Material (Paint)	700 00
		Overhead	525 00
		(Scaffolding Ladders Brushes Drop Cloths Insurance Cartage)	
		Profit	280 00
		Total	$3,605 00

When you can do this

INTEROFFICE CORRESPONDENCE

TO W. T. Benson **FROM** R. C. Hudson

RE: New Madison Plant

Bill:

Just saw an ad on Fenestra Super Hot-Dip Galvanized Steel Windows. Look like the kind of windows we need for the new plant. They're steel, so you know they're really rugged, and the ad says they're galvanized by a special system so they are super protected from rust. That will save our maintenance department a lot of money every year. Ad also says write to Detroit Steel Products Company, Dept. I.C., Detroit 11, Michigan for complete information and a special free book on the Fenestra Galvanizing System.

Check on it right away, will you?

Thanks.

Dick

LOOK HOW MODERN A ROOM CAN BE WITHOUT RADIATORS!

Find the radiator! Crane radiant baseboard heating is inconspicuous and can easily be adapted to any decorating scheme. Easily installed in new houses or old.

Crane radiant baseboard panels make the homes you build more liveable

Your clients can get more pleasure from the houses you design, when they don't have to arrange their furniture around conventional radiators or hot air registers.

That's the beauty of Crane radiant baseboard heating. It gives you unobstructed wall area. And it also keeps temperatures more even.

It's one of the many ideas presented in Crane's new Sketchbook of Ideas, an important part of Crane's new service to architects. You can use this remarkable book—with its illustrations and layouts of forty-eight bathrooms, kitchens and utility rooms—to help your clients visualize new room ideas.

And if you want further information on any room in the Sketchbook, we can furnish detailed, specific suggestions for room arrangements and decorating.

This service is available through your Crane Branch or Crane Wholesaler. Call them today.

COME TO **CRANE** FOR IDEAS

CRANE CO.

GENERAL OFFICES: 836 SOUTH MICHIGAN AVE., CHICAGO 5

VALVES • FITTINGS • PIPE
PLUMBING AND HEATING

it's the law

(Continued from page 158)

mechanic's lien statutes of this state and the authorities of other jurisdictions on the subject, points out the purpose of such statutes in this language: 'The mechanic's lien laws of America, in general, reveal the underlying motive of justice and equity in dedicating, primarily, buildings and the land on which they are erected to the payment of the labor and materials incorporated, and which have given to them an increased value. The purpose is to promote justice and honesty, and to prevent the inequity of an owner enjoying the fruits of the labor and materials furnished by others, without recompense.' The definition of 'laborer' as found in the Century Dictionary is also quoted in this opinion, a portion of which is: 'One who labors with body or mind, or both.'

This case when considered along with the phrase in the statute, 'and all persons perfo ing labor,' strongly supports the contention the appellant that his claim is lienable." (*p. 1*

"The labor and skill of an architect in dr ing plans and specifications and in supe tending the work upon a building or reparat thereof are a part of the expense of constr tion, and as an item of such expense, t enter into and help form the value of the bu ing. We can conceive of no sound reason the person who performs such labor and nishes such skill should not receive the sa protection as the carpenter, the mason, or ot mechanics. In a case like the present, wh the architect draws the plans, and uses th as his tools in the *supervision* of the work, think he is entitled to a lien for the labor pended in the drawing of the plans and sp fications and in the supervision of the const tion." (*pp. 197-198*).

It should be emphasized that the supervi of construction by the architect under this cision is the underlying important factor which the court grants the mechanic's lien the architect.

Group 3:

The courts of a minority of our States di from the views above set forth in that they h held an architect entitled only to a lien for supervision of construction, but not for any pl or specifications which he may have furnish A decision adhering to this point of view *Palm Beach Bank & Trust Co. v. Lainhart*, et 95 So. 122, wherein the Court stated:

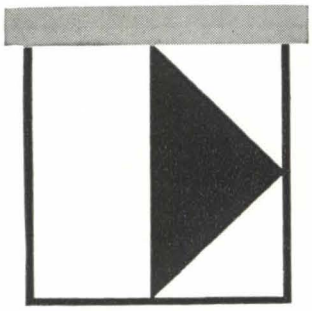
"As to the claim of E. A. Fonder, we th that the court was in error in designating as an architect so far as his activities w regarded in relation to the buildings. He employed not only to draw the plan for 'Gra Circle,' but he was employed as supervis superintendent of the construction and erec of the improvements. In that capacity he ac not as architect, but as a kind of foreman the erection of all the buildings and impr ments. In so far as his claim rested upon service he is entitled to a lien upon the prop

That kind of work is differentiated from services of an architect in drawing plans specifications. Supervising the erection o building and the selection of materials to placed therein is often done by a skilled chanic and is such labor as the statute con plates shall be provided for in a lien upon building or lands."

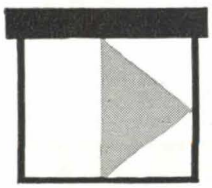
●

In some states adhering to this narrow struction of the lien law, one court has gon the extreme of denying a "mechanic's lien an architect where he has supervised cons tion and prepared and furnished plans. rationale of this decision was to the effect

(Continued on page



as fundamental as counter tops...



A good plan is always better when it includes symbols for telephone outlets.

Without working surfaces, a kitchen fails in one of its chief functions. And without telephone raceways, walls, too, are functionally incomplete. Raceways keep telephone wires out of sight and so protect the beauty of carefully planned interiors. The cost is low. Client acceptance is high.

Your Bell Telephone Company will be glad to help you work out economical telephone conduit installations. Just call your nearest Business Office.

BELL TELEPHONE SYSTEM

(Continued from page 162)

although the architect was entitled to a lien fo that portion relating to his supervision of co struction, his agreement with the owner forme an indivisible contract. Therefore, since he wo not entitled to a lien for his plans and specif cations, and since the contract was an "entir one," the Court held the architect was entitle to no lien at all.

The right of an architect to a "mechanic lien," where it exists, is an important adjunct i his perpetual battle to be paid adequately fo services rendered. There is no reasonable argu ment that can be made for the architect bein put in any worse position than the materia man or mechanic who renders work, labor, an services in construction. It is significant that th most recent amendment in New York State wi respect to the class of persons afforded the pr tection of the Lien Law extended its coverag to "landscape gardeners, nurserymen, or perso or corporations selling fruit or ornamental tree roses, shrubbery, vines, and small fruits." the architect is as diligent and organized the landscape gardener, nurseryman, and fru tree salesman, he too can become effective in practical way—this time to assure himself of lien law in each state that will aid him mo effectively in collecting a fee justly earned.

NOTICES

fall conference at M. I. T.

The Massachusetts Institute of Technology a nounces that a special three weeks' confe ence on CITY PLANNING AND URBAN REDE VELOPMENT will be held at the Institute b ginning Tuesday, Sept. 2, 1952. This is t 14th in a series of annual conferences, spo sored by the Department of City and R gional Planning at M.I.T., designed to meet t needs of men and women in the field of pla ning, housing, and urban redevelopment an intensive course in comprehensive planni principles and procedures.

The *tuition fee* for the entire conference \$75. The conference will be limited to a to enrollment of 24 persons, of whom not mo than half may be staff members of redevel ment agencies. M.I.T. dormitory rooms will available at a cost of $3 per night for th participating in the program. Requests further information and letters of applicat should be sent to: Prof. Frederick J. Ada Room 7-333, 77 Mass. Ave., M.I.T., Cambri 39, Mass.

CLEAR AS Roddiscraft PLYWOOD

RODDISCRAFT hardwood plywood will stand the closest of inspection. Free of blemishes and stains — clear as a school girl's complexion — it is the ideal plywood for your Number 1 paneling jobs.

The same quality that makes Roddiscraft doors the first choice of architects is built into Roddiscraft hardwood plywood. You can specify it with confidence. Your nearest Roddiscraft warehouse can show you samples of the many different species of woods available.

NATIONWIDE Roddiscraft WAREHOUSE SERVICE

Cambridge 39, Mass. • Charlotte 6, N. C. • Chicago 32, Ill. Cincinnati 2, Ohio • Dallas 10, Texas • Detroit 14, Mich. Houston 10, Texas • Kansas City 3, Kan. • Los Angeles 58, Calif. • Louisville 10, Ky. • Marshfield, Wis. • Miami 38, Fla. Milwaukee 8, Wis. • New Hyde Park, L. I., N. Y. • New York 55, N. Y. • Port Newark 5, N. J. • Philadelphia 34, Pa. • St. Louis 16, Mo. • San Antonio 6, Texas • San Francisco 24, Cal.

Roddiscraft

RODDIS PLYWOOD CORPORATION

Marshfield, Wisconsin

out of school

by Carl Feiss

There are two subjects discussed here this month: the vacancies in deanships; and a training program for building surveyors.

vacancies in the deanships

During the past several months, there has been discussion of the scarcity of deans and directors of schools of architecture. Current estimates indicate that vacanies will occur in the next five years totaling somewhere between fifteen and eighteen. The problem constitutes a serious challenge to the presidents or chancellors of the universities concerned. Further, since a fourth of all recognized schools are involved (and the number may go higher), it becomes a problem of concern to large numbers of existing and potential students, to the respective faculties, and to the architectural profession at large.

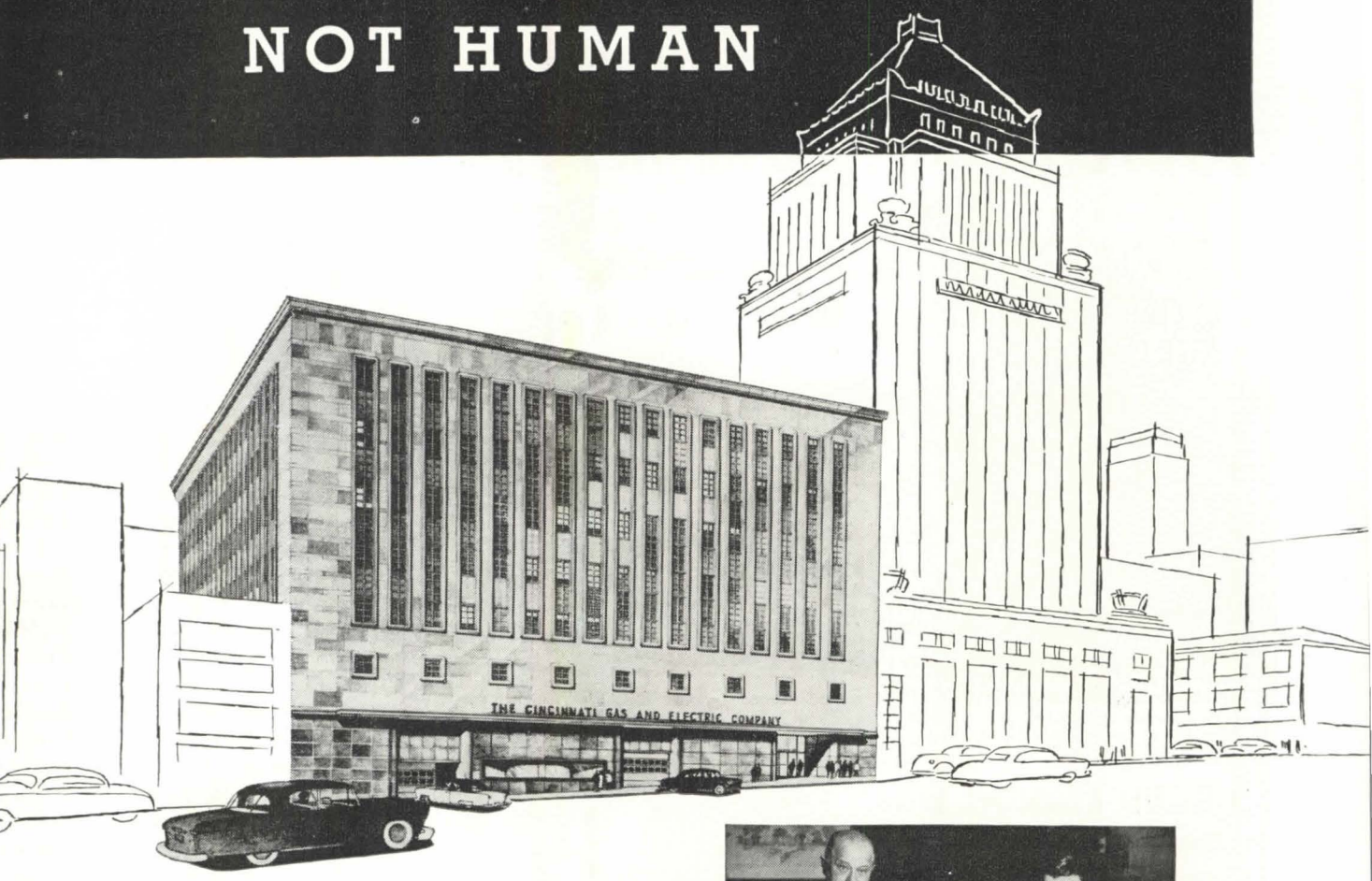
Leadership in schools of architecture (an planning) is an engrossing subject at an time. There is invariably raised the issue o the practitioner versus the educator; the ma of experience with a distinguished buildin record versus the educator; the man of ex perience with a distinguished building re ord versus the man who may have spe his time as a distinguished teacher or a ministrator, or both. And there are the pe mutations and combinations. Then, of cours there are those who look to the deanship a an honorary position, as a culmination of career, a position in which to grow old grac fully. The record, which is interesting, is subje to the laws of libel when discussed in a pla such as this. I wish it were possible to mak the important comparisons which are so nece sary in evaluating the career of leader in th ever-changing world of architectural educatio But three elements of this history are clea First, the man is more important than h provenance; second, the training program more important than the man; third, the stude is more important than either the man who to be dean or the training program he w administer.

There is the question, of course, as to th necessity of the position of dean or directo There are two reasons for believing that su a position is essential. First, the college school subdivision within the institution higher learning is a traditional breakdow based on more or less functional, topical, a often logical administrative units. The collegia concept, dating to the earliest days of th Christian Church and reflected in the monas orders from which much of our present no sectarian (and sectarian) education stems, is well tempered and tried system. It may be tr that the college all too often—particularly t professional college—becomes a segregated c in the institutional body. Still, it remains clear entity within which a specialized functi may be identified and an educational progra to satisfy the function, may be developed a administered.

Second, there is the question of the ne for a leader. Contemporary educational a university-wide administrative trends are pr gressing rapidly toward the development a healthier muscular tone in the collegia body, trends in which each cell serves n only itself but also all others directly or directly related. This service function is char ing the attitudes of administrators, both of university as a whole and also of those

(Continued on page 1

UNLESS YOUR CLIENT IS NOT HUMAN



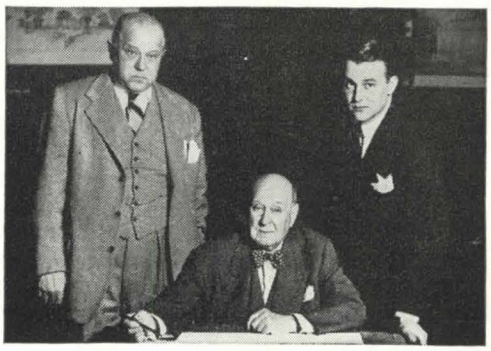
Have you any clients who would NOT appreciate these Q-Floor advantages which Harry Hake and Harry Hake, Jr., provided for the Cincinnati Gas and Electric Company:

- Lighter weight building, therefore lower cost foundation and supporting structural steel;
- Less drafting room time because partitions and electrical outlets could be located after occupancy;
- Earlier completion date because the construction time can be reduced by Q-Floor methods;
- Protection against electrical obsolescence for the life of the building because Q-Floors provide electrical availability on any six-inch area.

These are the more easily discernible benefits from Q-Floor. There is also an advantage which you can present, even though it is an intangible—the savings effected by the contractor when he organizes his work to take full advantage of Q-Floor methods: A contractor can dispense with much temporary material when he uses Q-Floor as the working platform for subcontractors. He can also anticipate shorter construction period and consequently lower his bid. In some areas, subcontractors automatically reduce their bids when Q-Floor is specified.

You can explain to your client still another saving: Q-Floor permits occupancy 15 to 20% earlier than the old-fashioned wet construction. To calculate this exactly—take the square footage of the building, multiplied by monthly rent per foot, times number of construction months saved. The original cost of Q-Floor is about $1 per square foot.

On many jobs the saving actually cancels out the cost of the Q-Floor!



Three generations in the firm of Harry Hake and Harry Hake, Jr., architects who specified Robertson Q-Floors for this building, constructed by Union Central Life Insurance Co., and leased to the Cincinnati Gas and Electric Co., Cincinnati, Ohio. ***General contractor***—Frank Messer & Sons, Inc. ***Structural engineer***—Harry Balke.

For Latest Q-FLOOR Literature...

Write

H. H. ROBERTSON CO.

2405 Farmers Bank Building
Pittsburgh 22, Pennsylvania

Offices in All Principal Cities in the U. S. A. and Canada

World-Wide Building Service

out of schoo

(Continued from page 166)

sponsible for specialized programs within ea cell. But such a synthesis as is indicated in t broadening of intra-institutional relationshi adds to, rather than detracts from, the lead ship responsibilities of the administrators specialized programs. And there can be question that there are highly developed lead ship responsibilities within each cell. The qu tion is, how shall they best be administere

●

Recently there have been several attempts find an alternate solution to the deanship single-leader system. One school has had ab six years of experience in the rotation of faculty chairman, elected each year by faculty, and with single-term rules. While have not been in a position to observe t system directly, I have been watching it at distance. One thing seems apparent. When chairman with leadership ability and popula retires, unpleasant comparisons are quic made and political issues arise which und mine his successor, even when not encourag by the more popular ex-chairman. Also, th is in such a system, democratic in purpose it may well be, an unevenness of contin which can affect teaching programs, budg and the stature of the school.

A committee or commission leadership tem seems to me to be unwieldy in relatively small unit of the architectural sch This does not mean that appropriate com tees of the faculty are not essential. I talking here of top responsibilities. These c such significant duties, for instance, as selection or dismissal of faculty (which faculty committee can properly do at final point), the selection or dismissal of dents, the selection or dismissal of non-teach staff. While committees may serve effecti in some of these duties, as in the chastisem or dismissal of students, primary responsibil in some of these other matters should rem in my opinion, with one individual who be held accountable to the president or c cellor and, if the situation involves unive policy as a whole, through the president chancellor to the board of trustees or reg

Committees may be assigned budget, c culum, library, student-faculty, and myriad o responsibilities. However, I do not believe a committee can satisfactorily represen school or college before the profession or community at large. And a committee, of two, is impersonal. That is its greatest w ness in the role of leadership, although

(Continued on page

Sessions Engineering Co., *Architects*

MODERN DOOR CONTROL BY *LCN* · CLOSERS CONCEALED IN DOOR

NEW PLANT OF POWERS REGULATOR COMPANY, SKOKIE, ILLINOIS

LCN CATALOG 11-E ON REQUEST OR SEE SWEET'S • LCN CLOSERS, INC., PRINCETON, ILLINOIS

out of school

(Continued from page 168)

personality may be its greatest strength in certain phases of school administration. Good committees also demonstrate democracy at its best, but a dictator can control committees—and a school with or without committees.

●

It is in the dictatorial or, perhaps more often, in the role of benevolent despotism that deanships have failed. Also deanships have failed where the factors of security and sinecure have permitted both laissez faire and somnolence. What young men and women, and their mentors, require is a working environment congenial to freedom of expression and freedom of exploration. They need to feel confident that the pater familias (whoever he may be), is sensitive to each individual but not so s sitive to the individual that order is lost the group. They need to feel that this lea call him dean for want of better word, someone in whom confidence may be pla confidence in his maturity as a man, confide in his honesty and integrity as a man, co dence in his ability and convictions as a among men with ability and convictions. I this stature of leadership in the personality an individual, whose interests are one wit student and with his school of students, w places a premium on the the all-important of a dean, for it is the primordial urge youth to fight control but ask for guida Youth, however, is very selective, and will cept guidance only from those who have pro themselves worthy of confidence. I have to see a student body fooled. Though a prising number have been amazingly patie maybe charitable is a better word. Many student body has been loyal and affection even though its eyes have been wide op In such cases guidance comes from other t the titular head.

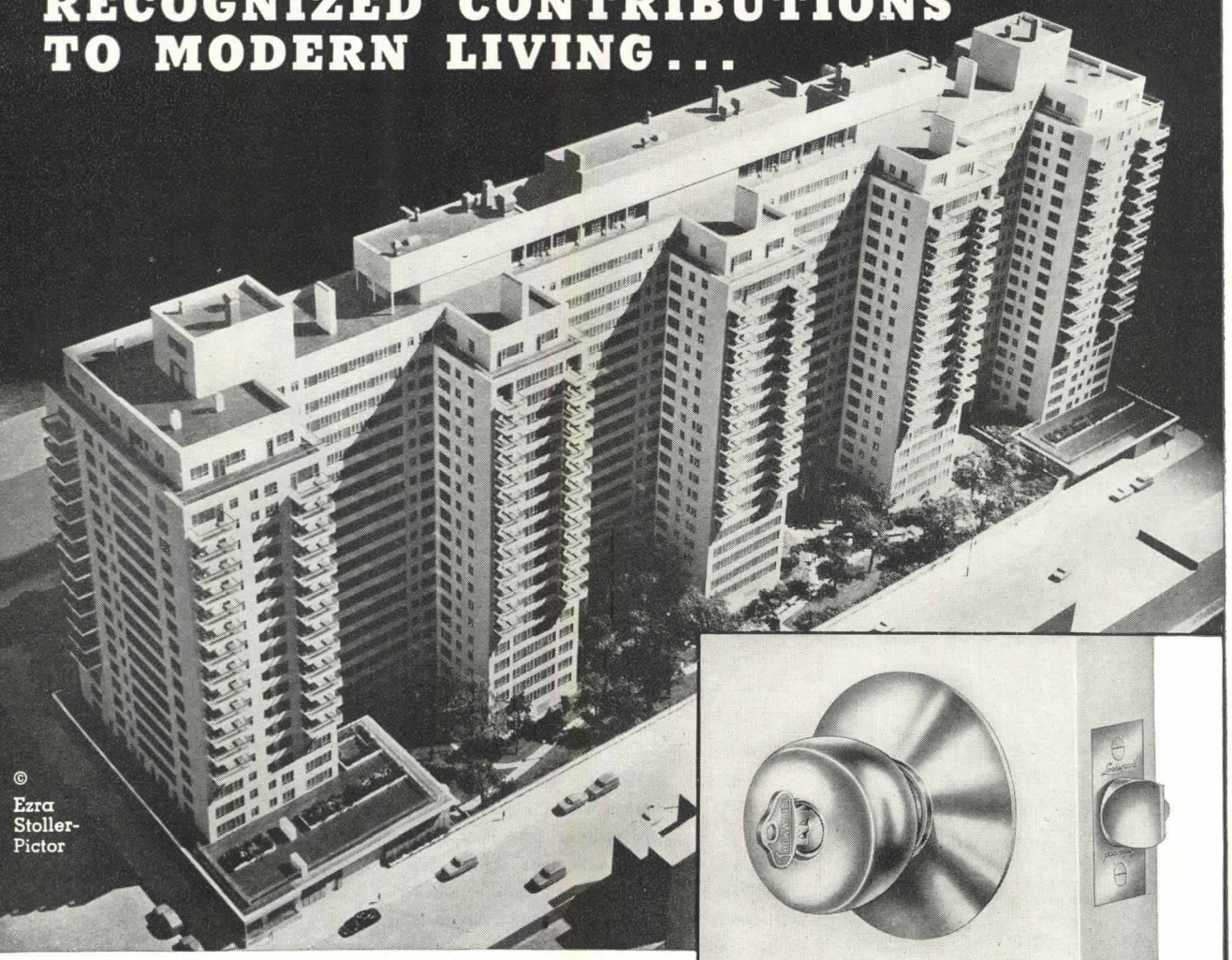
There is no established training ground the teachers of architecture, planning, building, although the A.I.A. Commission the Survey of Education and Registration, o mentioned in these columns (Dr. Burdell's C mission), recommends the establishment of "Institute of Architectural Education" w could serve as a training ground for teac and leadership in the building industry. seventy or so who now direct the destinies architectural schools arrived at their pres eminence either by accident or error, through dint of hard work and evidence real worth. Without any attempt at soft s I am happy to say that the accidents or er are very few and that, in my opinion, student architects and practicing architects this country can be proud of the heads of schools. Motley as their careers have b they form a distinguished group of leader education with a surprising unity of purp

●

The presidents of universities, facing the of filling existing and pending vacancies, h three difficult tasks. First, they must rec job specifications for the deanships, in light of changes in university organizat Second, they must recheck job specificat in line with changes which are, or should taking place in the profession and busines

(Continued on page

RECOGNIZED CONTRIBUTIONS TO MODERN LIVING...



© Ezra Stoller-Pictor

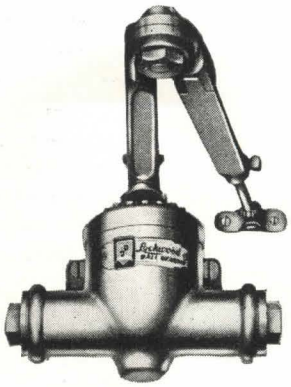
Lockwood Heavy Duty Key 'n Knob locksets in Hatten Design — a SOUND CHOICE for assuring the safety and privacy of the inhabitants of this award-winning project.

- **MANHATTAN HOUSE —**

  winner of the A. I. A. Award as the outstanding apartment building in New York City and recognized as a definite contribution to modern living — was skillfully conceived and developed by associated architects Mayer & Whittlesey; Skidmore, Owings & Merrill; and G. Harmon Gurney, Chief Architect for the owner — the New York Life Insurance Company. Contractor was Cauldwell-Wingate Co., New York City.

- **LOCKWOOD HARDWARE —**

  recognized contribution to the security and comfort of modern living at Manhattan House — selected for long wear, quick installation and unexcelled performance. Lockwood continues to keep its line complete and abreast of requirements with progressive product design — an accomplishment that is being rewarded by ever increasing preference by architects throughout the country. The name LOCKWOOD means SATISFACTION ASSURED.



Lockwood Ball Bearing Rack and Pinion Door Closers work swiftly, silently and efficiently — to give trouble-free door operation — night and day.

The Board Name has been awarded the GOLDEN ANNIVERSARY CERTIFICATE by the BOARD NAMES FOUNDATION

Lockwood

see our CATALOG in SWEET'S FILE ARCHITECTURAL

LOCKWOOD HARDWARE MANUFACTURING COMPANY

FITCHBURG • MASSACHUSETTS

out of school

(Continued from page 170)

architecture and building. It is there that the Survey Commission's report (see above) should prove invaluable.*

The president's third task is to find the right man. One thing is certain, that no two circumstances in the schools are the same. There is no one set of specifications which will universally fit all jobs or all men. It is going to be a long, tedious, and discouraging task in many instances. There have been cases where heads of universities have been so impatient, bored, disinterested, or discouraged with the problem that they have closed schools rather than fight for them and for their students. This is an ever-present danger in those situations where leadership is lacking, either at the level of the head of the university or in the school itself, or both. These are unpleasant facts, but let us be frank about them. One certainty is that only in rare instances can a major school survive or maintain status for any extended period without an individual in responsible charge on a full-time basis.

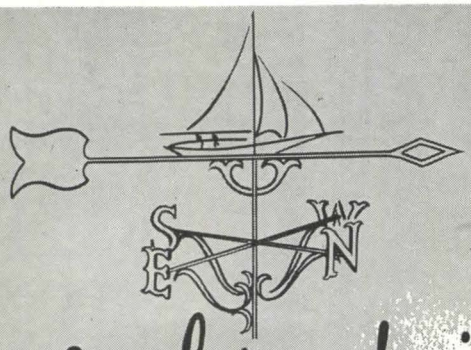
●

One of the delicate problems which confront us all in these matters is the feeling on the part of many universities that they do not want professional organizations interfering with the freedom of choice of curricula or teachers. Of course they are absolutely right. But avoiding interference or even coercion is one thing. Obtaining advice and counsel is another. After all, a professional school is training for a profession, and only the history and experience of the profession, its accomplishments and objectives, can establish the philosophy of instruction and the criteria for the choice of leadership.

We will all watch with interest and, I am certain, with sympathy and understanding the endeavors of the heads of the various universities to staff their schools of architecture. May they continue to succeed as they so often have in the past! And may the brief record of failures serve as a warning, but not as a discouragement, to those with the unenviable responsibility of making the right choices. The profession of architecture, depending for its future on the schools, stands by to help when called upon.

* Curiously enough, and in confidence, of course, I know of a university which is ignoring the services offered by the A.I.A. and the advice of the Survey Commission's report in reorganizing its school of architecture. The school has had serious accrediting problems, too. Yet that university isn't even interested in the results of three years of research which went into the Survey or in advice from the profession for which it is training students. I'm sorry for the students and the new dean or director, whoever they may be, when they arrive in that particular Never-Never Land.

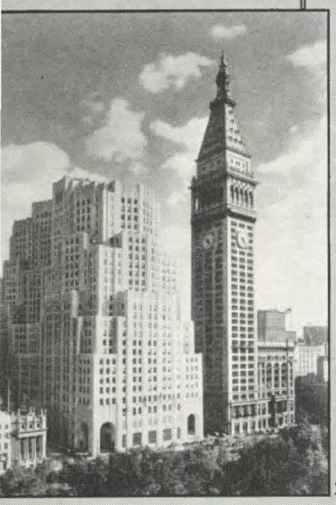
(Continued on page 174)



1.

modern buildings everywhere

choose G-J Door Devices



2.

Greyhound Station Building, Chicago
Architects: Skidmore, Merrill & Owens, Chicago
Builders' Hardware: W. H. Grimm Hardware Co., Chicago

2.
New Home Office Building, Metropolitan Life Insurance Co., New York
Architects: Waid & Corbett, New York
Corbett and Angilly, New York
Arthur O. Angilly, New York
Builders' Hardware: P. & F. Corbin, New York

3.
Statler Hotel, Los Angeles
Architects: Holabird & Root & Burgee, Chicago
Associate Architect: Wm. B. Tabler, New York
Builders' Hardware: Builders' Hardware Supply Co., Los Angeles

4.
Sakowitz Bros., Houston
Architects: A. C. Finn, Houston
Builders' Hardware: Peden Iron & Steel Co., Houston

3.

4.

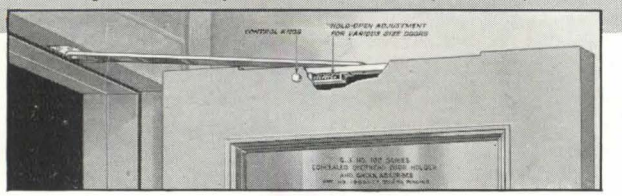
For over a quarter century hardware consultants and architects have specified Glynn-Johnson door devices and specialties for efficient operation and protection of all types of doors in all types of buildings.

Refer to G-J Catalog for the complete line of door holders, bumpers, and specialties.

Floor Type

Push and Pull Action

DOOR HOLDERS AND BUMPERS



CONCEALED DOOR HOLDER Overhead Type

DOOR HOLDER
Plunger Type

Dome Type
DOOR BUMPER

Glynn-Johnson Corporation
Builders' Hardware Specialties for Over 25 Years
4422 N. Ravenswood Ave. Chicago 40, Illinois

G-J Door Devices
for all types of doors
in public and commercial buildings

out of school

(Continued from page 172)

the training of building surveyors

You may not be familiar with the British term, "Building Surveyor." We badly need the term and its consolidated activity in this country. A building surveyor is just what the term implies. He is a licensed technician trained to inspect plans and buildings under construction, and to appraise completed buildings for all items covering construction, equipment, condition, location, use, and value. He may be employed as a public official or under contract for a specified type of job. He is trained in a special school for building surveyors, licensed to practice, and is an accepted and qualified member of the business or profession of building, and an invaluable asset to architecture, city planning, and the business of government.

In previous articles I have discussed the training for home builders in the light-construction industry. In these articles I have emphasized the wide diversity of the building industry, its lack of organization, its slowness to appreciate the potentials of technology, and the consequent lag in transition from centuries of handicraft to these days of limitless power and the machine. I have failed, however, to mention one facet in the universal building problem which will be touched on briefly here, to be elaborated on at a later date. It is part of the total problem of education for the entire building industry which I have been talking about.

Every city today, of any size and administrative competence, has built up a complex system of building controls to protect the health, safety, and general welfare of its citizens. There are normally about eight municipal departments, agencies, authorities, commissions, bureaus, and divisions charged with some type of building responsibility. Many of these have inspection and licensing powers. Others are quasi-judicial in function. Some combine the two. All require on their staffs technicians with training and experience in building and, sometimes, in architecture. All of them have influence, and some direct control, on the activities of the architect and the builder. Let us name a few of these agencies of local government which influence architecture and building, either directly or indirectly, or both:

The City Planning Commission
The Zoning Board of Adjustment
The Building Department
The Fire Department
The Health Department

(Continued on page 176)

rance lobbies, corridors, public rooms, or
er concentrated traffic demands an extra
e floor, Armstrong's Linotile® is the out-
ng choice. Resilient and comfortable
oot, its dense structure and smooth sur-
esist the penetration of dirt, make it
iest of all Armstrong Floors to maintain.

Boston Museum of Fine Arts
Leland & Larsen, Architects

ARMSTRONG'S LINOTILE

ARMSTRONG CORK COMPANY • LANCASTER, PENNSYLVANIA

out of school

(Continued from page 174)

The Housing Authority
The Department of Revenue
The Tax Assessor and Appraisers
And others.

These agencies develop and enforce the general plan and subdivision controls, the zoning ordinances, building, plumbing, electrical codes, fire codes, health codes, housing ordinances, appraisal and tax assessment policies, and other regulatory measures. They may, and usually do, employ inspectors and enforcement officers. The major number of these are to be found in the building department.

●

Now, inspection and enforcement of building codes and zoning ordinances are gaining strength in municipal organization, as we all too slowly recognize the disastrous effect of our vast acreages of slum and blight which are destroying our cities. Urban redevelopment programs are highlighting these functions with the assistance of housing code and health specialists. But where do the inspectors, licensing, and policing officials come from? What is the training required for these important positions? And they are important.

Recently, when seven building inspectors were discharged after a local scandal in a building department (a scandal caused by construction failures in new buildings), the head of the building department said of his inspectors, "They are honest men, but they just don't know any better." The low salaries paid to inspectors are all too often indicative of our low opinion of their importance and are, at the same time, one cause for the scarcity of good men who survey buildings. These include real estate appraisers and particularly building appraisers.

I want you to think about this for a while. The subject will be brought up again.

NOTICES

new practices

NORMAN E. GREENBLATT announces the opening of new offices for the practice of interior and industrial design at 319 E. 50 St., N.Y. 22, N.Y.

SOL WILLIAM COHEN announces the opening of his office for the practice of architecture at 805 Shirley Ave., Norfolk 7, Va.