Creative Styling:
**an inherent quality of Azrock floors**

For distinctive color and design ... low cost installation ... economical maintenance and longer life, Azrock vinyl asbestos tile provides today's best flooring value. Good example: The corridors, laboratories and offices in the Hoffmann-LaRoche research tower and administration building where floors in Azrock's Premiere Series compliment the attractive decor, provide comfort underfoot, make possible fast and easy cleaning. Before recommending floors to your clients, investigate all types for initial cost, low maintenance cost, life expectancy. Research will prove you can specify Azrock vinyl asbestos tile with confidence. Available in 12” x 12” modular size.

*an original floor styling by AZROCK®*

For an independent research report, write today for a free copy of the Wharton School of Finance and Commerce study, "The Economics of Carpeting and Resilient Flooring: An Evaluation and Comparison." Azrock Floor Products, 515 Frost Building, San Antonio - the HemisFair'68 City

On Readers' Service Card, Circle No. 323
...with Tab-Lock’s new beam cross tees.

Eastern introduces two new double-web beam cross tees, 4’ and 5’ in length. Routed at the center and at 6” and 12” on each side of center, they offer far greater latitude in fixture placement...importantly increase design possibilities in ceiling grids of standard modular construction. These beam cross tees carry heaviest lights with minimal deflection, satisfy every service need with support to spare.* As with all Tab-Lock tees, simply insert and bend the tab. The lock is permanently in tension; and for extra rigidity, bulbs, as well as flanges, make contact. See Sweets (1968) 14c/Ea, or write for specs.

*Evaluated in accordance with A.M.A. and S.C.M.A. specifications.

ACOUSTICAL SUSPENSION SYSTEMS
Architectural Metal Products Division, 1601 Wicomico St., Baltimore, Md. 21230
By the makers of Eastern Demountable Wall Systems, Drapery Hardware, Venetian Blinds
P/A's Editor argues that, as an approach to the problems that plague our cities, paternalism is outdated and self-defeating.

THE FIFTEENTH ANNUAL P/A DESIGN AWARDS PROGRAM

INTRODUCTION: A look at the way five jurors faced the formidable task of selecting 12 winners from among the 671 entries in the current Design Awards Program.

FIRST DESIGN AWARD: La Puntilla Public Housing Project, San Juan, Puerto Rico.

AWARD: Planning and structural system for use in erecting fishing villages in Puerto Rico; prototype communities at Patillas and Aguadilla.

AWARD: St. John The Evangelist Catholic Church, Hopkins, Minnesota.

AWARD: Fairway Villas, Aspen, Colorado.

AWARD: Fairway Villas, Aspen, Colorado.

AWARD: Environmental Physiology Research Laboratory Complex, UCLA Santa Monica Mountain Park Research Campus, Los Angeles, California.

CITATION: House for Mr. and Mrs. Frederick H. Robinson, Enniskillen Farm, Stafford County, Virginia.

CITATION: Lutheran College Chapel, The Irvine Ranch, Orange County, California.

CITATION: Design Disciplines Building, Washington State University, Pullman, Washington.

CITATION: Performing Arts Building, University of California, Santa Cruz, California.

CITATION: Comsat Laboratories, Clarksburg, Maryland.


JURY DISCUSSION: In a spirited discussion of the general design trends evident in the submissions, the
jury agreed that large-scale projects promote architectural quality, and again expressed reservations about private residential design.

P/A NEWS REPORT

P/A OBSERVER
URBAN PLANNING AND URBAN REVOLT: A CASE STUDY: Is urban renewal the answer to problems of the poor and underprivileged in our cities? P/A probes the anatomy of the 1967 summer race riot in New Haven, Conn., a city that received more Federal renewal funds per capita than any other in the nation. This report, a thorough study behind-the-scenes workings at city hall and in the neighborhoods, will give pause to those who see renewal as a possible corrective for the social and economic ills of our cities.

MECHANICAL ENGINEERING CRITIQUE
William J. McGuinness explains new fire alarm and detection systems for schools.

SPECIFICATIONS CLINIC
Harold J. Rosen offers further recommendations for a uniform arrangement of information in the technical section.

IT’S THE LAW
Bernard Tomson and Norman Coplan find that standard contract forms for furnishing construction cost estimates are inadequate for the protection of architects.

BOOK REVIEWS
A cross-section of significant new books.

VIEWS
Our readers’ comments on the architectural scene.

COVER
Design by Richard C. Lewis.

FRONTISPIECE
the beautiful world of reinforced concrete is looking up

Twenty years ago, reinforced concrete building construction literally hugged the ground. Not any more. It's on the rise, reaching for the clouds. And the trend to taller, more beautiful buildings in reinforced concrete has just begun. Look at what has happened in just the past ten years.

One of the major reasons for this spectacular breakthrough is the new Grade 60 reinforcing steel. It has 50% greater yield strength. Helps designers achieve slimmer columns. Greater usable floor space. Reduced overall construction costs. Gives construction a material as versatile as the men's minds that design, engineer, and build with it. Beauty, utility, economy are all a part of the package.

If you have a building that's going up, ask your consulting engineer about the many benefits high-strength reinforcing steels offer in modern concrete building design. Do it soon.

---

1958
Executive House
Chicago
370 ft.

1958
Executive House
Chicago
370 ft.

1961
The National Bank of Georgia
Atlanta
390 ft.

1961
The National Bank of Georgia
Atlanta
390 ft.

1965
1000 Lake Shore Plaza
Chicago
600 ft.

1965
1000 Lake Shore Plaza
Chicago
600 ft.

1965
1000 Lake Shore Plaza
Chicago
600 ft.

1965
1000 Lake Shore Plaza
Chicago
600 ft.
1967
Lake Point Tower
Chicago
645 ft.

1969
Shell Oil Bldg.
Houston
714 ft.
Praise for Well-Done Article

Dear Editor: "Three Houses, Three Generations," (November 1967 P/A), is uniquely well done and very relevant to the practice of architecture.

The effectiveness of the presentation affords a rare opportunity for comparative study. Coverage such as this in other building categories would be most appropriate for today's architects.

J. Donald Bowman
Mitosx & Assocs., Architects
Bellevue, Wash.

A Design Critique?

Dear Editor: The article "Adult Potato on Road House Tree," (P/A's title was "Adult Treehouse on Potato Road") in the November 1967 P/A issue really turned me on. Encomiums such as "puerile, contrived, ridiculous, sick, dirty" came to mind. Where had I seen similar visual pollution before? I grabbed, impulsively, the January 1967 P/A (for "Pot Architecture")? from under my pillow and, sure enough, on page 130, the New Haven "Youth Recreation Center" (or should it be, "Scenter"?!) is cited with the same designer - albeit diluted, since the four other guys obviously exerted a somewhat sobering influence. At the time an anonymous juror used the same terms as mine above in response to it.

Charles Moore must be terribly proud of his student. He has really improved since last year. This current product is even more puerile, even more contrived, even more ridiculous, even more sick, and not just even more dirty, but utterly obscene. And, tragically, "Pot Architecture" cynically equates this joke with two fine houses by Schweiker and Dart.

The Establishment has the emperor out there in his new clothes and you are right there in the front row, slack-jawed, applauding wildly. The truth is that "Adult Potato" is a stable hot-rod (involving the same mentality) and the fact that you publish it is a testimonial to how lightly you regard architecture.

Incidentally, he mislabeled his rooms on the plan - not that it matters.

F.B. Wildforster
Middletown, New York

We suggest Mr. Wildforster read the text, particularly where it says that the three houses "are not presented here side by side to invite invidious comparisons, but to show directions we have investigated and roads we have traveled, and are traveling, and where we might well be going next." - Ed.

At Least It Wann't Bombed!

Dear Editor: John Massa certainly was the epitome of acrimony in his letter that appeared in the November 1967 P/A. He unmercifully criticized the architecture as well as the exhibitions comprising the United States Pavilion at Expo 67.

By contrast, most Montrealeans and many of the Canadians from other provinces seemed to like it as a building. I know I did. When Expo opened, it seemed to be the U.S. journalists who were foremost and vitriolic in their condemnation of this wonderful piece of structural architecture.

I believe I might have an explanation for the lack of sensational or dramatic exhibits housed in Fuller's overwhelming creation. During the course of the past year or so, United States embassies and consulates in cities throughout the world, and even here in Canada, I regret to state, were subjected to some very unpleasant as well as quite numerous demonstrations. In all probability, the State Department in Washington wanted to have an exhibit that would not provoke controversy of any sort. In this respect, the U.S. succeeded in Montreal.

Aside from this, some of us did wax nostalgic about the mementos from the 30's on exhibition there. If the United States could promote foreign relations in other fields of endeavor as well as it did with its pavilion at Expo, then I believe that it would have few, if any, external problems.

CREIGHTON AQUIIN
Montreal, Canada

The People: Reston - Failure

Dear Editor: Re "New Lease for Reston," news report, November 1967 P/A: Your report should have been simply that Reston failed - because that is the truth.

We may all mourn the passing of this experiment, along with all our cherished dreams of other Restons. But Reston seems to have failed and we may have all been wrong. No challenge need be set out by you against Gulf Oil. Instead, it seems to me that your position should be to help the experiment, and other experimenters, by an effort to determine why it failed. Direction is what we need — not mourning and not chariness.

Reston failed for the same reason Wright's houses are constantly being rescued from the demolisher after failing as homes. Because they are lousy places for people to live in! Why build buildings or towns that people do not want or cannot use? That's not architecture; that's sculpture. Stick to the problem: To make people-places is our problem.

It is our function to give people places where they can live better. We cannot tell them what a "better" place is. They must tell us. And the people do tell us. They told us Reston was not it. Do not criticize the people. Do not criticize Gulf Oil. Do not criticize anyone - except ourselves. Try again. Only this time, let us listen to the people. They want a better place more than you want to give it. But it has to be better for them, not for you or I. Reston, per se, was a grand experiment. It failed. Learn from it. That's what experiments are for.

HENRY WRIGHT
College of Architecture and Design
Kansas State University
Manhattan, Kansas

Simulated Psychedelia

Dear Editor: (Re Ranger Farrell's VIEWS letter, November 1967 P/A): Ranger Farrell failed to notice so many things about the Kansas State heliodon that I'm afraid there's nothing for it but to buy him a trip to Kansas to see for himself. To speak only of one of his misconceptions, our students are now able to look at the excellent models they have long been building under the combined effects of daylight ('skyshine') and sunshine — in other words, in a simulated outdoor environment. They are able to change the time of day, time of year, and even their location on the earth's surface as quickly as you can say "psychedelic experience." Besides which, they are learning to design better buildings.

MELVYN KAUFMAN
William Kaufman Organization
Real Estate, Investment Builders
New York, N.Y.

Architect to the Rescue

Dear Editor: We were disturbed to read your recent article describing Wright's Martin House in Buffalo (news report, November 1967 P/A) and the state's current restoration project to make it suitable for our new university president. Buffalo architects applaud this project, which is being accomplished for the benefit of the entire profession.

However, we object to your references to Bill Tauriello, the local architect, who saw fit to rescue the Martin House from ruin in the late 40's. Unfortunately, Mr. Tauriello passed away recently and we feel obligated to defend his sale of Martin land, the demolition of accessory structures, and division of them into apartments.

Bill bought the house in 1947, after 20 years of abandonment. The roof had fallen in, plumbing torn out, windows gone, conservatory and garage virtually destroyed.

Continued on page 12
... chairs to you, Stow/Davis seats for executive impressions and comfort. The Bubble is covered in Stow/Davis Stretchwool from the newest collection of contract-oriented fabrics—a Stow/Davis story in itself. The S.I.P. is designed for Stow/Davis by noted Swedish architect and artisan, Sigurd Persson and executed in the impeccable Stow/Davis quality. For a designer's library of Stow/Davis, write on your professional letterhead to Stow/Davis, Grand Rapids, Michigan 49502, or visit one of our galleries. NEW YORK, 49 East 53 Street (212) 688-9410 • CHICAGO, 1181 Merchandise Mart (312) 321-0436 • LOS ANGELES, 8899 Beverly Blvd. (213) 676-3600 • DALLAS, 690 Decorative Center (214) 742-1661 • GRAND RAPIDS, 25 Summer Avenue, N.W. (616) 456-9681.
Air Diffusion

Sound Absorption

Lighting Fixtures
Beautiful ceilings. Functional ceilings. Mahonaire ceilings. They have hidden talents. Strip away that attractive exterior and you'll find rows of rugged steel "cells" designed to give structural support, and to house warm and cool air distribution systems, recessed lighting, sound control materials, power lines and sprinkling systems.

Specify Mahonaire ceilings and give your clients more than just a roof over their heads. For complete information, write the R.C. Mahon Company, 6565 E. Eight Mile Road, Detroit, Mich. 48234.

MAHONNaIRE
The ceiling with hidden talents!

MAHON IS IDEAS
in building products
The School Board of Ridgewood High in West Lafayette, Ohio got Gas and electric heat bids from independent contractors. Here's what they found: Electric came in at $2.59 per square foot for the 60,000 square foot school. The Gas bid was only $1.95. The difference adds up to a big $38,200.

Another first-cost savings came from the $15,000 that the school didn't have to spend on heavier wiring and the sophisticated controls needed with electric heat.

But the savings from Gas heat go on. Because the
electric and saves over $50,000.

Operating economy of Gas goes for as long as you use it. This school is no isolated case. There are many other studies that have proved the value of competitive bids when you want the best buying value. So if you're looking for a heating system for a school or any other installation, take a good look at Gas heat. Just call your local Gas Company.

AMERICAN GAS ASSOCIATION, INC.

For school heating, Gas makes the big difference.
the quiet show off

Sooner or later, when the big things are decided, you'll come to the time for drinking fountains. The wrong choice can be an eyesore, so don't settle for just anybody's fountain. Haws gives you more new designs and modern materials than all the "other guys" put together. Ask for your free catalog today. Haws Drinking Faucet Co., 1441 Fourth St., Berkeley, California 94710

*Shown is Model 7R, hard anodized Tenzaloy aluminum. The finish is permanent, corrosion and abrasion-resistant. Get free details now.

System Structures

Dear Editor: Re the review of my book, Building Structures Primer on p. 214 of the October 1967 P/A: I am quite frankly amazed to have a review in a major publication by someone who got the point of what my book was trying to do (and not do), since I was quite resigned to being misunderstood. I still expect that the majority of professionals and educators will judge the book on the wrong basis—as an end, rather than a beginning. I do not mean to sound superior, but I do feel that most of those who were trained under the old systems and still function under them will find it hard to appreciate and accept new approaches and techniques.

I have not made any steps toward really useful new techniques myself, but feel strongly that there is both a need and the possibility of a completely different development of the architectural and structural designer's education and professional participation in the design of buildings.

I am encouraged and enthused by every evidence of effort leading to this development, as manifested by the publication of the books you mentioned, together with the teaching experiments being carried on in various schools around the country.

I join you in hoping that similar attempts will be made in the other disciplines of architectural technology—building materials, environmental designs, and so on. Indeed, it is to be hoped that the various
Multi-purpose roof deck systems

Appearance usually associated with more costly ceilings is one bonus you receive when you use Robertson Long-Span Roof Deck systems. Recessed lighting may be built-in and varying degrees of acoustical treatment may be provided by blending acoustical sections which are perforated and backed with non-combustible glass fiber. The flush undersurface is now available in a stucco-embossed pattern steel, factory prepared and primed. Write for literature.

H. H. Robertson Company
Two Gateway Center, Pittsburgh, Pennsylvania 15222

Long Span Recessed Lighting
Built-in Acoustics
Textured Ceiling

ROBERTSON STEEL ROOF DECKS

JANUARY 1968 P/A
On Readers' Service Card, Circle No. 360

13
On Readers' Service Card, Circle No. 328
BARRETT can't rely on its 114-year-old name.

You can!
WE DON'T LOOK BACKWARD. Sure, we're proud of that last century. In that time, Barrett has become the standard of the roofing industry. But there are centuries to come, bursting with new ideas, new materials, new construction systems. And new standards to set.

The fact that Barrett is the first name in roofing isn't the important thing. What is important is the research, the experience, the dependability, the quality of products that have made Barrett the leader in the field. We started out to make products, not a name. But now that our name means something, we plan to protect it. By setting our own standards even higher. Which means constant product improvement, unexcelled technical service, continuing leadership.

And you can rely on it.
SELECTING ENCLOSURES for PUBLIC TELEPHONES?

SPECIFY GLADWIN...

STANDARD MODELS or CUSTOM DESIGNS

Versatile designs and a wide selection of materials are the primary reasons why more and more architects specify Gladwin enclosures. • For example, Gladwin Shelf-Ette® designs are available in single or multiple units with clear Acrylic or solid laminated vertical panels. Standard designs are offered in a wide choice of laminate finishes and stainless steel. They may be combined with a variety of directory shelves and signing. • Where custom designs are required, Gladwin offers a nearly unlimited selection of designs and materials for wall or free standing installations. Telephone equipment of all operating companies may be installed in Shelf-Ettes and all other Gladwin enclosures. • Whether you are selecting telephone enclosures for a new airport, commercial building, shopping center or country club, specify Gladwin ... custom or standard. Send for your copy of the new Gladwin Catalog ... there's no obligation.

GLADWIN INDUSTRIES, INC.
Department A
2162 Piedmont Road, N.E.
Atlanta, Georgia 30324
Telephone: 404-873-5941

Continued from page 12
disciplines will eventually be fused into a comprehensive development of "systems" for building.

JAMES E. AMBROSE
Dept. of Architecture, University of Southern Calif.
Los Angeles, Calif.

Children's Playgrounds
Dear Editor: I was most impressed with your recent evaluation of the $70,000 experimental playground at Cypress Hills Housing Project in Brooklyn, N.Y. (p. 47, AUGUST 1967 P/A). To the best of my knowledge, this is the first time an objective analysis has been written on the subject of playgrounds for children.

Generally speaking, all new attempts at creative playgrounds get extensive coverage in the press. This is primarily because most look architecturally attractive and thus appeal to the editor, who usually has no way of evaluating the play area from the point of view of the ultimate users—the children.

Your article is the first I have ever seen that did just that. Objectively analyzed, what looks like an attractive playground is in effect a very poorly planned playground, and, in fact, a very dangerous one—dangerous because it is scaled for adults and is defeating in its challenges to children.

ASHER ETKES
President, Playground Corporation of America
Long Island City, N.Y.

Progressive Systems
Dear Editor: I have just looked over your articles on systems analysis and systems design in the August issue and have found them extremely interesting. I have been developing a design for a comprehensive planning program for the City of Dallas in which it is our urgent hope that systems analysis can play a vital role. I was not aware that such a forward-looking magazine was available ... From what I have seen, the articles on systems analysis in this issue are excellent and will be of great benefit in dealing with fundamental concepts. You are to be commended on the progressive nature of this magazine, which certainly lives up to its title.

CORRECTION:
In the article, "Urban Institute of Fashion," NEWS REPORT, SEPTEMBER 1967 P/A, it was incorrectly stated that the Brooklyn Museum plans to turn its collection of fashions over to the Fashion Institute for permanent storage and display. The plans are to send only a study collection to the Institute for student use. The rest of the collection will remain at the Brooklyn Museum.

On Readers' Service Card, Circle No. 336

On Readers' Service Card, Circle No. 328
Now Reineman brings you basic Burke color. Choose charcoal, beige or white butyrate fluidized finishes, or stick with the standard—polished aluminum. A wide range of Burke upholstery materials are available with any color base you select. Color coordinate your next assignment with the furniture designed by Richard Reineman, and bask in the glow of colorful compliments from your client.
Bismarck's residents don't pay to watch the planes through Therm-O-Proof insulating glass.

There's no charge in Bismarck. The Ritterbush Brothers, architects, omitted the observation deck (plus the admission charge), and designed large glass areas for this terminal to permit the townspeople to watch the aircraft.

Therm-O-Proof insulating glass provided the view yet reduced heat loss common with large glass areas in Bismarck's extreme cold weather.

To accommodate the openings designed to meet this unique objective, Thermoproof fabricated 158 non-standard size units, with six different types of glass: $\frac{1}{2}$" Clear Polished Plate, $\frac{1}{8}$" DSA, $\frac{1}{8}$" #31 Grey Sheet, Grey Polished Plate,$^\ast$ $\frac{3}{8}$" Finetex® and $\frac{5}{8}$" Muralex®.

At Thermoproof, over 200 configurations and combinations are available to give you more ways to fit more ideas.

$^\ast$Registered trademarks of ASG.

---

**MUSSON Safety TREADS are BEAUTIFUL, too!**

MAXIMUM NON-SLIP STAIR SAFETY can be had in beautiful Musson Molded rubber. Accented with $\frac{1}{2}$" black abrasive strips—one is $1"$ from front with $\frac{1}{2}$" separation to second—they give super safe footing. Treads are $12\frac{1}{2}$" deep, with $\frac{3}{8}$" and $\frac{5}{8}$" thicknesses; lengths of 36", 42", 48", 60", 72". For wood, metal, pan filled or concrete steps. Marbleized Colors: Red, Green, Gray, Mahogany, Black, Birch, Beige, Walnut.

Write For Catalog, Samples, Prices

THE R. C. MUSSON RUBBER CO.
1220 Archwood Ave.
Akron, Ohio 44306

---

*In an apartment house, families live inches apart.*

BEFORE YOU SPECIFY WHAT THOSE FEW INCHES SHOULD BE, REMEMBER ONE OF MANKIND'S MOST CHERISHED RIGHTS IS IN YOUR HANDS. PRIVACY.

Keep New York Plastered.

THE PLASTERING INSTITUTE OF NEW YORK
No square corners here.

Wherever two walls might ordinarily come together in a hard line, Mosaic 1" x 1" and 1" x 2" tiles curve in and out and around... smoothly and easily. Add a new fluidity to contemporary designs.

Mosaic really knows how to take the edge off things.

Outdoors, colorful Mosaic tile can go a long way in dressing up a city, too: on buildings, plazas, structures of many kinds. It's rich in urban renewal possibilities.

And no matter which Mosaic colors you select, you'll find they are all compatible! Harmonizing with each other. With other materials. Landscaping and decorator objects.

Mosaic Tile. Today's tile.

For samples, colors and prices, contact any Mosaic Regional Manager, Branch Manager or Tile Contractor. Look under "Tile-Ceramic-Contractors" in your Yellow Pages.

Mosaic Tiles shown in photo are:

Walls — 622 Light Golden Olive, Velvetex, 1" x 2". Enclosure — Outside, No. 9 Peacock Blue, Staccato. Inside No. 11 Opal. Both 1" x 1".

Floor — 250 Bluegrass Green, Quarry Tile, 8" x 3½".

Mosaic makes the rounds.

© "Mosaic" is the trademark of The Mosaic Tile Company
39 So. LaSalle St., Chicago, Illinois 60603
In western states: 909 Railroad St., Corona, Calif. 91720

MOSAIC® Mosaic is the trademark of The Mosaic Tile Company
39 So. LaSalle St., Chicago, Illinois 60603
In western states: 909 Railroad St., Corona, Calif. 91720
The restaurant at the top of Atlanta’s dramatic new hotel is a revolving restaurant. It is turned on a 72’ O.D. x 46’ I.D. Macton Revolving Platform, giving every patron a constantly-changing view as the room turns slowly, smoothly, silently. Revolving restaurants are exciting for patrons, and profitable for management.

This single campus building serves alternately as a chapel and an auditorium. Its dual function is made possible by a 68’ solid Macton Revolving Platform that carries a chancel on one half and a stage on the other. When the platform turns 180°, the building is converted quickly and quietly. Dual purpose buildings result in substantial savings in both initial cost and maintenance.

Turning can save space and time and labor in any residential, institutional or industrial building. Macton can design, manufacture and install a revolving platform to turn any weight, for any purpose, at any speed, in any size. Macton Revolving Platforms run smoothly, at constant or controlled variable speed, year-in and year-out. They allow continuous or intermittent motion and are reversible. And they are simple and economical to operate, requiring almost no maintenance.

Just think how you can design with motion.
NOW FROM PELLA

Pick from a pair

WOOD CASEMENTS

BUSINESS REPLY MAIL
No Postage Stamp Necessary if Mailed in the United States

Postage Will Be Paid By Addressee

ROLSCREEN CO.
PELLA, IOWA 50219
For the beauty of wood at a moderate price, it's the new PELLA Standard Casement! All traditional PELLA quality features are evident in this new wood window. Sturdy wood frames and $\frac{3}{4}$" thick sash provide excellent insulating qualities. Dual Durometer weatherstripping (a combination of rigid and flexible vinyl) seals out drafts and moisture. All exterior surfaces are factory-primed, ready for finish painting. Double Glazing Panels and flat all-aluminum inside screens are self-storing. Sill-mounted roto operator opens sash $90^\circ$ so both sides of glass can be washed from inside. PELLA offers 20 vent and 37 fixed sizes.

When only the finest will do, pick PELLA Wood De Luxe Casements. Top PELLA quality, of course, with unique comfort and convenience features. Concealed steel frame adds strength to the beauty and insulating qualities of wood. Exclusive inside Rolscreens® pull down like a window shade, roll up out of sight. Self-storing inside storms and stainless steel weatherstripping seal against weather, dust and noise. Rectangular, horizontal or diamond muntin bars, snap in, snap out for easy cleaning. Exclusive design permits masonry installation without wood bucks. If you want the best pick from 18 vent and 48 fixed sizes.

YES, via first class mail, rush me more color photos and information about the following PELLA products:

- PELLA Wood Casement Windows
- PELLA Wood Double-Hung Windows
- PELLA Wood Awning Windows
- PELLA Wood Sliding Glass Doors
- PELLA Wood Folding Doors and Partitions

NAME

FIRM

ADDRESS

CITY STATE ZIP [if known]

☐ I want fast local service. Telephone:

Also available throughout Canada.

Printed in U. S. A.
A HOME IN EVERY FAMILY

WASHINGTON, D.C. Home ownership for families with very low incomes has traditionally been little more than a dream, if that. In an experimental program aimed at turning dream into reality, the Department of Housing and Urban Development is experimenting with a program it calls Turnkey III. Under way in Gulfport, Mississippi, the experiment encourages tenants in public housing to build up equity in their rented homes by doing maintenance work and by increasing rental payments as their income rises.

HUD Secretary Robert C. Weaver is confident that the experiment will have more lasting benefits than it has problems, and he sees in it a chance for "social and economic advancement and pride in ownership."

The Turnkey programs are ones in which private builders construct low-rent public housing, selling it to the Government when it is completed. So far, the graft, sloth, and neglect so prevalent in the development of housing by the Government has been refreshingly lacking.

Weaver expressed hope that private organizations would watch the Turnkey III project as carefully as the Government will.

MOVE TOWARD URBAN BRAINTRUST

WASHINGTON, D.C. In a move that could have far-reaching impact on the way people live, President Johnson took steps last month to set up an independent nonprofit research institute for urban problems. Initially, it seems that it may be patterned after the Rand Corporation, which was originally established to do research for the Air Force. Similarly, the Institute for Urban Development would work on problems projected by the Department of Housing and Urban Development, eventually expanding its scope to tackle work for a host of government agencies, Federal, state, and local, and perhaps even for private clients.

President Johnson appointed a panel to help organize the institute. It included Joseph Irwin Miller of the Cummins Engine Company, Columbus, Indiana; Arjay Miller of the Ford Motor Co.; Kermit Gordon, of the Brookings Institution; McGeorge Bundy of the Ford Foundation; Professor Richard E. Neustadt of Harvard University; and Cyrus Vance, a lawyer.

These men will select a site for the Institute and nominate a board of directors. As President Johnson outlined it, the Institute would:

- Tell the Government which urban problems need action.
- Become a clearing house for urban information.
- Provide independent review of proposed solutions to urban problems.

Initially, it is thought the institute would have a staff of 60 to 100 professional men with backgrounds in social sciences, economics, engineering, and architecture.

PITTANCE FOR ARCHITECTURE

WASHINGTON, D.C. The National Council on the Arts allocated $13,800 for architecturally planned, and designed last fall out of a total of more than $1 million being assigned to seven categories of the arts. The architectural grant goes to the Detroit Common Ground of the Arts, an arts center whose purpose is to bring together artists from many disciplines to work toward the visual enhancement of the American city. The council grant will help meet the center's expenses for the next three years.

STERLING PLANS FOR WATERFRONT

NEW YORK, N.Y. A six-month pier-recreation complex on Manhattan's West Side (p. 66, JUNE 1967 P/A) will become more than just a haven of comfort for ocean voyagers. Mayor Lindsay sees it as the catalyst that could lead to a new formula for West Side redevelopment. The proposed piers are in the Hudson River, adjacent to an area filled with garages, warehouses that handle auto parts, and small hotels and apartments housing about 40,000 persons.

Lindsay hopes the area, which stretches from 46th to 50th Streets west of Eighth Avenue, can become a "fitting gateway" for the nation's largest port. To help achieve this, he announced the appointment in late November of James Sterling, the British architect, who maintains a New York office, to prepare an architectural profile of what the area might become.

The city sees the study done by Sterling, working with Arthur Baker, a New York architect, as one of proposed development, to help guide the area's transformation to one of recreation and passenger ship service.

Sterling's report is due in the spring. One hopes it will be more than just another plan, like the ones that have spewed from the upper echelons of the Lindsay administration only to become mired in the mullings of minions on the lower levels.

MODEL CITIES GRANTS

WASHINGTON, D.C. HUD announced its Model Cities grants in mid-November. It was a matter of some importance to the cities involved that they receive Federal assistance in planning the betterment of their central cores. Of the 193 communities who applied for funds, 63 got them. They will share $11 million, to be used in drawing up plans. If they complete the planning process successfully, they will then share the $300 million set aside by Congress for urban renewal under the Model Cities plan.

In size, the cities ranged from New York (8,000,000) to Pikeville, Ky. (5000), with every section of the country represented. "They represent the hard core of need and of opportunity," claimed Secretary Weaver in announcing grants. "In the target areas," he went on, "there are one million families, or over four million people. Nearly a third of the families have incomes of less than $3000 a year, and the vast majority earn less than the medium-income level in the locality. A fourth live in substandard housing, and many more are overcrowded in deteriorating buildings. Unemployment is double the national level and there is substantial underemployment. A third of the adults have less than an eighth-grade education. The
Apartments and town houses are a Spancrete® specialty

Apartment owners like Spancrete — because it cuts down on expense of plastering and papering. The only thing a Spancrete ceiling needs is paint ... and you can even leave that out if you don't mind a pleasant light grey color! In many installations Spancrete floor surface is ready for direct application of linoleum, tile, or carpeting.

Tenants like Spancrete — because Spancrete floors do not creak or squeak ... and Spancrete sound-installation screens out the noise of the party downstairs — or up.

Architects and builders like Spancrete — because it goes up fast, even in adverse winter weather. This means lower construction costs and quicker occupancy. Job-site cutting to meet special conditions is easily done. The Spancrete provides an immediate working deck to further speed erection. Fire-rated when needed.

Investigate Spancrete for your next project; for latest technical information and cost data, call or write any of the licensed manufacturers on facing page.

Chicago Town House / Designed by Keck and Keck
infant mortality rate is double that for the nation as a whole." Not an encouraging picture. Yet the HUD grants may prove a kernel of hope that can help bring these neighborhoods into the second half of the 20th Century.

CORBELLETTI TO PENN STATE

UNIVERSITY PARK, PA. On January 1, Raniero Corbelletti became chairman of the department of architecture at Pennsylvania State University. He moves to Penn State from Pratt Institute, where, for five years, he headed the Center for Middle Eastern and Tropical Architecture. Corbelletti's career has been truly international. He has practiced in Italy, the U.S., Lebanon, and Saudi-Arabia. In addition to his teaching at Pratt, he spent a year as Fulbright professor of architecture at the Middle East Technical University in Ankara, Turkey, and as visiting design critic at Columbia University. Corbelletti succeeds Gregory Ain, who has headed the Penn State department of architecture since 1963.

A QUIET HURRAH FOR THE NATIONAL THEATER

LONDON, ENGLAND. Cost seems to be the main concern looming over the new home for the Sir Laurence Olivier's National Theater company. Already plans for an Opera House, to rise adjacent to the National Theater building, have been scrapped (to cut costs) and the theater moved to a new site — across Waterloo Bridge from the Queen Elizabeth Hall (see pp. 132-135, DECEMBER 1967 P/A). The Queen Mother, who had already tapped the theater's corner stone into place on the old site, gave her blessing to the move, and, rumor has it, the stone was trundled off at night to be laid again. A recent article in the London Times showed a photo of the models architect Denys Lasdun had discarded. There were too many to count. It is to Lasdun's credit that he has managed to come up with a distinguished solution despite the stress of constant changes. His latest design is for one building containing two theaters. (The $17,760,000 needed to build it may or may not be approved by the government.) A small, proscenium-stage theater seating 900 will be directly adjacent to Waterloo Bridge. A larger hall, seating 1200 and using an open stage, will rise beyond and above the smaller one. Their juncture forms an open courtyard entrance fac-

On Readers' Service Card, Circle No. 412

January 1968

PIA News Report 25
ing both water and bridge; a spacious, inviting promenade along the river provides a handsome setting. Each level of the building, stepped back slightly from the one beneath, is expressed with a deep balcony and a concrete parapet. Even without the glow of opening night lights, the theater should be a fitting, infinitely varied, reminder of Great Britain's distinguished theatrical tradition.

PRIVATE INVESTMENT TO RENEW BACK BAY

BOSTON, MASS. So far, most of the considerable planning effort expended on Boston has been government-sponsored. Now, however, as if caught up in the planning excitement that is sweeping this historic city, a group of private citizens, business groups, and institutions is taking steps to preserve and enhance one of the city's most renowned sections: Back Bay.

The private group, known as The Back Bay Council, with the aid of the Urban Renewal Authority, had a master plan prepared to guide Back Bay's future growth. In it, the city is asked to make $3 million worth of public improvements; private investment will pour in $325 million. Perhaps more significant than the division of the financing, is the recently enacted law creating the Back Bay Architectural Committee. This group of urban Minute Men is ready to prevent needless destruction and to demand compatible construction. They are authorized to review and approve all exterior changes of building in the area and to approve new construction. The council includes two architects, a lawyer, a realtor, and a housewife—all Back Bay residents. Their task will be somewhat clarified by zoning guidelines, regulating the placement and height of buildings. For example, along the Charles River side of Beacon Street, no building may go higher than 90' except within 100' of street intersections, where 200'-high structures will be allowed.

In all, the Back Bay development will cover about 300 acres, and hopes are high for luring the projected investment to the area over the next 10 years. According to the present outline, $125 million will go into housing, $10 million into rehabilitation, $300,000 into office space, $20 million into retail space, $400,000 for a hotel, $20 million for parking, and $60 million for air rights development, most of it over the Massachusetts Turnpike. First part of the plan to be implemented will be the city's $3 million portion. In hopes of inspiring private investment, the city will restore the rows of trees along Commonwealth Avenue, install wrought-iron fencing and brick sidewalks at intersections. On Boylston Street (1) will be placed a landscaped promenade; and on Dartmouth Street (2), a tree-lined mall. Part of the city contribution will also go for pedestrian overpasses and other traffic improvements.

Consultants on the project included the Cambridge planning firm of Adams, Howard & Opperman; architects Wilhelm von Moltke and Chapman & Goyette; and structural engineers Le Messurier Associates.

EXPO 70 HEADQUARTERS

OSAKA, JAPAN. Expo 70's headquarters will be housed in a building that spills in four giant steps down a sloped site. It is the work of Koichiro Nezu, an Osaka architect who won an open competition for its design. In all, there will be 12,000 square meters of floor area for Fair administration offices and other supporting services. The triangular, prism-like towers (32 meters high) will have observation decks on their upper levels. Construction is scheduled to get under way in March, 1968.
VERTICAL SPACE PLANNING

William Sullivan's Vertical Space Planning forms a natural transition to the office landscaping concept, yet vitally improves established modular systems. The professional space planner is acutely aware of the acoustical, circulatory, human and economic factors resolved in Vertical Space Planning. VSP-II is of solid Fiberesin and steel, VSP-III of genuine walnut... special colors and woods available in contract quantities.

May we help you utilize both horizontal and vertical (free) space? Please write today for an illustrated brochure to Marble/Imperial Furniture Company, Bedford, Ohio 44146.

Marble Imperial
A DIVISION OF DICTAPHONE CORPORATION

On Readers' Service Card, Circle No. 306
BOSTON, MASS. According to Webster's, a rhomboid is a parallelogram in which the angles are oblique and adjacent sides are unequal. According to the John Hancock Mutual Life Insurance Company, it is the shape of their newly designed building, a 60-story, $75-million structure on which construction will get under way next summer.

John Hancock is, of course, an old name in Boston, and its latest architectural ignis promisses to tower as far above surrounding buildings as the original one did above other signatures on the Declaration of Independence. The company seems perpetually concerned with physical size. A 100-story building now going up in Chicago will bear its name. And the Berkeley Building, seen opposite the new tower, was once, at 26 stories, the tallest building in Boston; it houses the Hancock executive offices. When the tower is completed in 1971, the 10-story company building between it and the Berkeley Building will be demolished and a landscaped plaza installed.

Directly across St. James Avenue from the proposed new tower is Trinity Church, built by Henry Hobson Richardson in 1877 at the head of what is now Copely Square. Facing the church across the square is the Boston Public Library, designed by Charles McKim of McKim, Mead & White.

Now — suddenly, shockingly — into this area of gentle calm is placed a 60-story rhomboid sheathed in reflecting glass. Henry N. Cobb, partner of I.M. Pei & Partners, who designed the Hancock building, has perhaps lessened the shock by placing the narrow side of his building toward Trinity Church. But the effect — in preliminary design, at least — seems to be one of a 60-story mirror held up at the corner of Copely Square. Cobb saw the design problem primarily as one of achieving "harmony between the totally disparate scales of building which characterize the old and new in our urban civilization." Given his solution, the problem still exists.

TELEPHONE TOWER FOR LOWER MANHATTAN

NEW YORK, N.Y. The American Telephone and Telegraph Corporation plans a 29-story skyscraper on lower Broadway, just north of New York City Hall. The new structure will house the world's largest center for long-distance telephone calls.

To contain the bulky equipment, 18' ceiling heights are needed. The 29-story structure will therefore be equal in height to an average 50-story building.

Columns projecting from the façade will enclose elevators, heating, and air-conditioning ducts, plumbing, and electrical equipment. This arrangement was designed by architects John Carl Warnecke & Associates to free the 800,000 sq ft of interior space for equipment and personnel. Mechanical system is de-
signed to store heat generated by telephone switching machinery pumping it throughout the building in winter.

Site of the new structure is the block bounded by Thomas, Worth, and Church Streets and Broadway, opposite the new Federal Office Building and the proposed Civic Center. The block contains several century-old buildings with cast-iron façades, all of which must be demolished to make way for the telephone company's new building. Although the condemned structures have not been designated landmarks and are, therefore, not protected by law, the city's Landmarks Preservation Commission has arranged for their preservation. Under an agreement between AT&T and the commission, the fronts will be dismantled and stored under the Brooklyn approach to the Manhattan Bridge until a site is found where they can be re-erected.

Construction will begin as soon as demolition is completed this spring. Completion is scheduled for summer of 1970.

**CALIFORNIA TRIO SWEEPS BROOME COMPETITION**

BINGHAMTON, N.Y. Three young California architects who teach at Berkeley formed a firm to enter the Broome County Cultural Center competition. And they won it. In doing so, Barry Elbasani, Donn Logan, and Michael Louis Severin received $10,000 and the right to act as the county's architects for the center.

Their winning plan places an 1800-seat performing arts theater on the banks of the Chenango River and an auditorium with permanent seats for 4500 inland from it on State Street. The two are connected by a promenade structure that will house both their lobbies, a corridor connecting them, and space for offices and shops. A restaurant and lounge will cantilever over the river edge just past the theater. Raised walkways will give pedestrians access to the center from buildings across State Street and from parking garages nearby.

Jurors commented that the design provides a "brilliant entrance for the site," which is in an urban renewal area. They called it "a solution of great strength and identity adequate to the magnitude of its scope," and pointed out that at the same time it sowed "respect for an environment of human proportion to which it contributes with great creativity."

Elbasani, Logan, Severin have entered competitions before. They were finalists in the competition for the Birmingham, Ala., cultural center and took second place in the design of a cultural center for Fremont, Calif.

Jurors for the Broome County competition were Romaldo Giurgola, chairman of the Division of Architecture at Columbia University, Eduardo Catalano, professor of architecture at Massachusetts Institute of Technology, H. Bernard Hoesli, professor of architecture at the Swiss Federal Institute of Technology in Zurich, and Douglas W. Seaman, former Thirtieth Ward supervisor in Binghamton. Professional Advisor was Werner Seligmann, an architect practicing in Cortland, N.Y.

BRASILIA, BRAZIL. Oscar Niemeyer's buildings never quite seem real. Either they are so grand in their massive isolation that even when coming upon them in photographs one feels one has swallowed one of Alice's pills and been suddenly reduced to the size of a gnat. Or they are so fancifully shaped (as in his half grapefruit slices for Brasilia's Congress buildings) that one's reaction is fanciful, too. Yet perhaps they are appropriate after all, for whatever goes on in them is also usually slightly unreal. Take any of the buildings in Brasilia, where the government is flown out from Rio once a month for meetings, then is flown right back.

In Niemeyer's latest structure for Brasilia, the foreign ministry, Itamaraty Palace, the image of unreality is as real as ever.

The Official Functions Wing of Itamaraty projects the image of a jewel box set on a mirror, like one of those winter concoctions your neighbors used to make with cotton for snow and little figures skating on the glass. Actually, it is a box within a box set in a sea of rectilinear reflecting pools. The column-supported roof sits above and away from the three-story glass-clad building beneath. On top of the inner box is a tropical garden landscaped by Roberto Burle Marx. Behind this wing is the administrative office wing (still uncompleted), a long rectangular slab that will serve both as a backdrop for the jewel box and a wall between it and the rest of Brasilia.

**COMPETITIONS**

PPG Industries, in cooperation with the National Institute for Architectural Education, announces its fifth annual design competition for architecture students and non-registered architects under 30. Theme of the 1968 competition is "A Condominium Community for Active Adult Living." Three top prizes of $1200, $750, and $500 will be offered, in addition to 12 merit awards of $100 each. Write for application forms and further information to: National Institute for Architectural Education, 20 W. 40 St., New York, N.Y. 10018

. . . The Liturgical Conference, a national Roman Catholic organization, invites architects to enter its 1968 Awards Competition in Church Architecture. Judges will evaluate designs with respect to total concept, relationship to the communities they are intended to serve, interior appointments, and provision for liturgical procedure. Categories for submit-
VARIATION GOING UP

NEW YORK, N.Y. Perhaps no single building type in recent years has remained so consistently uninspiring as the highrise apartment house. Bulky, rectangular, brick piles with rows of windows punched in their façades, they spring up everywhere, lending a drabness to the lives of people who live in them that not even an electric dishwasher or central air conditioner can relieve.

Variations that go beyond giving the brick a coat of white or blue paint stand out like fashion models would on a construction gang.

One recent variation is going up on Manhattan’s East Side at Third Avenue and 65th Street. Designed by Emery Roth & Sons, its concrete-and-glass façade is reminiscent of that firm’s Tower East (see pp. 114-117, JULY 1963). Some seven blocks north, at 72nd Street. The 31-story structure will consist of two towers connected by a recessed service core. Panels for the façade of this core will be cast on the site, and the expanse of concrete will lend complexity to a façade, which, merely because of its block-long bulk, could otherwise have become monotonous. By recessing the core, apartments at either end of the building are given more window space. At one point in the design stage, partner Richard Roth, Jr., had hoped to have a wall of glass at the rear, along the service core corridors overlooking the town houses and gardens that fill the rest of the block between Third and Lexington Avenues. But owner-builder D. W. Frankel saw only increased maintenance costs in the use of such a window wall, so Roth shifted to concrete.

One particularly inviting design touch will be at ground level along Third Avenue, where shopfronts will present an undulating, bay-windowed type of façade, set well back from the street behind planting boxes placed at intervals at the inner edge of the sidewalk. The lobby off 65th Street will open onto a small interior garden being designed by M. Paul Friedberg.

All two-bedroom apartments — there are six apartments per floor — will have full dining rooms and kitchens with service entrances. The lack of service entrances in apartments at Tower East has proved inconvenient according to Roth. Rents are expected to be about $125 per room.

SCHOOLS

Under the auspices of the interdisciplinary Institute of Urban Ecology at the University of Southern California, 20 students will study urban needs and problems without traditional classes or curricula. “Urban Semester,” a pilot program at USC, will emphasize flexibility of program, individual study, and close attention of faculty members. The program will begin in the spring semester, financed by a $54,000 grant from the Mary Reynolds Babcock Foundation. Frank Tyson, director of the program, hopes to bring students to an understanding of the social and environmental situations most of them will live and work in, and to create interest in the professions that deal with urban problems...

Stanford University’s Community Planning Laboratory will undertake a study of a town across the San Francisco Bay. The CPL group is composed of students in architecture, engineering, law, business, geology, and other disciplines under the direction of a steering committee that includes faculty members. The group will investigate growth problems of Concord, Calif., and make planning recommendations to the city council...

Harvard University has appointed Francois Claude Vigier Director of the Center for Urban Studies in the Graduate School of Design. Also at Harvard, a recent $3 million grant from the Ford Foundation provided funds for the establishment of five professorships at the Joint Center for Urban Studies of Harvard and MIT. The Joint Center of Harvard and MIT is distinct from the Joint Center for Urban Studies in the Graduate School of Design...

...A grant to Columbia University from the Richard King Mellon Charitable Trusts for work on the problems of urban areas will be administered by the School of Architecture through its Division of Urban Planning. Two annual gifts of $50,000 will be used as follows: $20,000 for Mellon Fellowships in urban planning, $20,000 for faculty salaries for those teaching in the fellowship program, and $10,000 to be used as needed for either fellowships or faculty salaries...

George Sadek, head of the art department at Cooper Union School of Art and Architecture, will succeed Esmond Shaw as dean of the school in July, upon Professor Shaw’s retirement...

The Institute for Architecture and Urban Studies, founded under the auspices of the Museum of Modern Art, Cornell
Solid brass plus the added protection of brilliant chromium plate. The latch, which offers the lift-free emergency access feature, is recessed within the door. The stainless steel bolt automatically retracts if the door is slammed.

The ruggedness of SOLID BRASS HARDWARE

...handsome feature of
Weis Toilet Compartments

Write for Catalog
See Weis in Sweet's

On Readers' Service Card, Circle No. 370
University, and several private foundations, has received a charter from the Board of Regents of the State University of New York as a nonprofit educational institution. (See p. 54, November 1967 P/A.) . . . The Department of Architecture of the University of Michigan announces two new fellowships for graduate study in architecture and planning. The Wells Bennet Memorial Fellowship in architecture carries a stipend of $5000, and C. Allan Harlan Fellowship in the field of building technology carries a $4000 stipend.

U.S. ARCHITECTS TAKE ORIENTAL HONOR

TOKYO, JAPAN: Two young New York architects copped first prize in a competition sponsored by Shinkenchiko, the Japanese architectural magazine. This year, the magazine asked contestants to present proposals for housing that might be built in areas with high population densities — without displacing the people there.

Winning architects Robert R. Markisz, 25, and Robert Esnard, 29, submitted a cats' cradle design. Housing is suspended on wires from central concrete towers that straddle highways, rail lines, or rivers. Within the towers would be located stacks of stores, schools, and even theaters. Markisz and Esnard had the South Bronx in mind as a site, one of three major slum areas in New York City, where the density is about 550 persons per residential acre. They envision a series of these towers connected by covered moving walkways. Apartment units would be suspended from the towers by a network of tension cables; each prefabricated, plastic, two-story apartment unit would be cantilevered at a 45° angle from its neighbors. Blocks of apartments would rise at a 45° angle from the base of the towers to avoid crowding neighboring houses and apartments. Each tower would have an open pedestrian promenade, a sort of park in the sky, on its upper levels and parking facilities near its base.

PERSONALITIES

The City University of New York has assigned architect-planners to each of its campuses. Firms will assume responsibility for development and continuing supervision of planning under the university's direction. Commissioned for Richmond College is Edward Durell Stone; for City College, John Carl Warnecke; for Lehman College, Hird Pokorny and David F. M. Todd & Associates; for Hunter College, DeYoung & Moscowitz; for Brooklyn College, Myller, Snibbe, Tafel. Architect-planners for community colleges are: William A. Hall for New York City Community College; the Moore & Hutchins Partnership for Staten Island Community College; Katz, Waisman, Weber, Strauss with Warner Burns Toan & Lunde for Kingsborough Community College; Percival Goodman for Queensborough Community College, and, finally, the firm of Caudill, Rowlett, Scott for Borough of Manhattan Community College . . . Tweedy, soft-spoken Edward J. Logue, former head of Boston's Redevelopment Authority and an unsuccessful candidate for Mayor, is now Professor of Government at Boston University . . . John C. B. Moore of The Moore & Hutchins Partnership, New York, has been named to the architectural Review Board of the University Circle Development Foundation in Cleveland. The foundation coordinates building and planning for the several educational institutions of University Circle, which includes Case Western Reserve University . . . Eugene J. Pidgeon is the new president of the American Institute of Steel Construction.

NEW YORK, N.Y. When Raymond Hood, fresh from a resounding success with the Daily News Building, completed a building in 1931 for McGraw Hill, Inc., the magazine and book publishers, on West 42nd Street, it quickly became a landmark. Its lines were crisp; it had broad expanses of windows, and a distinctive green color, which led many who worked in it to refer to it fondly as the Pistachio Building — green on the outside with the nuts on the inside.

Now, 36 years later, McGraw Hill plans another building. It will be designed by Harrison & Abramovitz for a site in Rockefeller Center at 49th Street and Sixth Avenue. In preliminary design, it looks strikingly similar to Edward Durell Stone's building for General Motors, now rising on a site opposite the Plaza Hotel. Like the GM building, it will have base flanking outrigger sections. Like GM, its mullions will be clad in a white or off-white material, probably masonry. And again like GM, it will have a broad plaza at the front entrance.

When completed in 1970, the 48-story building will house 5000 McGraw Hill employees now scattered in eight sites around Manhattan.

It will be the twentieth structure in Rockefeller Center, and rumor has it that another, the twenty-first, is being planned for the Celanese Corporation, on a site just to the south of the McGraw Hill structure. Slowly, the procession moves down Sixth Avenue. The McGraw Hill building will be the sixth glass-and steel structure to rise on the west side of Sixth Avenue since 1959, when Time, Inc., completed a building there at 50th Street. With all those glass walls stacked side by side across narrow side streets, someone waiting for an elevator in the Hilton Hotel at 54th Street might, glancing up, catch himself looking at copies of a magazine, like Flowerpot Age, in an editorial office six blocks south.

CORRECTION

Consultants for the new PepsiCo International headquarters building in Harrison, N.Y., designed by Edward Durell Stone, were listed incorrectly on p. 54, October 1967 P/A. Structural engineers are Fraoli, Blum & Yesselman; landscape architects are Edward Durell Stone, Jr. & Associates.
SPECIFICATIONS AND LOAD TABLES FOR HIGH STRENGTH OPEN WEB STEEL JOISTS

Here, in one convenient source, is everything you need to specify joists to carry uniform loads on spans up to 96 feet. This practical working handbook covers the following joists: J-SERIES, joists made from 36,000 PSI minimum yield strength steel; H-SERIES, high-strength joists made from 50,000 PSI minimum yield strength steel; LJ-SERIES, longspan joists compatible with the J-SERIES; and LH-SERIES, longspan joists compatible with the H-SERIES.

MAIL COUPON TODAY for your free copy of this valuable book.

STEEL JOIST INSTITUTE
Room 715 DuPont Circle Bldg.,
Washington, D.C. 20036

Please send me a free copy of the 1968 Edition of Specifications and Load Tables

NAME__________________________
COMPANY_________________________
ADDRESS________________________
CITY_________________STATE_______ZIP______

On Readers' Service Card, Circle No. 365
NEW YORK, N.Y. Art had a big season in the big city this fall. In fact, the very size of some works seems to cause them to spill out of the atelier and into the public places. During October, visitors to New York found contemporary sculptures by Nevelson, Rickey, Oldenberg, and 21 other artists in front of many distinguished buildings in town. The city's Office of Cultural Affairs called its open-air exhibition "Sculpture in Environment." Shown here is Antoni Milkowski's "Diamond" at Kips Bay (1).

Not all the environmental sculpture to be seen was outdoors, however. There was, for example, an exhibit of Pietro Consagra’s aluminum-sheet constructions (2) at the Marlborough-Gerson Gallery, some of which are painted a pale pink, blue, or green; they rise on a slender stem and are firmly planted, like great flowering bushes, in supporting bases. At the Pace Gallery, Eduardo Paolozzi's collection of chromed sculpture (3), designed for interior environments, plays fascinating optical tricks with reflections. Undulating surfaces of one piece seemed to turn the observer's reflection into a vision of Manhattan's skyline.

Kites, rockets, and other, less easily identifiable flying objects (4) could be seen this season — not over Central Park (although such things were reported by a late-evening stroller or two), but dangling from walls and ceiling of a rather small gallery (the Howard Wise). The "UFO's" exhibited consisted of twisted, lighted neon tubes by artist Billy Apple, whose neon light installation in the Pepsi-Cola building last year was unplugged by city inspectors when they found it had been wired by an artist who was not a member of the local electricians' union.

Another artist who brought the outdoors indoors was Gillian Jagger, who makes molds of manhole covers. Lately, she has been making casts of bicycle and auto wheel tracks, trails left by horses and dogs in the park, and traces of birds and small boys. The work shown here, entitled "International Harvester" (5), was part of an exhibit at the Ruth White Gallery.

More familiar works on view during November included a fairly large collection of nudes (6) by de Kooning at the Knoedler, and a good sampling of drawings made by Kaethe Kollwitz during the 20's and 30's.

Paintings on view (for architects and other professionals only) at Etchings International included a sampler of work (7) by Paul Colby. The hard edges bordering his paintings express, he feels, the desire for a return to form as a determining principle in contemporary art.

Two museum exhibitions of particular importance were presented at the Guggenheim and the Museum of Modern Art. The Guggenheim announced winners of its 1967 International Award for sculpture. One of the winning works purchased by the museum and currently on view is Günter Haese's "Olymp" (8); other winners were "Work Brass 402-No. 15, Series A," by Akio Miyawaki; "Untitled," by Robert Morris, and "Inversion," by Eduardo Paolozzi. MOMA...
Cohyde's new contract vinyl wall covering

Interchem's Cohyde vinyl wall coverings are designed specifically for the contract market. They are versatile and beautiful. They are durable and easily maintained, no repainting, repapering, re-anything. Cohyde's low installation cost makes it ideally suited for both original and re-furbishment installations. Architects specializing in contract installations are singling out Cohyde's new Tirador pattern.* Designers and decorators tell us that the new Tirador is a fine cork reproduction, and it coordinates beautifully with Cohyde's vinyl upholstery fabrics. We'd like to send you a sample of Tirador, along with our color brochure featuring other contract-oriented patterns. Write us today. Most Cohyde patterns are available with Tedlar.

INTERCHEMICAL CORPORATION, COATED FABRICS DIVISION, TOLEDO, OHIO 43601

*U/L rated, with physical properties that equal or exceed Federal specifications.
exhibited nearly every major sculpture of Pablo Picasso, including a small model of the controversial “Chicago Picasso.”

Concurrently, New York University announced that Greenwich Village will soon display an oversize Picasso of its own. The sculpture (9) will occupy a 100-sq-ft plot in front of the university’s Pei-designed apartment towers, facing Bleeker Street in the heart of the Village.

To top off the season, the Halim Gallery assembled a benefit exhibit of Christmas trees designed by celebrities. Among the designs were trees created by Bucky Fuller, artist Marisol, and stage designer Beni Montresor. Marisol’s Christmas tree is shown dreaming (10), we suppose, of virgin forest.

CALENDAR

The Annual Meeting of the Society of Architectural Historians will be held January 25-28 at the Chase-Park Plaza Hotel in St. Louis, Mo. Sessions will be devoted to aspects of theater design, and will include such topics as “Stage Design and Occasional Architecture” and “Theater and Festival Architecture.” Additional information is available from: S.A.H., 1700 Walnut St., Room 716, Philadelphia, Pa. 19103 . . . The Society of the Plastics Industry’s 23rd Technical Conference of the Reinforced Plastics/Composites Division will feature latest developments in reinforced plastics for the building industry. Meeting takes place at the Shoreham Hotel in Washington, D.C. February 6-9. More information may be obtained from: SPI, Inc., 250 Park Ave., New York, N.Y. 10017 . . . The University of Wisconsin Extension will conduct a short course on timely aspects of private engineering practice at its Madison campus, February 8-9. For details of the “Private Practice Institute,” write to: Dwight D. Zeck, Institute Director, 725 Extension Bldg., The University of Wisconsin, 423 N. Lake St., Madison, Wis.

NEW CONSTRUCTION FOR KENDALL SQUARE, CAMBRIDGE

CAMBRIDGE, MASS, As MIT officially opened its 30-story Eastgate Residence Tower by Eduardo Catalano (1) see p. 52, FEBRUARY 1966 P/A — for married students and faculty recently, The Badger Company, Inc., announced plans for a complex of two high-rise office buildings, a shopping mall, and a garage, directly adjacent to Eastgate Tower on Kendall Square. New headquarters for The Badger Company (2), designed by Emery Roth & Sons, will rise opposite the company’s present site across an inlet from the Charles River. Initial construction will be a 16-story tower containing 220,000 sq ft of office space, the parking garage, and retail space with auxiliary facilities. Above the parking structure and running the entire 460’ length of the Broadway-Main Street frontage, the architects have designed landscaped plazas.

Eventually, a second office tower will be erected at the rear end of a central shopping mall. Shopping facilities will provide 19,000 sq ft of retail space; the garage will accommodate 445 cars. Construction is expected to begin in the spring of 1968. Completion of the first phase is planned for summer of 1969.

PERSONALIZED DINING HALL

HAVERFORD, PA. By 1972, Haverford College, a small Quaker-affiliated liberal arts college outside Philadelphia, expects to have an enrollment of 700. Much soul-searching preceded the college’s decision three years ago to expand its facilities to handle an extra 200 students. Even with the increase, Haverford will remain a small school in an age when U.S. education is beginning to suffer from giantism. The college’s emphasis on personalized education is reflected in the design of its new dining hall, where the entire student body will eat three meals each day.

Designed by Philadelphia architects Harbeson Hough Livingston & Larson, the dining hall will have two main cafeteria-style dining rooms, capable of holding 200 each, reaching out on either side of a central entrance hall. Near the top of the high, truss-supported ceiling, clerestory windows will let in large washes of light to reinforce that supplied by the ground-level windows. Small private dining halls will surround the kitchen in the rear.

Natural materials throughout will help blend the building with others on the Haverford campus. The roof will be of slate tiles, trusses in main dining rooms and lounge will be wooden, and both interior and exterior walls will be of local stone, probably Wissahickon schist.

Construction started in the fall, and completion is expected during the winter of 1968.
Design with freedom from the start. Automatic entrances strip away the fetters, and answer the demands of a computer-paced society. Concealed controls and operators. Sliding and swinging entrances for all the exciting, advanced ideas on your boards—high-rises to hospitals.


But do your doors stand still?

Sure, your designs swing.

Doors were doors until STANLEY entered in.
NEW YORK, N.Y. "What is crime?" asked four senior design students from the Parsons School of Design, who set themselves the project of designing interiors for the $23 million Correctional Institution for Women, now going up on Riker's Island here. Ann Gilford, Barbara Greene, Howard Kaplan, and Luis Rey started with fundamentals and ended with suggestions that often pleased Department of Correction Commissioner George F. McGrath.

On the road to a solution of the design problem, the students, who are now graduates, raised more questions. Is a dangerous person made more or less dangerous by imprisonment? Does excessive punishment really rehabilitate a criminal?

To offer prison authorities an aid in rehabilitation, the designers suggested interiors "rich in variation of form, color, pattern, texture, and movement." They hoped to provide a sharp disassociation with the past, by providing living conditions that would in no way remind inmates of their life in the slums. By offering a new environment they hoped to lure the frustrated inmate away from past hostility.

Suggestions presented to Commissioner McGrath last month included the use of tackboards in cells to give the otherwise sterile rooms some individuality. A brightly colored cube lid for the toilet would be a seat when down and a privacy-providing panel when up. A cover on the wash basin could be used as a dressing table or desk. The built-in bed would have a shelf above it for personal objects.

In the dormitories, the designers suggest breaking up the open rows of cots, providing instead staggered units of four beds each. These beds would be separated by partitions, and the units could be arranged to provide as much variety as desired. An open passageway would be maintained around the periphery of the room.

In the corridor, color, texture, and lighting could be used to break up the long, cold expanse of open hallway. Although Commissioner McGrath did not accept all the suggestions immediately, he approved the report and stated publicly that many of its suggestions would be incorporated into the new building.

Faculty advisor for the project was James A. Howell, chairman of the Parsons Interior Design Department.

OBITUARIES

Paul Lester Wiener, architect and city planner, died of a heart attack November 16 in Munich, Germany. He was 72. Born in Leipzig and educated at the Royal Academy of Vienna, he came to the United States in 1913. With Jose Luis Sert, he formed the firm of Town Planning Associates, with offices in New York. He was designer of plans for Brazil's first model city, an industrial community of 25,000 near Rio de Janeiro, and planned many other cities in Columbia, Cuba, Peru, Brazil, and Venezuela. He designed the American Pavilion for the Paris Exposition of 1937 and the interiors of the Brazilian and Ecuadorian Pavilions at the New York World's Fair of 1939-40. In recent years, Wiener served as site planner or consultant on the Gateway Center development in Minneapolis, the Downtown Community Development in Syracuse, N.Y., and Washington Square Village and the McCombs Bridge urban renewal project in New York City.

A & A PUT TO BED FOR LAST TIME

LOS ANGELES, CALIF. Last month, at 56 years of age, the magazine Arts & Architecture was retired from monthly publication. This happened in spite of a threefold subscription increase to more than 10,000 readers since World War II. Since its founding in 1911, the West Coast-based journal of contemporary art, architecture, and related fields of environmental design had absorbed 14 competing or complementary professional and business publications.

GOLD DUST TWINS IN THE CITY OF BROTHERLY LOVE

PHILADELPHIA, PA. Before too long, William Penn will look down from his perch atop Philadelphia City Hall on two new office towers designed by Vincent G. Kling & Associates. The taller one (38 stories, 813,000 sq ft) will house the headquarters of the First Pennsylvania Banking and Trust Company. The shorter (32 stories, 505,000 sq ft) will hold offices for the Atlantic Richfield Co.

At ground level (Market Street between 15th and 16th Streets), the buildings will be connected by a 40-foot-high gallery covering 30% of the site with space for exhibits, lighted by a vast, complex skylight.

Cost is expected to be $80 million.
The worst place ceiling.

Armstrong Ceramaguard™ goes places that’d raise havoc with conventional acoustical materials . . . if you’d dare try them there in the first place.

Much of Ceramaguard’s success is due to its immunity to the effects of moisture. Even when soaking wet, this fabricated ceramic material keeps its rigidity and span strength. In bottling plants, locker rooms, commercial kitchens, factories, or wherever moisture presents a problem, Ceramaguard can provide an answer.

Temperature extremes? Freeze-thaw cycles don’t phase it a bit, and when protected from direct exposure, Ceramaguard does a fine job on outside applications such as in open-air garages and under canopies.

Even in a steam room

Even the chlorine-heavy atmosphere of an enclosed swimming pool or the torture of a steam room doesn’t affect it. Ceramaguard can be washed again and again—even with steam.

And yet, tough as it is, Ceramaguard means more than durability. It means excellent acoustical control, high light reflectance, rated fire protection, and handsome appearance. All in all, Ceramaguard offers a more comfortable environment than might have been expected or was ever possible before. In short, you’ll find in the worst places, Ceramaguard works out best.


CERAMAGUARD BY Armstrong
What's Ahead for 1968— Coming back to a wintry Washington after a too-brief interim between sessions, Congress and the President face a year of political jockeying that promises little for the construction industry and its professionals.

The fact that 1968 will see not only the whole House and a third of the Senate, but also the President himself facing the voters will color every action, every word, every thought. And the politicians have read the public mood to indicate that anything labeled "economy," "consumer protection," or "aid to the poverty-stricken" (including the growing number of oldsters) is the key to re-election.

Hence, things that would cut spending (or appear to cut it), offer more benefits, protect the public against rapacious business profiteers, or control pollution will be popular; very little else will get any attention, aside from the war in the Far East.

Indeed, this preoccupation with politically popular considerations is apparent in any review of what Congress did during its 1967 session. It is almost impossible to find any legislation of special interest to the construction industry that got more than very short shift, aside from the normal appropriations bills — and even these were generally extremely late in achieving passage.

The various proposals on urban problems and housing, for example, got a lot of attention in the newspapers and in speeches, but Congress left them among its unfinished business for this year; labor got nothing at all (but did get an enormous boost from a Supreme Court decision that seemed to approve boycotts on prefabricated items); Congress got nowhere on attempts to unscramble disputes over architect-engineer fee limitations; efforts at highway beautification barely got off the ground, from a money standpoint. Even the perennial battle over the hapless J. George Stewart, Architect of the Capitol, was carried along as a pro forma operation; a bill by Senator Eugene McCarthy (D., Minn.) — S. J. Ros. 99 — backing the Marcel Breuer design of a memorial for the late President Franklin D. Roosevelt (a design thumbed down by the city's Fine Arts Commission) languished in committee without action.

Architects took an increasingly active part in the legislative process during the year, true enough, testifying on such widely separated matters as highways, the development of the Potomac River Basin, urban development, and in many local matters concerning the capital itself (including having the design for their own headquarters turned down).

Much of what they said will have some effect on Congressional actions in the current session, but such matters are to be subordinated to the Economy Act and the poverty-stricken (including the growing number of oldsters) is the key to re-election.

In assessing which of the unfinished business stands much chance for action during the current session, it must be kept in mind that this is an election year. Obviously, such matters as slum rehabilitation or affecting a lot of pork-barrel votes — with useful priority; so will smoke abatement, stream-pollution control, aid to education, etc.

Schemes to get private industry interested in urban affairs have already attracted a lot of attention, and something will undoubtedly get through. Any proposal that offers benefits without added governmental spending should be attractive to vote-hungry legislators. Among the pending legislation is a bill by Senator Abraham Ribicoff (D., Conn.): The "New Towns Development Act" (S. 2680) would encourage "new town" development by authorizing planning assistance to states, so that both entirely new communities and satellites may be financed on a long-term basis, thus taking up the financing slack (because of slow initial return) that has caused near-disaster in several ambitious projects within the year.

Further moves to bring the architect, engineer, and other planners into a rounded team for planning urban expressways are certainly in the cards for the year, as legislators finally heed the advice that highways can aid urban development — as well as chop it up or destroy it.

In all, 1968 has to be assessed as a year of virtual status quo, as far as professionals are concerned.

Financial. — The spate of forecasts for the construction economy that roll out annually in the calendar leave over are uniformly optimistic, though some contain heavy qualifications. All seem to have ignored, however, the weighty and unpredictable effect of political considerations.

The most optimistic forecasts predict a rise of 10% in industry dollar volume. Even the usually more conservative forecast of the U.S. Department of Commerce says an 8% rise is possible (to $83,500,000,000).

But more realistic industry observers note two facts: The damage already done by the severe slowdown over spending on Federal public works, which will have the effect, at least, of stretching expenditures much further into the future; and the growing gap between costs and actual work put in place — a reflection of continuing inflationary trends.

According to statistics compiled by the Commerce Department, for example, "current dollar" spending on construction in 1966 was $74,400,000,000; reduced to 1957-59 dollars, however, that actually bought only $61,700,000,000 worth of actual work in place. With labor wage demands rising steadily as the year alone over the past three years, that gap is very likely to increase. It explains contractors' worries over competition for fewer jobs, despite the rising dollar totals.

As to political effects: The appropriations battles of the 1967 session (in which the President and Congress threatened each other with spending limitations) have already cost several months of available construction time in terms of delays compounded now by winter weather, slowdowns because of uncertainties in highway, pollution control, urban planning funding, and the like.

It must be remembered that the apparent paradox of appearing to be careful with the taxpayers' money, and at the same time being generous
new weatherstripped steel windows solve rain, wind and rust problems

High-performance steel windows by Ceco (check the features)

✓ Weatherstripped ventilators
✓ Built-in pressure-equalizing features
✓ “Cecoclad” in colored polyvinyl chloride
✓ Furnished with snap-on glazing beads

Weatherstripping and pressure-equalization features afford superior resistance to air infiltration and prevent water leakage (even under a simulated 8”-per-hour rainfall with 90 mph wind pressure). Add to this, a 6 to 8 mil color-cladding of polyvinyl chloride and you have a truly high-performance Ceco steel window.

Design makes the difference . . .
Cecoclad Weatherstripped H-P Steel Windows permit outside wind pressures to enter into the internal chamber of the window through planned openings (a) behind baffle (b). This creates pressure inside the chamber essentially equal to the outside pressure. Specially designed closed-cell foamed vinyl weatherstripping (c) seals the inside surface of the chamber. Rain is blocked by the baffle along with outside weatherstripped contact surfaces (d). The baffle and contact surfaces are effective because there is no pressure differential to draw quantities of water into the chamber. Small amounts of water that enter with the wind collect at the bottom of the chamber and drain off freely to the outside.


Name ___________________________
Company _______________________
Address _________________________
City __________ State __ Zip ______

On Readers' Service Card, Circle No. 327
POST-TENSIONING INCREASES DESIGN FLEXIBILITY AND REDUCES COSTS

The west end of the building has a chapel on the first floor, with the obstetrics wing above it. These two levels use waffle slab construction to span 52’ x 64’. Each span terminated in a 17’7” cantilever. Modules of the waffle slab were 8’ x 8’ with some areas as large as 8’ x 10’. Waffle sections were composed of joists 8” wide and 21” deep plus a 5½” slab at second floor for a total of 26”; the total depth of the roof waffle section was 20”.

The Memorial Hospital of Gardena, California, (completed November ‘67) has seven stories, providing 155,000 square feet. It has 235 patient beds, operating rooms, laboratories, a 200-seat auditorium, and other facilities to make this one of the outstanding hospitals in the country.

The structural frame is composed of an 8½” post-tensioned flat plate with columns at approximately 25’ in both directions. Lateral loads are resisted by the use of cast-in-place shear walls. The second floor level required that 800 yards of concrete be placed in a single operation. Prescon tendons as long as 234’-0” were required in this area. Due to the tendon length, friction losses made stressing from the ends impossible. Prescon tendons with central stressed anchorages (Type X) were used to reduce friction and obtain the desired force. Central stressing blockouts were located at two points along the tendon length, approximately one-fourth the distance from each end of the tendon. Fixed end anchorages (spread plates) were used at the tendon ends, thus eliminating stressing pockets at the slab edges. Stressing was accomplished by two central stressing jacks operating simultaneously at the central stressing anchorages. Upper slabs also utilized central stressing in areas where applicable, resulting in additional savings.

Use of Prescon flat (Type F) tendons throughout the project made possible an 8% reduction in prestressing material requirements. The thinner flat tendons allowed an increase in eccentricity while maintaining the same concrete cover.

The advantages that can be gained by use of post-tensioning makes it important that the Prescon System be considered in your project design. Write for literature.
heating equipment, and to act, in addition, as thermal barriers. This system is conducive to pleasant conditions in working areas. These structurally self-supporting plenums come both preconstructed and in a modular form, ready to be put together. Made of steel and acoustic fill. Doors and access panels are among components. Industrial Acoustics Co., Inc., 380 Southern Boulevard, Bronx, N.Y. 10454.

Circle 100, Readers' Service Card

CONSTRUCTION

Structural modules. These structural-steel building modules can be connected to each other on all sides, permitting versatility in the way they are used. The three-dimensional frame system affords a wide choice of finishing materials, interior partition placement, and curtain-wall use. Available in standard modules (10' x 32' and 10' x 60'), they have electrical plumbing, lighting, heating and air-conditioning systems built in at the factory. Flooring, ceiling, interior partitioning, and paneling are included as specified. Designed Facilities Corp., 3240 N. Durfee Ave., El Monte, Calif. 91732.

Circle 103, Readers' Service Card

Bubbles on the roof. Bubble-shaped plastic skylight, when subjected to a severe blow, is said to bend instead of breaking and causing roof leakage. Constructed from Eastman Uvex plastic sheet, the clear dome, heat-welded to the translucent white diffuser, provides insulating dead air space. Because the plastic is compatible with mastic roof-sealant, it is conducive to pleasant conditions in working areas. These structurally self-supporting plenums come both preconstructed and in a modular form, ready to be put together. Made of steel and acoustic fill. Doors and access panels are among components. Industrial Acoustics Co., Inc., 380 Southern Boulevard, Bronx, N.Y. 10454.

Circle 100, Readers' Service Card

Heat with efficiency. The salient characteristic of this horizontal discharge air unit heater, according to the manufacturer, is its increased efficiency with both steam and hot air, and its quiet operation. Designated as a type "H" unit heater, it is said to heat with minimum time lag, as well as conserve floor space. Water passes through multiple tubes, instead of through a single tube, thus increasing heat transfer. Fans are specially shaped for maximum air delivery and minimum noise. Young Radiator Co., Racine, Wis.

Circle 102, Readers' Service Card

Heat with efficiency. The salient characteristic of this horizontal discharge air unit heater, according to the manufacturer, is its increased efficiency with both steam and hot air, and its quiet operation. Designated as a type "H" unit heater, it is said to heat with minimum time lag, as well as conserve floor space. Water passes through multiple tubes, instead of through a single tube, thus increasing heat transfer. Fans are specially shaped for maximum air delivery and minimum noise. Young Radiator Co., Racine, Wis.

Circle 102, Readers' Service Card

FLOORING

Another kind of "Elephant Test." Raised flooring system that permits easy access to wiring concealed beneath it is also said to be able to support an elephant balancing itself on one foot — i.e. to support a pressure of 8000 lb per sq ft. Is said to be well suited to rooms accommodating heavy-weight machinery. One-foot-square floor units are raised on pedestals and each

Circle 108, Readers' Service Card

DOORS/WINDOWS

“Neither rain nor snow . . ." shall seep in at a threshold tightly sealed. Manufacturer’s "Magnetic Threshold" is designed to provide a positive seal between door and sill without rubbing when the door is moving. A sealing-strip is held magnetically to the underside of the door except when door is closed; then, the strip is more strongly attracted to a magnetized vinyl strip in the threshold, drops down to the threshold and forms the weathertight seal. The Michaels Art Bronze Co., Covington, Ky.

Circle 107, Readers' Service Card

Clad in copper. Stainless steel bonded with copper on both sides forms an economical material said to combine the light weight, strength, and low thermal expansion of stainless steel with the corrosion-resistance of solid copper. Manufacturer notes uses for roofing, flashing, downspouts, and so on. Texas Instruments Inc., Materials Division, 34 Forest St., Attleboro, Mass. 02703.

Circle 106, Readers' Service Card

Now you see 'em, now you don't. For auditoriums and arenas where seating needs vary, these aluminum chair-platforms fold away, when not in use. Can be stored in the auditorium or moved with a small vehicle to a storage area. Manufacturer claims they are constructed for strength and safety. Safety devices include thick understructures, and cross-bracing, serrated platforms for firm footing, high-test tension cables, and anti-friction chambers. Universal Bleacher Co., Champaign, Ill.

Circle 105, Readers' Service Card

Radiant energy. Radiant heating panels are mounted flush with the ceiling to be unobtrusive. For use especially in areas where heat loss is greatest, such as near windows and doors, they radiate heat directly to people and objects below, not relying on air circulation. Panels and molding trim in off-white can be painted to fit the decor. According to manufacturer, system is especially clean and saves space. Operates on 240 voltages of 208 and 277. Two foot widths; 4', 6', 8' lengths

Circle 104, Readers' Service Card

January 1968

Products 43
PACIFIC DRAPERY FUNCTIONAL METAL MESH FOR

NIGHT CLUBS
10,000 sq. ft.
¼" anodized aluminum,
Casino, Freeport,
Bahamas

10,000 sq. ft.
La Guardia Airport,
New York
¾" anodized aluminum

INTEGRATED DESIGN IN EYE-LEVEL AND UNDER-COUNTER REFRIGERATORS

Designed to fit flush with adjacent cabinet work in stainless steel or custom finished to your specifications, these space saving refrigerators provide a clean, uninterrupted line of design. Thin-wall construction incorporates polyurethane insulation for air tight neoprene thermo-break door seal. The undercounter models have outside dimensions of 24" x 24" x 34¾" and a capacity of 5.4 cubic feet. The single door wall mounted models come in four sizes 18" W. x 13" D. x 30" H. with 1.5 cubic foot capacity up to the 4.3 model with dimensions of 24" W. x 18" D. x 36" H.

Also available are double door models with capacity of up to 9 cubic feet.

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

MODEL UC-5-CW
Cold wall type cooling system with automatic push button defrost. No freezing compartment.

MODEL UC-5-BC (illustrated above)
Blower type cooling system with automatic off cycle defrost. No freezing compartment.

MODEL UC-5
Two-tray ice cuber cooling system and semi-automatic defrost.

MODEL WM-CW (illustrated above)
Cold wall type cooling system with push button defrost.

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

THE MANUFACTURERS OF REFRIGERATORS OF EVERY TYPE FOR INSTITUTIONS
Since 1849

On Readers' Service Card, Circle No. 381

January 1968

On Readers’ Service Card, Circle No. 388

P/A News Report
unit can be removed for access to concealed wiring. A "Shap-Lok Grid System" assures strong fastening. The grid system plus the "egg crate" floor panel construction guarantees minimal deflection under pressure, says manufacturer, Washington Aluminum Co., Inc., Knecht Ave. and Penna. R.R., Baltimore, Md., 21229. Circle 109, Readers' Service Card

FURNISHINGS

Work organizer. Another L-shaped desk-storage arrangement, designed to be both functional and streamlined, is the "work organizer" desk: drawer and shelf space are in a credenza section; an attached "L" slab is for writing. Unit comes in walnut, rosewood, and teak with a woodtone or colored plastic-laminated top. "Sleigh base" is made of rectangular frames of tubular steel in chrome, brass, or bronze finishes. Robert John Co., 821 N. Second St., Philadelphia, Pa. Circle 110, Readers' Service Card

Raised on spheres. In this Mario Bellini chair, the profile view shows a bold, stylized "Z" formed by the glass fiber back and seat. The profile view also shows the "floating" effect given by the black rubber spheres that support the chair. Foam-filled cushions are upholstered in a selection of fabrics. The show-

"If somebody could come up with a ducting as strong as rigid sheet metal but flexible enough to bend around corners without restricting air flow... somebody would have a great idea!"

On Readers' Service Card, Circle No. 397
the P&S Super Line—gives you eight ways to better contacts

With all EIGHT P&S SUPER outlets, plug blades get positive connections—even with constant use. Every contact is reinforced by spring steel clips. Each double-grip, bronze contact is individually recessed—to prevent flash-over.

Sturdy, high impact Melamine bodies are arc and moisture-resistant, deliver superior service and maximum protection under the most rigorous conditions.

Speed up the job, get feed-thru wiring without splices. Every SUPER duplex has eight wire holes; every single outlet has four.

Terminals are 40% heavier than usual. Designed for side or back wiring, will take up to No. 10 wire.

If the job requires positive heavy-duty grounding outlets, then it requires the P&S SUPER line. Available in DUPLEX and SINGLE 15A., 125V; 20A., 125V; 15A., 250V; 20A., 250V.

For more information, write Dept. PA-168

No. 6301-I
No. 6600-I
No. 6201-I
No. 6800-I

PASS & SEYMOUR INC., SYRACUSE, NEW YORK 13209
BOSTON • CHICAGO • LOS ANGELES • SAN FRANCISCO

On Readers' Service Card, Circle No. 416

January 1968
"long-life fiberesin" and steel, is designed especially for heavy duty, whereas "VSP III," in American black walnut (woodgrain tops optional) emphasizes the beauty of the materials. Marble/Imperial Furniture Co., Bedford, Ohio 44146. Circle 113, Readers' Service Card

Loosely woven. Natural Irish linen and unscoured wool are loosely woven into a vertical stripe pattern to become "Kerry," one of Isabel Scott's newest casements. The collection includes fabrics of both man-made and natural fibers (and combinations), which are composed of either open-net or opaque weaves to afford varying degrees of light control. Colors include white, beige, and, in the wool fabrics, livelier colors such as "primrose" and "cornflower." Isabel Scott Fabrics Corp., 979 Third Ave., New York, N.Y. Circle 114, Readers' Service Card

Lighting the town square. Main streets and parking lots are among outside areas requiring attractive, high-powered lighting fixtures. Manufacturer's aluminum-housed "Space-Lite" fits these needs and has two special features: (1) When new light sources requiring different ballasting become available, only part—not the entire fixture—needs to be replaced; (2) A charcoal-filter placed inside the housing "cleans" incoming air of impurities that would otherwise be deposited on the fixture and reduce its efficiency. The square or circular fixture fits onto a hub providing a fast method of installation. A choice between photoelectric or externally mounted controls. Five colors. General Electric, 777 14th St., N.W., Washington, D.C. 20005. Circle 115, Readers' Service Card

Bring 20 gal to 180 F. Commercial water heater, "Model A-20-100," can accommodate 20 gal and is approved by the American Gas Association both as a circulating tank heater and an instantaneous heater for operating temperatures of 180 F. Glass-lined heater may be used as booster unit on commercial dishwashers or wherever space is at a minimum. The water heater features 120,000 input and 100.8 gal per hr. recovery rate. The Republic Heater Company Division of Briggs Manufacturing Company, 6600 E. 15 Mile Rd., Warren, Michigan 48092. Circle 116, Readers' Service Card

"If somebody could come up with a ducting that costs less than the least expensive ducting but performs better than the most expensive, somebody would have a great idea!"
ACOUSTICS

Standards for air moving. A

Acoustical performance data. Booklet gives charts of acoustical materials' properties. It

is organized in two ways: by material and by manufacturer. Trade names are

arranged by company; characteristics listed include thickness, flame resistance, surface

weight, attenuation factors, and ceiling sound transmission class. Installation rec-

ommendations are given, as well as explanations of coefficients and attenuation fac-


Circle 200, Readers' Service Card

SOUND CONTROL

“Sound-conditioning” partitions. Wood-framing systems that can be made into effec-
tive sound-barrier partitions use gypsum wallboard or glass fiber insulation for use inside

or outside. “Sound Control” pamphlet shows cross-sections of 20 partition systems. In-

cludes charts listing construction details, partition thickness, ASTM sound-transmis-

sion class, and fire-resistance rating for each system. References to supplementary in-

formation. 8 pages. Western Wood Products Associates, 700 Yeon Building, Portland,

Ore. 97204.

Circle 201, Readers' Service Card

AER/THERMAL

Standards for air moving. A

standards handbook by the

conditioning Association, Inc., contains
definitions and standards of
air-moving equipment for the
architect, specifier, and en-
gineer. General definitions
and types of units are de-
scribed for “air moving de-
vice,” “centrifugal fans,” and
so on. Chart presents air-
density ratios for various alti-
tudes and temperatures; in
other sections, diagrams and
data show the association's
standards for centrifugal fans.
40 pages. Air Moving and
Conditioning Association,
Inc., 205 W. Touhy Ave.,
Park Ridge, Ill. 60068.

Circle 202, Readers' Service Card

Air diffusers for a modular
set-up. Specifications, general
engineering data, and illustra-
tions of possible patterns are
featured in brochure on modu-
lar air diffusers. An extended
discussion of sound ratings
for this line of diffusers in-
cludes recommended noise
levels for different areas in 11
types of buildings. Perform-
ance data includes CFM, static
pressure, and throw. Dimensions and installation
details. Carnes Corp., Verona,
Wis.

Circle 203, Readers' Service Card

The case of the movable wall.

Movable partitions afford va-

riety in offices, hospitals, labs,
schools, and industrial build-
ings. They are available in
sizes ranging from ceiling height to 42”, pamphlet in-
cludes elevations, connection
details, and photographs of
two lines of these partitions.
A special feature, the manu-
facturer's patented locking
system, permits shelf brackets,
coat racks, and other attach-
ments to be locked into the
post channels with a screw-
driver. Workwall Movable
Partitions, L. A. Darling Co.,
Box 130, Bronson, Mich.
49028.

Circle 204, Readers' Service Card

Folding doors and movable
cells. Possible uses of folding
doors and partitions in dormi-
tories are presented by manu-
ufacturer. Color, versatility,
ventilation, and space-saving
features are noted. Accompa-
nying leaflets describe manu-
facturer's series 8510 and
8530 operable walls. Empha-
sis is on interchangeable
faces, ease of operation, and
acoustical performance. In-
stallation specifications and
construction features. Pum-
plet. 5 pages. Color. Hough
Manufacturing Corp., Janes-
ville, Wis.

Circle 205, Readers' Service Card

An exhibit of Georgia granite.

Brochure shows photos of in-
stallations of granite, framed
as paintings displayed on gran-
ite walls. The variety of Geo-
orgia granite colors, textures,
and finishes is said to permit
the architect to achieve an
equal variety of designs. The
Georgia Granite Co., Elber-
ton, Ga. 30635.

Circle 206, Readers' Service Card

Trusses ready-made. “Data
and Dimensions” gives infor-
man concerning manufac-
turer's truss systems, includ-
ing beam length, end depth,
slope, and rise. The brochure
also shows the vertical and
horizontal force reaction at
column bases for six series of
column designs. It states that
the manufacturer's range of
trusses and packaged building
is large enough to suit almost
any construction need. Pruden
Products Co., Evansville, Wis.
53536.

Circle 207, Readers' Service Card

Plywood specification guide.

A brochure-guide to specifying
plywood gives specifications

January 1968
Introducing a great idea.

Dayco's all-metal Aircon-Duct.™

Dayco Aircon-Duct is a new type of flexible metal ducting for commercial heating and air conditioning systems that we can unblushingly call a great idea.

It's a great idea because it combines the strength of rigid sheet metal ducting with the flexibility of fabric type connectors while eliminating the disadvantages of both.

Aircon-Duct is formed from a high tensile steel foil sheet and corrugated for added strength and durability. It's designed to make complicated bends and still retain maximum air flow.

Because of its all-metal construction, Aircon-Duct resists crumbling and tearing; it won't burn, smoke or contribute fuel to a fire. (A special zinc coating protects it from rust, corrosion, and mildew.)

Aircon-Duct is easy to handle and install, saves installation time and costs. (It can even be cut with a pen knife.) And, because of its shape retaining and lightweight benefits, it is self-supporting—won't sag or droop after installation.

But, best of all, Aircon-Duct won't cost you very much money. (As a matter of fact, it is competitively priced with the least expensive flexible ducting on the market, while providing better performance than the most expensive ducting now available.

These are some of the reasons we think Dayco Aircon-Duct is a great idea. You can see for yourself at the AIR Show in Atlantic City—visit Dayco’s Aircon-Duct Display at Booth 756. For more information write Dayco Corporation, Dayflex Plastics Division, 333 West First Street, Dayton, Ohio 45401.

D A Y C O
CORPORATION

D A Y F L E X P L A S T I C S DIVISION
DAYTON, OHIO

© Copyright 1968 by Dayco Corporation

On Readers' Service Card, Circle No. 397
anything NEW
IN KITCHEN VENTILATION

YES

The
GAYLORD VENTILATOR

No Filters — or removable parts
Automatic Water Cleaning — Daily
Centrifugal Grease Extraction
Requires less air
Removes grease, heat, odors
24 hour Automatic Fire Quenching
Fire System thermostatically controlled
Underwriters' Laboratories Inc. Listed
National Sanitation Foundation Approved
Regional Fire Underwriters Approved
Reduced Insurance Rates
Reduced Maintenance Costs
Guaranteed Performance

AUTOMATION
WITH A FLAIR

DESIGN SERVICE — The Gaylord Ventilator is adaptable to all equipment — upon request we will provide design services and layout drawings for each of your installations showing not only our recommendations for the utilization of the Gaylord Ventilators but complete air engineering for the job — at no cost or obligation.

For Complete Literature:
GAYLORD INDUSTRIES
P.O. BOX 19044
Portland, Ore. 97219 - 503-246-8835

Instant house-raising for schools. Flexibility is becoming more and more important, especially in school design. Many schools want relocatable classrooms. Booklet explains the advantages of manufacturer's architect-specified construction system for supplementary classrooms, high-lighting economy, attractiveness, strength, and reusability. 9 pages. Panelfab, Inc. 2000 N.E. 146 St., N. Miami, Fla.

Circle 208, Readers' Service Card

A feast of frames. Standard and special steel door frames are available as shown, in different styles for different applications. Booklet includes sections on interlocking, welded-assembly, wrap-around and hospital frames, as well as a chart of available sizes in the manufacturer's "Selector Series." Sizes, gages, construction details, and anchoring systems. 8 pages. Amweld Metal Doors and Frames, 160 Plant St., Niles, Ohio 44446.

Circle 211, Readers' Service Card

FINISHES

PROTECTORS

How aluminum is finished. Booklet describes and illustrates 12 surface appearances possible through different alu-

On Readers' Service Card, Circle No. 334
minimum finishing methods and notes their uses. The actual finishing processes are explained, too, with technical advice on their uses. These finishes include mechanical, chemical, electrochemical electroplated ones and applied coatings. Full-color photographs accompany each section. 68 pages. Aluminum Company of America, 1501 Alcoa Building, Pittsburgh, Pa. 15219. Circle 212, Readers' Service Card

---

You talk "zoning" with your client when you plan lighting, heating, air conditioning, and the flow of materials, production and people. We talk "zoning" when helping you design internal communications to attain maximum efficiency in the free flow of vital information.

Zoning is a planning concept. It has proven to be the most effective way to provide for all the specialized needs of various people and departments in a completely integrated communications system.

WE
CALL IT
"ZONED"
COMMUNICATIONS

PROVIDES CONVENIENT EXTRAS It may be as simple as a conversation between two people or as complex as a group conference. It may also include paging, time and emergency signals, and music distribution. Requirements for private conversation, hands-free operation, remote answering, direct or automatic dial connection can all be met with Teletalk equipment.

WIDEST CHOICE OF SYSTEMS You have a choice of Teletalk® loudspeaking intercom, private and automatic dial equipment, and sound. They may be used in combination in a zoned network to provide the best communications tool for each zone.

EXPERT COUNSEL Only Webster offers such a variety of methods and such a full range of special features. Only Webster, too, offers such expert counsel. Webster consultants are highly skilled at planning and installing communications systems tailored to meet the immediate and future needs of business and professional offices, industry, schools and churches.

Teletalk — Reg. T.M. of Webster Electric Co., Inc. for communications equipment.

On Readers' Service Card, Circle No. 395
surfaces, lightweight tops, and one-unit folding leg frame systems. They are available in square, circular, rectangular and boat shapes. 36 pages. Hamilton Manufacturing Co., Two Rivers, Wis. Circle 215, Readers' Service Card

Cabinet hardware. Ten lines of cabinet door hardware (knobs, pulls, backplates, and hinges) are shown and described in brochure. Styles range from period to contemporary. 7 pages. Ame­rock Corp., Rockford, Ill. Circle 216, Readers' Service Card

For lounge and library. The "50 Series Modular Group," designed by Hans Krieks, comprises several combinations of chair, table, and bench units plus one three-seat sofa. The series' masculine, square-frame arms of 4½"-wide solid ash planks are secured at the corners by finger joints. The "400 Series Library Group," designed by Antraing Der Marderosian, includes reading tables, carrels, reference tables, dictionary stands, and a card catalog base. All pieces are of white oak veneer on hard birch plywood. The carefully laminated plywood is left unedged in the finished pieces. Low-gloss plastic laminate is used for tabletops, carrel desk tops, and for card catalog top and leg panels. Catalog. 20 pages. CI Designs, 230 Clarendon St., Boston, Mass. 02116. Circle 217, Readers' Service Card

Murphy's beds. Brochure reviews the space-saving conveniences of the perennial Murphy bed; among types available is a pivot bed that rolls around (vertical edge first) into a standard closet, thereby negotiating a narrower door than usual. 8 pages. Illus. Murphy Door Bed Co., 3 E. 44th St., New York, N.Y. 10017. Circle 218, Readers' Service Card

"Child-proof" furniture. School furniture, said to be "child-proof," includes lift-lid desks and posture-engineered chairs. Smooth-welded heavy gage steel is featured in two lines of desks, tables, chairs, with plastic writing surfaces and chair seats and backs. The lift-lid desk (ST-150), ST-100 chair, and MT tables (with...
The second time you draw these
(or any other repetitive element)
you're wasting creative time!

Use STANPAT repetitive symbols for any dia-
gram, spec, detail, title block . . . or any
other detail you draw. It's like adding
another draftsman to your staff. STANPAT
will preprint your own symbol. You'll always
have it ready for application to your draw-
ings and tracings on any medium. It will be
accurate, permanent, reproducible, and . . .
most important . . . you will gain creative
time!

STANPAT reproduces the drawing you need
on top-quality tri-acetate sheets. You simply
apply the STANPAT to your tracings when-
ever you need to, as often as you need to.
Adherence is instant. Reproductions are
crisp and clean, even when microfilming.
There's never ghosting . . . no matter what
tracing medium you use!

Send for literature and samples today.

faithfully serving the engineer and
architect for a quarter of a century

STANPAT PRODUCTS INC.

Covert and Main Street, Dept. Q-1
Port Washington, N.Y. 11050
Telephone: 516 883-8400

On Readers' Service Card, Circle No. 364

WITH OUR COMPLIMENTS

An Authoritative, Non-selling Guidebook
To Good Weatherstripping

what you should know about
interior and exterior
Weatherstrip & Thresholds

FREE
A simplified, objective analysis of all
that's important in weatherstripping.
Gives immediate answers to specification
problems. Contains no advertising, 24
pages.

See our catalog in Sweet's and AEC.

PEMKO Manufacturing Co.

5755 landeran St., Emeryville, Calif.
On Readers' Service Card, Circle No. 356

On Readers' Service Card, Circle No. 386

What's the Big Idea in Chicago Faucets?

It's simple really. The faucet body doesn't wear
out. The parts that do wear are all in one replaceable unit. And
today's unit still fits Chicago Faucets made as much as 50 years
ago—completely renews the operating heart almost as easily as
you'd change a light bulb.

No other faucet can offer you such assurance of long life expect-
cy, ease of maintenance, or honest economy. Keep the Chicago
Faucet idea in mind for your next job.

You can get this Big Idea
in the biggest selection
of faucets available—for
residential, commercial,
institutional and laboratory
use. Write for catalogs.

No. HC807
Push Button Lavatory
Spout allows about 10
seconds flow, then
closes automatically.
Smart new answer for
public or school
washrooms.

No. 937
Laboratory Table
Fitting, Available for
water, steam, gas or
air service. Also deck
mounted and
turret types.

No. 1749-6
Built-in Tub and
Shower Fittings.

No. 886 Exposed Sink
Faucet, with integral
vacuum breaker. Other
types with wall
brace, pail hook,
integral stops, etc.

CHICAGO FAUCETS

LAST AS LONG AS THE BUILDING

THE CHICAGO FAUCET CO., 2100 S. Nuclear Drive, Des Plaines, Ill. 60018
(A Suburb of Chicago)
round, rectangular, and trapezoid tops) have a clean yet not squared-off design. Catalogue. 24 pages. Illustrations. Poloron Products, Inc., 165 Huguenot St., New Rochelle, N.Y. Circle 219, Readers' Service Card

**LIGHTING**

Lighting from Koch & Lowy. Catalog features line of lamps and lighting appliances, including a chandelier of leaded crystal pendants with circular or trefoil cross-sections. Light from 12 clear bulbs interspersed among the clear and amber pendants radiates outward. Measures 21" x 13". Available either pendant or flush with ceiling. Price list. 60 pages. Koch & Lowy, 940 Third Ave., New York, N.Y. Circle 220, Readers' Service Card

**SANITATION PLUMBING**


For the sake and safety of the community. Architects and community designers are increasingly concerned with waste disposal and treatment. Brochure explains the manufacturer’s pre-engineered sewage treatment plant; diagrams of interior compartments (aeration tank, clarifier, chlorine tank) are included. Volumes and dimensions are given for each of the 56 models available. Specifications given for individual compartments, working parts, etc. Data pertaining to average amount of sewage to be handled per day for a range of establishments including apartments, hotels, camps, and airports. 6 pages. Lyco Systems, Inc., Williamsport, Pa. 17701. Circle 222, Readers' Service Card

**SURFACING**

Is a veneer a veneer a veneer? No, because veneers vary in color range, grain figures, and textures. The architect's choices, starting with selection of wood, make possible extremely personalized final effects. Booklet gives pertinent facts about the cut, matching, and specifications of hardwood veneer, including a checklist of 18 points to consider in specifications, veneer-matching diagrams, a chart of typical hardwood veneer species, and a glossary of terms. 12 pages. Fine Hardwoods Association, 666 Lake Shore Dr., Chicago, Ill. 60611. Circle 223, Readers' Service Card

**NEW KELLEY DOCKBOARD**

Fastens to face of dock. No concrete forming. Full 11" projection. Full 6' width. Full 15,000 lbs. capacity. And price, complete with bumpers, is comparable to portable plates.

- Attendant lifts and tilts. LTL settles into place ready for use. No cams, springs, hinges, rollers or adjustments.
- Easily services trucks from 8" above to 4" below dock level. Automatically returns to place when truck pulls out.

See 3 min. color “test” film on new Kelley LTL Dockboard in your own office. Call collect, wire or write:

KELLEY COMPANY, INC.
6740 North Teutonia Avenue
Milwaukee, Wisconsin 53209
Area Code 414 - 352-1000

55-261

On Readers' Service Card, Circle No. 345
FORD FOR THE FUTURE. Tell all the gang on 42nd Street that Roche & Dinkeloo are there! The long-awaited opening of the new Ford Foundation Building in New York has occurred, and February P/A presents a thoroughgoing critique of the result: as an individual work of architecture, as a major element in the cityscape, as a unique concept in indoor-outdoor relationships, and as a completely realized interior scheme. A major U.S. building given the most penetrating coverage in the design press.

AN OLD SCHOOL BUILDS. Kenyon College, the 133-year-old liberal arts college in Gambier, Ohio, has long held an eminent place in U.S. education. Now, like many colleges and universities, it is expanding its facilities considerably to accommodate increased programs and a growing student body. The lessons learned in adopting a new master plan by The Perkins & Will Partnership and building two new dormitories by Vincent G. Kling are discussed by Kenyon's president and provost, the architects, and some critics among the alumni.

A NEW URBAN PATTERN. Professor Robert Le Ricolais of the University of Pennsylvania's Institute for Architectural Research proposes a new plan for the arrangement of urban spaces. Contending that the traditional rectilinear system of streets is inefficient, he suggests a regular system of triangles and hexagons, dubbing it the "Trihex," an intriguing new approach to urban planning.

A DEVOUT SPACE. The main church of Our Shepherd Lutheran in Birmingham, Michigan, by Glen Paulsen, is a distinguished addition to an older, run-of-the-mill religious complex. Using simple materials and forthright forms, the architect created a structure that is a commanding focus in its neighborhood and possesses a serenely inspirational interior space.

THE NEW ORDERS IN DETAILING. An "On the Job" article postulating a new functional classicism in ornament that might be becoming as "traditional" as antiquity's decorative moldings. The thesis illustrated by comparisons of details from a fishermen's church in New England and a Houston office building.

AMENITIES ON A BUDGET. A Vermont high school with a typically conservative cost ($19.50 sq ft) contains, thanks to the ingenuity of its architect—Benjamin Thompson—and a cooperative client committee, some admirable amenities, such as two-level library, flexible auditorium, completely equipped vocational training center, and custom-made furniture in library, student lounge, and laboratories.

MATERIALS AND METHODS: Examination of how a glued and pegged building survived seven New England winters; "restoring" Maybeck's Palace of Fine Arts; a cluster of Fuller-like domes in California and how they grew; a low-cost multistory housing system by George Pinter; and how a parking garage became the beginning of an office design and got the owner into the building business.

MAKE '68 A GREAT READING YEAR—fill in and send in the subscription coupon at the rear of this issue. You will receive 12 of the most vital and informative issues on architecture you have ever read.
Now—from the Clark Door Man

**Increased loading dock efficiency with Vertical Lift Cold Storage Doors**

(Also useful for corridor openings and blast freezer tunnels)

Increase cold storage loading dock efficiency with Clark Vertical Lift Doors. Maximum efficient use is made of exterior wall space since more truck docks may be installed in the same area. And if used instead of old fashioned overhead doors, they add valuable, insulated storage space by converting wasted dock space into extra, temperature-controlled areas.

Where vertical headroom is limited, double or triple track models may be supplied.

Duo-Wedge™ extra-tight perimeter sealing, low maintenance counterbalance system, positive security with inside automatic latching, and heavy duty ball bearing construction are standard features.

The Clark Vertical Lift Door arrives on-site in one complete easy to install unit with no extras to buy. Available with 2", 4", or 6" of foamed-in-place Urethane insulation. Manually operated models operate with "finger tip" pressure. Power operator features manual-disconnect for use in event of power failure.

Free 16-page catalog shows complete details on this and other manual and power operated cold storage doors. Write today.

Doorway specialists since 1878.

69 Myrtle Street, Dept. P-1
Cranford, New Jersey
Tel. (201) 272-5100

On Readers' Service Card, Circle No. 329
George Nelson, FAIA, Enhances Service Station Design with Wood, Imaginatively Used.
Weyerhaeuser Company has commissioned a number of leading architectural firms to create design innovations which highlight the potential of wood in public and commercial building. This original design by George Nelson and Gordon Chadwick, architects of New York, is the 13th in the series.

"Our view is that a positive and creative contribution can be made . . . to develop facilities that are at once more appealing and better suited to function . . ."

"In its interminable love affair with the internal combustion engine, America has managed to adorn its cities with a litter of automotive services, almost universally in bad taste.

"Cities are reacting now to this visual pollution, and there is swelling opposition to new filling stations, from new zoning ordinances, reluctant city planners, neighborhood associations, and civic beautification groups.

"There's no opposition to the services, but there is to gas station design, and to the deleterious effect on neighboring property.

"Our view is that positive contribution can be made if fundamental premises of filling station design are re-examined and attempts made to create facilities that are visually appealing and better suited to function. The principles involved are few and simply stated:

1. Today's filling station is the only retail establishment where transactions are carried on in snow, sun or rain. We propose a sheltered station that's pleasant to visit.

2. It should be an inconspicuous neighbor. City dwellers know where things are. There's no need to scream for attention.

3. But the station should be identifiable by brand. One sign can do it.

4. Auto repair and maintenance are messy and dirty, but there's no reason the entire station should be. We propose tucking maintenance work out of sight. The clean area — where gas, oil and auto accessories are sold — is set apart. It becomes a pleasant, sheltered merchandising showroom.

"Oil company technical advisors say this proposal is economical and practical. The main obstacle to it appears to be rooted resistance to change — and the current popular insistence on higher quality of environment may yet overcome this."
The curved laminated beam sections which form the canopy are tied at the top by two steel pipes and supported on square steel tubes welded in a "V". Plates fabricated in a "U" shape connect beams to steel supports. Laminated wood decking encloses the roof. Roofing is cedar handsplit shakes to harmonize with the residential character of the neighborhood.

Fences are Channel Rustic cedar with recessed areas for display and storage. The material used in the recessed display areas is Panel 15, a pre-finished aluminum overlaid plywood panel with a no-maintenance surface.

This plan creates a drive-in product display. Gasoline pump islands are curved to fit the traffic pattern. The station floor is sheltered by a canopy, with protective perimeter display cases for tires, batteries and accessories, in clear view. The station thus becomes a merchandising center.

The less-visually-appealing lubrication and auto repair section is at the rear of the lot — easily accessible, but screened from public view.

"This concept has been viewed as both economical and practical"

The common way to improve service station design has been desultory face-lifting, with some paint here, a low fence there. Mr. Nelson has done some uncommon work in this proposal, looking beyond what is, to what might be. In doing so, he has not only improved the appearance immeasurably, he has also suggested improvements in plan that can make service station operation more efficient. Weyerhaeuser architectural wood materials help make this kind of creative work possible.

Weyerhaeuser is one of the nation's foremost producers of Architectural Wood Products. These products are backed with a services program organized on a national basis to provide ready access to the most comprehensive body of technical data available from a single source in the wood products industry.

Call on your Weyerhaeuser Architectural Representative for details. Or write to us at Box B-2705, Tacoma, Washington 98401.
For architects who can't pass up 4 good ideas.


Facing a tough environment? Ceramaguard™ is the finished, acoustical ceiling for places a finished, acoustical ceiling never went before. Ceramaguard's the tough, scrubbable acoustical ceiling that retains all its rigidity and span strength in the wettest, wildest spots... outside and in. Ceramaguard quiets and beautifies indoor pools, labs and locker rooms, factories, and kitchens. Outside, Ceramaguard is being used over entrances, walkways, and in open-air garages. Ceramaguard can even be installed while buildings are still open, and wet work continues.

Using the systems approach? There's been a lot in the news lately about the revolutionary, new concept that allows a building to be completely redesigned—practically overnight. The systems approach. A modular approach with movable partitions that make changing room sizes and shapes a snap. A building approach that lets lighting modules and acoustical panels be quickly interchanged to meet changing service requirements.

The Armstrong C-60 Luminaire Ceiling System is an exceptional fit in the systems approach, particularly in view of recent adaptations made to increase Luminaire's flexibility. Luminaire is compatible all down the line—an integrated system that performs all essential ceiling functions. In addition to offering outstanding performance, efficiency, and dramatic appearance, Luminaire points to unusual economy. Economy proved in a number of buildings and bids across the country. For example: in a recent systems school project Luminaire was responsible for a $150,000 budget savings.

Want to add critical sound control? Some activities are just plain louder than others. And every active building has them. What to do? Spacetone™ provides the answer. These cellular glass acoustical units literally soak up sound. Mechanically fastened or cemented to walls, Spacetone units provide an amazing degree of supplementary acoustical control in areas where sound conditioning is particularly critical. And they're perfect as a means of basic acoustical control in areas where the use of usual sound-absorbing materials might be prevented.

Luminaire, Ceramaguard, Accessible Tile System, Spacetone. Just a sample of exciting, new ceiling innovations. From Armstrong, the innovator in ceilings. For complete, concise details and data on all of the above, just mail the attached card. We'll reply with our Fact-Pack for Architects. If someone beat you to the card, or if you'd like details in relation to a specific project, write Armstrong, 4201-A Watson Street, Lancaster, Pa. 17604.

On Readers' Service Card, Circle No. 321
This is the Alma 400 Director Series. Another of the distinguished lines of executive office furniture from our Trend Program. For more information on this and other Trend lines, write Alma Desk Company, Box 271, High Point, N. C. 27261.
Prescription for economy: Concrete tees that combine mechanical and structural functions

At the Medical Merchandise Mart, a one-stop shopping center for doctors, prestressed single-tee units span the 96-ft. wide showroom and cantilever beyond. Only prestressed concrete could combine the long spans and striking appearance within the budget limitations of this project.

Contributing to its economy was the ability of the tees to perform beyond their primary structural function. Their very shape reduced the cost of air distribution and made practical the use of inexpensive light fixtures.

Again, the undersides of the tees require no weather protection outside and only a coat of light-reflecting paint inside if desired.

The structural system is a combination of prestressed concrete tees and precast framing. The high white ceilings and freedom from columns give the feeling of an open-air display that enhances the building's function—the display of medical equipment.

The Medical Merchandise Mart is typical of structures being built today for new reasons and new functions: an excellent example of how total thinking and cooperation between owner and architect can create a structural answer that is both aesthetically pleasing and commercially functional.

For the full story on design and construction details of the Medical Merchandise Mart, write for free literature. (U.S. and Canada only)
WHEN THE CH

ONE OF THE EXCITING NEW WILSON-ART ROSEWOODS
Robert Ashbrook, 
John Backues, 
Jerry Busker, 
Gordon Skager, 
Ernest Van Der Heyden, 
Jack Wetzel and Gene Whitman

are determined to prove to you that RALPH WILSON PLASTICS COMPANY is Number One in service.

These special architectural design representatives are familiar with all types of plastic laminate applications. They can help you, the professional, in a professional manner.

Try them on for size. And for stature. Let them show you the superb new WILSON-ART® ROSEWOODS, see how accurately they reflect the radiant beauty of real rosewoods . . . plus providing the added advantages of hard-surfaced high pressure plastic laminates.

NEW WILSON-WALL SYSTEMS
Unusual flexibility of design is now possible with two types of Wilson-Wall Systems. When you're planning interior walls, call our representatives to show you the many advantages of WILSON-WALL Systems.

WHEN THE CHIPS ARE DOWN . . . WILSON-ART Representatives are Number One in service . . . and in offering patterns and designs.


Case in Point.

Quality is more than a word at Natcor.

Natcor's ingenious Vinyl Glazing Bead principle saves time and labor. Only one member to snap in during glazing of door, assuring snug, permanent fit and simple, fast installation—just one of six solid reasons why your specifications always mean quality and dependability with Natcor.

1. Patented, adjustable Butt Hinge.
2. Snap-In Vinyl Glazing Bead.
3. Quality Extrusions.
5. "Sure-Grip" Pull Handle.

For full information on a complete line of doors and entrances, see our catalog in Sweets, or write Natcor.
A Bally Walk-In... center of the growing change in the modern kitchen. A most important change is taking place in mass feeding kitchens across the country. It’s a vigorous move to meet the challenging need for... more food prepared faster... better use of available space... greater operating efficiency.

Bally, one of the world’s leaders in commercial refrigeration has pioneered a remarkable new design concept of prefab walk-ins. In the broadest measure it fully meets the urgency presented by this challenging need.

A Bally Walk-In Cooler or Freezer can be assembled from modular panels in any size or shape to fit existing kitchen space. It can be converted from cooler to freezer or vice versa with a simple refrigeration change. Insulated superlatively by 4-inch urethane “foamed-in-place”, Bally prefab walk-ins combine customized features with technological and economical benefits of mass production methods.

Establish maximum efficiency in kitchen refrigeration with Bally prefabs, the accepted industry standard of high quality. In food serving centers the kitchen evolution gets a big thrust forward the day Bally Walk-Ins are installed.

Send to Bally Case and Cooler, Inc., Bally, Pa. 19503 for free 32-page catalog and urethane wall sample.
It had to be more than aluminum.
It had to be Alcoa.

At Lexington, Ky., the architect of the University of Kentucky’s proposed 11-unit dormitory-dining complex had to select a window-wall system that would be immune to mildew problems and also offer maximum insulation values. To meet these needs, he specified Alcoa Alply Panels. Made of polystyrene foam laminated between aluminum sheets, Alply Panels offer excellent resistance to rot and mildew. In addition, the polystyrene-aluminum combination provides a 3-in.-thick panel that imparts the insulation value of a 15-in.-thick masonry wall.

The handsome and durable bronze finish that lends such dignity to the light metal components is Alcoa Duranodic 300 finish. Its rich color, like all Duranodic 300 finish colors, is not a dye or a pigment but an integral part of the metal itself.

Other reasons why aluminum was specified: Its versatility and compatibility permitted clean, crisp detailing of the bays. The 11-unit dormitory-dining complex reflects the architect’s imaginative use of Alply Panels and aluminum extrusions.

Scheduled for completion in September, 1967, the project includes eight three-story structures, two 23-story, high-rise buildings, and a separate dining facility.

From concept to completion, Alcoa can smooth the way for an architect. Get the benefit of fresh, imaginative Alcoa architectural thinking. Call your local Alcoa sales office and talk to Alcoa early at the talking tissue stage.

*Registered Trademarks of Aluminum Company of America
†Trade Name of Aluminum Company of America

Design Architect: Edward Durrel Stone
Architects: Shannon & Clark Associates; McLoney & Tune; Watkins, Burrows & Associates
General Contractors: Foster Creighton Company; Haggett Construction Company
Aluminum Applicator: Whalen Erecting Company of Kentucky, Inc.
Fabricator: William Bayley Company
...And now in its own new circular headquarters, just outside Brussels. This center of all Glaverbel operations is the new home of the world's largest exporter of drawn sheet glass and cast glass. One of the great flat glass manufacturers, operating the largest drawn sheet glass tank in the world. Glaverbel—a name that stands for leadership and prestige in every market on the globe.
HOLOPHANE INTRODUCES

the shy lens

Holophane's new regressed Controlens® recesses itself discreetly into the ceiling. It creates a soft, luminous transition between lens surface and ceiling line.

Holophane's regressed Controlens requires no metal splays that mar the appearance of your ceiling—the regression is molded into the lens itself. Even the flange is luminous, and can be cut to fit any standard troffer for suspended ceilings. And you get all the comfort and efficiency of Holophane precise, prismatic light control.

The regressed Controlens is available in 1' x 4' (#7150) and 2' x 4' (#7250) sizes. Ask your Holophane representative about this exciting new concept in regressed lighting. Or for more information, write: Dept. G-1, Holophane Company, Inc., 1120 Avenue of the Americas, New York, N.Y. 10036.

THE REGRESSED LENS... NEW FROM

HOLOPHANE
Beauty that endures

Ceiling of the Royal Palace, Corfu Island, Greece, 1819, designed by General Sir George Whitmore

Design for Enduring Beauty with Conwed® Ceiling Products

In designing this domed ceiling set with plaques of Wedgwood blue, General Sir George Whitmore blended English Regency style with a true respect for classic Greek architecture. The result—an exceptional combination of beauty and superb lighting. Today, you can achieve a blend of beauty and functional objectives—air distribution, lighting, sound control, fire protection—with the help of Conwed ceiling products.

For example, Ft. Lauderdale architect George Storrs, Jr. chose Lo-Tone® mineral slotted ventilating ceiling board for the Moonraker Restaurant, Ft. Lauderdale, Florida (shown above). These Lo-Tone panels, in the Fissura pattern, provide a distinctive combination of beauty, acoustical control and efficient air distribution.

Semi-concealed suspended ceiling
Unique, kerfed Lo-Tone ceiling panels combined with semi-concealed suspension system. Result—only the main runners are exposed. It’s economical, accessible and has lighting flexibility.

Efficient air distribution
Ventilating Grid is the newest of the three Conwed ventilating systems. It features a continuous ventilating channel that is unobtrusive and conceals light leaks from above. It is compatible with standard suspended ceiling dimensions.

Fewer problems with air leakage
Conwed Series 7000 recessed troffers will accept frameless lenses, fit right in exposed suspension grids. And these air tight troffers assure better installed ventilating ceiling systems.

Information please
See our Sweet’s file AIA 398. Complete product application information and samples are available from your Lo-Tone and Conwed products representative or acoustical contractor. To get your job started, just give us a call.

Conwed CORPORATION
332 Minnesota Street, St. Paul, Minnesota 55101
formerly WOOD CONVERSION Co.
"multi-purpose"
CHECK ROOM
LETS DOLLARS DO MORE

The VEEP 400 enables you to design in that much needed checkroom without permanently tying up valuable prime access space. Conveniently stored VEEP 400's are always ready to turn any available area into an efficient checking facility—instantly—then disappear when not in use. Each unit is complete with its own hangers and numbered guest-checks and is of quality construction—designed to unfold and lock into a rigid trouble-free rack.

The VEEP is just one of a most complete line of architecturally oriented coat racks by Vogel-Peterson Co. Write for catalog VP-510.

©1967 V.P. Co.
KINNEAR

offers the many benefits of coiling operation
to many public building applications...

Kinnear has the product to do the job that is required — be it a rolling door, rolling shutter or rolling grille. Each of them offers the space economy and durability of upward coiling operation. In the interlocking slat, Kinnear Engineers originated the design principle that has now been time proven throughout the world for over 70 years. And to this day, it has not been excelled for efficiency from any standpoint.

rolling doors...

Stored on a compact coil above the lintel, all floor, wall and ceiling space around the opening is cleared when the door is open. When closed and locked, the heavily galvanized steel, interlocking slat curtain gives maximum protection against weather, fire, vandalism — and hard daily use. (Also available with automatic closing mechanism and U/L Labeled as a fire door.)

Ask about Kinnear “Chart Doors” — push-up chain or motor operated. Frequently, with a little alteration of your specification, they can be used with a savings of many weeks of delivery time.

rolling shutters...

Whether it's a pass window, concession counter — or even a wall cabinet — it can be neatly and securely closed and locked with a Kinnear Counter Shutter. Developed especially with architectural appearance in mind, all mechanism is designed for maximum concealment and the curtain is composed of a small artistic steel, stainless steel or aluminum flat slat.

Where a fire rated counter shutter is required ask about the new FYR-DOR.

rolling grilles...

When it's desirable to barricade an opening or corridor against trespassers, without sacrifice of air, light or vision, the Kinnear Rolling Grille is a perfect answer. The ornamental assembly of steel or aluminum bars and links is attractive in any style architecture; and flexibility and operating efficiency of the grille are similar to Kinnear Doors or Shutters. For the ultimate in convenience they can be equipped with electronically controlled motor operation.

When you specify any of Kinnear Products, you have the safeguard of "Registered Life Extension" backed by Kinnear's nationwide installation and service organization. Call Kinnear on your projects.

Also manufacturers of door operators and wood, steel, aluminum or fiberglass overhead doors.

KINNEAR CORPORATION
and Subsidiaries
1914-20 Fields Ave., Columbus, Ohio 43216
Factories:
Columbus, Ohio 43216 • San Francisco, Calif. 94124
Centralla, Wash. 98531 • Toronto, Ont., Canada
Offices & Representatives in All Principal Cities
— Listed in Yellow Pages under "Doors." Also see Sweet's!

May we send you brochures on contemporary, traditional and ultramodern wood office furniture?

**jofco**

DEPT. 31. JASPER, INDIANA

The hardware specialist at your Corbin distributor is the man to go to for the Corbin "Gallery of Design Ideas."

ARCHITECTURAL HARDWARE

Designs to fit any style... any function

P. & F. CORBIN
DIVISION OF EMMART CORPORATION
NEW BRITAIN, CONNECTICUT 06050

In Canada—Corbin Lock Division
Belleville, Ontario
Hadco lighting stays beautiful.
And that's one of the real beauties of it.

Cast metal preserves the superb styling and elegance of these Hadco fixtures, which illuminate and enhance the decor of this outstanding youth center. Inside the handsome, rustic building, lighting is provided by Hadco band fixtures with Tudor series lanterns. Additional accent lighting is provided by Hadco miniature fixtures on walls and beams.

Outside, post-mounted, pier-base and bracket fixtures from Hadco's Tudor and Architectural series compliment the appearance of the building exterior. Metal craftsmen traditionally have used cast metal for finer works, because nothing else can match its rich luster and durability. That's why all Hadco lanterns and fixtures are made of cast metal.

See our complete selection of hundreds of post, bracket, ceiling, hanging and pier-base fixture models, and our selection of fixture finishes, glass styles and lantern posts. Write for your free copy of Hadco Catalog No. 22S-17.

Hadco craftsmen also create custom-design fixtures for special lighting requirements.

E. J. Dalton Youth Center, Rockton, Illinois. Harold Diehl, Architect
Architect Haigh Jamgochian designs a contemporary “tree house”

Each floor is attached to the trunk like limbs of a tree. The trunk is a central “slip formed” concrete core. This cantilevered design concept is suitable for apartments, office buildings and motels. The design permits use of small downtown plots of land. Due to their tapering shape, the floors will not block daylight from neighboring buildings. Floor units are precast, then hoisted into position. Post-tension cables support the floors. Sill-to-ceiling window walls are added, and sliding glass doors lead to balconies at wing ends. The type of glass used depends upon building location and orientation. Parallel-O-Grey* and

New design freedom in the Open World of L-O-F glass

14-story apartment designed to fit on a 25-foot urban lot.
Caisson-type foundation for mechanical core goes down to bedrock. Precast floor units are hoisted into position.

Parallel-O-Bronze® Plate Glass are recommended for sun heat and glare control. Thermopane® insulating glass will reduce heating and air-conditioning costs.

A two-wing version of the “tree house” apartment can be constructed on a 25-foot-frontage lot at a cost, the architect estimates, of $20 per square foot. Additional units would reduce this cost. Ideal for urban renewal. Floor plan and variations of “tree house” buildings are shown. They were conceived by Architect Haigh Jamgochian of Richmond, Virginia.
672-room motel with double towers that can rotate so that all views of an area can be seen from each room every hour.
L·O·F makes a particular kind of glass for every purpose in Open World design. Refer to Sweet's Architectural File or call your L·O·F Glass Distributor or Dealer listed under “Glass” in the Yellow Pages. Or write to Libbey-Owens-Ford Glass Company, 811 Madison Avenue, Toledo, Ohio 43624.

115,000 sq. ft. office building.

L·O·F GLASS FOR APARTMENT BUILDINGS

POLISHED PLATE GLASS
Parallel-O-Plate®, ¼", ⅛"
Heavy-Duty Parallel-O-Plate, ¼", ½" to ¾"
Parallel-O-Grey®, ⅛", ¼", ⅜", ½"
Parallel-O-Bronze®, ¼", ⅜", ½"
Heat Absorbing Float, ¼"
ROUGH PLATE GLASS

INSULATING GLASS—Thermopane®
SPANDREL GLASS—Vitrolux®
Vitreous colors fused to back of heat-strengthened glass
HEAT-TEMPERED GLASS—Tuf-flex®
Doors and sidelights
WINDOW GLASS
PATTERNED & WIRED GLASS

Architect's original sketch of the “tree house”.

Libbey·Owens·Ford Glass Co.
Toledo, Ohio.
"You cannot approach a large design project as a field for personal exercise. You have to search for a more comprehensive and more permanent expression, with more concern for fundamental conditions."

JUROR COMMENT, FIFTEENTH ANNUAL F/A DESIGN AWARDS PROGRAM
Paternalism does not work any longer. Under slavery, or serfdom, or even the more recent social or economic discrimination, the suppressed bowed to hereditary title power, hereditary money power, and hereditary color power. Realizing the hopelessness of their situation, the poor were meek indeed, as they were required to be. Today, however, in this age of instant communication, fast transportation, mass education, and equal opportunity propagandization, power from other fields is beginning to make forceful inroads into the political arena. In our techno-scientific society, there is no place for the Beatitudes; the meek are meek no longer.

Paternalism is also outdated in a society that tends to believe in pluralism. A life regulated by rigid doctrines is inconsistent with a world of constant growth and constant change. The space-age generation, with its open-ended attitude to life, will not bow to some inevitable fate imposed on it by others. For it, the pursuit of happiness is a nondoctrinaire involvement in the constant guidance of its own destiny. This is beginning to be recognized within the ecclesiastical as well as the secular world, and also on both sides of the Iron Curtain.

In the area of planning and architecture, paternalism means the creation of a fixed situation—the imposition of a rigid order and a complete package that tightly wraps the individual into a predetermined mold. This packaging process, imposed from above, works in the shipment of merchandise, but does not work in creating an environment for people. It does not work because two principles are violated: participation in the guidance of one's destiny is absent; and the possibility for individual self-expression is nonexistent.

For the architect, whose traditional aim is to control an environment as rigidly as possible, right down to the shape, color, and placement of ashtrays, it is difficult to accept the idea that he must relinquish the role of the beneficent dictator who imposes formulas on the lives of others. And yet, it appears, this is what he must accept. This is illustrated in this month's two key presentations.

The La Puntilla project in San Juan, the top award selected by the jury in our fifteenth Annual P/A Design Awards Program, attempts to avoid the usual frustration and alienation of the relocated urban poor by not giving them a complete, inflexible, predetermined package. Instead, what they will get is simply a structural, sanitary, and circulation framework within which there will be freedom to enclose and subdivide living spaces at will. The idea here is not only to give the people a choice of space division, but also to soften the blow of uprooting by not changing abruptly the shanty-town dwellers' predisposition to their own particular sense of aesthetics and environmental empathy.

The other presentation, a case study of one of the most planned cities in the U.S., torn by a riot last summer, pinpoints, among many urban problems, the resentment of citizens at being treated as pawns in a paternalistic game of I-know-best-what-is-good-for-you. The incredible communications and credibility gap afflicting all segments of the population of New Haven, which results from this paternalistic approach, proves that the new New Haven is not the happy haven governmental and business patriarchs meant it to be.

Thinking about the common denominator in these two presentations, a 15th-Century dictum comes to mind. To switch around and paraphrase what Thomas à Kempis once said, "Architect proposes, but man disposes" is a recognizable element that will prevail in the future development of our cities. ■
On the morning of September 18, 1967, the jury for the Fifteenth Annual P/A Design Awards Program arrived at our Manhattan offices, shook hands, selected a chairman, and got down to work with a minimum of fuss. On the jury were:


Layered 12 deep on the long jury room table were 671 submissions. Two days is not much time to pass judgment on so much material, but this year's was a taciturn, hard-working jury that made the most of its opportunities. Every design got at least a quick sizing-up by each juror — more if it seemed to deserve it — and bit by bit the obviously outstanding, the possibly outstanding, and the good designs were placed on the "hold" pile for further screening, while the others took the dive under the table that is the way of the Design Awards reject.

The inevitable show-off churches and tormented vacation houses made their brief appearance, and posed no problem of judgment. Some designs almost made it. In the end, 12 designs — one out of every 56 submitted — were selected for awards of citations.

Before they left, the jurors summed up their impressions of the last two days, and commented on the way things seemed to them to be going in architecture currently (see "Jury Discussion"). Among other things, some of them expressed dissatisfaction with the task of judging so much material so quickly, feeling that the pace was too hot to permit them to keep the freshness of mind that fairness demands. Perhaps they underestimated their performance, however. Far from undergoing a sort of mental entropy, they reacted to good design whenever they found it. For instance, late in the first day's session, the jury members, their spirits drooping from fatigue and a mediocre run of academic buildings, revived as a new layer of academic buildings, somehow much better, was uncovered. In the end, four buildings in the education category got citations. Such an occurrence, on the midnight of a busy day, suggests that the pace of judging is rougher on the jurors than it is on those at their mercy.
P/A FIFTEENTH ANNUAL DESIGN AWARDS PROGRAM
PROJECT La Puntilla.
LOCATION San Juan, Puerto Rico.
SITE An area of filled land reaching into the bay to the south of Old San Juan. Although outside the city walls, the site has easy access to the city. It is currently filled with warehouses, many empty, since the center of port activity has moved across the bay. It is an area ripe for redevelopment.

PROGRAM To provide 1000 units of housing (500 low rise, 500 high rise), an elementary school, commercial facilities (including a supermarket, a drugstore, offices, and related community facilities) within an extremely low budget.

DESIGN In approaching their design problem, the architects had to keep in mind three basic considerations: (1) How people live in the slum and how many of the existing positive social and physical elements can be incorporated into the new housing. (2) How the old city of San Juan, with its strong physical order, has influenced the culture of Puerto Rico. (3) How new housing might be made to involve residents socially as well as physically with the neighborhood and with the whole city.

La Perla, the area from which they will be moved, is a hillside cluster of tar paper and wooden shacks on a slope lying between the ocean and the outer wall of the city. At least half of the shacks consist of only one room, which means that the one space must serve multiple household functions. In addition, most of La Perla is without electricity, water, or sewerage. Even so, the 3000 residents are strongly attached to their little community. They like the view, the nearness of the city, and the varied neighborhood environment created by the constant and imaginative use of open space. The Puntilla project was conceived by the architects as one of providing an improved physical environment without destroying established, often successful, social patterns.

The design itself calls for one large structure, patterned to pick up the grid of the streets and plazas of Old San Juan, from which it will be clearly visible. The structure will be divided to provide housing, commercial establishments, and community facilities such as schools, churches, and community halls. These community facilities will be located between two distinct housing sections — one for an extremely low-income group, and one for a group with a slightly higher income level.

The ground-floor level of the housing will be almost entirely open, except for space taken up by shopping and community facilities. Spaces will occasionally open vertically through the structure to form plazas. In all, there will be eight large plazas; in addition, there will be 14 smaller ones, containing stair towers to the housing above and ringed with balconies, which will serve as entrance halls. Interiors will consist only of floors, columns, ceilings, and basic utilities;
A public housing scheme for Puerto Rico designed to provide clean, easily maintainable, extremely low-income housing for former slum dwellers without changing their environment so radically that they can no longer relate to it.
THE EXISTING SLUM,
La Perla (this page), is a hodgepodge of tarpaper, mud, and wood. Residents will be moved to La Puntilla (facing page, top), a point of land across town.

CONSTRUCTION AND MATERIALS
Cast-in-place concrete columns and beams. Two-way concrete floor slab system with native hollow clay tiles. Painted concrete block between apartments and for utility core walls; if not provided by the tenants, exterior walls will be plywood, as will interior partitions.

JURY - What appeals to me is that it's not an insult to the people who are going to use it. An outside design force is not at work imposing a strange order; it comes out of a particular culture and its needs. And it's made to be lived in by people who normally aren't sensitive, or aware, or involved with anything called architecture. It is capable of both change and growth. It is not, as so much public housing is, a boring place. It is repetitive, but not boring. . . . It is a good threshold experience — from nothing to something. It looks like the rugged kind of a solution that's needed to act as a transition from the slum to another kind of environment.

- It's the top award because it has many important aspects. It's a system of putting together dwellings spatially, which can serve as a prototype for this kind of housing unit . . . It attacks and solves the housing problems of a real district in a real city with real success in its relationship to the environment.

- It's a very straight structural approach.

- Strong form.

- The only weak spot is in the connection: A great deal of intensity will be generated by the passage from the old to
PROPOSED NEW HOUSING at La Puntilla may be finished by residents in many ways, some of which are anticipated in these renderings. For structural framework, see preceding two pages.
the new. It seems rather casual, but, in my estimation, it is in fact not so.

— It's the views that are exciting, inside the courtyards; these little sections are very Latina. And the open quality of living outdoors is a very good response to the way of life of these people, without being snobbish about whose way of life it is.

— It has touches idiomatic to the area—for instance, the outdoor television set. No one has a television set, so the city provides one.

— It is good also because of its characteristic application to a universal architectural language.

— It's a good balance of variety, of scale, proportion of spaces, and repetition.

— There is a nice absence of slickness, even if the plan itself is based on a square, a square, and a square, and you expect that there will be really a slick solution underneath.

— The interesting combination here is that the spaces are not monotonous and yet the structure is very simple and natural for the total project. As a result, the cost is also low, but it retains good social and other properties.

— I like its implication as an over-all social solution as well as architecture.
Developed for the government of Puerto Rico, a planning and structural system for use in the construction of fishing villages has wide adaptability, ease of construction, and richness of form.

**Plannin g and Design Division of the Land Administration of Puerto Rico, Architect**
Robert M. Oxman, Designer
The Departments of Commerce and Agriculture of the Government of Puerto Rico and the Puerto Rican Planning Board, Consultants

**PROJECT**
A planning and structural system for use in erecting fishing villages in Puerto Rico.

**LOCATIONS**
Prototype communities are at Patillas, on the south coast of Puerto Rico, and at Aguadillas, on the west coast.

**CLIENT**

**SITES**
A grove of coconut palms, beside the sea (Patillas); a sloping bluff top near the sea (Aguadilla).

**PROGRAM**
To analyze the physical environment of the Puerto Rican fishing communities, then to evolve a structural and planning system suitable for use in such communities on a wide variety of sites; also, to design two prototype communities using the system.

**DESIGN**
A three-dimensional skeletal grid was evolved, permitting a large number of enclosed spaces on either or both of two levels to be assembled into standard housing units or into spaces for various community purposes. The basic module is a square, but diagonal partitions, meeting at right angles, are used to expand some spaces in order to house staircases. Both flat and sloping roofs are used.

The architects felt that the densities and space allowances provided for would be of great importance to the social life of the community, and attempted to create a physical environment that would be suitable to the way of life of the inhabitants. Because of the large number of formal combinations possible, the architects invented new techniques for describing the utilization of the two-level spaces in specific plans, and made some use of computers to select optimum combinations.

In the prototype communities, different arrangements have been evolved. Patillas will have three inner plazas as focal points for social life, while Aguadilla will have one, open to the sea.

**CONSTRUCTION**
Precast concrete columns, beams, and slabs, with welded connections. Wood interior partitions and infill panels. Pre-fabricated toilet-kitchen core.

**MATERIALS**

**JURY**
— More than a simply rational solution, this project is produced with a method for alternate vertical and horizontal modules. It also tries to get rid of the vertical-horizontal property limit, which is one of the things that afflicts modular construction nowadays.

— The structural system is very simple, and a good thing about it is that the whole structure can be erected by people
BASIC STRUCTURAL UNIT
Potential Directions Of Growth

POSSIBLE CONFIGURATION
Using the modular system, the designers planned two prototype fishing villages: Patillas (this and facing page), and Aguadillas (overleaf). Patillas is located on a sandy, palm-studded site at sea level and its dwellings are grouped around three inner plazas. Fifteen of the almost infinite number of building configurations the system allows are shown at right.
themselves, and it can grow in either direction because of the same module, the same system being followed.

— A system can be dangerous, though. This architect has decided to stop here with what we see; what if he hadn't? What if it went on and on? The problem with a system is, where do you end?

— But this shows an interesting thing. The advantage under these terrain conditions is that there is enough land so that there probably would not be an incentive just to keep on growing linearly. People would probably go out finally and start a little group again.

— The kind of spaces that are developed are very rich, thanks largely to the simple device of making the triangular stairway that reappears create all these transitions from one open area to another. It's nicely worked out in materials and assembly as well.

— You can quibble about some of the ways he's put it together, but it's this sort of thing that will prevent the wrong kinds of revolutions. This is 20th Century, intelligent, rational.

— He's dealing with current problems in a very encouraging way.

— Seeing this project, I realize how prefabrication is the proper answer to the most simple and essential condition of life. That is the most sophisticated technique with the most elementary need.

— Very good project in that it proves that the best contribution to environment today is given on an industrial level. The boundary of the project will be an interior discovery. You stop where the site and the topography require.

— It's really a system of row houses, but they can be placed at right angles.

VILLAGE OF AGUADILLAS

Located on a bluff, high above the sea, Aguadillas' housing is clustered about and radiates from a central plaza, open at one corner to the sea. Seen in elevation (above), housing is given variety by choice of configuration, open spaces, siding material, and roof slant.

Models by Miguel Angel Rivera
A Catholic church for a small Minnesota town is well planned and in harmony with the surrounding residential neighborhood.

**PROJECT** St. John the Evangelist Catholic Church.

**LOCATION** Hopkins, Minnesota.

**SITE** A nearly level area, containing a school building and rectory, surrounded on three sides by residential streets.

**PROGRAM** To provide a church seating 700 people, having a baptistry area integrated with the nave area at its entrance. Also required were a small chapel, containing the Eucharistic reservation for the entire church, a community center with kitchen for caterer's use, a library, administrative facilities, garage facilities, and guest quarters. Only one corner of the site was available, due to a pre-existing restrictive covenant. The church was to be connected physically with the existing school.

**DESIGN** The architects wanted to design a church that would harmonize with the neighborhood of well-maintained, single-family homes in which it was to stand. The school building on the site was bulky and unattractive, and an effort was made by the architects to mitigate the total effect of the building complex by a careful attention to the materials and scale of the new work.

The church is oriented so that liturgical east is compass west. A spacious narthex at the north end of the church leads to all parts of the new building and to the school. The baptistry area is open to the nave at its entrance, in conformance to present-day liturgical requirements. The church interior is skylighted, with no windows. The guest quarters, containing two bedrooms, are situated over the garage.

**CONSTRUCTION** Reddish-buff brick bearing walls throughout. Church interior walls to be painted white. Coffer concrete ceilings for all spaces except the church, which will have an open roof of steel trusswork with a ceiling of 1" x 6" cedar boards. Dark slate floors.

**MATERIALS**

**JURY**
- Rather understated in presentation, but it's like a garment—the more you wear it, the more you like it.
- It's a very mature solution; it's a growing, evolving kind of plan that houses several functions, and it's well resolved.
- It's rare to have a church with these other functions, which nowadays are so often attached to it, worked out so that the supporting functions are really subsidiary and supporting to the main church, not making something non-churchlike.
- Good exterior-interior relationship. It conveys the notion of the church-community home.
- Nice handling of light.
- It also has a certain basic simplicity. Structurally, it is solved without much difficulty.

**COMMENT**

Awards.
A vacation condominium in the Rockies, in which a clever handling of roof planes and varied arrangements of three standard plans obviate an appearance of monotony and make possible an economical use of interior space.

PROJECT  Fairway Villas.

LOCATION  Aspen, Colorado.

CLIENT  Snowmass-at-Aspen, a joint venture of the Janss Corporation and the American Cement Company.

SITE  A gentle slope, facing southward, with views across an adjacent golf course toward the Rockies.

PROGRAM  To design a moderately priced, attractive condominium for both summer and winter use. Adjacent common ground to provide facilities for such summer activities as swimming, games, sunbathing, and outdoor parties. Winter occupants will be mainly interested in skiing, but will require outdoor deck areas free of snow. Snow removal to be made as easy as possible. Parking facilities to be provided for automobiles and for the electric carts used for travel to and from the nearby village of Snowmass.

DESIGN  Three standard plans are grouped in various ways and with various orientations under single-pitched roofs designed to shed snow readily and to exclude the midday sun, while allowing a full view of the mountains from the living areas. The roofs and the clusters of dwelling units are varied in grouping and orientation to avoid any quality of monotony. Houses are raised above the level at which snow accumulates, and outdoor decks are sheltered by roof overhangs. Entrances are grouped around small, sheltered courtyards, "to establish a sense of community." All land beyond the building lines is held in common to avoid unsightly changes. Garages are sunken and have gently sloping roofs covered with sod so that they blend with the natural slopes. Upstairs sleeping areas are treated as balconies, open to the living areas below, and utilize the space afforded by the upper parts of the long, single-pitched roofs.


MATERIALS  — The site planning is excellent. A repeating unit is used in such a way that you don't really see it as a repeating unit.

JURY  — One of the rare examples where the slope was really justified and appropriate and made sense for the solution.

COMMENT  — This is also probably one of the most professional of all the presentations. We've seen some very bad presentations.

— This one is very simple and convincing.
Citation

Henry C. K. Liu, Designer
George A. Dudley, Consulting Architect

Project: Environmental Physiology Research Laboratory Complex.
Location: Los Angeles, California.
Client: University of California at Los Angeles Santa Monica Mountain Park Research Campus.
Site: A valley (mostly in the natural state) on the northwestern portion of a 350-acre proposed research campus in the Santa Monica Mountains facing the Pacific.

Program: To design facilities for environmental physiology research in space biology, and bioengineering. The two research programs will each have individual offices and laboratories (48 major labs and 60,000 sq ft of offices and work labs), but will share a 150-ft-dia centrifuge and four environmental testing chambers. The complex will house 200 scientists and 300 supporting personnel, with parking for 800 cars.

Design: The steeply sloping site, together with circulation requirements, play the major roles in determining building form and organization of spaces. The circulation elements will serve not only as links but will also provide a variety of meeting places. Offices and work labs are to occupy the jutting horizontal wing, and major labs are housed in the broad wing stepped up the hillside. Space biology and bioengineering each occupy a three-level section separated by a level of public circulation. Two other public areas are at ground and roof levels. Sections of each research level can be sealed off for security projects. Two parking structures at the base of the valley accommodate 400 cars each and are connected with the centrifuge, environmental testing chambers, and (via pedestrian walkways) to three open-view inclined elevators serving the terraced portion of the structure. Future expansion is possible either linearly or on the opposite side of the valley.

Construction and Materials: Reinforced concrete construction; both exterior and interior will probably be exposed concrete. At this stage of the design, no other materials and methods have been decided on.

Jury: — A complicated traffic problem that has been solved in typical California style. Structure seems quite simple.
— It's got a lot of spaghetti.
— The project reveals a certain difficulty in applying to the site. In particular, the parking looks very complex at first sight, and the connection between the horizontal wing and the left wing is hard to take. There are many remarkable aspects, however, such as separate public circulation and the general character of the architecture.
— I am putting every confidence in the architect.

Liu
Dudley
Section Looking South
INCLINED ELEVATORS

CENTRIFUGE

PARKING

ENVIRONMENTAL TESTING CHAMBERS

CIRCULATION DIAGRAM

SPACE BIOLOGY

PUBLIC BIO-ENGINEERING

INCLINED ELEVATORS

SERVICES
Hobart D. Betts, Architect  
Stanley Gleit, Structural Engineer  
Harold Hecht Associates, Mechanical Engineers

PROJECT  Residence for Mr. and Mrs. Frederick H. Robinson.

LOCATION  Enniskillen Farm, Stafford County, Virginia.

SITE  A wooded hilltop on a large farm. Gently rolling countryside. Spectacular views, especially to the north and west. A tall grove of hickory trees adjacent to the house.

PROGRAM  To provide a home for a retired but active couple. Major living areas and master bedroom to be on one level. Guest accommodations for visiting children and their families. The architect was asked to recall the “simplicity and boldness” of early Virginia brick architecture, but without being imitative. Because the house will stand in lonely isolation, he was asked to give it an enclosed, protected appearance as seen from the road, yet without cutting off the major views. Air conditioning is to be used throughout.

DESIGN

SOLUTION  In order to use the hickory grove as a setting, and to command the major views, the house was sited on the north side of the hilltop and given a multilevel plan. As approached from the south, the house will appear almost completely enclosed. A vista, however, is opened through a window panel beside the front door and through the sunken living area, so that as one comes up the entrance ramp one will obtain a hint of the view beyond. The living room windows face north and west, and the obtuse angles made with these windows by the adjoining walls allow views of over 180°, as well as providing dramatic contrasts of scale and of voids with solids. The stair tower beside the entrance is also treated as a distinct formal element, contrasting boldly with the walls adjoining it.


JURY  — It’s kind of a monument to an era, or, perhaps, the end of an era.

COMMENT  — Certainly this house is symptomatic of a lot of particularly small buildings in the East that we’ve seen in recent years in the way it approaches the carving-up of space. It seems to be handled with a great deal of success and skill, and very definitely appealing to live in.
— There is a good and clear proposition in this plan. I don’t mind that it’s fashionable.
— It’s well done and has a lasting quality, at least of our time.
— It looks very livable.
A chapel for a denominational college in the hills near Los Angeles, harmonizing with and yet dominating the campus with a single bold form.

John Carl Warnecke & Associates, Architects
John C. Warnecke, Director of Design
James T. Ream, Associate Director of Design
Paul Johansson, Project Manager
Marc Feldman, Altar Development
T.Y. Lin, Kulka, Yang & Associates, Structural Engineers
Charles & Braun, Mechanical Engineers
Edward S. Shinn & Associates, Electrical Engineers

PROJECT
Lutheran College chapel.

LOCATION
The Irvine Ranch, Orange County, California.

CLIENT
Lutheran Church, Missouri Synod Board of Higher Education.

SITE
A college campus on a hilltop near Los Angeles. Campus buildings are planned and scaled to give a village-like effect, with stucco walls and clay tile roofs. Chapel is free-standing but has other buildings close by. Climate is sunny and dry.

PROGRAM
To provide an 800-seat chapel that would blend well with the other college buildings, maintain the prevailing quality of intimacy, and suggest the continuing vitality of contemporary religion.

DESIGN
Seating was arranged around three sides of an altar area located almost at the center of the building. The materials of the existing buildings, tile and white stucco, were repeated in four semi-independent compositional elements, having single-pitched, steeply sloping roofs arranged around a central area so as to form a blunt cross. The central area is covered with a rectangular flat roof, sunk so as to allow a well for the indirect natural lighting of the nave from above on all four sides. The eaves of the sloping roofs project well beyond the walls so as to allow natural lighting from beneath. This use of windows above and below, along with the glazing between adjacent outer elements, is expected to create a dramatic effect at night when the chapel is lighted from within. The end walls of the four outer elements rising past the central flat roof, will support it near its corners.

CONSTRUCTION
Concrete walls, finished in white cement stucco and white sand plaster. Concrete sloping roofs covered with natural red clay tile. Reinforced concrete beams with exposed steel kingposts and tension bridles, for central flat roof truss. Wood tongue and groove decking as infill between flat roof beams. Concrete floors, covered with carpeting and/or quarry tile. Clear plate glazing in dark finish trim. Natural oak furniture.

JURY
— A beautiful, simple geometrical form, solved marvelously in relation to the problem of lighting. Its questionable features are in relation to the structural solution and the way in which one enters the space.
— It's treated more like a monument or a shrine and because of the absence of any other functions it's a very clear plan. Lighting is handled very nicely. The inside will be grand, I think.
— The basic shortcoming of the perfection of this idea, as so often happens with these over-simple geometries is, How do you get in. You come in, but there's no transition.

Warnecke
Ream
Johansson
Feldman

Photos: James T. Ream

JANUARY 1968 P/A
Imaginative circulation "streets" serve flexible loft spaces and help to connect design disciplines building to the campus center.

Naramore, Bain, Brady & Johanson, Architects
William Bain, Jr., Partner-in-Charge
Dean E. Hardy, Project Architect
Howard Berglund, Project Designer
Naramore, Bain, Brady & Johanson, Interior Designers
Skilling, Helle, Christiansen & Robertson,
Structural Engineers
Bouillon, Christofferson & Schairer, Mechanical Engineers

PROJECT
Design Disciplines Building.

LOCATION
Washington State University, Pullman, Washington.

CLIENT
Board of Trustees, Washington State University.

SITE
Steeply sloping site on existing campus; about 5 acres.

PROGRAM
To bring together the Departments of Architecture, Fine Arts, Landscape Architecture, Interior Design, and Industrial Design in a complex that will stimulate interaction and collaboration among the environmental design disciplines and involvement with the rest of the university.

DESIGN
A series of flexible, linear loft spaces separated and served by high, top-lighted circulation "streets" are provided. Streets are open to some adjacent spaces and closed to others; besides providing circulation, they are meant to be student gathering places and exhibition spaces. Efficient circulation has been planned to draw students from other parts of the campus through the building on their way to and from classes. Large open studios occupy the top level, and areas for heavy materials and equipment are below the entrance floor. Multilevel parking fits into the sloping site below the building.

CONSTRUCTION
Combination precast and cast-in-place concrete. Exposed concrete and indigenous brick, harmonious with existing campus buildings, to be used for exteriors and interiors. Mechanical ducts and pipes will be exposed to serve as teaching aids.

MATERIALS

JURY
— The connection to the center of the campus is very, very well worked out. It has the quality of exposing the activities to people who move through the building.
— I'm not completely persuaded by the exterior architectural handling, although we liked the section very much and the suggestion as to how the teaching spaces are open and free.
— The exterior system that slopes out does not easily make sense structurally.
— I, too, have a quarrel with the base.
— Good plan. Bold and diagrammatic structure. I submit the model is quite different from what the building would be in reality.
CITATION

Lively campus center for the performing and visual arts takes advantage of a beautiful setting.

Ralph Rapson F.A.I.A. Architect, Architects
Kay M. Lockhart, Richard B. Morrill, and Frank D. Nemeth, Project Associates
Henrik Bull, A.I.A., Liaison Architect
Thomas Church, Landscape Architect
Pregnoft & Matheu, Structural Engineers
G.L. Gendler & Associates, Inc., Mechanical Engineers
Robert F. Lambert, Acoustical Consultant

PROJECT Performing Arts Building for the University of California at Santa Cruz.
LOCATION Santa Cruz, California.
CLIENT State of California.
SITE Rolling, wooded parcel of land on the new University of California campus 75 miles south of San Francisco.
PROGRAM To provide a campus center for the arts with facilities for drama, music and the visual arts.
DESIGN Focus of the complex is a 600-seat, thrust-stage theater with teaching and work spaces at the rear. Flanking the theater on either side are the art and music departments organized around their own exterior court spaces connected to the main plaza. Building groups are unified by a large “lid” roof covering the complex geometry of the main theater. Facilities include a smaller, 290-seat auditorium, studios, practice rooms, and offices. Art studios are sited to facilitate possible future incorporation into the drama complex, and all three departments can be expanded. The mild climate made it possible to eliminate enclosed corridors, but covered circulation links building groups, which follow the rolling topography and are designed to preserve certain existing trees.

CONSTRUCTION AND MATERIALS Concrete block bearing walls and steel bar joists. Stucco finish, exterior and interior. Standing seam metal roof. Court paving is precast concrete with exposed aggregate. Concrete columns support steel roof trusses over main theater.

JURY — This is a beautiful project. Atmosphere expressed with confidence, great concern with the site, economy of means. A place to be discovered. Technically excellent.
— I’m impressed by the simple structure used to enclose people in space. It’s a two-way system and it’s very simply done.
— It would be a very enjoyable experience being in there.

COMMENT

Rapson
Lockhart
Morrill
Nemeth
A laboratory for researching and building communications satellites that celebrates its glistening skin and strong circulation pattern in no uncertain terms.

Daniel, Mann, Johnson & Mendenhall, Architects  
Cesar Pelli, Director of Design  
Philo Jacobson, Design Associate  
S. Kenneth Johnson, Partner in Charge of Project

PROJECT Comsat Laboratories
LOCATION Route 70 S. Clarksburg, Maryland.
CLIENT Communications Satellite Corporation.
SITE 210 acres of rolling fields with maple, sycamore, and beechwoods in the Maryland countryside.

PROGRAM To design a building complex to house all functions necessary to research, develop, and produce communications satellites. Basic program elements were: laboratories, research offices, spacecraft assembly area, administration offices, building and mechanical services. Other requirements: allowance for future expansion of facilities and services; flexible laboratory spaces; flexible mechanical and power distribution system; consideration of present and future spacecraft dimensions; parking for 350 employees and 50 visitors.

DESIGN “The plan is generated by the circulation,” states the architect. Conceiving the Comsat Laboratories as a complex of spaces, the architect has made the central corridor, running the length of the plan, the most important space. From this, the administration wing and the individual labs, separated by courtyards, branch off on one side, and the other spaces on the other. The only partitioned space on the lab side of the corridor is the administration wing. Secondary circulation lines for people and materials branch off the main corridor, into and around the laboratory-research office wings and off to the building services element. Predetermined expansion will be carried out by continuing the spine of the corridor toward the employees’ parking lot. Other growth can take place around subsidiary elements or spaces. The corridors are intended to serve as common room, meeting place, or room away from work. Consequently, the main corridor and the outside corridor connecting the lab wings across the courts have been given “the best views and the better materials.” The treatment of the exterior skin is as a glittering membrane turned over and under and around the structure. The sense of mass is increased by bending the skin over the roof line and giving prominence to the roof elements. The exterior corridor connecting the laboratories will be all glass and thus will enclose the courtyards physically while leaving them open visually. The architects intend the building (or complex) to look from the exterior in some aspects as a single, streamlined shape and in other aspects as a sequence of courts and wings. The rural landscape will be left undisturbed to create the effect of a man-made object “carefully placed on a natural area.”

Mechanical services will follow the same general patterns as the human and materials service circulation. Vertically, they will run between the interior corridors and the core laboratories.

CONSTRUCTION AND MATERIALS Concrete spread footings with steel rigid frame construction in both directions. Intermediate floors of metal decking on steel beams with concrete fill. Bright aluminum mullions
and panels. All-glass walls for corridors, lobby, library, and cafeteria. Insulated aluminum walls with "punched" windows for offices; corrugated metal panels for environmental test laboratory and assembly area. All walls on a 5-ft module.

JURY COMMENT

— All the 1920's comes in here, and yet it is not affected intellectually. The notion of the exterior surface, not as a fill-in but as a continuous scheme, is the real success of this project. The service distribution is not totally convincing, and the connection between the labs seems quite simple-minded, but in general I am most sympathetic to this project.

— The wall impresses me, the skin of the building.

— It's a very rational building. The different functions in the whole building are expressed quite well by the different materials in the wall system.

— Very superior plan, organization, and a fine cross-section for providing mechanical services for the laboratories.

— There's one negative thing: the connecting link looks very metallic.

— An excellent, rational building using the technology of today and also extending beyond the familiar form in use—for instance, the curtain wall.

— A magnificent scheme for an industrial laboratory in which some elements that have already become all too familiar to us—like the curtain walls and continuous windows on a 5-ft module—have actually been put to work in
Schofield & Colgan and Earl R. Flansburgh, Associated Architects (A Joint Venture for This Project)
Earl R. Flansburgh, Partner-in-Charge of Design;
Hugh C. Browning, Job Captain;
And Andrea L. Manheim: Design Team
Zorab Vosganian, Structural Engineer
Kallen & Lemelson, Mechanical Engineer
Arthur E. Bye, Landscape Architect
Dr. Cyril Sargent and Jack Ward, Education Consultants
Flambert & Flambert, Kitchen Consultants

PROJECT Wilton High School Addition.

LOCATION Wilton, Connecticut.

CLIENT High School Building Addition Committee, Town of Wilton.

SITE A rocky knoll directly across the entrance road from the existing school; extremely limited ground area with little possibility of much additional land acquisition. Use of knoll will permit utilization of level land for athletics.

PROGRAM To expand a 600-student high school to accommodate 1300 students.

DESIGN Two elevated classroom-corridor wings are pulled across the entrance road from stairs rising out of two existing court­

SOLUTION yards in the present school. They join a central element that steps up the knoll in “terraces,” glazed overhead, within which are classrooms and teachers’ units, culminating in a double-loaded, pierced corridor with a full-length barrel­roofed skylight, off which open classrooms and student activities rooms. At the two “joints” of the plan are, respectively, an auditorium over storage space, and the resource center or library, which is located so as to be accessible from two levels of the addition. The architects state that “the addition has been designed to bring a strong architectural character to the front of the total school.”


JURY - Sensitive­ly engaged into the older building, and contains spaces that move and vary between high and low spaces and corridor areas.
- That gallery idea is an old one, but it seems most appropriate.
- Definitely a difficult problem; a concise presentation of a good addition.
- A very natural solution.
- An extraordinarily successful job of adding to an old building, seemingly on an afterthought basis.

Flansburgh
Browning
Manheim

Circulation is the design basis for a sensitive addition to an older high school.
PROJECT
Bellevue Community College.

LOCATION
Bellevue, Washington.

CLIENT
Board of Trustees, Community College District 8, State of Washington.

SITE
Approximately 125 acres of second-growth wooded land at the crest of a low ridge. First phase will occupy about 30 acres for buildings, 35 acres for parking.

PROGRAM
To create an expandable “commuter” college (no dormitories, but extensive parking areas) responsive to the changing needs of the community, and designed to maximize interaction among students, and between students and faculty. Portions of the site to be preserved in their natural state.

DESIGN
Occupying a north-south plateau on the site, the college will be a grid that can expand both east-west and north-south. The pedestrian commons, formed by surrounding buildings, offers a variety of open and closed spaces to invite communication among the academic groups. The design concept divides space usage into three categories: spaces that can be changed; relatively inflexible areas, such as stair and toilet cores, that will “line” the mall and protect it from encroachment; and specialized areas that serve as centers of interest within the campus form.

SOLUTION
Precast concrete structural elements; loadbearing brick and gray glass.

CONSTRUCTION
Non-loadbearing walls are steel studs, stucco, and

MATERIALS
— Exciting elaboration of the street idea as an organizing element for a college campus, combined with a modular structural bay that seems to have a good deal of scope for the different elements of the program.
— I would like to see a better resolved ending of it.
— But isn’t this one of the advantages — that it could grow indefinitely?
— The total structure seems to be simple and efficient; however, I don’t understand why the beams are projected outward.
— That’s a very strong and a very good plan.
Judging over at last, appointments elsewhere calling, the jury found a few minutes to talk about the experience of the past two days, and what it seemed to indicate. Design Awards juries are sometimes alarmed, sometimes sardonic, sometimes almost satisfied with what they have seen. This year’s jury concentrated on what it considered to be the good effect of the large-scale, highly coordinated building program on the quality of architectural design. As it happens, 8 out of the 12 submissions premiated were projects that had to make point-for-point responses to detailed programs. The others — a performing arts building, a private house, and two churches, were designed with a self-restraint that appealed to the jury; lacking the imposed discipline of complicated programs, they revealed a compensating self-discipline that distinguished them from the commoner self-indulgent work in these categories, which has led to the rejection of all church designs in some past years, and to the rejection, in 1965, of all the 148 private house designs submitted.

Concerning the large-scale program as a promoter of architectural quality, the jury commented:

Anderson: There were enough big-scale urban design and campus planning projects to bear out the popular statement that the whole environment has now become far more important than the individual building. This is really true or beginning to come true; there actually are the projects, the clients, and offices or teams of offices somehow able to make some progress doing them. This is proved by some of the citations and awards.

Dober: The reason why there are some things that annoy us in our environment is because there are people doing things that are annoying, and there are bad buildings being built. The encouraging thing — here I agree with Anderson — is that, where the scale is large, the work seems to be much better. And this shows a great deal of hope. The reason for this
is the amount of investment in these things is such that they can command the attention of groups of people to do the work. There's a multilient aspect to this; contending forces and different markets are at work, where both the public and the private interests have a stake in a much better job being done.

Birkerts: The small projects are overly form-conscious, and the form by now is of one kind—mostly it's the roof form, and one kind again, the sloped roof. That's been worked over in the residential, in the religious, and the recreational as well. You couldn't tell many of those projects apart if you didn't read the fine print. Now, in the large-scale projects, where the problem is more complex and the involvement greater, you don't see that, because the forms get purified somehow in the process of solving problems, and one just does not have to play with form. The large-scale projects had more appropriate solutions than the smaller, where the overexuberance of the architect took over.

Giurgola: You cannot approach a large design project as a field for personal exercise. You search for a more comprehensive and permanent expression; you have more concern for fundamental conditions. It is evident that the buildings or structures concerned with schools, campus planning, and urban design represent the best contemporary architecture because these represent the real motivations of our time. It is not so much a matter of their being large scale, but rather that they meet the real needs of today. From them, a more genuine architectural language has always been set by projects of a comprehensive nature that have influenced the character of smaller ones.

Khan: The way I look at the difference between the large and small projects is that the large projects seem almost always to be more rational. There's overall thinking in them. One of the reasons why that's possible is because large projects involve more people and bring in other disciplines as a total team. For instance, the condominium we gave an award: Even though the module of one little unit is very small, there's an awful lot of rational thinking behind it—testing of samples and making things up even before proposing a design like that. In smaller projects, the rational part is very often lacking, because there's no immediate contact with other disciplines.

Birkerts: One of the reasons why the large-scale projects are so good is that the problems to be solved are new. We haven't dealt with them before to this extent. Since they are new, you don't have the frustration of having seen this before, or having done that before, or doing it as other architects have done before. It's a new problem, a virgin problem; you get at it, and there's the challenge.

Anderson: Also, if you have a big project, your circulation system has to be strong; it won't work unless it is.

Birkerts: It's really purifying. I think, for our profession.

The P/A Design Awards Program, among other things, is the glass of current architectural fashion. Our jury had some comments on current trends. Besides pointing out the preoccupation with the sloping roof, as Birkerts did, jury members made these observations:

Anderson: There's still an awful lot of fashion.

Birkerts: Still an awful lot of fashion, right. However, not so much of certain influence from last year's Design Awards has come through as might have been expected. The absence of the signatures of masters shows—except for Charles Moore's, who has been in strong. The separate, distinct expressions and influences have kind of faded out and amalgamated into a certain uniform kind of architecture that prevails throughout.

Giurgola: We see a great deal of stylistic diversity in the small-scale projects, except perhaps for the presence everywhere of pitched roofs. We have, however, seen less of the picturesque than usual.

Khan: The diagonal is in good shape. Everywhere you enter through a diagonal. The axis has shifted from basic frontal symmetry to diagonal symmetry.

Birkerts: The one thing I would miss, if it left us, would be the kind of light that you can admit by using the sloped roof. Should that go out of style, what then? Well, there are other ways, but the sloping roof has done at least one good thing by introducing top light.

Although one private house, with strong diagonals, was premiated, this year's jury had some of the same misgivings about the problem of private residential design as other recent juries:

Birkerts: It's supposed to be laboratory for experimentation but it's surprising how little the older guys use that. They have a chance to play around with the real stuff, and big things, too.

Anderson: My feeling is that the future of materials development is more in industrialization for large-scale complexes.

Dober: So the individual house is not the event . . .

Anderson: Not on the technical end, anyway.
URBAN PLANNING AND URBAN REVOLT:

A Case Study

Violence in the streets of America's cities in the past few years has led most thoughtful architects and planners to suppose that the urban renewal and redevelopment measures that have been proposed and sometimes put into effect in the United States are not the panaceas they have been touted to be. To examine what makes a city in crisis tick, and what the effect of a widely known urban redevelopment program on the urban poor has been, P/A here probes the anatomy of New Haven, Connecticut, scene of riots last August, and offers its findings as a cautionary exegesis of the ills of our cities and the noncurative aspects of most of our urban planning programs.

NEW HAVEN, CONNECTICUT
Saturday, August 19, 1967:

5:55 P.M.—The white owner of Tony's Snack Bar on Congress Avenue, in the predominantly Negro section called the Hill, shoots Julio Diaz, a Puerto Rican, as crowds mill around outside.

6:30 P.M.—Reports reach police headquarters that small gangs of youths are running up and down Congress Avenue smashing store windows.

7:30 P.M.—Fairly large crowds—demonstrators and by-standers—plus police, begin to accumulate around the headquarters of the Hill Parents Association (HPA), a neighborhood organization. Everyone is jumpy, and HPA leaders try to calm them down. The leaders talk with police and help try to pull back the more militant demonstrators. Scattered incidents of looting are reported.

8:30 P.M.—About 20 young Negroes, yelling and laughing but unarmed, approach a large group of policemen. The two groups yell back and forth at each other. The police then drop seven or eight canisters of tear gas in front of the Negroes, who retreat back down the street.

This report was prepared by Associate Editor Peter M. Green and Assistant Editor Ruth H. Cheney. P/A thanks the many individuals and organizations, including the New Haven Redevelopment Agency and its City Plan Department, for providing much of the background material and illustrations.
now clearly angry at the unexpected police move. Soon violence erupts a few blocks away on Washington Avenue. Fred Harris, President of HP A, goes there with police and succeeds in halting the trouble. But Harris reports to a friend that he was clubbed in the chest with a rifle butt and shot at. He says, "I've had it helping the police. I'm losing my own guys in helping, and then the cops go after me. You can't do nothing. They deserve whatever's going to happen. There's no talking or reasoning with them."

Harris, in these first few hours, asks the city for 100 brooms and two sanitation trucks, and promises to clean up the broken glass on the street in a few hours — providing that no more police are sent in. Neighborhood feeling is still optimistic that the few demonstrators can be controlled. Police are viewed as antagonists.

The city sends the trucks and brooms, but the police do not let them through their barricades. Mayor Richard C. Lee calls in the state police.

9:00 P.M. — A loud crash near Congress Avenue; seconds later, the entire front of Ciociola Clothing Store erupts in flames. Police ring firemen to protect them from thrown objects.

9:30 P.M. — Yelling, clapping, fire-bombing, singing, fast-throwing packs of angry young black men roam the streets of New Haven, the most model of modern major "urban renewal" cities.

Rampaging youths attack a freelance photographer angling for a better shot of two burning buildings — a small department store and a tenement in the Hill, a bare half-mile from Yale.

Mayor Lee, dubbed "King Richard the Little-Hearted" by some Negroes, receives news that the trouble has spread to the city's three low-income sections: Newhallville, Fair Haven, and Dixwell. All are integrated, but predominantly Negro and Puerto Rican.

One, the Dixwell section adjacent to Yale, has been a major focus of urban renewal programs during the past 10 years; the other three are still in the planning stage. Lee says: "I seriously thought that something like this wouldn't happen here... although I would never leave the city during summer." He calls the National Guard.

10:00 P.M. — Police Chief Francis McManus drives through the Hill urging people to go home. He is answered with obscenities. Well-prepared police (New Haven is one of the few cities to equip local police with Mace spray cans, a chemical inducing temporary paralysis) continue to put up barricades around the main areas of violence.

Sightseers arrive. White vigilante groups converge on Hill residents. In most reported instances, police try to break them up. A white citizen marches down Congress Avenue with a shotgun. He tells the police: "I'll help you kill the niggers."

Later, as The New Haven Register noted, "a sense of numb fear, helplessness, and defiance could be felt on the sidewalks throughout the smoke-filled area Saturday night." Many residents, mainly women and children, flee the Hill, an area that is currently under study for urban renewal in the office of architect Louis I. Kahn. A young white woman is seen sitting in her white Ford holding the back of her bleeding head. She is driven to the nearby Yale-New Haven Medical Center by the police.

11:00 P.M. — As the night wears on, the tempo of violence increases in some areas and continues to spread. Rampaging gangs break windows, throw fire-bombs, and attack reporters. About 350 policemen are on duty, attempting to break up groups with tear gas and Mace. The main office of the Elm Haven low-income housing project in the Dixwell section is broken into. All the white-owned stores in the section are "hit."

The action in the Hill is stalled for awhile as everyone waits for Fred Harris and his aide, Ronald Johnson, to come back from downtown. Police stand on one side of the street, facing Negro men on the other; there is occasional shouting and mutual provocation. Harris finally returns, angry and disappointed. Action begins again. A serious fire is reported in the Dwight section, next to the Hill.

SUNDAY

Early Morning — Harris is sprayed with Mace and arrested just after he helps a crippled woman in a wheelchair out of a burning building. Police begin making wholesale arrests in the Hill section. Scattered reports of looting come in from Dixwell.

In the Hill, the air hangs heavy with tear gas, smoke, and a stifling humidity. People's eyes fill with tears.

A small army of police, wearing powder-blue riot helmets and equipped with shotguns, carbines, and automatic weapons, scours the panicky city for troublemakers. Some of the police wear gas masks, others handle dogs. Small supply trucks stand ready to provide more ammunition and tear-gas bombs. Nearly all residents are openly hostile or indifferent to the police — even those who disapprove of the rioters.

10:30 A.M. — Traffic on Congress Avenue, the most widely publicized area of violence, is jammed solid with sightseers. Police with drawn rifles are stationed along the avenue.

1:00 P.M. — Mayor Lee meets with HP A leaders, representatives from the Redevelopment Agency, the clergy, and Community Progress, Inc., the New Haven anti-poverty agency. The Mayor agrees to give HP A leaders the names of people in jail, to have the police keep their shotguns out of sight in the trunks of their cars, to pull back some of the police in order to cut down the visible force that apparently antagonizes Hill residents, to put four Negro policemen (selected by HP A because of their rapport with the community) in charge of the police
in the Hill, and to allow Fred Harris and other Hill leaders to work with these policemen in cooling things off.

As they leave this meeting, HPA leaders witness the arrival of the state police. Wondering now about the mayor's sincerity in the meeting they have just left, they return to the Hill to see if the Negro policemen arrive. They don't. Police shotguns are barred on Congress Avenue. HPA decides it will now be impossible to stop or control the violence.

4:00 P.M. — Groups of teen-agers and young men begin to form again on Congress Avenue. Mayor Lee reacts strongly — some think too strongly — when he calls in 250 state police and imposes an 8 P.M. curfew on the entire city.

Lee, no longer surprised that violence has come to New Haven, says: "There are no outside influences involved in the ferment; what happened here is part of urban America, 1967. It can happen regardless of the city or state, anywhere in the nation."

6:00 P.M. — Lee announces a state of emergency. State police cars with four or five men, followed by city patrol cars with an equal number of local police, prowl through the four hardest hit sections. Later, many describe this show of mass force by the city as uncalled for, and a further incitement to already angered area residents. A National Guard unit of 250 men stands ready for action at the Fire Department Training Center. Meanwhile, white sightseers are being "pelted" by Negroes in the Hill.

8:30-11:00 P.M. — Half-a-dozen fires are set, several automobiles are put to the torch. As police converge on one area, violence erupts in another. Spotlights flash against buildings; police warn people to stay away from their windows, Fear and rumors spread. Platoon of police march down the streets. Armored tracked vehicles appear.

Sometimes, incidents occur simultaneously in different areas. On the other side of the city, in fabled Wooster Square, Negroes in Parnum Court (a pre-Lee, low-income housing project separated by Interstate Route I-91 from the rest of Wooster Square) invade grocery stores, smashing windows and looting. Incidents are reported in the sparkling new business district; a jewelry store and a clothing store are looted on Chapel St. Even in Westville, an affluent white neighborhood, vandals and looters break into a jewelry store.

The city rents 50 rooms at the newly opened Park Plaza Hotel — a showplace of downtown renewal — for police and officials working overtime. Police patrols rush from one incident to another in scattered neighborhoods as complaints of violence pour in from all over the city. Newspaper photographs later show that many young white citizens are arrested, along with the Negroes and Puerto Ricans. Many are vigilantes; some are demonstrators. A woman shouts frantically from a second-floor window; a dozen police run up to get her, bring her down, and put her in the wagon with other prisoners. Some claim she is beaten by police.

At some locations, a carnival atmosphere prevails, as determined looting begins. Negro and white looters help themselves and each other to liquor and food. Photographs show smiling children not older than 9 or 10 helping themselves, parents, and friends.

In an interview with P/A, one young Negro told how he had been away from New Haven on Saturday, and returned on Sunday not knowing about the curfew. He claims he saw several policemen beating the heads of two youths against a brick wall in the Dixwell section. No one else was on the street, so he stopped his car and went over to find out what was going on. He is a city worker, and showed the police his ID card. They refused to look at it. To mask their own identity, they wore no shields. When the Negro began taking down their license plate number, the police took him and the two victims to jail.

When P/A questioned this same man about newspaper reports and the word of city officials that "not a single shot had been fired by the police," he replied, "Bull."

Elsewhere, Lee paces the floor in his map-lined basement command post, tears filling his eyes, asking, "Why? Why? Why?"

HPA headquarters discovers that its telephone line is broken.

MONDAY
9:00 A.M. — Fred Harris and Ronald Johnson request Mayor Lee to remove police and barricades from the Hill, and to lift the 8 P.M. curfew. The Mayor refuses.

10:00 A.M. — Lee, called by some Negroes the "Great White Father," holds a series of talks with city officials. He grants interviews to three television networks, which question him largely on New Haven's national image as a model city. Lee believes that there are "... no organized efforts or organized group" behind the "disturbances."

12:30 P.M. — Lee explains to a large group of HPA representatives and other community leaders that he has no control over the state police, and what it was his decision to put them on the alert, but that it was a local police decision actually to call them into riot areas. Community groups now wonder whether the situation has passed from municipal to police control.

They feel the Mayor is under enormous pressure from many other groups besides their own, and that these other groups are pressuring for precisely the opposite of what they feel is needed — less police action. One misunderstanding they clarify is that many Puerto Ricans do not understand what "curfew" means and are being arrested for violating it.

Officials state that "the disturbances have taken on a different light, with many more vicious and violent acts aimed at policemen and firemen."

2:00 P.M. — Amid persistent rumors that the entire Hill will be burned down on Monday night by its inhabitants, hundreds of women and children seek help from HPA in leaving the area. Many leave on their own.

HPA asks Yale University for the use of its vacant dormitories to house fleeing Hill residents. After conferring with university officials, Sam Chauncey, President Brewer's top aide, gives Yale's final answer — no. Harris contacts the Connecticut Bus Company, and hun-
dreds of families are sent to the suburbs for the next two nights. Other families seek shelter at the nearby Connecticut Mental Health Center.

Harris says that no one has control in the riot areas. "The guys that are supposed to be in charge look like they're the worst racists around."

6 P.M.-2 A.M. — Violence starts earlier than on preceding evenings. Fire-bombs ignite buildings in Wooster Square, hallmark of New Haven renewal programs; the Dwight area, which is fully integrated; the Yale University area; downtown; and in Fair Haven, a low-income area; and again in Dixwell. The Hill is relatively quiet. Many incidents of violence occur in and around the Elm Haven housing project in Dixwell, for the third straight night.

Police, patrolling in small groups, are working 16- and 20-hour shifts. A meeting of New Haven's 40 Negro leaders is held at the Zion Lutheran Evangelical Church. They proclaim that their meeting "puts the white community on notice that from now on they must work exclusively with our unified black leadership." They draw up a manifesto calling for an apology from the police for brutality.

Police rigidly enforce the curfew only in black and Puerto Rican neighborhoods. Gangs of white men gather in some troubled areas; not all of them are dispersed by police.

HPA discovers that the electric power in their headquarters has been turned off.

TUESDAY

12:00 P.M. — After a conference with police officials, Mayor Lee announces that the curfew will not be lifted today. He states that the "... incidents were not racially motivated; they are wanton acts of violence and disregard for the law."

Fred Harris says, "Something meaningful had better happen soon. Things are getting out of control. There is no trust in Lee or the police. I don't know how it will be established. There's no dialogue between the black community and downtown."

He says he thinks the situation would be helped if the police would get "... all their rifles out from remove dogs and tear gas. These things are bitterly resented, he states.

Lee comments: "I wish there were some way of getting across to the people in the neighborhoods involved that the police and fire departments represent law and order, and are the first line of defense for all the people."

Residents of Congress Avenue feel that removal of the curfew and most of the police would bring things back to normal more quickly than any other measure.

A Negro walks over to a policeman with a rifle and asks him why he has it, since an agreement was made with Mayor Lee that rifles would be withdrawn. The cop answers, "It's not loaded, boy, but it can be loaded in a second." (In New Haven, the police call adult Negroes "boy," as in the South.)

2:00-6:00 P.M. — Isolated and sporadic incidents of looting and fire-bombing occur during daylight hours. Police begin patrolling at 3 P.M.

It is estimated that insured losses in the town will total close to $1 million; uninsured and incalculable losses will boost the final total to several million dollars. One incalculable loss is that business in downtown stores is way down, due to suburban shoppers' reluctance to drive into New Haven along the only existing routes, which go straight through the heart of the riot areas that ring the downtown district.

7:00 P.M. — More families from low-income areas are bused out to the suburbs. About 650 city and state police again penetrate all riot areas, armed with rifles, shotguns, riot guns, gas masks, riot sticks, and Mace. Everyone is ordered off the streets. Those who refuse are arrested.

Again, persistent rumors spread that the Hill is going to be burned down during the night. Hundreds of whites and Negroes leave New Haven for the suburbs after warnings by HPA. "They told us to leave," says a young woman, "because there might be violence tonight. ... I don't have any faith in the police,"

8:00 P.M.-1 A.M. — A man is arrested for carrying a bull-horn after the curfew. Residents in the Hill and Dixwell monitor police calls with stolen receivers.

A Negro woman says, "I think the violence should stop, especially by the police. The violence of the people is only against property; the violence of the police is against people."

Police spirits rise when they are given a free hand to make wholesale arrests and seal off Dixwell, Hill, Fair Haven, and Newhallville areas. Most areas are quieter throughout the night. A policeman says, "They know we aren't kidding this time." Groups of police are seen laughing and joking among themselves.

WEDNESDAY

7:00 A.M. — Police discover a cache...
NEW HAVEN: MODEL CITY?

New Haven, Conn. Industrial city and education center (including Yale University) on Long Island Sound. Population: 1950, 164,000, 1960, 132,000, 1967, 140,000. Mayor and 33 aldermen all Democrats. Former carriage industry replaced by firearms, hardware, and shirts.

New Haven, home of picturesque greens and mock-Gothic Yale, has made more journalistic mileage in praise of its urban renewal than any other city in the U.S. Praises have been heaped so high upon it that its mayor, Democrat Richard C. Lee, was able to say with modest depreciation, "If this is a model city, then God help America." Deity, however, declined to help even a model city.

The disenchantment shown by New Haven's citizens is almost universal in American cities, where unemployed and low-income people are seething at the apparent indifference of civic leaders to improve their conditions. The lack of jobs with any future is a major cause of discontent, and in New Haven, housing runs it a close second.

This may seem ironic for a city with urban renewal allocations running at $830 per capita, but the distribution of housing favors the middle- to lower-income groups. Out of 5291 housing units built and planned under the renewal program, only 923 (17 per cent) are for low-income families.

As the mayor said, New Haven is not a model city, but it has made bigger efforts than others to renew itself. Not everyone believes the efforts are worthwhile, or even that they should have been attempted. After all, dissent is an historic New England characteristic, and New Haven's roots go back nearly 300 years.

Why New Haven?

After the riots, everything changed, yet nothing changed. The New Haven Redevelopment Agency (NHRA) and the City Plan Department pursued the same renewal plans and goals outlined before the riots. Suburban shoppers no longer hesitated to drive into the downtown area to shop. The police moved out of the Park Plaza and left it to visiting architectural editors and conventioneers. Storekeepers replaced windows. The state police and National Guard eventually went home. So did the armored vehicles.

But national attention had focused briefly on New Haven's problems, instead of its new buildings. Perhaps more important, Negroes and Puerto Ricans had focused attention on their own plight. A stark contrast suddenly became evident between the accomplishings of a 14-year-old, ambitious urban renewal program, and the social and economic conditions of the people many believed the program had been initiated to help. Some wondered whether urban renewal had in fact helped cause the trouble in New Haven. Perhaps what had happened there was a key to what had happened in other cities.

The immediate cause of New Haven's violence was that a white man shot a Puerto Rican in one of the Negro ghettos. But residents of that area, the Hill, say that they had been expecting riots during the two previous summers — the years of Watts and Chicago.

So two things seem clear: What happened in New Haven is partly due to the nationwide "Negro Revolution" and partly due to the continuing existence of ghettos in a city that has spent $237 million on new construction since 1958.

In addition, New Haven spent another $8 million annually on anti-poverty programs since 1962. Where did the money go? Had it changed things for the better or the worse for the poor?

First, the national unemployment rate for Negroes and Puerto Ricans is at least double that of whites. In New Haven, this rate is only slightly lower.

Young men and women in New Haven, as in other cities, have even less chance of employment than their elders. Some observers estimate unemployment as high as 35 per cent for 20-year-old nonwhites. Not surprisingly, the majority of rioters were between the ages of 15-25.
Arrows on map indicate the proposed Inner Ring Road.

- Residential
- Institutional & Public
- Automotive & General Commercial
- Neighborhood Commercial Center
- Central Business District
- Industrial

One Mile
Second, the urban renewal program was originally intended to raze slums and replace them with highways and commercial developments. That is precisely what New Haven has done, and in the process it has relocated thousands of people at least once, and many several times. It is not surprising that resentment would eventually build up against this process, especially among those it happens to affect (the poor) in a city that is praised nationally as a "Model City," partly because the city administration has been so efficient at doing this.

Police a Major Cause
Other major causes of New Haven's summer troubles seem to have been police actions, and the lack of meaningful communication between citizens and their government. When the trouble broke out, feeling in the Hill was that it was caused by just a few militant individuals and daredevils who could be controlled by the neighborhood itself. The New Haven police force did not agree; it thought matters were already out of control the first night.

Who was right? In the neighborhood's view, the police aggravated the situation in three ways: by attitudes, through the use of unnecessary violence; and through the massive patrolling of their neighborhood. Some even termed the events following Saturday's outbreak a "police riot." They felt the behavior of the police reflected an image of themselves as wild beasts, animals that are liable to lunge any minute—not ordinary people. They felt insulted and wanted to retaliate. A feeling apparently spread that "whitey" was out to "get us." So they wanted to "get whitey." Even those who disapproved of rioting disliked and distrusted the police.

For ghetto residents, the large, heavily armed police force sent in to their neighborhoods served only to focus their hostility on what they term the "white power structure." Policemen are the only form of city government that most Negroes see or communicate with in New Haven and in other American cities. Thus their perspective is roughly as follows: The police had patrolled their neighborhoods for five days with drawn rifles and nerve gas; most had been white. Most of the city administration is white; the Mayor is white.

The white people live in the suburbs and in the new, expensive buildings built by urban renewal. Yale is white. White people also run the national government; there are few Negroes in Washington who do not live in the slums adjacent to the Capitol. In other riot-torn cities, white policemen "subdued" rioting black people whose city governments are also white, just like New Haven's. And in these other cities, too, the white people live in the suburbs and the expensive buildings and the black people live all together in neighborhoods of old buildings. This is the way they experience city life—even in small cities like New Haven that carry out ambitious rebuilding programs.

What Negroes Want
Most Negroes are not angry black power militants, but they do feel they are systematically excluded from what "white folks" enjoy—decent housing, good schools, steady jobs, and, most of all, the ability to choose where to live and work.

They want to live like white middle-class Americans live, like the people on television live, but the gap seems to get wider between these hopes and real gains every year. More and more Negroes are listening to Black Power leaders who tell them their hopes will never be realized as long as "whitey" keeps preventing them from making their own decisions about how to get out of the ghetto.

"Whitey's" plans, like civil rights and anti-poverty programs, say the militant black leaders, never seem to pan out for anybody but the Negro middle class, which is self-perpetuating (like the white middle class) and even it gets lower salaries and segregated housing. Even its members live in pockets, isolated, left to themselves. And, the militants say to ghetto dwellers, never forget that in World War II, America put its Japanese-Americans into concentration camps. If it could happen to them, it could happen to you. And, they say to the middle-class, just because you're making it" never forget you're black, because you can be certain "whitey" never forgets you are.

Who's In Charge?
Another aspect of the serious communication problem that seems to exist in urban governments, and perhaps even in the national government, is the relationship between civilian control and military or police control. From an examination of New Haven's riots and the efforts made by riot-area residents to communicate what they thought would be useful suggestions about ending the violence, it appears that the Mayor, the top civilian administrator, had very little to say about what the police did.

Many people in New Haven believe Mayor Lee had an outstanding political debt to the police chief, McManus, and so had to allow McManus to do whatever he wanted. This may be an exaggeration, but nevertheless, on that August Sunday, Lee made an agreement with the community leaders that he knew he could not keep.

When he agreed to keep local police as inconspicuous as possible and put Negro police officials in charge, he had already called in the state police. (A newspaper reported he had done so on Saturday night.) Perhaps he really thought he would have the power to keep the police under control because that is what he told community leaders when they asked why he had not kept his promises. But it turned out, according to Lee himself, that McManus had that power, not Lee, and McManus did not use it. Lee apparently thought the community people he spoke with did not actually represent the rioters, for he is quoted as repeatedly saying that no one represented them. Even Fred Harris, the nominal leader, said no one represented them.

The question arises, why did the Mayor spend hours talking with Harris and other leaders if they did not represent the people? It would seem logical that Harris and the other so-called leaders who lived in the affected area would at least be in a better position to understand the peoples' attitudes than those who had never had any contact with them.

What Happened?
Other aspects of the communications "gap" between government and citizenry are evident even in simple discussions about what actually happened during the five violent days in August. Every city official refers to the events as "The Disturbances"; it never varies from one administrator to the next.

Even The New Haven Register, whose apparent stance is anti-renewal, adhered strictly to disturbances as the most fitting description. However, Hill and Dixwell residents, to a man, refer to the events as "civic rebellions," or "our rebellion." This description is supported by some Yale students and a group of white, middle-class intellectuals called AIM (American Independent Movement).
Obviously, the violence was willful and widespread obstruction of "law and order"—as good a definition of "rebellion" as any other. And The New York Times reported that there were no reports of the kind of large-scale looting by mobs that has accompanied civil disorders elsewhere, which indicates demonstrators were mainly intent on breaking laws to provoke the white establishment.

Although the city has announced it will go ahead with all its pre-riot programs, most New Haveners agree that violence will occur again—possibly this winter and certainly this coming summer.

Most also agree that whatever the riots are called, they spell trouble for the small but effective group of planners, architects, redevelopment experts, politicians, and poverty administrators in power today in New Haven.

The Credibility Gap

A final example of the widespread conflict between government and electorate is that many people in New Haven have no trust in what their city government says. Critics of the renewal program told P/A not to believe a word of what the Redevelopment Agency said. Nearly everyone, including former architects, employees, singled out the Redevelopment Agency and the City Plan Department as misleading and unreliable. Even employees confess that in some cases it is difficult for them to know what are the real statistics and plans.

Leaders also get "confused": Lawrence Spitz, Director of CPI, New Haven's anti-poverty program, told a reporter that not more than 400 people participated in the riots. The facts show 587 persons were arrested during the riot period. Obviously, many more participated than were arrested.

Melvin J. Adams, director of the NHRA, said, in comparing renewal with violence, that there were neither renewal programs nor militancy in the Newhallville section. However, riot reports indicate there was violence in Newhallville.

Credibility problems often stem from attempts to manage the news. Spitz told an interviewer he would send P/A a copy of CPI's "Inner City Survey." This report, say informed sources, is a house-to-house survey taken in the Hill and Dixwell neighborhoods which indicates two startling things: that there is no need for extensive physical renewal in the Hill, and that the anti-poverty program has had no effect on most households.

P/A did not receive the report, and found that employees of CPI and NHRA had been instructed to tell inquirers that no such report existed, or that it had never been completed. The report presumably contradicts the NHRA plans.

Evasion Leads to Fear

It seems that no individual actually knows the whole truth about future plans: exactly what structure will be torn down, when, and, especially, why; what exactly will be put up in its place and what was wrong with the old one. There is not even an over-all map or group of smaller plans that indicate an over-all plan. Urban renewal, or redevelopment as it is called in New Haven, is at best a shadowy, slippery sort of piece-meal process. And because of the image of powerful groups pulling hidden strings, people have come to fear it.

Uppermost in people's minds is the fear of being removed from their own neighborhood to a strange one. For a poor family, removal will mean waiting for time to establish credit at grocery and other local stores, perhaps isolation from relatives and close friends, and frequently readjusting to higher living costs. And, most important, both Negroes and whites resent being moved out of their homes and familiar surroundings by a government that never consults them about whether they may like their neighborhood, or whether they have any ideas about what can be done to repair rather than destroy it. Perhaps this added tension helps set off violence; the people had watched other "slums" being torn down and word is out that theirs is next.

Planning Is Not New in New Haven

New Haven claims to be the first planned town in the New World. The Puritans laid out nine squares in 1638, and though the blocks have subsequently been subdivided, the city still revolves around them. Sixty years ago, Cass Gilbert and Frederick Law Olmsted drew plans covering a much wider area to include parks and roads for the new-fangled horseless carriages, but the plans were never realized.

Automobiles sparked another round of planning on the eve of World War II, and the city, urged by the League of Women Voters, the Chamber of Commerce and other civic groups, hired Maurice Rotival, then an associate professor of planning at Yale, to prepare a master plan. The Rotival plan called for renewing the commercial section of the city and improving the flow of traffic to accommodate the highways the state was concurrently planning.

Although described as brilliant, the plan lacked a directing person or group to overcome municipal inertia, and, before any prime movers could organize, World War II siphoned off the active bodies, and the
In 1951, when Rotival again worked on his plan, Richard C. Lee, a name now synonymous with urban renewal in New Haven, was making his second attempt to win the mayoralty. He ran on what was then considered a revolutionary platform for making urban renewal a goal of the city and the mayor, and lost by two votes. Now that renewal is a household word, it is difficult to recall the days when city administrators did not make a virtue out of it, but Lee did (and still does), so that in 1953 he succeeded on his third mayoralty attempt, and has continued to do so at two-year intervals ever since.

Lee, however, did not create the New Haven Redevelopment Agency. His Republican predecessor, Mayor Courtman, had it in 1950, and Lee, in his former position as a city alderman, backed it and the hiring of Rotival. Since then, most New Haven people say, even if it pains them, that Lee has been the dominant force in the city's urban renewal.

The first man Lee hired to direct the agency, Edward Logue, started without previous experience but went on to become a ranking expert in this field. He later ran Boston's redevelopment, and also served as a consultant to New York City.

Coinciding with Lee's first year in office, 1954, Washington passed a new Housing Act that enabled cities to build residential as well as commercial projects under urban renewal, and offered Federal grants to cover two-thirds of the cost of redevelopment projects.

Since a new act never starts with the impetus of a new model production in Detroit, this measure did not serve as an instant panacea for Lee or New Haven. However, Lee became active on renewal at the beginning, and since it requires experts to obtain Federal funds for a city, he began to recruit for this objective.

State Assists City to Start Renewal

No review of New Haven history is complete without reference to the Oak Street Connector. This short highway brings a steady stream of cars and money from the Connecticut Turnpike into the commercial center of the city. Without it, the story of New Haven would be the same as other small New England cities, except that it leads to an obscure community. With it, New Haven cleared itself of an embarrassing slum and opened the door to suburban shoppers returning to city stores. This, in turn, led to many other renewal projects, and, to the great delight of the city, the State of Connecticut paid for the Connector.

Stability Lies Within the Middle Third

The Federal funds pay for two-thirds of a city's renewal. Bookkeeping for the city's one-third is what separates the men from the boys, and New Haven quickly mastered the rules of one-thirdmanship. The Federal law holds that a city's share does not have to be in actual cash, but can include improvements to municipal amenities. Some of New Haven's amenities, such as sewers and roads, apparently required historical research to uncover, but, once found, they could be lumped in to defray cash outlays.

The bookkeeping works like this: A total project cost comprises city expenditure for planning the project, acquiring land and demolition, plus the value of locally improved finances, which perchance may be larger than the city total. Hence, after the deduction, the city is left with a paper profit. This, however, is an exception to the rule, and usually the deduction merely decreases the cash expenditure.

To add frosting to the cake, the state government recently passed legislation to contribute half of a city's renewal cost for housing projects. Thus, a Connecticut city pays only one-sixth of the total housing project.

For example, Fair Haven, a renewal neighborhood now in the planning stage, has a budgeted total cost of $5,400,000. Federal funds are committed for two-thirds, $3,600,000, only after the right overtures. Lee picked a responsive staff, and in the words of a former staff man, added a little muscle that brought results. Other cities have not succeeded nearly as well as New Haven, even though the money is available to all. Lee obviously understands the Federal mind, and knows where to make connections. He also has an advantage over big-city mayors because he can ask for fairly modest sums, yet keep up an extremely high per capita total. At the end of 1967, the Federal Government had paid or committed nearly $131 million since 1949, which, divided by a population of 140,000, yields $930 per capita. (New York City received $367 million, which breaks down to only $46 per capita.)
The architectural and planning concepts of a generation ago, upon which the first phases of urban redevelopment were generally based, have now clearly shown themselves to be obsolete. Most planning of the past 15 years has been based upon three fallacies: the cataclysmic, the automotive, and the suburban. The cataclysmic hates the
... It cannot bear the complexity and the splendid mess of towns, just as it is unable to adjust itself to those pre-existing buildings through which the culture of cities— which means human civilization—is handed on from generation to generation. . . . These fallacies, with their concomitant purism and sick gentility, must all be cast aside.

Vincent Scully
and the state will pick up half the city's $1,800,000. From its $900,000 share, New Haven will deduct $1 million for public improvements, so the city will not have to pay any hard cash for the project.

For Good and Yale

Yale stops New Haven from being Bridgeport, goes a local saying, and for anyone not acquainted with the city will not have to pay any hard cash for anyone not acquainted with its $900,000. From its $900,000 lion for public improvements, so the share, New Haven will deduct $1 million for public improvements, to work with its neighbors.

All Yale faculty members interviewed by P/A expressed great concern for involving the community in planning neighborhoods, but often were vague about how the dialogue should start. Many Yale staff serve as consultants to NHRA, and no doubt have contributed enormously to the city's planning. But because they do not want to alienate their chances of future work, the faculty, with few exceptions, has seldom individually or collectively offered strong advice or criticism.

Yale made a significant move last July when it appointed lawyer Joel Fleishman an Associate Provost for Urban Studies and Programs. His job is to increase the activities of the university "toward the amelioration of social problems with particular concern for the racially and economically disadvantaged."

Upgrading a university's neighbors is not pure philanthropy on the part of a city. Congress encourages it by allowing the cost of institutional improvements to be deducted from a city's share of a renewal project. Not surprisingly, the stimulus for this Federal aid came from universities, led by the University of Chicago, with the implied intent of cleaning up slum neighborhoods.

Dixwell, a low-income neighborhood bordering the main Yale campus, offended the sensibilities of the university, and the city obligingly concentrated its renewal efforts in that section. Unfortunately, pre-Lee attempts at public housing in Dixwell, at a project called Elm Haven, misfired badly and only served as an example of how not to house people. Since then, however, some of New Haven's "showplace" renewal, such as the Florence Virtue Town Houses, has been built in Dixwell.

In 1954, the city sold Yale three old Dixwell schools (with a reportedly 80 per cent Negro enrollment)
that were surrounded by university property. Again, this helped remove an unwanted neighbor and obtained space for Saarinen's Stiles and Morse Residential Colleges.

Selling property is not the only way for a city to assist a university to retain its isolated splendor. Highways can separate shabbier parts of town from gown, and the proposed inner ring road will curve around the back of Stiles and Morse, keeping it from the Dixwell neighborhood. And, in the Hill, this same road will separate the Medical Center from a low-income neighborhood.

Ghettos in New Haven?

It may seem surprising to hear the term “ghetto” applied to a small city like New Haven, especially since Robert C. Weaver, secretary of the Department of Housing and Urban Development, calls it the town that “comes closest to our dream of a slumless city.”

Does New Haven have slums or ghettos? Before answering, the terms need defining. A general criterion for slum identification is offered by David R. Hunter in his book The Slums: “The identifiable features of slums are these: poverty, run-down housing, high residential density (per room), concentration of lower-class people, racial concentration, many welfare cases, crime, health problems, broken families, relocation problems, inadequate community services (such as street repair, garbage collection, building inspection, schooling), isolation and alienation, dirt, fire hazards, and language problems.”

Webster’s dictionary defines “ghetto” as any “isolated or segregated group” and/or a geographic concentration of racial groups due to “social, legal, or economic pressures.”

As in most other U.S. cities, the white middle-class of New Haven lives either in the suburbs or in high-rent apartment buildings and expensive residential sections of the city. The Negro middle class lives in isolated pockets of the suburbs or in isolated segments of moderate and middle-income housing in cities.

The lowest income levels and welfare clients — black and white — live in the low-rent (and generally the oldest) section of town. These are all economic ghettos, both in the suburbs and in the “inner city.”

Degrees of Segregation

It seems also that the bigger the city, the more strict is the racial segregation, since New Haven’s poor neighborhoods, unlike New York’s or Chicago’s, are much more integrated than in larger cities that maintain separate low-income ghettos for each race. The Hill and Dixwell are predominately black and Puerto Rican, but, unlike Harlem, many poor whites (as well as Yale students) live there. Even so, the Hill has several adjacent blocks of white residences and groups of predominantly black blocks.

The same is true in Dixwell. Thus, there are both economic and racial ghettos in New Haven. Perhaps it is truly a “mixed” or prototypical city in this respect.

But are there slums? Many of the houses in the Hill, for example, are in excellent condition, according to architect Louis Kahn. Some are slightly run-down, and some are in bad condition, but not many. A visitor from New York, accustomed to Harlem tenements, does not at first see the identical economic and social conditions that exist in both cities, since New Haven's are hidden behind less scabrous facades.

Consequently, it is only the anomaly of the lack of “run-down housing” that prevents the Hill and Dixwell from being true “slums,” since that was the only noneconomic and nonsocial element in the list of criteria for slum identification cited in Hunter’s list.

The four main riot neighborhoods are slums in almost every other respect, which leads one to question the importance of housing and new construction in relation to other seemingly more basic slum problems and conditions.

The Impact of Renewal on Ghetto Residents

What has urban renewal done for New Haven’s low-income ghettos? First, it moved them. The Redevelopment Agency has relocated nearly 7000 households since 1956. This figure does not include the almost equal number who moved themselves when they realized their neighborhoods were to be razed. (It does include the 886 families moved for the Oak Street Project, New Haven’s only genuine slum, and its first adventure in urban renewal in 1956.)

Since the figure is in terms of households, it would not be an exaggeration to put the number of individuals relocated at more than 21,000. (And the actual number is probably even higher, since poor families have more than the average two children and tend to live with grandmothers and aunts.)

Second, renewal has discriminated against ghetto residents. According to NHRA figures, 4785 families have been moved since 1960. This comprises less than 5 per cent of the city’s white people, but almost 30 per cent of the black people, have been moved. (A Yale student’s planning study, based on 1965 figures, calculated that 40 per cent of the total Negro population has been relocated.)

Moreover, what is even more unfortunate about the relocation problem is that it was inevitable because of the emphasis of “redevelopment” programs on physical renewal.

Lawrence Spitz (CPI) admitted publicly: “New Haven knows the bulldozer is the wrong approach [to renewal], but emphasis on physical renewal was necessary to win the support of our business community.”

Why Urban Renewal Equals Negro Removal

The business community profits from highway and luxury apartment construction that replace low-yield locations like slums. Negroes, occupying the bottom of the economic scale, invariably live in the worst sections of any city. These sections are torn down and replaced for three reasons (in addition to the profit motive): the original Federal legislation was intended for slum removal; city governments claim slums do not produce enough tax income; and white people do not like slums. (Neither do Negroes, for that matter, but for a different reason — they live in them.)

Black power intellectuals would add that white people write the Federal legislation and vote on it; white people want the highways and luxury housing; white people still run local governments; white people make the
profits; and white people cannot tolerate the sight of slums next door. In short, it is not difficult to see why urban renewal is often labelled “Negro removal.”

Third, redevelopment not only moved ghetto dwellers, it scattered them all over the city. When Oak Street was razed, poor whites moved to Wooster Square and Fair Haven. Poor Negroes moved to Dixwell, the Hill, and Newhallville. The Redevelopment Agency followed them to Wooster Square and Dixwell, dividing the former into white and black sections by means of a six-lane highway.

Dixwell was more subtly cut up by large pockets of moderate- and middle-income (thus, predominantly white) housing placed on sites formerly housing Negroes, thereby edgeing black people out once again.

The Hill, Fair Haven, and Newhallville are now in the “project planning” stage in the City Plan Department. Once again, neighborhoods will be torn apart to make room for a different kind of population. All of these neighborhoods were involved in the August riots.

A Haven for the Elderly

The people, particularly low-income groups who usually articulate less clearly than the middle class, have not received the housing program that many planners believe should have been built. Housing, in fact, remains a major bone of contention in the community.

New Haven has built and planned to build almost the same number of low-income housing units for the elderly as for the low-income families. Since 1953, it built or plans 933 units for the elderly versus 923 for families. The city’s reason for building 17 1/2 per cent of the total housing units exclusively for elderly persons is that there had been a shortage of this type of accommodation when urban renewal started.

However, there are no over-all goals set for housing the elderly, says Mel Adams, director of the NHRA. The agency builds housing for what is appropriate for any particular site. Thus, if a housing site would reasonably accommodate apartments for the elderly, they would be built. Naturally, when New Haven started its housing program, it consciously looked for sites that would be appropriate for elderly units.

One of the recurring criticisms of New Haven is that it has not built sufficient housing for its low-income population, and although 933 units for elderly persons is a noble

<table>
<thead>
<tr>
<th>Type of Housing</th>
<th>Completed Since Underway Planned Total Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper-Income (Private Rental)</td>
<td>707</td>
</tr>
<tr>
<td>Upper-Middle-Income (Private Rental)</td>
<td>75</td>
</tr>
<tr>
<td>Middle-Income: Co-op Rental</td>
<td>75</td>
</tr>
<tr>
<td>Moderate-Income: Co-op Rental</td>
<td>249</td>
</tr>
<tr>
<td>State-Aid</td>
<td>208</td>
</tr>
<tr>
<td>Low-Income Public Housing</td>
<td>389</td>
</tr>
<tr>
<td>Elderly: Moderate Income</td>
<td>217</td>
</tr>
<tr>
<td>Low-Income</td>
<td>333</td>
</tr>
</tbody>
</table>
achievement, it does not impress the large, low-income families. Politically, however, housing for the elderly has always been a good bet for drawing votes not only of the grateful tenants, but also from their adult children.

These same adults may fare a lot worse than their retired parents because New Haven has no rent controls for housing, and the city provides little low-income housing of its own. Controls on rent raise political hackles in the U.S., so the Hill Action Group faces a long haul in its attempt to get state legislation requiring the city to institute rent controls.

Co-ops, Turnkeys, and Rehabs

Meanwhile, the city builds rental and co-operative housing, and encourages landlords to rehabilitate old houses. Under Section 10c of the National Housing Act, the city can assign part of a moderate-income development for low-income tenants in order not to isolate low-income families in projects of their own. Controls on rent raise political hackles in the U.S., so the Hill Action Group faces a long haul in its attempt to get state legislation requiring the city to institute rent controls.

Turnkey housing, a process encouraged by the U.S. Department of Housing and Urban Affairs, enables the NHRA to increase its low-income scattered site program. Under the turnkey process, a private developer builds housing to his own— but city-approved— specifications, then sells the building to the city.

HUD claims that turnkey operations can produce housing two years faster and up to 15 per cent cheaper than conventional public housing construction. The benefits accrue from close liaison between architect and builder during the design stages, and in the case of New Haven, lower construction cost because contractors have sufficient work not to pare prices for bids on public contracts. At present, no turnkey projects are completed in New Haven, but several are in the planning stage.

Much of the city's low-income housing is achieved through rehabilitated houses. The city takes long-term leases on rehabilitated property, and rents for less than it pays. The difference is made up with rent certificates financed by the Federal Government but administered by the Housing Authority.

The Widespread Effect of Scattered Housing

The scattering process is currently undergoing wide-scale application in New Haven's appropriately titled "scattered-site public housing" program. The announced intention is to avoid concentrating minority groups in large projects that perpetuate ethnic and income segregation. The city attempts to implement this concept by building small groups of houses, renting apartments in moderate-income co-ops, or subsidizing rents in rehabilitated houses.

Liberals welcome the scattered-site concept as a progressive social innovation, but Black Power advocates and the black man-in-the-street consider it a racist maneuver designed to break up concentrations of potentially volatile Negroes, and to destroy their neighborhoods.

The Insider's Newsletter, published by Look magazine, noted that "urban renewal has not eliminated the slums and the ghettos in New Haven; it has scattered them. (That is another reason the riots did not get further out of control.)"

The small scale of scattered housing was designed to avoid the high-
The Oak Street area (above), a slum neighborhood, separated the Downtown Business District from the Yale-New Haven Medical Center. The Wooster Square area (below) became one of the city's Italian communities.

The Connector replacing Oak Street (above), terminates in a parking lot; high-income apartments and department stores replace houses. Route 1-91 cuts through Wooster Square (below), and industry spreads into the neighborhood.
rise public housing projects that become vertical slums in many cities. These large projects fail because they re-house the same social and economic ills existing in the old neighborhoods. Not surprisingly, many Negroes feel that a new high-rise project is often uglier than the surroundings they are moved from.

The scattered projects cannot alleviate the economic conditions that cause so many Negro families to remain unemployed or in low-income jobs. Therefore, the concept fails because, like high-rise projects, it simply relocates the causes that lead to ghettos.

An authoritative source told P/A that the city has only succeeded in building one group of 12 new low-income houses: White neighborhoods resisted plans for all the other proposed groups.

Politically, the scattered site program has two major effects. It can lose votes for the city government if the neighbors playing reluctant host to the pocket community of poor families resent the intrusion. Also, it weakens the possibility of the poor organizing themselves effectively for political representation. This is significant in the eyes of many sociologists who believe that political power is the way to escape the ghetto. Historically, this is the route taken by immigrant Jews, Italians, and Irish into the “affluent society.”

The current Negro Revolution, coupled with the Black Power movement, is the first great thrust toward this goal, but it requires geographic power bases of votes to work. Scattered-site housing then can be viewed as an attempt to break down the geographic solidarity of the “underprivileged.” It must be remembered, nevertheless, that the program was conceived with the good intention of eradicating slums: a goal that even black power believes is ultimately desirable.

The High Penalty of Neglecting Low Incomes

Housing has been a one-sided affair in New Haven. The table (p. 150) shows to what extent the low-income group has been neglected. Middle and high-income apartments in the city are aimed at bringing the suburbanites back into the center of the city. This suggests that the city is not particularly interested in housing the people who most need it, and who either cannot afford to buy houses in the suburbs, or would be prevented from doing so by racial prejudice.

Indeed, one of the more obvious reasons Negro ghettos exist is that non-whites are not allowed to rent
apartments in white neighborhoods—a condition known as de facto housing segregation. Ironically, the August riot would not have occurred had there not been ghettos; and there would not have been ghettos if it were not for racial prejudice. Despite this, many people, including Mayor Lee, seem to believe that race had nothing to do with the riots. A further irony is that if open housing were practiced, black power leaders would be deprived of a political base. This would dispel much of the spectre of race war that currently hangs over the country.

The Black View of White America

Although black power intellectuals want ghettos and de facto housing segregation removed, they assert that real economic and educational achievements by the poor are vastly more significant. Jobs and education will do more to raise living conditions for those who now live in the ghetto. Thus their idea is that housing is another excuse, another avoidance, of the real problems: poverty, inferior schools, crime, disease, inadequate community services and building inspection.

"Paternalism" is the word they use to describe the process of putting a few new roofs over the heads of the poor instead of rehabilitating ghetto neighborhoods and providing job-training and decent schools.

The black people, say their radical spokesmen, do not want to be "given" anything by white America except the same opportunities everyone else has. With these, they will raise themselves and provide their own housing as soon as they become economically self-supporting and not dependent on white taxpayers for degrading forms of charity.

Black power sees Senator Robert Kennedy's and Senator Charles Percy's new housing programs, which provide tax incentives so that the rich can make profits out of low-income housing, as simply more of the same. Such ideas are also considered morally reprehensible—as if "whitey" will not solve any problems unless he can make a buck in the process.

The black man's criticism of housing programs deserves and demands attention, since current housing and welfare programs amount to public subsidies of ghettos. Black power views housing programs, no matter how well intentioned, as "racist," since they make no progress toward improving the economic plight of the Negro. Moreover, say its leaders, if the problems remain unsolved, urban guerilla warfare (race war) will break out on a national scale.

These opinions are not going unheeded in Negro communities nor among young white radicals who find black power a contagious, attractive and vital intellectual attitude.

Three Dissenting Groups

A week after the August riots, Mayor Richard Lee commented: "I feel saddened by this whole thing, but it won't deter me from continuing our programs. We've got a good thing that must be made better, not a bad thing that must be changed."

Among the citizens of New Haven, there are three distinct groups that would not agree with their Mayor, even though individually they are loyal and respect him. They evidence less regard, however, for some members of Lee's staff—particularly those within the Redevelopment Agency and the City Plan Department. The latter, a division of the Redevelopment Agency, is the source of all the City's planning proposals and specifications. It is this department, for example, that decides a certain area needs a new school, where to put it, how many rooms it should have, and so forth.

One dissenting group is the American Independent Movement (AIM), an organization composed of young, white, middle-class intellectuals concerned mainly about two things—urban renewal and the Vietnam war. They are against both.

The Negroes are another clearly defined group. Currently, they are reorganizing themselves in an attempt to draw into their ranks the middle-class Negro who up to now has remained aloof from the problems of his "brothers" in the ghetto. It seems that one of the unforeseen effects of summer riots nationally, as well as in New Haven, was to bring about this growing involvement of more affluent Negroes.

In addition, the Dixwell Community House recently hired Dr. Nathan Wright, a nationally recognized black power advocate, and the Chairman of the 1967 Black Power Conference in Newark, N.J., as a consultant to help Dixwell and Hill leaders in forming a "United Black Coalition" composed of all the Negroes poor and middle-class—in the entire metropolitan area around New Haven. This would include 39,000 persons, including 35,000 in New Haven.

A third, and growing, although unorganized, group is clearly discernible. It comprises the "professionals" and other highly educated citizens of New Haven, many of the Yale teaching staff and ordinary middle-class citizens, who in the wake of the summer disturbances" sense vaguely that something is wrong with current city plans. Perhaps confirmation of this third dissenting trend came when Mayor Lee's winning margin in recent November elections—his smallest in years.

Harris: Hero or Heroin?

All three groups are backing the Hill Parents Association, which they believe to be currently under attack by the city. What they term the city's "Break HPA" movement centers around repeated arrests of HPA's leader, Fred Harris. Robert Bowen, the local executive director of the Urban League, normally a fairly conservative organization for civil liberties, is incensed at Harris's harassment, and told P/A that most of the previous charges against Harris were dropped by the city or dismissed in court after he had been held by police for a day or two.

In October, Harris was again arrested, this time on charges of drug addiction and possession of stolen goods. The city claims Harris has been addicted to heroin for the past two years—during which time he ran for a State Assembly seat on an AIM ticket, and was in charge of a $45,000, highly successful summer program for CPI.

Many wonder why, if the police believed Harris to be an addict, they would wait two years. Needless to say, city officials claim Harris is a "worthless demagogue," while AIM, HPA, the Black Coalition Movement, and Yale's Friends of HPA, claim the arrest constitutes harassment of the only grass-roots leader in one of New Haven's ghettos.

In addition, CPI has denounced HPA, New Haven's only well-organized Negro group, poverty funds ever since the August riot. To keep HPA alive, prominent white and black citizens pledged $60,000 directly to HPA, and petitioned City Hall to provide other funds through CPI.

The Opposition's View

The three dissenting groups are militantly opposed to all proposed urban renewal plans, particularly the road system. They say the general theory behind the city's urban renewal plans is not complicated: It is to "rebuild" the center of New Haven in order to bring suburbanites back into the city to shop, which will bring in revenues and, hopefully, permanent residents. But the crux of the opposition's argument is that urban renewal should be for present residents of the city, not for nonresidents.

If the Redevelopment Agency's plans were for city residents, claim the dissenters, none of the roads
planned would be necessary. Moreover, they continue, plans for these roads (and related structures, like parking lots and garages, which complement them), were made without consultation with city residents, and, because of the way renewal plans are administered, there is no legal recourse citizens can invoke to stop plans already committed by the Redevelopment Agency.

Thus, they are calling into question the democracy of urban renewal as well as the merits of particular projects. In one instance, engineered principally by Yale historian Vincent Scully, an aroused citizenry seems to have succeeded in preventing what they deemed the unwarranted destruction of two fine old buildings: the New Haven Federal Post Office and the Library.

However, preservationists should take note that current city plans still show the obliteration of both these buildings. Thus, it remains to be seen whether Scully and his allies, the New Haven Preservation Trust, have actually succeeded. Other projects are still under attack, although all have been planned for years by the Redevelopment Agency.

In discussions with P/A, officials indicated there was no real likelihood that these projects would not ultimately be built, a somewhat ominous situation in the eyes of a growing number of embattled New Haveners.

Perhaps their struggle has national implications: If the citizens of a small town cannot exercise their will on decisions affecting their whole environment, what chance do citizens in New York, Detroit, or Chicago have? Urban renewal, from this perspective, looms very large as a threat to basic democratic institutions.

**Space for the Omnipotent Auto**

One ambitious New Haven City Plan Department scheme, the State Street Project, is currently under zealous attack by residents of Wooster Square, AIM, and Vincent Scully and other members of the community.

State Street is now a three-lane city street that runs through a half-mile section of small, dilapidated structures housing grocery, meat, and fruit markets, discount stores, and other small neighborhood shops. The Redevelopment Agency plans to tear down all the small stores, and build a half-mile-long, six-story-high garage on one side of the street. Another three lanes of new highway is to parallel the present State Street, between the garage and the railroad tracks.

The garage will hold 4000 cars, and the new six-lane State Street will connect Route I-91 with Route 34; both are incoming paths for commuters and shoppers from the suburbs who will be encouraged to park at the garage. This new highway also forms a link in the Inner Ring Road, currently under planning.

**For the People? By the People?**

In response to more than 500 Wooster Square petitioners, Charles Shannon of the NHRA recently addressed a public meeting to explain the plans for the State Street project. The residents, in turn, also explained to the agency why they thought the project should be stopped. Among the complaints: the proposed highway will generate noise and obnoxious fumes; divide the neighborhood from the downtown district; and drive up the rents of new stores, which will be reflected in the prices of merchandise.

If the city wants a half-mile-long garage with stores beneath it, say the residents, it could build it without adding a three-lane highway. They seriously object to an extravagant construction project that will only provide convenience for non-city residents, and in the process increase trade for stores catering to affluent middle-class suburban visitors.

But there is a higher ideal at stake in this issue: Can a neighborhood protect itself from urban renewal? Apparently not, because although the agency says neither garage nor highway are designed, planning is too far ahead to stop the project legally.

A former high-level agency employee reported that the City Plan Department planned for the six-lane highway back in 1963. In 1964, the NHRA told the developers of the Community Services Building that it was committed to building the highway, and constructed the first block of it behind the new building.

The plans were approved by the Board of Aldermen two years ago and adopted by the city without public knowledge. Thus, a few administrators made a decision that will affect the environment of thousands of people, and there is not a thing the public can do about it.

**City Hall Leads the Way**

City officials are specific on the reason for some of their secretiveness: If they told their plans to people in the neighborhoods while there still was time legally to stop them, they would never get anything built the way the city wants it. Thus, at bottom, city administrators assume that only they know what is good for the people. Although one can question the democracy of this attitude, it is probably true that the people would change the city's plans and nothing would get built the way the city sees it. After all, no one wants to be removed from his home to make room for a highway or a department store.

Cities are required by Federal law to hold public hearings in neighborhoods planned for renewal. New Haven administrators, reversing their stand from the above, claim that this practice answers the criticism that people affected by renewal plans are not consulted.

However, when New Haven does consult a neighborhood, it is too late. Frequently, all the enabling legislation has already gone through the state and city governments, funds have been appropriated in Washington, buildings designed, and, in many cases, already gone out for bids, when a public hearing is finally held.

**Another Futile Citizen Protest?**

The East Rock Connector, which if built will drive four lanes through East Rock Park, a New Haven landmark, has been under fire from area residents for nearly three years. A “Save the Parks” committee, now under architect Paul Mitarachi, stopped construction on this highway, which will connect Whitney Avenue and I-91. This link would have given suburban commuters an easier route onto I-91, the Connecticut Turnpike,
and into downtown New Haven.

Although New Haven has already sold much of the needed land to the state for the East Rock Connector (it will be a state road), Mayor Lee maintains a public stance against the road. However, Mitarachi is convinced that the mayor has done nothing to prevent construction of the East Rock Connector.

Angry citizens question the value of the road, since traffic tie-ups occur not on the residential portion of Whitney Avenue to be bypassed by the Connector, but further out where it is lined with numerous small shopping centers and gas stations. In addition, Mitarachi points out that if the Inner Ring Road is buried under Whitney Avenue, as current plans indicate it will, the East Rock Connector will have to be built in order to get the traffic from Whitney Avenue onto the Inner Ring Road.

The city has seemingly planned the road network in a way that necessitates building an unpopular project that will destroy valuable open parkland, in order to bring people into the center of the city — apparently one of the city's chief aims.

Apart from the East Rock Connector, the "Save the Parks" Committee has a larger fight with New Haven. The basic philosophy is that as many cars as possible should be kept out of the center of the city by improving mass transportation. The committee points out that New Haven, known for its expertise in obtaining Federal money, had not (by October 1966) applied for Federal grants for any of the 96 urban transportation grants that came under the Housing Act of 1961 and the Urban Transportation Act of 1964.

Since then, Mayor Lee has called for a regional study on public transportation — a hopeful sign. However, both Mayor Lee and Redevelopment Agency Director Melvin Adams have indicated they think very little of mass transportation, because it "doesn't solve problems." Meanwhile, New Haven's massive road network goes ahead full steam, and, not incidentally, in a state that has spent over $2 billion on roads in the past 12 years.

When P/A asked the City Planning Department to respond to the "Save the Parks" committee challenge that the Connector would not be built, an employee, obviously slightly embarrassed, said the department would rather not talk about it so that "we can spring it on them when we're ready to begin construction."

**First You See It, Then You Don't**

The proposed Inner Ring Road will follow some established streets, and break new ground in other sections. It follows an L-shaped route between the two six-lane highways, I-91 and Route 34, then crosses Route 34 and encircles the Yale-New Haven Medical Center.

Through the better-class neighborhood of Yale, the city proposes to bury the ring road beneath the back gardens of houses. Elsewhere, front gardens will be shortened to make space for widening existing streets, and in some blocks the houses will have to be razed.

One block expected to be razed is in front of the medical center. A spokesman for the center said that, if the existing road is moved half a block over as everyone expects it will, the hospital will extend out to it. The Inner Ring Road will help separate the hospital from the Hill, Stiles and Morse from Dixwell, and Dwight residential areas.

The so-called Outer Ring Road assumes the same mysterious air as the East Rock Connector. The city avows it is not planned; the critics swear the city intends to build it. But even though it says it will not build either road, the city thoughtfully provided an exit ramp on I-91 at the natural location for starting both of them. And, planning maps since Rotival's 1942 plan have shown a road looping around the outer circumference of the city.

**The 70-mph Connection**

The six-lane extension of the Oak Street Connector, virtually a certainty since the completion of the Connector, has, nevertheless, been hotly contested by neighborhood groups whose homes would be destroyed by it.

From a planning point of view, its defects are obvious. For instance, Garry Harley, an architect formerly with the Redevelopment Agency, criticizes the 80-ft median that will cause loss of an additional 10 acres of residences and small businesses.

Apparently, New Haven wants this median for two reasons: tree-planting and other highway "beautification" measures, and to meet the State Highway Department's design requirement for a 70-mph highway. This high-speed requirement seems ridiculous, says Harley, because all roads that feed into it are either at or below 45-mph, and this includes the Oak Street Connector. Thus commuters will be able to travel at 70 miles per hour for exactly two miles through a residential area of New Haven.

Other critics point out that razing the buildings along the route will demolish the only remaining area that even approaches looking like a slum

---

**The Hill Next Time?**

Louis I. Kahn is New Haven's architect and planner for the entire Hill section, currently designated a renewal area by the City. Kahn and the agency are concentrating on a 20-acre portion — Hill Central. On this site, at present occupied by several hundred houses and small businesses, the city called for a boy's club, a neighborhood services building, approximately 500 housing units, two schools, and a play area large enough for both schools. Kahn is to devise a site plan to accommodate these buildings, in addition to designing one of the schools.

At first, Kahn was impressed with many of the present houses on the site and wanted to retain them in his plan. He began to devise ways of enhancing the street for play, possibly parking the cars underground, and creating many small parks around the present homes instead of the one large park proposed by the city.

Kahn presented these ideas to the agency on two occasions, much to the delight of The New Haven Register. It quoted a leading Republican, who said he was gratified that Kahn's approach was "entirely different from the amateurish, bulldozer approach proposed by the Redevelopment Agency in the past."

But then Kahn made his third trip to New Haven to meet with the agency. Afterwards, he had changed his mind about play streets and nice old houses. He said that New Haven planners had convinced him they were concerned about establishing a "new kind of urbanity" in the Hill area, a ghetto scared by the August riots. Some insiders said the Kahn scheme did not provide enough parking to satisfy the city.

In any case, there are more than a thousand low- and moderate-income people, mainly Negro, who will probably be uprooted in the Hill Central area. Perhaps they will participate in this summer's riots. Will the wire services ring with the same dateline this summer as last?

**NEW HAVEN, CONNECTICUT**

Monday, August 19, 1968

5:55 P.M. — The white owner...
New, Superstrong Moistop-2 Makes Sure Moisture Migration Never Damages The Floor

It’s what goes under the floor that counts! Moisture migration through the slab plays havoc with floors as well as the most beautiful floor covering. Not to mention complaints, call backs and repairs. That’s why before you start thinking about floor covering, think first about a tough enough vapor barrier. Specify and then insist on Moistop®-2.

Moistop-2 . . . the 5-ply vapor barrier that keeps out moisture because job-site abuse won’t rip and tear it like plastic film. Moistop-2’s strength comes from two plies of polyethylene film, plus glass-fiber reinforcement, asphalt and high-strength kraft. It has a permanent MVT rating of 0.10 perms. Be sure . . . send for Moistop-2 sample and Specification Guide. Write: Sisalkraft, 56 Starkey Avenue, Attleboro, Massachusetts. In Canada: Domtar Construction Materials Ltd.
FIRE SIGNALS
and automatic signal and
systems protect schools from fires
that often result from after-hours vandalism. The author is a practicing engineer in
New York City.

In detecting and dealing with fires, school officials and building designers feel that, where
the lives of children are at stake, maximum facilities rather than minimum standards should be the goals.

The installation of relatively new, speedy signal systems to supplement long-established types is one such goal.

It is assumed that new schools are built with incombustible materials and provide proper fire barriers, fire stairs and efficient egress. Yet, despite these safeguards, school administrators in large cities often report the occurrence of a hundred or more small fires annually. These fires usually take place after school hours and result from vandalism or arson. Prompt notice and fast action are essential in coping with them, before they lead to a possible serious conflagration. To achieve this, the following elements of a manual and automatic signal and alarm system are required.

Manual Stations and Gongs
This classic system, little changed through the years, is basic. Upon discovering a fire, one goes to the nearest of the many signal boxes in hallways or other public spaces. A manual pull at the box operates all the gongs. The resulting periodic and repetitive pattern of bell-ringing, audible in all parts of the building, is a signal for all occupants to leave the school.

Sprinkler Alarm
Sprinkler heads under constant pressure of water, and releasing it upon the destruction by heat of a fusible metal element or other trigger-device, are commonly used to protect storage areas and the stages of auditoriums. When water begins to flow, the motion in the pipes is detected and an alarm bell rings. The bell should ring at locations where the custodian can hear it. These would include his office and the boiler room. Better planning would call for the flow-detector in the sprinkler piping to ring the general gong system throughout the school as a signal for total evacuation.

Punch Register
Knowledge of the location of the fire is most important. It is usually in close proximity to the manual station through which the signal was given. Concurrent with the general alarm, the punch register notifies the custodian of this location. It is indicated by holes punched in a paper ribbon strip passing between reels.

If the sprinkler alarm is designed to actuate the general gong system, it is a good idea to indicate sprinkler flow on the punch register.

Thus, if the gongs ring for a manual signal, the register punches out “Code 1” and follows this with the identifying number of the station. If they ring for sprinkler flow, it punches out “Code 2,” which indicates sprinkler activity. Since sprinklers are usually restricted to one or two locations, the fire is easily found.

Smoke Detectors
Small particles of smoke can be detected by sensors in less than a minute, but experience shows that people are not aware of smoke for about half an hour. Thus, smoke detectors are a great advance in rapid fire discovery.

They are commonly used under high ceilings above auditorium stages. When activated, they open vents in the roof and start fans that exhaust superheated air and smoke that might otherwise spread to the audience.

When ducts are used to recirculate air for ventilation in public spaces such as gymnasiums and auditoriums, smoke detectors in the ducts promptly shut down blowers that might spread fire through the ducts. Secondary protection in ducts is provided by fire dampers actuated by fusible links.

When any detector goes into action, a bell rings and its location is shown on a panel. Advanced thinking now favors a design by which any smoke detector will ring the general alarm and evacuate the school. The punch register would identify it as “Code 3” and also identify the detectors’ position.

Heat Detectors
Similar in effect to smoke detectors, these “thermal heads” at ceiling level respond quickly to “runaway” behavior of kitchen ranges, boilers, and incinerators.

In most current installations, they ring a local alarm, as do the smoke detectors, and identify their locations on a panel.

Many designers would include these as a fourth source of actuation for the evacuation gong system, and have them punch through as “Code 4” on the punch register, giving also the location of the trouble.

Monitoring
Loose electrical connections, severed wires, and short circuits can make a delicate system inoperative. Lest these faults occur between tests, the systems are continuously monitored. A light current is passed through all vital circuits. If it is interrupted, or if special faults appear, the system “fails safe” by ringing a trouble bell.

Maintenance
Obviously, the foregoing networks comprise intricate assemblies. There is great need for the assimilation of knowledge by those who design, build, and use them.

Often, the problems of servicing and repair are beyond the scope of the average custodian. He must either receive special training, or specialists must be delegated such tasks.

In addition to fire drills, all systems should be tested frequently. When tests involve gongs, they can be scheduled for hours when schools are not in session. The punch register is an effective log of tests, drills, and real fires. The date, the hour, and the custodian’s initials should be appended.

Central Alarm
The question arises whether any of these signals should automatically call fire apparatus from the nearest municipal fire station. This is not considered necessary or advisable. On the other hand, it would be unfortunate to go into the street and find that the nearest signal box was already in use in connection with some other emergency.

So, the central-station call box is generally placed outside the principal’s office.
What do you expect for 8¢?

A roof deck like this costs $1.00 per square foot.* Joists 40¢, galvanized steel form 20¢, concrete 22¢, built-up roofing 18¢. This includes 8¢ worth of Permalite perlite concrete aggregate.

What does the 8¢ buy?

A better all-around deck with actual savings on the entire roof system. Here's how:

**INSULATION:** Permalite concrete, with a "K" of 0.58, is the insulation. Eliminates the need for other insulating materials; cuts heating and air-conditioning costs.

**LIGHTWEIGHT STRENGTH:** The deck shown, including steel form and concrete, weighs only 6 ½ pounds, and is stronger than other concretes in its class. Saves steel.

**FIREPROOF:** Permalite is non-combustible and carries maximum UL approved fire rating when supporting members are protected. Insurance costs less.

**PERMANENT:** Permalite and Portland cement is true concrete. There is no structural loss due to possible leaks; the insulation remains efficient for all the years you design into the building.

Put these and other Permalite features together into one roof deck and have a combination of advantages you can't get in any other type of roof... 8¢ well spent when you specify Permalite.

*Based on 2" of Permalite concrete over top of steel form corrugations, using cost averages of major market areas.

Permalite® LIGHTWEIGHT INSULATING CONCRETE

Largest Selling Perlite Aggregate in the World.

GREFCO Inc. / Building Products Div.
333 North Michigan Avenue
Chicago, Illinois 60601

A subsidiary of General Refractories Company

JANUARY 1968 P/A

On Readers' Service Card, Circle No. 338
SPECIFICATIONS
CLINIC

TECHNICAL SECTION FORMAT

BY HAROLD J. ROSEN
Further recommendations for reorganizing the technical section. The author is Chief Specifications Writer for Skidmore Owings & Merrill, New York City.

In July 1965, this column proposed an arrangement of information within the technical section. Since that time, several section formats have appeared. However, a formal, agreed-upon standard that would bear the imprimatur of organizations such as CSI and AIA is yet to be devised and issued.

A cogent case for a uniform arrangement of information can be made quite readily. The specifier, in following a standard format, is less likely to omit or overlook material that should be incorporated in his technical section. Those involved in reading the specific-

ation for their areas of special interest—the contractor, estimator, materials manufacturer, field superintendent, and resident project representative—will be in a position to find the information much more readily.

The CSI Format was a boon to the profession in organizing the book of specifications so that technical sections may be more readily located in predetermined slots. Correspondingly, a universal section format will serve a useful purpose when attempts are made to use the computer as an aid in writing specifications. Systems engineering will only work when there is order and arrangement. And standardization of the arrangement of the technical section should be the concern of CSI, AIA, and perhaps the Specification Writers Association of Canada, as the next important step to be taken in the interest of improving specifications writing.

Generally speaking, the arrangement proposed in this column (JULY 1965 P/A) advocated a system that followed a chronological order. It recommended major paragraph headings reflecting the sequence in which a subcontractor would perform his work. Briefly, the headings are as follows:

1. General
2. Scope of Work
3. Work of Other Sections
4. Materials
5. Samples
6. Shop Drawings
7. Tests
8. General Requirements
9. Fabrication and Manufacturing
10. Installation
11. Tests of Completed Installation
12. Protection and Cleaning
13. Guarantee
14. Measurement and Payment
15. Schedules

It further provided that, for specific technical sections, where certain paragraph headings did not apply, they would be omitted, and where new paragraph headings were desirable, they could be introduced.

Since then, H. Griffith Edwards, FAIA, FCSI, has suggested a section format consisting of three major categories, the Specification Writers Association of Canada has recommended a standard format, and the AIA, in the September 1966 issue of the Architect's Handbook of Professional Practice, has suggested a section format.

Edwards' suggested format provides for the following three major categories:
1. General Section Provisions
2. Materials
3. Installation

Under Category 1, Edwards' format would include a number of articles covering such items as Scope, Work Included, Delivery and Storage of Materials, Samples, Shop Drawings, Permits, and Guarantees.

Under Category 2, he would describe in detail the materials and equipment or combinations of materials required for the section.

Under Category 3, Edwards' format would have articles describing the preparation of surfaces prior to installation of materials, the installation of materials, field tests, cleaning and schedules.

The SWAC format likewise has a three-category arrangement:
1. General Paragraphs
2. Materials and Assembly Paragraphs
3. Guide Paragraphs

Category 1 is somewhat similar to Edwards' category. Category 2, however, includes fabrication and erection as well as materials, whereas Category 3 sets forth requirements of work under other sections and qualifications of subcontractors and manufacturers.

The AIA section format provides for seven major categories as follows:
1. Scope of This Section
2. General Provisions
3. Materials
4. Performance (including fabrication and installation)
5. Protection and Cleaning
6. Close-out (including guarantee and maintenance instructions)
7. Schedules (if required)

It is quite obvious that all of these recommendations will provoke a demand that a universal format for the technical section be adopted. This can only come about if CSI, AIA, and SWAC enlist the best talents available to them. They can create a task force to explore the merits of the several recommendations already in existence and solicit comments from their memberships. With diligence and purpose, a recommended section format can be evolved and promulgated through these agencies, which would become the standard to be used by the profession.
Among the countless luxuries of the Mansion House Apartments is the gift of quiet living. Engineered sound control throughout insures that neither a neighbor's Hi-Fi, nor the strains of a concert on the promenade deck below will disturb the tranquility of any apartment. Selected to complement this "hear a pin drop" atmosphere are 1400 Sloan Quiet-Flush II Flush Valves.

**Mansion House Center**

—a New 52 million dollar Apartment Community

on historic St. Louis riverfront site

In the shadow of the Gateway Arch, St. Louis' newest landmark—and on the site of the historic Mansion House, one of the city's oldest landmarks—stands the elegant new Mansion House Center representing a truly spectacular and unique venture in urban living. Rarely have modern design, materials and technology combined to produce an apartment community with such impressive services, planned conveniences and interesting facilities. The three 28-story apartment buildings, sheathed in bronzed aluminum, are the tallest of their kind in the city. In addition, three adjacent commercial buildings provide Mansion House Center with offices, retail stores, restaurants and social clubs. On the beautiful six-acre promenade are an interdenominational chapel, lushly landscaped lawns and gardens, reflection pools, illuminated fountains, and statuary by internationally known sculptors.

The flush valves selected for Mansion House Center are Sloan's new Quiet-Flush II Flush Valves. With Quiet-Flush II, Sloan has once again raised the standards of flush valve quality and performance, incorporating a new dimension in quiet operation, new dependability, new ease of installation and new smart appearance. Sloan is indeed the Flush Valve of Tomorrow—Today. Be sure to specify and insist on Sloan Quiet-Flush II Valves for your new building.

SLOAN VALVE COMPANY • 4300 WEST LAKE STREET • CHICAGO, ILLINOIS 60624

On Readers' Service Card, Circle No. 362
The furnishing of construction-cost estimates by architects and engineers appears to be one of the more hazardous aspects of professional practice. It has long been a source of concern to the design professional how to describe this function in his contract with the owner, in order to avoid unanticipated liability and to protect his right to receive his fee under the contract in the event bids exceed estimates of cost. Unfortunately, however, similar language in earlier editions of the AIA form contract has not necessarily afforded the architect the protection for which it was designed.

Illustrative of the foregoing is the Illinois case of Stevens v. Fanning (207 N.E. 2d 136). In this case, the architect instituted a legal action against the owner for the balance of his fee in the amount of $14,500 under an AIA contract for the furnishing of architectural services in the design of a building for an auto dealer. Apparently the owner and the architect had discussed the possibility of either a prefabricated-type steel building or a prestressed concrete building, and the bid documents provided for bids on each type. The lowest bid for a steel frame construction was under $250,000, but the bid for a prestressed concrete type of building was approximately $317,000. The owner contended that the architect had contracted to design a prestressed concrete building that would not exceed a cost of $250,000, and the owner terminated the architectural contract and refused to make payment to the architect of his fee on the ground that the architect had not performed.

The actual AIA contract between the owner and the architect, in describing the project, stated that it was to be "a multipurpose building suitable to the needs of the owner, at an approximate estimated cost of $250,000." This contract also provided that, "since the architect has no control over the cost of labor and materials or competitive bidding, he does not guarantee the accuracy of any Statements of Probable Construction Cost." The contract further provided that, if the bid price exceeded any budgetary limitation, the owner "shall cooperate in revising the Project scope or quality, or both, to reduce the cost as required." Despite these provisions, the jury refused to award the architect his full fee, finding, in effect, that, because of oral agreements between architect and owner, the architect was required to design a prestressed concrete building that would cost not more than $250,000. Upon appeal by the architect, this determination was affirmed by the Illinois Appellate Court.

Upon this appeal, the architect contended that he did not guarantee a building the cost of which was not to exceed $250,000, relying upon the fact that this figure was expressed only as an estimate in the contract, and further upon the express provisions of the contract that he does not guarantee the accuracy of an estimate. The Illinois Appellate Court rejected this contention, stating:

"In view of the unanimity of the testimony of the parties relative to their understanding of . . . the objectives and purposes they had in mind when executing the contract, we believe that by the insertion of the clause in the contract that the building was to be of 'an approximate estimated cost of $250,000,' they intended and manifested their intent, that $250,000 was to be the maximum cost. . . . This construction does not conflict with the language of the parties actually used to express their intent. . . . The use of this language prevented the result that any deviation above the express limit, no matter how slight, would have been a failure to perform under the contract. Nor does this clause conflict with the printed portion of the contract which recites that the architect "does not guarantee the accuracy of any Statements or Estimates of Probable Construction Cost.' There is no question of a guarantee at issue."

The Court further rejected the argument that the owner's failure to reduce the scope of the project, in order to reduce the cost thereof, constituted an abandonment of the project and thereby entitled the architect to his fee.

The seemingly casual significance that the Court gave to the express provisions of the AIA contract, which sought to protect an architect from inaccurate cost estimates, indicates that such language was insufficient to its goal. Since architects or engineers are reluctant to amend form contracts to highlight, for the owner, areas for which they are willing to accept responsibility, consideration of modification of the AIA document and other similar documents on this subject would appear to be in order.
Downlighting at budget prices

Is that your problem? Our Lytecaster group may be a happy solution.

Lytecaster downlights in anodized aluminum construction are designed for a variety of applications — both indoors and outdoors.

All are characterized by crisp detailing, new finishes, and consistent quality.

Fine shielding or high quality glass diffusers assure excellent brightness control.

And each Lytecaster is engineered for the simplest possible installation and maintenance.

For complete data, see or write for Brochure No. 49A.

The Lytecaster collection is one of the many efforts by Lightolier to better coordinate lighting with architecture.
CORRALLING THE CAR

BY JEFFREY ELLIS ARONIN


Next time you are hunting for a parking space, perhaps this book will come in handy. It is a virtual directory of buildings devoted to the parking of cars in countries throughout the world. You can even take your choice: ramp garages, underground garages, or mechanical garages.

Yet the need for this book goes far beyond the immediate personal problem one has in a crowded metropolis. It is of profound significance to architects, city planners, government officials, and real estate owners confronted with the off-street housing of millions of vehicles.

The profound revolutionary effects of the car are best studied in North America, but Europe is having similarly complex problems. In a city like Frankfurt, for example, if the parking needs were met by ground-level car parks alone, they would cover nearly the whole area of the city. Thus, the stationary traffic in most cities can only be accommodated in multistory structures. The questions to which the author addresses himself are where and how.

Klose likens motor traffic to a liquid obeying the laws of hydraulics. He points out that, in selecting the sites and designs of parking facilities, the town planner is able to determine the sources and objectives of moving traffic so that he can influence future traffic flow patterns. "Provided that he makes the most of the opportunity, he will thus have a lever which will enable him to bring about profound changes in the structure of our cities."

He takes an old town as a case in point. Where the center must be lifted basically as is, the planner should insure the creation of a new business center outside the old gates. Car parks should be provided at the fringe of a town where commuters can leave their autos, then take public transportation. Any car parks within the city should serve short-term parkers only, at a low fee or even at a fee reimbursed by the local businesses, for the first two hours; after that, a very high fee should make car parking impractical. No parking should be permitted at street curbs, he feels. It is as indispensable as requiring traffic to move in a certain lane at a defined speed.

Mechanical garages are best adapted, writes Klose, in a town center where great numbers of vehicles must be accommodated in a small area. Of the many types of mechanical installations, all fall within two categories: systems with elevators, and systems with endless chains. In the first, the car is moved to the stall by horizontal and vertical lifting devices; in the second, the stall is moved to the car, much like a ferris wheel picks up a passenger. My own conversations with parking facility clients indicate that in general, in America, they do not like these mechanical devices. There is one good device, however, which I have seen in Europe, and which I intend to use on a current garage project in the U.S. The car is parked on a dolly, a large flat plate, on tracks; if the mechanism fails, the car can still be driven off. And the beauty is: With the exception of one narrow lane, the entire area of a garage can be covered by the cars, sometimes two or three deep, with no attendant required to keep things in order.

In multistory systems where cars reach the stall under their own power, they do so by using a ramp, of which there are two basic types (straight and helical), and many variations, such as: straight ramps between full level floors; helical ramps between full level floors; ramps between split level floors; ramped floors; straight ramps between split level floors; single lane up and down helical ramps; counter-rising single lane up and down helical ramps; ramped floors with two way traffic; separate ramped floors for up and down movements.

Therefore, if you design a ramp garage, do not feel immediately that you have designed something new. Chances are that it will fall into one of these categories. On attendant parking, Klose favors it: Cars can be parked more closely by skilled personnel. On underground parking; It is more costly than a parking garage of equal capacity aboveground; but, if placed below public squares, the parking problem is solved without encroaching on valuable open spaces.

There are examples in this book of garages for department stores, administrative buildings, banks, hotels, and housing. Some of the cities represented are: Milan, Pittsburgh, Hong Kong, Rochester, Mexico City, Vienna, New York, and Beverly Hills. It sounds as though the author had a good time; I wonder if he went by car.

For those readers who are rusty in English, there is a parallel text in German. Unfortunately, there is no distinction in typography and one finds it a little confusing. On p. 43, for example, one finds the following: "The façade of mechanical garages lend themselves to being treated, in their scale and their sculptural effect, in such a way that they blend with the old structures."

But the main message is loud and clear. In the redeveloped city of tomorrow, says Klose, there must be: "... a differentiated system of traffic facilities complemented by a differentiated system of parking facilities. Pedestrian zones should be planned with the same ease as those for vehicular traffic... . . . No longer will it be necessary to sacrifice the streets and squares of our historic cities, so rich in irreplaceable architectural values, to a wrongly interpreted traffic need. If our cities are permeated by pedestrian precincts, they will again enable us to enjoy that 'urban' atmosphere, which, before the advent of mechanized traffic, used to be the mainspring of rich cultural development."

Continued on page 172
A complete line of advanced architectural hardware, including the Sargent Maximum Security System

New Haven, Connecticut • Peterborough, Ontario
A serene setting for research...
glazed with ASG's Starlux plate glass

Atlantic Richfield's new production research center near Dallas is graceful and dignified enough to be a college, a bank or a concert hall. And ASG's Starlux® twin-ground, polished plate glass helps give the building its classic simplicity and airy openness.

Focal point of the 155,000 sq. ft. center is the 33 ft. high reception area (below), glazed floor-to-ceiling with Starlux. From here, Starlux-walled corridors (right) run to several research wings, which join to form ten landscaped inner courtyards. This plan assures that every employee in the sprawling building is only footsteps away from a view. The extensive use of Starlux assures that those views are always distortion-free.

Twin-ground, polished Starlux is the premier product in ASG's complete line of architectural glasses. For complete information on Starlux, including sizes and thicknesses, write: Dept. E-1, American Saint Gobain Corporation, P.O. Box 929, Kingsport, Tennessee 37662.

Atlantic Richfield's Production Research Center, Plano, Texas
Architect: Thomas E. Stanley
© American Saint Gobain 1967

Starlux twin-ground, polished plate glass by...
Secretaries love this file.
It's the strong, silent type.

File drawers opening and closing all day make a lot of noise. Enough to drive a girl to aspirin.
So we designed our file with drawers that just won't slam or screech.
Another nice thing about our file drawers. They pull out all the way. The "zebra" folder is as easy to remove as the one on "aardvark".
There's nothing tinny or weak about our file, either. It's built to take on big loads without getting out of alignment. You know what happens when files lose their alignment. They get stuck.
Our "500" file has a clean, beautiful face. Easy on the eyes. No drawer pulls that stick out like sore thumbs. And your clients don't need a magnifying glass to read the labels.
In two, three, four and five drawer units. Letter and legal size. In gray, black and beige finishes.
Art Metal furniture looks beautiful and works beautifully—a solid investment for management.
We'll be happy to send you a brochure on the "500" files, and tell you where they can be seen.
Write today. You'll hear from us, posthaste.
Zefkrome acrylic, Engineered for Superior Performance, creates the impressive new carpet for public places. The innovations in beauty and wear are unique to Zefkrome.

Color: multichromes, a new concept developed for greater clarity and variety.

Durability: Zefkrome has wear tests behind it of 2 million footsteps, equal to 54 years. It is stronger than other acrylics by as much as 50%.

Superior color retention: the color in Zefkrome lasts, and it’s safe in sunlight, because it’s locked in when the fiber is made.

Superior cleanability: “Andrew Carnegie” carpeting returns to its original appearance after on-location cleaning better than any other acrylic carpet.

Dirt resistance: Zefkrome is a circular cross section acrylic fiber that doesn’t hold soil the way other acrylics do. The new Sequoyah carpet is also moth and mildew proof. Everything about it adds up to quality.

Please address all inquiries to:
Chuck Purcell, Sequoyah Mills, Anadarko, Oklahoma

*Dow Badische Zefkrome E.S.P.
Engineered for Superior Performance

Zefkrome® is a trademark of Dow Badische Company
On Readers’ Service Card, Circle No. 330
THE ARCHITECT
HOW AN AGE-OLD ARGUMENT WAS RESOLVED

THE ARCHITECTS IN THE OFFICE OF ALFRED EASTON POOR WANTED A WINDOW COVERING THAT WOULD PRESERVE THE NEAT UNIFORMITY OF THE FACADE, AS WELL AS CONTROL LIGHT AND HEAT. THEY SPECIFIED THE 1-INCH-WIDE SLATS OF LEVOLOR RIVIERA VENETIAN BLINDS.
THE INTERIOR DESIGNERS WANTED A WINDOW COVERING THAT WOULD
BLEND UNOBSERVABLY WITH BOTH CONTEMPORARY AND TRADITIONAL
OFFICE DECOR. THEY INSISTED ON THE "INVISIBLE" LADDERS
AND MAGIC WAND TILTERS OF LEVOLOR RIVIERA VENETIAN BLINDS.
EVEN THE BUILDING MANAGER GOT INTO THE DISCUSSION.
HE WANTED TO SAVE TIME, MONEY AND EFFORT ON THE INSTALLATION,
SO HE HAD LIGHTWEIGHT RIVIERAS GLUED INTO PLACE INSTEAD OF
USING CONVENTIONAL HARDWARE. NOT ONE HAS FALLEN.
FOR COMPLETE DETAILS ABOUT THE BLIND ARCHITECTS AND DESIGNERS AGREE ON.
WRITE LEVOLOR CORP., INC., 770 VERNON STREET, HOLBOKEN, N.J. 07020
Continued from page 164

Eye and Ear Tuning
BY FORREST WILSON

The Classical Language of Architecture, By Sir John Summerson. The M.I.T. Press, 50 Ames St., Cambridge, Mass., 1966. Illus., $5.95. The reviewer is an Associate Editor of P/A.

Forty-six pages of text and almost again as many pages of glossary and illustration add up to an extended definition of the Classical Language of Architecture. The book is not an apology for classical architecture, although it is understandably sympathetic, as one would anticipate from the background and works of its famous author. It is, in fact, a description of the language by one of its foremost grammarians.

The book was originally a series of radio talks: "A script written for broadcasting is a script written for broadcasting, and it is, I think, a mistake to try to turn it into something else." Summerson didn't.

The perpetuation of the orders has probably always existed for the same reason Pevsner gives for their resurrection by Renaissance intellectuals and Ortega gives as the motivational function of modern art. It involves the division of society into ranks: the illustrious and the vulgar. The orders have been the trademark of the cultured for 500 years, denoting quality in contrast to vernacular brand X.

This book is the right volume for those tuned to the babble of architectural language. It allows the reader to distinguish the classical architectural players by the uniforms they wear, denoting rank, division, and branch of service.

The book is roughly equivalent to a handbook of basic English. The author feels, and is undoubtedly correct, that an inking of the structure of the classical language will create an interest in its forms. A little knowledge is far from a dangerous thing; it is, in fact, the only prelude to more. As such, this is a worthwhile effort. Summerson talks as well as he writes.

The Classical Language of Architecture is, therefore, not a comprehensive study. However, the book gives the ground rules and in text and illustration furnishes enough information to whet the appetite. It tunes the ear to vowels and consonants. After reading this book, one will not again look at classical decoration without first listening, like Pygmalion's Dr. Higgins, to fathom its origin and derivation while at the same time delighting in its innovations and deriving pleasure in shared archaeological knowledge. The book, to say the least, is an excellent conversation piece.

Just Passing Through
BY EDWARD K. CARPENTER

Through the Great City. By Anthony Bailey, Macmillan Co., 60 Fifth Ave., New York, N.Y., 1967. 276 pages, $5.95. The reviewer is an Associate Editor of P/A.

Anthony Bailey's pleasant perambulations through the Northeast Corridor, from Boston to Washington, D.C., are deceptively relaxed and only seemingly haphazard. Along the way, which he negotiated one fall in a battered, green jeep station wagon, he manages to talk with at least one of each kind of expert exploring a particular facet of the megalopolitan explosion. It is a Noah's Ark kind of tour, with Bailey collecting the wisdom of ecologists, architects, planners, demographers, oceanographers, geologists, as well as Louis Mumford, taking it all aboard his jeep, and managing in the end to still the flood waters of rising concern to leave the reader on the high ground of hope.

Bailey is obviously having a good time, despite the hazards of the journey, such as trying to park on Manhattan's West
Furniture that's handsome . . . styled to bring new beauty to every area of the modern office. Furniture that's adaptable to the requirements of every work station. Furniture that's durable . . . built for years of distinguished service with a minimum of maintenance. Furniture that's constructed with the same care and precision that mark the most expensive, yet is moderately priced.

That's office furniture by Cosco.

With desks, chairs, credenzas, tables, lounge furniture, and utility seating, Cosco can satisfy your every office furniture need . . . superbly!

Designers, architects and other office specifiers should ask for the "Architects Package" when they write to Dept. PA-18.

count on COSCO® where the new ideas are

Hamilton Cosco, Inc., Office Furniture Division, Gallatin, Tennessee
Continued from page 172

Side and driving through the semi-urban mess of northern New Jersey, Northern New Jersey turns Bailey sour, as it does anyone of any intelligence and sensitivity.

"I had to bear right through Union on Route 22," he writes, "and a brief exposure to this part of the metropolis brings out the grumpiness in the most tolerant of travelers. It makes one wonder if the old, clear-cut distinction between man and other animals was ever valid; are we in control of our destiny? Do people—statistically better off, more comfortable, more highly taxed and educated than any other people in history—truly imagine that this is a fitting landscape, a proper city?"

I suspect that Bailey patterned his excursion after those taken on horseback through the English rural countryside in the 1820's and 1830's by William Cobbett. At least, Bailey mentions Cobbett's book Rural Rides, and, like Cobbett, he sets down in some detail his impressions and experiences. Probably unlike Cobbett, Bailey's experiences are, at least in part, prearranged. From a fairly eclectic reading list and from other more mysterious sources, he prepared a sound outline of whom to meet and talk with. The outline was then filled in by improvisation, such as his encounter with and description of a giant Rex road paver, and by visits with friends who happened to live in the area. The result is that one comes away from this very pleasant trip knowing a good deal of what is happening to the Northeast Corridor. For example, Bailey talked with architects Clotheil Smith and Oskar Stonorov, with landscape architect Ian McHarg, and, of course, Louis Mumford. And he quotes from books on architecture such as Henry-Russel Hitchcock's Rhode Island Architecture. But more than that, he talks with the experts in other fields—experts who are determining how people will live and how architecture will be practiced. I know of no other single source that gives such a clear picture of the physical expansion pains of the Northeast Corridor. And certainly there is no more painless way to get the picture. The practice of architecture, and, indeed, of our way of life today, would be a lot easier if all Americans could turn off the tube for an evening and spend the time instead with Through the Great City.

The Art of Fiscal Survival

BY ROBERT H. MUTRUX


The reviewer, a frequent contributor to PA, is an architect practicing in Bridgeport, Conn.

A review by an architect of a book on architecture by another architect is not likely to emerge as a paradigm of objective writing. A review, by definition, is an evaluation in the reviewer's terms; the experienced architect-reviewer is bound to be influenced by his personal opinions and taste as a rival practitioner, while the novice will unconsciously—and invariably—grab the opportunity to ride piggy-back on another's effort in order to air his own immature views. And, at best, there is no assurance that a man's work is being assessed by his peers, particularly at a time when the standards of architectural peerage are notably vague.

Morris Lapidus' book, Architecture, A Profession and A Business, happily does not run this risk because it is not a book on architecture as such. It is a clear, impressively documented treatise on how to maintain an architect's office in order to make money. And all those who, like ourselves, have finally learned to make ends meet in this rather precarious pro-

Continued on page 180
Los Angeles MUSIC CENTER

The three-unit complex, designed by Welton Becket and Associates, gives Southern California one of the nation's largest and most versatile performing arts facilities. Steel framing played a starring role in the construction of all three buildings.

Located on a 7-acre site in Los Angeles' Civic Center Mall, the $33.5 million Music Center is composed of the Dorothy Chandler Pavilion, the Mark Taper Forum, and the Ahmanson Theatre (from upper left of photo to lower right).
The MARK TAPER FORUM

This circular building is designed for the production of intimate drama and opera, recitals, chamber music concerts, special lectures and major civic-cultural meetings.

It seats 750 in amphitheatre style, with 14 rows of seats in a steeply rising semi-circle.

The 140-ft-diam Forum rises from a 175-sq-ft reflecting pool. The upper 27 ft of the structure, cantilevered 13 ft from the base, are faced with a bold precast concrete relief mural 378 ft long. The panels are supported by 72 steel columns spaced 6 ft apart. The main floor is covered with dark, exposed aggregate.

The AHMANSON THEATRE

The five-level Ahmanson Theatre, which seats 2100, measures 155 by 175 ft. The Theatre is used for legitimate drama and musical comedy, light opera, ballet and other musical and theatrical events not requiring the larger facilities of the Pavilion.

The south side of the Theatre is enclosed by a wall of glass extending the full 73-ft height of the building. This permits a view of the Forum mural and the plaza mall. The remaining three sides are faced with precast panels of large tumbled-onyx aggregate.

A feeling of intimacy as well as unity between stage area and auditorium was achieved by eliminating the conventional proscenium opening. This concept, unique in theatre design, was made possible by the use of a steel truss roof which provides a column-free area above the auditorium measuring 102 ft by 108 ft.
The COLONNADE

Surrounding both the Mark Taper Forum and the Ahmanson Theatre is a 48-ft-high, vaulted-roof colonnade measuring 224 by 424 ft. Its 66 columns, set in parallel rows 24 ft apart, are 18-in.-sq steel plate weldments. Roof framing members, welded to the columns, are 12- and 24-in. Bethlehem wide-flange beams.

By linking the two theatres, the graceful colonnade creates a visual unity to balance with the striking vertical accents of the Dorothy Chandler Pavilion across the Mall.

The Forum’s roof is framed with 24 curved steel ribs welded to a 2-ft-diam steel compression ring. Ribs are connected to a steel shoe at their base by a single 2½-in.-diam steel pin. This type of connection acts as a hinge which permits thermal movement of the dome. The dome provides a clear span of 117 ft.

The Los Angeles Music Center is operated by the Music Center Operating Company, a non-profit corporation, for the County of Los Angeles, which holds the master lease from the Music Center Lease Company, a non-profit corporation.

Located on the south side of the landscaped mall, this 6-level structure serves as a 3250-seat symphony hall, opera house and theatre.

The 330 by 252-ft Pavilion presents gracefully curved sides faced with dark granite and glass. Dramatic fluted columns (steel pipe columns covered with concrete panels) extend the full 92-ft height of the building. A wide outdoor promenade surrounds the structure at the first and second levels.

The Pavilion's structural steel frame features steel plate girders, 5 ft deep and 50 ft long, at the third and fourth floor levels. There are six trusses in the cantilevered roof area.
DOOR HOLDER suitable for either right or left hand doors

GJ 80M* non-handed
OVERHEAD DOOR HOLDER for entrance, vestibule and heavy traffic interior doors

* as in Modernized

- No need to specify hand of door
- Extended arm reach plus longer spring increases shock absorbing efficiency
- Extruded bronze housing (choice of standard plated finishes)
- On-off hold-open—with safety release

GJ 80M HD available for heavy duty use on interior and exterior doors

Send for complete details

GLYNN-JOHNSON CORPORATION
4422 north ravenswood ave / chicago, illinois 60640
profession will bow low before the words of one who was not only able to make the ends overlap a little, but even found time to expatiate on the subject. True, he has enlisted the aid of two sons, one an architect in his own right, the other an attorney, but this fact adds to rather than detracts from his credit. Together, they have assembled a highly readable and eminently instructive study of that aspect of the profession which (though we seldom admit it) goes a long way toward making great architecture possible.

There are no wordy flights of philosophical fancy, no invitation to controversy in the realm of design or the psychological significance of building, no indulgence in the current catch-phrases such as "involvement," "environment," or "tension," after the manner of those fashionable writers who are trying desperately to gloss over the contemporary mélange of fads, novelties, and half-baked notions that make up the bulk of today's building. Nor does it expand the thesis of the well-known western architect who listed three prerequisites to success: "First, get the job. Second, get the job. Third, get the job." But the book develops in detail the businesslike basis for the association among architect, builder, and client after the contract has been signed.

The young man starting in business should read this book carefully, then go free-wheeling as his temperament directs, but with the knowledge that he has been forewarned, by an expert, of the myriad pitfalls that may mar an association and even ruin a potential practice. The larger firm — and this book is directed, in the main, toward a broad and varied horizon — may be less than enthusiastic about Lapidus' private problems, But the entire profession will be impressed by his solutions.

The reactions of various members of one particular firm, patterned along lines similar to Morris Lapidus Associates, is in one sense a measure of the impact of the book. The head draftsman, without opening the book, said, "Let's get it." The comptroller turned to one significant page and stated categorically, "It's expensive." The designers, characteristically thumbing through it for illustrations, were well rewarded, and the public-relations consultant voiced a resounding "Amen." It is the fine print, however, that reveals the book's true value. The chapters on the importance of cost accounting, progress checklists, time records, and office standards are well worth the book's entire cost to those in charge of those phases of "a demanding profession, a difficult business," if only for purposes of comparison. An introduction to a colleague's key to success goes well beyond my own private discovery that "lettering shall be slant style with a slope of 67½°".

On the other hand, one of the best chapters, "The Good Guys and the Bad Guys" (referring to different types of clients), is all too brief. This writer missed reference to that perennial bête noire of the whole profession, the disposition of shop drawings, and would welcome some advice on what to do about errors and omissions in plans and specifications.

Lapidus has generously larded the book with personal experiences that serve as examples of what to do and what not to do, omitting, with polite diffidence, specific names, places, and buildings. It is a credit to its literary style that, even in a book of this type, the reader is disapponted not to find out "whodunit."

BOOK NOTES


P/A's "It's The Law" columnists have updated the first edition of their book to reflect the many changes in the laws affecting architects and engineers, not the least of which is the extension of the potential liability of contractors.
Have You Seen What ARCHITECTURAL Site Lighting Does For Aesthetic Unity?

It's what's happening... aesthetic togetherness through Moldcast Site Modules. This important new design medium provides the architect with the exciting prospect of unifying site and structure.

A harmony of squares and rectilineals... Moldcast Site Modules project the geometric character of modern building design throughout the grounds.

Site Modules are a complete family of coordinated fixtures, designed to fill the lighting requirements of an entire site. Products range from 28' tall area and roadway lights to 3' shrub lights, matching directional signs and building mounted fixtures.

These handsome units are furnished with engineered optical systems providing the finest in highly efficient, controlled lighting distribution.

For complete technical information, send for our 16 pg. full color catalog.

MOLDCAST MANUFACTURING COMPANY
164 DELANCY STREET, NEWARK, NEW JERSEY 07105 • In Canada: Verd-A-Ray Electric Products, Ltd., Montreal 9, Quebec, Canada

Serving Architecture Through Lighting

On Readers' Service Card, Circle No. 352
New MSH seating by Harter. Superbly crafted yet modestly priced. (And even more comfortable than they look!) Available in 6 swivel and conference models. Now on display at Harter showrooms in New York, Chicago, Denver and Los Angeles. Send today for MSH brochure.

HARTE CORPORAION
117 Prairie Avenue
Sturgis, Michigan 49091

Please send me the MSH 900 Series seating brochure.

Name
Firm
Address
City State Zip

On Readers' Service Card, Circle No. 417

REINHOLD

Authoritative

THEATRES AND AUDITORIUMS
Second Edition

by Harold Burris-Meyer and Edward G. Cole

1964 384 pages $22.00

This book makes it possible for anyone concerned with the planning of theatres to understand what constitutes a good theatre and to make his plans accordingly. Intended for both the architect and those who need better theatres and auditoriums, this new and enlarged second edition is the only book which approaches the problem of planning theatres and auditoriums by analyzing the functions which are to be performed within the building. Trends and innovations in theatre form which have become evident since the publication of the first edition are thoroughly examined from an analytical as well as a critical point of view. Profusely illustrated with drawings, photographs, and plans.

Available at your bookstore or write Dept. M-499
REINHOLD BOOK DIVISION,
430 Park Avenue, New York, N.Y. 10022

To Order, Circle No. 505 On Readers' Service Card

Quality by Wiedemann

IN BAPTISTRIES
(in-f琢磨的 the fiberglass
baptistry and leading
baptistry specialist)

IN SPIRES
(in-mold fiberglass)

IN LIGHTING
(Aluminum in 5 styles)

Write for free information kit. See Sweet's
Architectural File

Wiedemann Industries, Inc.
Box 672, Muscatine, Iowa 52761 Phone: 319-263-6642

On Readers' Service Card, Circle No. 410
... and the first patient hasn't even arrived.
Sure, it's designed to take the best possible care of patients. The construction is totally sound. And facilities include everything modern medicine could ask for.
But if communications aren't the most modern available, a hospital is obsolete before it's even begun.

Modern hospitals need all the communications consideration you can give them.
So they can take full advantage of the telephone. Bring in Tele-Lecture or closed-circuit TV. Even tie into a computer with Data-Phone* service or teletypewriter.
And that's where a Bell System Architect and Builder Service Representative comes in. He can help make your next hospital—and every building—as modern as modern communications can make it. And insure that communication needs of the future will fit in without expensive alterations.
Just call 212-393-4537 collect. We will send you a complete list of our Architect and Builder Service Representatives.

*Service mark
NEW! WEATHERTIGHT EXTRUDED ALUMINUM FLUORESCENT UNITS

The 97 line—rugged, totally enclosed fixtures—ideal for any wet location

mcPhilben brings you a fixture of great structural strength whose clean rectilinear styling blends naturally with the most contemporary architectural concepts. Heavy wall aluminum construction combined with an unbreakable polycarbonate diffuser creates a virtually indestructible unit. A clear prismatic acrylic diffuser is standard for normal applications. Fully enclosed and gasketed, the 97 Line keeps out water under pressure, vapors, bugs and grease. Your choice of one or two lamp units with ballasts for starting temperatures as low as -20°F. Varied mountings available.

97 Line has a continuous knuckle hinge door (see left) that swings away to simplify relamping and is completely removable for maintenance. The door locks with quarter turn Phillips head Camloc captive screws. Write for complete specifications and data.
Sha-Walker has a new kind of chair.


They're handsome, richly tufted, easy to admire. But comfort—there's the big story. You "float" on a triple-layered cushion of foam. You relax against a luxurious, form-fitting Backrest that cradles your body as you work.

That's why these chairs can help office people feel better and work better—help cut absenteeism and turnover, too.

See how easily your clients can have this beauty and comfort. Phone your Shaw-Walkerman for the colorful chair brochure A Great New Concept. It pictures all thirty-two design-coordinated models.
Every fine building needs modern door control.

The door closers for the entrance of this handsome college building are LCN—5010 series... concealed in the head frames. It was a good choice. With the closers concealed the entrance is better looking. And because the closers are LCN the doors are under complete control regardless of traffic, drafts, wind, or hard usage. LCN makes nothing but door closers. There's a wide variety of styles: Overhead concealed, surface mounted, bracket mounted, concealed in floor, etc. Whichever you specify, remember that with LCN you are assured the quality that means "lowest long-run cost".

Continued from page 184

New Firms

Alemsbooks & Associates, Architects and Engineers, 83 Walton St., N.W., Atlanta, Ga. 30301.


Henrik Bull & Ian Mackinlay Associated, Architects, 400 Pacific Ave., San Francisco, Calif. 94133.

GARTH CARROLL, Architect, 2011 Six Hundred Building, Corpus Christi, Tex. 78401.


CLAYTON & WESTBURY, INC., Architects, 1904 Monroe Dr., N.E., Atlanta, Ga.

DAMIANOS & Pedone, Architects and Interior Designers, 416 Hastings St., Pittsburgh, Pa. 15206.


Hueppelsheuser Associates, Architects, Fort Worth Club Bldg., Fort Worth, Tex.

Schlott/Norman/Cain, Architects, 145 Third Ave., N., Nashville, Tenn. 37201.

New Partners, Associates

Robert E. Alexander & Associates, Architects and Engineers, Los Angeles, Calif., have named Ernest H. Elwood an associate of the firm.


Getter-Green Associates, Consulting Engineers, New Rochelle, N.Y., have been joined by two new associates, Emanuel Self and George F. Gedge.

Continued on page 194
The FolDoor Model 3000 provides greater interior space flexibility and design freedom than any other system. Each panel is separately suspended so it may be moved in or out of storage, from room to room or in any position along a network of tracks. Individual self-adjusting floor seals make each panel a separate modular unit yet when all are used together they form an effective visual, space and sound separation barrier with no unsightly floor track.

Other features include automatic track switches which do away with old-fashioned pull chain and rod switch activators—panels may be stored flat with no angled stack protruding into sight line—ball bearing trolleys, five point vinyl compression seals on all vertical panel edges and a wide selection of custom facing materials from which to choose. For more information contact your FolDoor distributor or write to Holcomb & Hoke Manufacturing Company, Inc., P. O. Box 1965, Indianapolis, Indiana 46206.

Holcomb & Hoke Mfg. Co., Inc.
1545 Calhoun Street
P. O. Box 1965
Indianapolis, Indiana 46206
The Thiokol Seal of Security
represents the most advanced sealant quality and performance standard ever written for the building trade.

Unless Thiokol's Seal of Security is on the label, the sealant you choose may not deliver total weatherproofing protection.

The Seal symbolizes a Thiokol leadership program to raise sealant quality...to keep it at a level pacing or exceeding environmental service requirements of structural joints and building materials.

Behind the Seal lies a new standard of excellence for joint sealants established by Thiokol, extending professionally accepted specifications and supported by a monitoring program aimed at continuity of quality. Materials both from production runs and random selection at job sites are lab tested for capability on a regular basis. Only compounds meeting the standard wear the Seal on the label. No program in the industry goes so far to assure consistent high grade product performance.

Be wary of sealants not wearing the Seal. Be wise—make Thiokol's Seal of Security your exclusive guide to long-term weatherproofing for all joints, in all climates, meeting any service condition. For the assuring facts, write Thiokol.

Only in LP* polysulfide polymer is there quality assurance by Thiokol CHEMICAL CORPORATION

780 N. Clinton Avenue, Trenton, New Jersey 08607. In Canada: Thiokol Canada Ltd., Wellington Sq. Bldg., 377 Brant Ave., Burlington, Ont.

*The manufacturer warrants by affixing this label that this product is a duplicate of materials independently tested and approved by, and in accordance with standards established by Thiokol Chemical Corporation.
If you only knew how often I think of you, Horace, Hutch & Sinkwell, A.I.A.

Never heard of Horace, Hutch & Sinkwell, A.I.A.? Well, maybe the girls in that new office building aren't so good at remembering architects' names. But like the gal above they do appreciate it when an architect goes to the trouble of specifying one of Bobrick's attractive and convenient stainless steel, built-in dual vending machines for dispensing both feminine napkins and tampons.

And since about half the gals now use tampons, there's more than beauty involved in their appreciation of Bobrick's recessed dual-vend machines.

So how about it? Send for our free catalogue or see Sweet's File No. 26 (or Bobrick, File 26a) for a description of vending machines available for dispensing Kotex® napkins and tampons.

True, your name may be forgotten but your good deed will live on in the hearts of all the girls.

Kimberly-Clark Corporation
Commercial Department Neenah, Wisconsin
On Readers' Service Card, Circle No. 346

Trademarks and Symbols of the World
by Yusaku Kamekura, Preface by Paul Rand

"It is easier to remember a person's face than his name" is a statement often used to explain the importance of trademarks. In this extraordinarily beautiful book, the best trademarks designed during the last 10 years are reproduced at large scale in black and white and color. The high level of imagination and skill that designers of many countries have brought to bear on this most important design assignment is clearly visible. The trademark designs presented cover a wide variety of fields, such as advertising, packaging, and television. Since a recent trend in trademark design is the use of color, the book contains pages printed in as many as six colors. Complete new designs for old and new firms—as well as examples of the re-design of old trademarks—are included. Examples range from Erik Nitsche's design for General Dynamics and Saul Bass's design for Alcoa to Giovanni Pulfoni's signs created for Olivetti products and Paul Rand's complete design programs for I.B.M. and Westinghouse.

264 pages, 11 x 10¼, 60 pages of illustrations in many colors, 164 pages of illustrations in black and white. $22.50

Use this book FREE for 10 days.
Send no money, mail coupon to your bookseller, art material store or:
Reinhold Book Division
430 Park Avenue
New York, New York 10022

☐ Please send on 10 days approval (U.S.A. only).
1-150 Kamekura, Trademarks and Symbols of the World, $22.50
If I am not completely satisfied, I may return the book without obligation. If I decide to keep the book I will send the full price plus a small shipping charge.
☐ SAVE MONEY! If you ENCLOSE payment (check or money order only) we will pay the postage. Same return privilege. Add sales tax on N.Y.C., Ohio and Penn. orders.

Name
Address
City State Zip Code

To Order, Circle No. 506 On Readers' Service Card
JANUARY 1968 P/A
Here's the key piece in FORMA, Troy's new deluxe contract seating line. Troy offers this unsurpassed combination of classic design, "air suspension" comfort, durability, versatility...at a surprisingly low price. FORMA includes sofas, modular multiple seating units, love seats, benches, swivel club chairs, and correlated tables. For details contact The Troy Sunshade Company, Division of The Hobart Manufacturing Company, Troy, Ohio 45373.

Designed by Herbert C. Saiger, A.I.D.
This book presents the most up-to-date reference and drawing data in the field of architecture, construction, and design. Here, in a single, conveniently arranged volume, is the latest information on new construction methods, much of which has never appeared before in book form. An extremely practical book, it features the most essential reference data required by the professional in his daily work.

The contents are organized to deal, in order, with the four main aspects of building: sub-soil constructions; wall systems; floor and roof systems; and methods of construction, including details, surface, and finish treatments. The book begins with detail drawings and data for footings and foundations, and its sequence of presentation follows a pattern similar to that used in the actual construction of buildings. Valuable information is given on the various methods of wall, floor, and roof treatments employing new uses of wood, concrete, steel, and stone.

The arrangement of the subject matter is distinguished by the fact that where materials in a certain construction system have been shown in detail, the methods of estimating quantities of these materials have been included. Questions and answers pertaining to mechanical and electrical equipment of buildings have been added for the benefit of those preparing for the Registered Architect's examination.

The practical applications of this book within the building construction, cement, building materials, and equipment manufacturing industries are exceptionally broad. Architects, engineers, and builders will find it especially useful as an up-to-date source of ready reference, and for the contractor it can prove a most efficient aid to becoming better acquainted with new methods of construction. In addition, it is highly adaptable for reference use by students of architectural design and mechanical drawing in technical schools and colleges.
No matter where you build an all-aluminum pool, you're always on solid ground.

Because a pool of Alcoa® Aluminum has the rugged strength and strong constitution needed for tough terrains.

Where can you build an aluminum pool? Practically anywhere. The pool above was built on the edge of a hill over an abandoned coal mine. It could have had terrain trouble. But this all-aluminum pool is self-supporting; prefabricated aluminum walls are vertically stiffened and solidly buttressed by aluminum channels (see cutaway).

The pool's makeup? A special aluminum alloy of magnesium and manganese for durability. It is tested for strength, is corrosion-resistant and absolutely watertight. And with aluminum's prefabricated techniques, your construction costs are kept to a minimum, your installation time slashed.

Build a beautiful addition to any landscape—a pool made of Alcoa Aluminum. For more information or names of Alcoa customers who can engineer your aluminum pool requirements, write Aluminum Company of America, 1612-A Alcoa Building, Pittsburgh, Pa. 15219.
This should be on every Store Architect’s desk!

ANGELES DISPLA/WALL MAKES WALLS WORK HARDER EASIER

This California-designed ‘built-in’ wall fixture system is achieving what more Store Owners want. WALLS THAT WORK HARDER EASIER. Here in a five-part brochure containing specifications, detail drawings and photographs is the complete story of DISPLA/WALL... illustrating both mechanical and aesthetic features superior to any design and construction method on the market today. Send for two copies on your letterhead. It's Free.

ANGELES METAL SYSTEMS
Lightweight Building Components
4720 E. Washington Blvd.
Los Angeles, Calif. 90022
EASTERN and MID-WEST DISTRIBUTOR INQUIRIES INVITED

Continued from page 187

Hillman, Garmendia, Architects, New York, N.Y., announce that Louis R. Morandi has become a partner in the firm.

Schutte-Phillips-Mochon, Architects, Planners, and Engineers, Milwaukee, Wis., have named Frederick Albert Schutte a partner.

Van Bourg/Nakamura & Associates, Architects and Planners, Berkeley, Calif., announce that Lee Karmen has been named an associate member of the staff.

Elections, Appointments

Daniel Mann, Johnson & Mendenhall, Architects, Planners, Engineers, Economists, have named Cesar Pelli, the firm’s director of design, a vice-president of the corporation. James S. Schuff has been appointed project manager.

Victor Gruen Associates, Architects and Planners, Los Angeles, Calif., announces that David Travers has joined the firm as director of corporate planning.

Johnson & Johnson, Engineers-Architects, Inc., Chicago, Ill., announce the appointment of B.B. Twyman as vice-president for project development.

Charles Luckman Associates, Architects, Planners, Engineers, Los Angeles, Calif., have appointed Rudy L. Veland to the position of assistant director of design, and William M. Schoenfeld a vice-president. Peter De Franchisc is has been appointed director of consulting services.

Morganelli-Heumann & Rude, Architects and Interior Designers, Los Angeles, Calif., announce that Sidney M. Drasnin has joined the firm.

Quinton Engineers, Ltd., Los Angeles, Calif., have appointed Don Muntz vice-president. The firm announces two new appointments in their Pacific Northwest office in Seattle: Donald H. Grueel, manager of the office; and Hanford Thayer, director of research and development.

Stone, Marraccini & Patterson, Architects and Planners, San Francisco, Calif., have elected three new vice-presidents: George A. Agron, Sanford L. Berger, and Robert J. Bettencourt.

Name Changes

Abernethy, Robinson & Abernethy, Architects, Johnson City, Tenn., upon the association of C. Bolton Abernethy; formerly, Abernethy & Robinson.

Atchison, Kloverstrom & Atchison, Architects, Denver, Colo., upon the resignation of Maxwell L. Saul; formerly, Atchison, Kloverstrom, Saul & Atchison.

Vincent C. Cerasi & Associates, Landscape Architects and Land Planners, with

Continued on page 200

The “or” in “or equal” usually ends up in...

in inferior

Those two words — “or equal” — in your specifications section can lead to considerable disappointment in a finished project. Particularly in vinyl wallcoverings. A moment of inattention, a persuasive salesman, a rash attempt to save a few dollars and you agree to a substitute for Vicrotex. Sometimes, the substitution is even made without your knowledge.

There’s only one way to guarantee that you get superior stain-resistant finishes, attractive textures, unique patterns and lustrous colors of Vicrotex vinyl wallcoverings. By tight specs and double-checking along the way.

If you know enough about vinyl wallcoverings to specify Vicrotex, make sure you get Vicrotex.

Write today for our helpful booklet:

L. E. CARPENTER & CO.
Empire State Building
New York 10001
(212) $0ngacre 4-0080

Continued on page 201

On Readers' Service Card, Circle No. 420

JANUARY 1968 P/A
"PIGGYBACK" BRIDGE AFFORDS WIRE GLASS PROTECTION

Student pedestrians are protected from the elements at the ever-expanding University of Minnesota campus by means of a unique, covered walkway constructed atop a four-lane highway that spans the Mississippi River.

A quarter of a mile of "life safe" Polished MISCO Wire (22,300 ft.) provides approved fire retardance and impact resistance while daylighting this new convenience feature that serves the needs of students commuting between the East and West campus. Mississippi Glass is one of only two manufacturers whose wire glass products are listed by Underwriters' Laboratories. For maximum protection and modern beauty always specify UL approved Mississippi wire glass. Available from most distributors of quality glass.

MISSISSIPPI GLASS COMPANY
88 Angelica Street • St. Louis, Missouri 63147
NEW YORK • CHICAGO • ATLANTA • DALLAS • SAN FRANCISCO • FULLERTON, CALIF.
DISTRIBUTORS IN PRINCIPAL CITIES OF THE UNITED STATES AND CANADA
Handsome translucent channels of PROFILITE glass achieve clean, functional modern design in First National Bank Building, Atlanta, Georgia.

Partitions by: Womack & Sons, Atlanta, Georgia.
Glazed by: PPG Industries, Atlanta, Georgia.

NEW Snap-On Moulding for PROFILITE Installations

Whether used in building exteriors or in partitions and screens, PROFILITE creates the aesthetic effect of bold vertical lines unencumbered by glazing members... allows the architect to capitalize on the many desirable properties of glass in areas where heretofore its use was considered impractical. Manufactured in standard stock lengths of 8, 10, and 12 ft., its application has been facilitated thru the development of anodized aluminum sections that combine trim appearance with easily installed snap-on design.

New PROFILITE Installation Guide
Contains methods for installing PROFILITE in single and double glazed systems. Send for your free copy today.

MISSISSIPPI GLASS COMPANY
88 Angelica Street • St. Louis, Missouri 63147
NEW YORK • CHICAGO • ATLANTA • DALLAS • SAN FRANCISCO • FULLERTON, CALIF.
LARGEST DOMESTIC MANUFACTURER OF ROLLED, FIGURED AND WIRED GLASS
No other sealant did. No other sealant could stand up to the punishment the job required, so the new Challenge Cream and Butter Association plant in Los Angeles was caulked with General Electric Silicone Construction Sealant.

Architecturally, the job was tough. Joints of precast tilt-up concrete panels had to be caulked inside and out. And they were 20 to 22 feet high.

Plant location and function made the caulking job even tougher:

Los Angeles—where surface temperatures up to 110°F are normal.

The ice cream room—subfreezing. −25°F temperatures must be held constantly.

But because G-E Silicone Sealant is silicone rubber, it's permanently flexible. It's designed to withstand stress and strain created by temperature extremes. It won't soften, harden or become brittle. Won't crack or crumble with age. And it's permanently leakproof.

Year after year, in all kinds of weather, G-E Silicone Sealant will give and take without losing its grip. It'll last as long as your building. And look as good. Available in a range of permanent colors, in standard caulking cartridges.

Try it once. Recaulk or repair with G-E Silicone Sealant. Or use it from scratch and forget about recaulking. Forget about repairs. For information and color swatches, contact your G-E distributor.

Or write: Section Q1257, Silicone Products Dept., General Electric Co., Waterford, New York 12188.
4 ways this book can save time and money for anyone in the building industry.

1. By covering all the legal and contractual obligations, liabilities, and remedies applicable to the building industry.
2. By providing a basic understanding of the legal aspects involved in a construction enterprise.
3. By warning against legal problems or situations that could arise.
4. By presenting pertinent citations, arranged by states, of related cases.

Every day, architects, engineers and contractors enter into legal relationships that can affect their liability to the client, and the public as well. From the signing of contracts to the collection of fees... legal problems are inherent in every stage of an architect's or engineer's dealings with his clients, partners, and contractors. For this reason, everyone associated with the building industry should possess a basic understanding of the legal aspects involved in all phases of his work. This book covers the legal pitfalls that can arise in any of these situations, and it presents this information in a style that is readable, compact, and to the point.

5 Sections, 18 Chapters Offer Complete Legal Guidance

1. License Laws for the Architect, Engineer, Surveyor, and General Contractor.
2. Relations among Architects and Engineers.
3. Architect, Engineer, and Owner... The Employment Relations.
4. The Decision or Certificate of the Architect or Engineer.
5. Rights of Architects and Engineers: Compensation.

Each of the 18 chapters covered under these sections states the basic principles behind the subject covered. Each one is then discussed in detail along with selected citations, arranged by state. This method of organization supplies the reader with thoroughly prepared discussions, supported by references, of the various problems confronting him. Because so many of the legal principles applicable to the building industry have changed in the past decade, the great number of up-to-date citations in this book will prove extraordinarily valuable. ARCHITECTURAL & ENGINEERING LAW is an important reference guide. Owning it is like having your own personal legal guide to the construction industry.

ARCHITECTURAL & ENGINEERING LAW
SECOND EDITION
By BERNARD TOMSON, Judge of the District Court, Nassau County (New York), and NORMAN COPLAN, member of the New York law firm of Bernstein, Weiss, Parter, Coplan & Weinstein.

7967 / 382 pages / 6 x 9 / $17.50
can be ordered from your bookstore, or write to:

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

Use this coupon to order ARCHITECTURAL & ENGINEERING LAW, SECOND EDITION on a 30-day approval offer

REINHOLD PUBLISHING CORPORATION
430 Park Avenue, New York, N.Y. 10022

Use this coupon to receive our latest catalog and be placed on our mailing list.

To Order, Circle No. 503 On Readers' Service Card
Wide-Lite* floodlights give buildings dramatic beauty at night!


During the day, the beauty of this unusual building is apparent. And at night it is "painted with light" to transform what might otherwise have been just a dark shape into a clean-lined, classic beauty!

"Wide-Lite" floodlights were specifically chosen for night lighting to bring out all the beauty the architect had put into the building. And only 15 fixtures do a dramatic job on the three sides of the building which were illuminated.

Light patterns produced by "Wide-Lite" floodlights are broad, and blend smoothly—without shadows or "hot spots." This is because of Wide-Lite's exclusive reflector design. And "Wide-Lite" fixtures are built for rugged outdoor lighting, with a sturdy cast aluminum body...tempered glass lens to protect reflector and lamp from weather, dirt, bugs and vandalism...deep cooling fins...patented Stabilux* socket to grip the lamp at its upper end to protect the lamp from breakage.

Your "Wide-Lite" representative can give you more building exterior lighting facts. Phone him (see "Lighting Fixtures" in the Yellow Pages). Or write Dept. 24A-489
NOW, from RIXSON

THE THRESHOLDER*

faster, better anchoring...forever eliminates loose and floating thresholds

FOR ALL METAL THRESHOLDS

economical, trouble free and durable...secures in floor without tools...provides for quick screwdriver installation or subsequent removal of threshold...assures positive anchoring...and may be easily adjusted at any time.

THE THRESHOLDER

detailed information available from your local Rixson representative or:

RIXSON CLOSERS
A DIVISION OF RIXSON INC.
FRANKLIN PARK, ILLINOIS
REXDALE, ONTARIO

*patented

NOW!

MOTELS CAN
HEAT AND COOL THE
EASY ECONOMICAL WAY

WITH THE NEW

Dyna-Temp
Combination Gas Furnace
AND Air Conditioner

ONLY

Dyna-Temp

offers all these features motels are insisting on:
• Smallest combination unit available
• Easy installation
• Installs in wall or window
• No vent or duct attachments required
• Safe sealed combustion heat
• Quiet power-vented exhaust
• Burns no room air
• Individual room control
• Easy to operate
• Filtered air
• Instant heat or cooling
• Occupies no floor space
• Fully automatic
• Stainless steel burner and combustion chamber
• Designed for all motel rooms
• Saves over 30 percent in operating costs

Available models provide up to 11,500 B.t.u. air conditioning and 20,000 B.t.u. Heating

WRITE FOR FREE CATALOG

SUBURBAN MANUFACTURING COMPANY
Box 399, Dayton, Tenn. 37321

On Readers' Service Card, Circle No. 407
It's no alias.

Trend Contract isn't just another name for a good-looking piece of carpeting. It's just what our specifications say it is. Printed or textured contract carpeting of a certain fiber, pitch, density and tuft-lock.

We sell Trend Contract by specifications. And we've sold enough to make us one of the top five in the business. The men who sell Trend Contract are specialists in contract—from specifications to maintenance and tax depreciation.

We compete on specifications and price. And you can't beat us on that. Call us by name, Trend Contract, when you want to get specific.

For your "Contract Carpeting Spy Kit and Specifications Guide", write on your professional letterhead, to: Trend Contract, Division of Trend Mills, Department P1 295 Fifth Avenue, New York, New York 10016
An authoritative work covering the properties and uses of plastics in construction

PLASTICS IN BUILDING

Edited by Irving Skeist
Chemical Consultant
Skeist Laboratories, Inc.
Newark, New Jersey

Here is one of the most complete handbooks ever assembled on the evaluation and use of plastics in the construction industry. It offers extensive, up-to-date, and thoroughly researched data on the chemistry, properties, functions, engineering behavior, and specific applications of plastics to building requirements, both in the U.S. and abroad. Twenty-three of the world's leading architects, plastics engineers, chemists, and building-code specialists have contributed articles to this profusely illustrated book. Thorough discussions of coatings, adhesives, and sealants are included. The importance of building codes and specifications is emphasized, and model codes are presented.

Complete Contents and Contributors:
The Role of Plastics in Construction—Irving Skeist
The Plastics Materials—Harold A. Sarvetnick
Building Codes and Regulations—Harold Perrine
Construction Aids—J. A. Baumann
Structural Fiber-Glass Reinforced Plastics for Building Applications—Richard E. Chambers
Design of Reinforced Plastic Shell Structures—Frank J. Heger
Resin-Bonded Wood Structures—Charles B. Hemming
Plastics For Walls, Roofs, and Doors—J. A. Baumann, Ray C. Hess
Plastic Foams in Thermal Insulation—Paul Harsha, Robert C. Kennedy
Sealants—Gordon E. Hann
Adhesives in Building—George J. Schulte
Resilient Flooring and Carpeting—Leonard Moser, Robert P. Conger
Pipe and Plumbing—Jerry S. Schaul
Utilities—Ray C. Hess and J. A. Baumann
Lighting—Joseph R. Loring, Svend W. Brunn
Permanent Fixtures—J. A. Baumann
Paints and Other Coatings—Anthony Errico
Plastics in Roofing—Joseph W. Prane
Plastics Abroad—Kaoru Maeda, Masanori Kanai, Z. S. Makowski, Irving Skeist, Armand G. Winfield
NAHB Research Houses Demonstrate Plastics—John M. King
Extending the Horizon—Irving Skeist

Available at your bookstore or write
REINHOLD BOOK DIVISION
430 Park Avenue, New York, N.Y. 10022

1966/ 480 pages / 7" x 10" / $18.00

30-Day Approval Offer

Please send me ________ copy(ies) of Skeist: Plastics in Building (500-112) @ $18.00 (each), on 30-days' approval (U.S. and Canada only), under the following terms:

☐ Total payment enclosed (Reinhold pays regular delivery charges). ☐ Purchase order attached. ☐ Bill me (plus delivery charges). ☐ Send your latest catalog.

Name ____________________________
Address __________________________
City ___________________ State ______ Zip __________

Include sales tax on California, Ohio, Pennsylvania, and New York City orders.

Dept. M-498
Keep peace on the reservation.
Appropriate desks
for every member of the organization on
every level by ➤ Directional.

Directional Contract Furniture Corp.
New York: 979 Third Ave.
Chicago: 6–121 Merchandise Mart.
Los Angeles: C. J. Welch + Assoc.
8900 Melrose Ave.

Catalogs available on six desk series, seating and occasional furniture. Write on your business letterhead or use Reader's Service Card.

On Readers' Service Card, Circle No. 413
JOBS AND MEN

SITUATIONS OPEN

ARCHITECT—A.I.A. Registered. To assume responsibilities with established planning-engineering firm to associate status. Location Midwest. Box #510, PROGRESSIVE ARCHITECTURE.

ARCHITECT—Approximately 40 years of age, college graduate, registered. Position lends to association in small, long-established Central New Jersey office. Practice includes public buildings, commercial & industrial work. Should be experienced project manager. Studying education, experience, marital status, availability and starting salary expected to Box #511, PROGRESSIVE ARCHITECTURE.

ARCHITECT—Established progressive engineering, architectural and planning firm with four regional offices seeking an architect, registered in Maine, with broad architectural design experience expected to direct many diversified projects in regional office. Submit detailed resume in confidence to Box #512, PROGRESSIVE ARCHITECTURE.

ARCHITECT—Excellent opportunity for growth into associate position in a mid-west firm specializing in industrial design. Must be registered with at least eight years experience; to be able to meet clients and assist in pre-concept projects from concept to completion. Personal integrity, professional honesty and ability to supervise and inspire others essential. Company benefits include life insurance, major medical, wage continuation, vacations, hospital and surgical, sick pay, paid holidays, profit sharing and relocation expense. If interested and confident of your ability, send complete resume in confidence to Box #513, PROGRESSIVE ARCHITECTURE.

ARCHITECT—Graduate. Preferably with at least three years experience in institutional and commercial buildings. Registration is not required. Permanent position with an experienced architectural engineering firm in Maine. Send resume stating education, experience, and salary requirements to Box #514, PROGRESSIVE ARCHITECTURE.

ARCHITECT—Permanent position with established medium-sized architectural-engineering firm in small town in West Virginia. All types of work including planning—firm ranges statewide. Architectural department is small, but growing. Congenial working atmosphere and benefits. Want experienced graduate capable of handling all phases of projects. Registration preferred but not necessary. Send resume to Box #515, PROGRESSIVE ARCHITECTURE.

ARCHITECT—Registered, minimum of 10 years experience commercial, industrial, educational projects.Capable of executing all phases of architectural practice from client relations through supervision. Project architect position with expanding A-E firm in medium-sized Midwestern city, offers permanent growth, fringe benefits, hospitalization, retirement plan. Salary commensurate with ability. Send resume to Box #516, PROGRESSIVE ARCHITECTURE.

ARCHITECT—Senior draftsman and job captain in ten-man office with diversified long range commercial program. Starting salary range $9,000 to $12,000 commensurate with education and experience. Excellent working conditions, new offices, Northwest Detroit. Non-smoking, shopping, recreation. Box #517, PROGRESSIVE ARCHITECTURE.

ARCHITECT/CAMPUS PLANNER—Rapidly expanding university requires additional professional staff for its Campus Planning office to help design, coordinate and work with consulting architectural and engineering firms. Experience with full staff benefits which can be most rewarding to the right man. Please submit a resume stating age, years experience and salary expected to Personnel Officer, The University of Minnesota, Winnipeg 19, Manitoba, Canada.


ARCHITECTS—Nolen, Swinburne and Associates are seeking experienced designers and project architects who are systems oriented and can speak the language of performance design featured in the August issue of P/A. Please send your qualifications, salary requirements and work to: 120 South 17th Street, Philadelphia, Pennsylvania 19103. LO 4-2610. An equal opportunity employer.

ARCHITECTS—With strong design interest for office work in institutional, commercial and industrial type projects. Excellent opportunity to work with highly experienced architectural and engineering management. Contact Nolen, Swinburne & Associates, Architects & Engineers, Vandenberg Center, Grand Rapids, Michigan.

ARCHITECTS—STRUCTURAL ENGRS.—Established, expanding architectural-engineering firm in New York seeks minimum of five years experience. Individual must have permanent positions available for experienced architects and structural engineers. Projects include hospitals, schools, industrial, institutional and commercial buildings, airfield and terminal buildings and military projects. Minimum five years experience required. Employee benefits include hospitalization, medical-surgical, major-medical coverage, insurance, bonus, retirement plan, vacation, holiday and sick leave. Submit for outstanding year round recreational attractions. Main office in Scranton, Pennsylvania in the heart of an expanding industrial community. Personnel director, Bellante and Clauss, Architects & Engineers, Box #1125 Scranton, Pennsylvania 18503.


ARCHITECTURAL COORDINATOR—With design ability for imaginative, young student housing development firm in San Francisco area. Total professional desirable but willingness to learn and grow more important. Responsibilities include standards development, budget control, project coordination.

Advertising Rates
Standard charge for each unit is Seven Dollars, with a maximum of 125 words. Popcorn counting words your complete address (any address) counts as two words, any other words 3 words. Two units may be purchased for twenty-five dollars, (minimum of 150 words). Check or money order should accompany advertisement and be mailed to Jobs & Men c/o Progressive Architecture, 480 Park Avenue, New York, New York 10022. No reservations will be accepted not later than the 1st of the month preceding publication. Box number replies should be addressed as noted above with the box number placed in lower left hand corner of envelope.

ARCHITECTURAL DESIGNER—Architectural design and project planning for industrial plants and buildings. Bachelors degree in architecture, five years experience, and ten years maximum experience. Abilities to make perspectives and renderings desirable. Architectural background, as well as experience in industrial design, become registered is required. Contact manager, Employment and College relations, Armstrong Cork Co., Lancaster, Pa. 17604.

ARCHITECTURAL DESIGNERS—Young graduate, minimum one year experience to work in expanding progressive office in U.S. Virgin Islands. Diversified practice includes resort hotels, condominiums, commercial and residential work. Advancement opportunities. Send resume, required salary and examples of drafting and presentation drawings to Box #518, PROGRESSIVE ARCHITECTURE.

ARCHITECTURAL DRAFTSMEN—Established, design conscious architectural firm in Virginia’s most dynamic community offers opportunities for recent graduates in the field of national significance outstanding opportunity for career positions. Excellent salary benefits with salary and position in keeping with experience and ability. Send confidential resume to: Williams and Tazewell & Associates, 710 West 21st Street, Norfolk, Virginia 23517.

ARCHITECTURAL DRAFTSMEN—Excellent opportunities in a growing office for draftsmen with two years minimum experience. Degree preferred. Permanent positions with advancement opportunities. Good benefits package, good hunting and fishing. Send experience resume, salary requirements and work samples to: Parker, Skewes & Gobola, 165 Drexel 458, Chicago, Illinois 60611.

ARCHITECTURAL DRAFTSMEN—Permanent position open for right man in small rapidly growing office in Vermont’s Sun and Ski country. Commercial, institutional, residential and religious work. Clean air, good schools and a growing town. Send resume to Wehler & Tenlica, Architects, 39 Main Street, Springfield, Vermont 05156.

ARCHITECTURAL ENGINEER—To $20,000. Professional growth opportunity with a growing, estab­ lished New York’s largest conventional home builder. Established 20 years. Take charge of engineering department. Requires good engineering and project coordination abilities. Must have solid experience in single and multi-family home design and construction. Work involves new home development. This is a key management position with one of the nation’s top fifty progressive home building organizations. Annual, executive bonus based on your contributions to the company profit picture. Forward resume including salary level to Box #520, PROGRESSIVE ARCHITECTURE.

ARCHITECTURAL JOB CAPTAINS—And draftsmen. Established southern Connecticut firm has permanent positions available in the production of working drawings. Unlimited growth potential. Send resume giving experience, ability and willingness to learn and grow more important. Responsibilities include standards development, budget control, project coordination.

ARCHITECTURAL SERVICE—Representative. National manufacturer requires man as liaison with contractor in Metropolitan New York area. Prefer man with some experience in this field, although not obligatory. Submit resume of experience to Box #521, PROGRESSIVE ARCHITECTURE.

ASSOCIATE BUILDING EDITOR—For large consumer magazine, young man, married, with architectural degree, design talent.
SCHOKBETON

Another outstanding example of Schokbeton's design plasticity.


For the best in precast concrete, specify Schokbeton

EASTERN SCHOKBETON CORP.
441 Lexington Ave., New York, N.Y. 10017

EASTERN SCHOKORITE CORP.
A Division of Granite Research Industries Inc.
68 Mountain St. West, Worcester, Mass. 01606
P.O. Box 56, Brandywine, Md. 20613

PRECAST/SCHOKBETON, INC.
P.O. Box 2359, Columbus, Ohio 43216

INLAND SCHOKBETON
A Division of Nebraska Prestressed Concrete Co.
P.O. Box 2008, Lincoln, Nebraska 68502

ROCKWIN SCHOKBETON
Division of Rockwin Prestressed Concrete Corp.
Subsidiary of United Concrete Pipe Corp.
P.O. Box 2516, Santa Fe Springs, Calif. 90670

TEXAS SCHOKBETON, INC.
Loop Road-P.O. Box 1092
Crockett, Texas

BUESCHER SCHOKBETON COMPANY
381 West 60th Place, Denver, Colorado 80216
5200 South Main St., Salt Lake City, Utah 84110

BASALT SCHOKBETON
A Division of Basalt Rock Company, Inc.
P.O. Box 2546, Napa, California 94559

GRANITE RESEARCH INDUSTRIES INC.
24 Chestnut St., Somerville, Mass. 02143

CANADA
SCHOKBETON QUEBEC INC.
P.O. Box 240, St. Eustache, P.Q., Canada

CONTECH SCHOKBETON
Division of Concrete Technology (B.C.) Ltd.
790 Nelson Road—P.O. Box 68
Richmond, B.C., Canada

SCHOKBETON PRODUCTS CORPORATION, 35 MASON STREET, GREENWICH, CONN. 06830
206 engineering staff requires individual qualities. Engineer seeking broadening responsibilities in Chicago. Salary, potential and benefits are available for major expansion programs and management of a truly outstanding firm. Send confidential resume to: W.A. Robie, Professional Employment, 531 Washington Street, Water- town, New York 13601.

MARKETING POSITION—For architectural grad or business/sales oriented individual seeking challenge of new position of Product Manager. Experience in marketing of metal wall panels essential. Ability to communicate with professionals in the field is a prerequisite. Send resume and salary requirements to Box #523, PROGRESSIVE ARCHITECTURE.

SPECIFICATION WRITER—Well established and growing firm with excellent insurance, medical and retirement programs requires the addition of a specification writer to its staff. Our major areas of professional practice are: architecture, chemistry, engineering, and geophysics. The writer must be thoroughly experienced in writing and preparing contract documents for architectural and civil engineering projects. It is preferred that the major portion of this experience be in the preparation of civil engineering specifications. Interest in and experience with purchasing practices is also a consideration. Address reply to: Ruble and Kaple, Inc., Professional Consultants, 217 South Lake Avenue, Duluth, Minnesota 55802.

STRUCTURAL DESIGNER—Structural design and project planning for new construction, additions & alterations of industrial buildings, equipment foundations, supports for mechanical services, etc.—in architectural section of engineering department. Bachelors degree in Civil Engineering with major in structures preferable. Five years minimum and ten years maximum experience in design and preparation of working drawings and documents for structures. Knowledge of soils for selection and design of appropriate foundations is desirable. Engineering registration, or willingness to become registered, is required. Contact Manager, Employment and College Relations, Armstrong Cork Co., Lancaster, Pennsylvania 17604.

YOUNG ARCHITECT—Interested in locating family in a progressive, clean, healthy section of Southern New England. Job requires man who is capable of total architecture—site planning thru supervision. Submit resume and salary to Box #524, PROGRESSIVE ARCHITECTURE.

SITUATIONS WANTED


ARCHITECT—Registered B. Arch., 28 years
Continued on page 208

Continued from page 204

Journalistic training or experience a plus. Should be able to organize notes, plan sketches, develop editorial ideas and critique new methods of presentation. Duties include locating outstanding new houses and remodeling projects in the area, photography on location and studio projects. Prefer man with enough technical understanding of home building methods and design to assign and edit such material with outside contributors. Position includes travel and contact with outstanding professional architects across the country. Box #522, PROGRESSIVE ARCHITECTURE.

CHIEF PARK PLANNING—Responsible for administration of acquisition and development of all county park and recreational facilities. Requires degree in park management, landscape architecture, planning or related field and two years responsible experience in park administration or park development. Salary $904 to $1,170 per month. Los Angeles County Department of Personnel, 222 North Grand Avenue, Los Angeles, California 90012.

CORPORATE ARCHITECT—Is a laboratory any place for a corporate architect. Abbott Laboratories isn't just a place, it's an environment filled with challenges for the degreed architect, or experienced architectural engineer seeking broadening responsibilities. Newly created position on central engineering staff requires individual qualifications to direct efforts of consulting architects and engineers for major expansion programs and management of a truly outstanding firm. Send confidential resume to: W.A. Robie, Professional Employment, Abbott Laboratories, North Chicago, Illinois 60064. An equal opportunity employer.

CONSTRUCTION—Engineer or architect with building construction experience who is willing to undertake field and office training for future position as the purchasing agent for a major building construction firm in New York State. Duties will encompass the negotiating and award of subcontracts. All responses treated confidentially. Write: Chief Estimator, Rouse Construction Corporation, 531 Washington Street, Watertown, New York 13601.

PRESS IV E ARCHITECTURE.

GR ESS IV E ARCHITECTURE.

DESIGN through construction. Suburban location filled with challenges for the architect or experienced architect seeking new directions in the field of architecture.

Newly created position on central engineering staff requires individual qualifications. Interest in and experience with purchasing practices is also a consideration. Address reply to: Ruble and Kaple, Inc., Professional Consultants, 217 South Lake Avenue, Duluth, Minnesota 55802.

STRUCTURAL DESIGNER—Structural design and project planning for new construction, additions & alterations of industrial buildings, equipment foundations, supports for mechanical services, etc.—in architectural section of engineering department. Bachelors degree in Civil Engineering with major in structures preferable. Five years minimum and ten years maximum experience in design and preparation of working drawings and documents for structures. Knowledge of soils for selection and design of appropriate foundations is desirable. Engineering registration, or willingness to become registered, is required. Contact Manager, Employment and College Relations, Armstrong Cork Co., Lancaster, Pennsylvania 17604.

YOUNG ARCHITECT—Interested in locating family in a progressive, clean, healthy section of Southern New England. Job requires man who is capable of total architecture—site planning thru supervision. Submit resume and salary to Box #524, PROGRESSIVE ARCHITECTURE.

SITUATIONS WANTED


ARCHITECT—Registered B. Arch., 28 years
Continued on page 208

Cramped for storage space? Running out of work area? LUNDIA FULLSPACE is the answer to both problems.

FULLSPACE is a practical, versatile and economical system of movable storage shelving that saves 40% or more of the floor space required for an equal amount of conventional fixed shelving.

Space gained may be converted to additional storage areas or put to productive use thus shelving the immediate need to move, expand or build. Quickly installed and easily dismantled for relocation, when required. FULLSPACE is available in various depths, widths and heights to meet most requirements. Perfect for archives, offices, storerooms, libraries, central record rooms or anywhere shelf storage is a requirement and a space problem.

FREE PLANNING AND LAYOUT SERVICE

LUNDIA, MYERS INDUSTRIES, INC.
Department P
P. O. Box 309 • Decatur, Illinois 62525

BUSINESS
ADDRESS
CITY
STATE
ZIP

On Readers' Service Card, Circle No. 384

On Readers' Service Card, Circle No. 333

On Readers' Service Card, Circle No. 384
Terne, Mansard Fascia & Contemporary Architecture

Probably no comparable architectural element has been so widely utilized in significant contemporary design as the traditional mansard concept. This is, of course, a striking example of the manner in which "we make out of the very old the very new" (to borrow a descriptive phrase which the late Frank Lloyd Wright once applied to Terne itself). And wherever mansard fascia is employed, the unique functional characteristics of Follansbee Terne, along with its notable affinity for both color and form, are available at relatively moderate cost.

FREEWAY OFFICE PARK, Atlanta, Georgia
Architect: HEERY & HEERY, Architects & Engineers
Roofing Contractor: THERREL ROOFING COMPANY

FOLLANSBEE STEEL CORPORATION
Follansbee, West Virginia
Continued from page 206

of field construction experience as superintendent in all types and phases of construction would like to act as representative of Architect to render supervision and inspection in the Washington-Baltimore-Richmond area. Free to travel. Reply to Box #527, PROGRESSIVE ARCHITECTURE.

ARCHITECT—Single, 43, registered in California, Nevada, NCARB, fallout shelter analyst, experienced in FHA, urban renewal programs, experienced traveler, speaks Polish, German, Russian, conversant with metric system. European building codes and standards, will join firm with important foreign assignments, assume responsibility, available immediately. Direct proposals to Box #528, PROGRESSIVE ARCHITECTURE.

ARCHITECT—12 years with internationally known firms, experience including capacity as head designer and project architect. Desire association with progressive firm, preferable, Eastern Seaboard area. Resume on request. Box #529, PROGRESSIVE ARCHITECTURE.

ARCHITECT/DESIGNER—B. Arch., M.S. Arch., Registered. Four years diversified, creative design experience in religious, commercial, educational, residential — as Project Designer with firms in New York City and Seattle. Seeking design position possibly leading to partnership with creative, progressive, design oriented firm preferable in Pacific Northwest. Box #530, PROGRESSIVE ARCHITECTURE.

ARCHITECT/ENGINEER—NCARB, Licensed. Diversified experience in planning, design, production of construction documents, supervision, cost estimating and administering architectural projects including 17 years private practice. Seeking responsible permanent position with any organization concerned with building projects. Box #531, PROGRESSIVE ARCHITECTURE.

ARCHITECTURAL GRADUATE—Midwestern University, 30, Married, Registration pending personal interview, 3 years experience. Two years experience in well established Southeastern firm covering all phases from project conception to completion. Seeking responsible position with Colorado, North Central, or New England firm. Resume on request Box #532, PROGRESSIVE ARCHITECTURE.

EXECUTIVE ARCHITECT—Structural Engineer, N.C.A.R.B., and P.E., degree and 16 years varied experience in all phases of architect-engineer practice, seeking partnership or associateship with medium size progressive firm doing good contemporary work. Prefer West. Detailed resume, references, and work samples upon request to Box #533 PROGRESSIVE ARCHITECTURE.

GREEK ARCHITECT—33 years old, owner of "Diplom ingenieur" of the Institute of Technology Stuttgart, W. Germany, of excellent qualifications and great desire for work, experienced for 4 years, in Germany, mainly with architectural compositions, with successes in architectural competitions of many subjects, of particular capability, asks for a commensurate permanent position in America, by invitation. Write to: George Anastopoulos, Athens-Aristoteles Street 22 Greece.

INTERIOR ARCHITECT—12 years extensive professional exp. in management, creative design, drafting, specifications, construction and installation; whose scope of work includes corporate offices, hotels, banks, hospitals, schools, showrooms, boutiques, residential work desires association with aggressive organization. Write P.O. Box 591 GCS, New York 10017.

ITALIAN ARCHITECT—Licensed, 31, 4 years in architectural design (universities, schools, residential, commercial buildings), 2 years in urban planning and design, seeks position with American firm working in Italy. Languages: French, English. Box #535, PROGRESSIVE ARCHITECTURE.

PROJECT IN CALIFORNIA?—Will represent you as construction representative or as Consulting Architect. Dependable, conscientious, diplomatic, and thoroughly experienced registered architect. Experienced engineer. Can help with codes, specs, contract conditions. Good with color and planning too. Box #536, PROGRESSIVE ARCHITECTURE.

MISCELLANEOUS

ARCHITECTURAL & DESIGN AGENCY—Architects, design or production experience $60 to $250, Muriel Feder maintains close contact with the entire Architectural and Design field. The "Professional Consultant" for confidential, nationwide and international coverage. Specializing in personal ranging through all phases of the architectural office for the past 15 years. 667 Madison Ave., at 61st St., New York City, TE 8-3722.


SUN CONTROL
IT'S NEW

CONDITION: Lake Michigan exposure on Lake Point Tower, a statuesque, 70 story, triform luxury apartment building. Structure must provide for sun, rain, wind, heat and cold atmospheric conditions.

REQUIREMENTS:
- Reduce glare
- Reduce heat from the sun
- Reduce outside noises
- Provide visibility and light
- Reduce air conditioning costs
- Reduce heating costs
- Application must blend aesthetically with the building

SOLUTION: Polarpane's new SS 10 INSULATING GLASS UNITS (11,400—44" x 80") with 3/16" Glaverbel bronze sheet glass outside and 3/16" Glaverbel clear sheet glass inside with a hermetically sealed 5/6" airspace.

COST FACTOR: The low cost of Polarpane's SS 10 Unit will be recovered in a few years as a result of the high insulating values and low solar energy transmission.

CONSULTATION: For the latest in sun, glare and sound control glass products, call on Polarpane.

Lake Point Tower Ltd., 505 North Lake Shore Drive, Chicago
Developers: Hartnett-Shaw & Assoc. & Fluor Properties Inc.
Architect: Schipporeit-Heinrich, Inc.
General Contractor: Crane Construction Company, Inc.
Curtain Wall: Cupples Products Corp.
Glass & Glazing: National Hamilton Glass Company

Manufactured by POLARPANE CORPORATION, 825 Hylton Road, Pennsauken, New Jersey • Phone 609-662-0400
### DIRECTORY OF PRODUCT ADVERTISERS

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almo Desk Company</td>
<td>64</td>
</tr>
<tr>
<td>Bennett Advertising, Inc.</td>
<td></td>
</tr>
<tr>
<td>Aluminum Co. of America</td>
<td>70, 71, 193</td>
</tr>
<tr>
<td>Fuller, Smith &amp; Ross, Inc.</td>
<td></td>
</tr>
<tr>
<td>American Gas Association</td>
<td>10, 11</td>
</tr>
<tr>
<td>Ketchem, MacLeod &amp; Grove, Inc.</td>
<td></td>
</tr>
<tr>
<td>American Saint Gobain Corp.</td>
<td>166, 167</td>
</tr>
<tr>
<td>Turner &amp; Feneay, Inc.</td>
<td></td>
</tr>
<tr>
<td>American Telephone &amp; Telegraph Co.</td>
<td>183</td>
</tr>
<tr>
<td>N. W. Ager &amp; Son, Inc.</td>
<td></td>
</tr>
<tr>
<td>Angeles Metal Systems</td>
<td>194</td>
</tr>
<tr>
<td>Arrendia Stewart Promotions Assoc.</td>
<td></td>
</tr>
<tr>
<td>Architectural Models, Inc.</td>
<td>46</td>
</tr>
<tr>
<td>Harold Kling Advertising</td>
<td></td>
</tr>
<tr>
<td>Armstrong Cork Co., Collings Systems</td>
<td>39, 61, 62, 63</td>
</tr>
<tr>
<td>Batten, Barton, Durstine &amp; Osborn, Inc.</td>
<td></td>
</tr>
<tr>
<td>Art Metal, Inc.</td>
<td>168</td>
</tr>
<tr>
<td>The Slane Company</td>
<td></td>
</tr>
<tr>
<td>Arokes Metal Products Div.</td>
<td>2nd Cover Glen Advertising, Inc.</td>
</tr>
<tr>
<td>Bally, Case &amp; Cooler, Inc.</td>
<td>69</td>
</tr>
<tr>
<td>Bosseman, Heller &amp; Spaurig, Inc.</td>
<td></td>
</tr>
<tr>
<td>Bethlehem Steel Corporation</td>
<td>175 thru 178</td>
</tr>
<tr>
<td>Van Brunt &amp; Co.</td>
<td></td>
</tr>
<tr>
<td>The Bobrick Corporation</td>
<td>180</td>
</tr>
<tr>
<td>Len Woolf Company</td>
<td></td>
</tr>
<tr>
<td>Brunswick Corp., Burke &amp; Acton Div.</td>
<td>17</td>
</tr>
<tr>
<td>Wm. John Upjohn Associates, Inc.</td>
<td></td>
</tr>
<tr>
<td>Byzantine Mosaics</td>
<td>46</td>
</tr>
<tr>
<td>Carpenter, E. &amp; Co., Inc.</td>
<td>194</td>
</tr>
<tr>
<td>Ceeo Corporation</td>
<td>41</td>
</tr>
<tr>
<td>Foskohill Advertising Agency, Inc.</td>
<td></td>
</tr>
<tr>
<td>Celotex Corporation</td>
<td>14, 15</td>
</tr>
<tr>
<td>Biokapiacs/Green/Fishler, Inc.</td>
<td></td>
</tr>
<tr>
<td>Chicago Faucet Company</td>
<td>53</td>
</tr>
<tr>
<td>Kreickler &amp; Melon, Inc.</td>
<td></td>
</tr>
<tr>
<td>Clark Door Company</td>
<td>56</td>
</tr>
<tr>
<td>J. M. Keatinger &amp; Associates</td>
<td></td>
</tr>
<tr>
<td>Clocky Ventilator Company, Inc.</td>
<td>52</td>
</tr>
<tr>
<td>Pearson &amp; Buffington Advertising, Inc.</td>
<td></td>
</tr>
<tr>
<td>Concrete Reinfocing Steel Institute</td>
<td>4, 5</td>
</tr>
<tr>
<td>Foskohill Advertising, Inc.</td>
<td></td>
</tr>
<tr>
<td>Conwed Corporation</td>
<td>74, 75</td>
</tr>
<tr>
<td>MacManus, John &amp; Adams, Inc.</td>
<td></td>
</tr>
<tr>
<td>Corbin, P &amp; F Div., Emhart Corp.</td>
<td>79</td>
</tr>
<tr>
<td>Wilson, Height &amp; Welch, Inc.</td>
<td></td>
</tr>
<tr>
<td>Directional Contract Furniture Corp.</td>
<td>203</td>
</tr>
<tr>
<td>Loothan Advertising</td>
<td></td>
</tr>
<tr>
<td>Dow Bodische Company</td>
<td>169</td>
</tr>
<tr>
<td>Norman, Craig &amp; Krummel, Inc.</td>
<td></td>
</tr>
<tr>
<td>Eastern Products Corporation</td>
<td>1</td>
</tr>
<tr>
<td>S.A. Leegna Co., Inc.</td>
<td></td>
</tr>
<tr>
<td>Follansbee Steel Corporation</td>
<td>207</td>
</tr>
<tr>
<td>George Hill Co., Inc.</td>
<td></td>
</tr>
<tr>
<td>Forms &amp; Surfaces</td>
<td>208</td>
</tr>
<tr>
<td>Fritz Hansen</td>
<td>188</td>
</tr>
<tr>
<td>Abner E. Kahn Associates</td>
<td></td>
</tr>
<tr>
<td>Gaylord Industries</td>
<td>50</td>
</tr>
<tr>
<td>Kendon Advertising</td>
<td></td>
</tr>
<tr>
<td>General Electric Co., Silicone Prod. Dept.</td>
<td>197</td>
</tr>
<tr>
<td>Rose Boy, Inc.</td>
<td></td>
</tr>
<tr>
<td>Gladwin Industries</td>
<td>16</td>
</tr>
<tr>
<td>Allen Advertising Agency, Inc.</td>
<td></td>
</tr>
<tr>
<td>Glaverbel</td>
<td>72</td>
</tr>
<tr>
<td>Edwin E. Geiger Advertising</td>
<td></td>
</tr>
<tr>
<td>Glenn-Johnson Corporation</td>
<td>179</td>
</tr>
<tr>
<td>E. R. Gelpi Advertising</td>
<td></td>
</tr>
<tr>
<td>Greco, Inc., Bidg. Prod. Div.</td>
<td>159</td>
</tr>
<tr>
<td>Boghurt, Lovett &amp; Dean, Inc.</td>
<td></td>
</tr>
<tr>
<td>Hadez Products, Inc., Subs. Esquire, Inc.</td>
<td>80</td>
</tr>
<tr>
<td>Ritchie Advertising Agency</td>
<td></td>
</tr>
<tr>
<td>Hamilton Cosco, Inc.</td>
<td>173</td>
</tr>
<tr>
<td>Noble-Dryer &amp; Associates, Inc.</td>
<td></td>
</tr>
<tr>
<td>Harter Corporation</td>
<td>182</td>
</tr>
<tr>
<td>J. G. Sullivan Advertising, Inc.</td>
<td></td>
</tr>
<tr>
<td>Hartman-Sanders Company</td>
<td>211</td>
</tr>
<tr>
<td>Van Handel Company</td>
<td></td>
</tr>
<tr>
<td>Haws Drinking Faucet Co.</td>
<td>12</td>
</tr>
<tr>
<td>Pacific Advertising Staff</td>
<td></td>
</tr>
<tr>
<td>Holcomb &amp; Hoke Manufacturing</td>
<td>188</td>
</tr>
<tr>
<td>Clark &amp; Merer Advertising Agency</td>
<td></td>
</tr>
<tr>
<td>Holophane Company, Inc.</td>
<td>73</td>
</tr>
<tr>
<td>Turner &amp; Feneay, Inc.</td>
<td></td>
</tr>
<tr>
<td>Interchemical Corporation</td>
<td>35</td>
</tr>
<tr>
<td>Arndt, Proton, Chapin, Lamb &amp; Reen, Inc.</td>
<td></td>
</tr>
<tr>
<td>Kelley Company</td>
<td>54</td>
</tr>
<tr>
<td>Ludwig Advertising</td>
<td></td>
</tr>
<tr>
<td>Kentile Floors, Inc.</td>
<td>4th Cover</td>
</tr>
<tr>
<td>Wheelman, Bloch, Palin &amp; Cook, Inc.</td>
<td></td>
</tr>
<tr>
<td>Kimberly-Clark Corp., Commercial Dept.</td>
<td>190</td>
</tr>
<tr>
<td>Van Handel Company</td>
<td></td>
</tr>
<tr>
<td>Kinnear Corp. &amp; Subsidiaries</td>
<td>77</td>
</tr>
<tr>
<td>Wheeler, Blitl &amp; Gainey, Inc.</td>
<td></td>
</tr>
<tr>
<td>LCN Closers</td>
<td>186, 187</td>
</tr>
<tr>
<td>Atlas T. Franks, Inc.</td>
<td></td>
</tr>
<tr>
<td>Levolor-Lorentzen, Inc.</td>
<td>170, 171</td>
</tr>
<tr>
<td>Friend-Reiss Advertising, Inc.</td>
<td></td>
</tr>
<tr>
<td>Libbey-Ovens-Ford Glass Co.</td>
<td>81 thru 84</td>
</tr>
<tr>
<td>Fuller &amp; Browdy &amp; Bovardis, Inc.</td>
<td></td>
</tr>
<tr>
<td>Lightolier, Inc.</td>
<td>163</td>
</tr>
<tr>
<td>Daniel &amp; Charles, Inc.</td>
<td></td>
</tr>
<tr>
<td>Lundia, Myers Industries, Inc.</td>
<td>206</td>
</tr>
<tr>
<td>W.R. Kahn Advertising</td>
<td></td>
</tr>
<tr>
<td>Macton Machinery Company, Inc.</td>
<td>20</td>
</tr>
<tr>
<td>Richard Multin Company</td>
<td></td>
</tr>
<tr>
<td>Mahon, R.C. Company</td>
<td>8, 9</td>
</tr>
<tr>
<td>Gray &amp; Kilgore, Inc.</td>
<td></td>
</tr>
<tr>
<td>Marble/Imperial Furniture Co.</td>
<td>27</td>
</tr>
<tr>
<td>Raymond M. Tinco Advertising</td>
<td></td>
</tr>
<tr>
<td>McPhlen Lighting Company, Inc.</td>
<td>184</td>
</tr>
<tr>
<td>Dunwoodie Associates, Inc.</td>
<td></td>
</tr>
<tr>
<td>Mississippi Glass Company</td>
<td>195, 196</td>
</tr>
<tr>
<td>Bate-Hodge&amp;Newhouse, Inc.</td>
<td></td>
</tr>
<tr>
<td>Mulcaft Mfg. Co.</td>
<td>181</td>
</tr>
<tr>
<td>Harold Pearson Associates Advertising</td>
<td></td>
</tr>
<tr>
<td>Monsanto Company, Textilesdivision, 3rd Cover</td>
<td>19</td>
</tr>
<tr>
<td>Dupko, Dante &amp; Bernbichl, Inc.</td>
<td></td>
</tr>
<tr>
<td>Mosaic Tile Company</td>
<td>19</td>
</tr>
<tr>
<td>Carr Lipsett Advertising, Inc.</td>
<td></td>
</tr>
<tr>
<td>Musson, R.C. Rubber Co.</td>
<td>18</td>
</tr>
<tr>
<td>Fred Buch Advertising Company</td>
<td></td>
</tr>
<tr>
<td>Nater Co.</td>
<td>68</td>
</tr>
<tr>
<td>Buxton, Cook Harmon, Smith, Inc.</td>
<td></td>
</tr>
<tr>
<td>Polarpane Corporation</td>
<td>209</td>
</tr>
<tr>
<td>H. I. Monaghan Associates</td>
<td></td>
</tr>
<tr>
<td>Portland Cement Association, J. Walter Thompson Company</td>
<td>65</td>
</tr>
<tr>
<td>Presscon Corporation</td>
<td>42</td>
</tr>
<tr>
<td>Brown &amp; Roby</td>
<td></td>
</tr>
<tr>
<td>Progressive Architecture</td>
<td>55</td>
</tr>
<tr>
<td>Plastic Institute of Greater New York</td>
<td>18</td>
</tr>
<tr>
<td>Deihamby, Kurtd &amp; Gellar, Inc.</td>
<td></td>
</tr>
<tr>
<td>Polarpane Corporation</td>
<td>209</td>
</tr>
<tr>
<td>H. I. Monaghan Associates</td>
<td></td>
</tr>
<tr>
<td>Portland Cement Association, J. Walter Thompson Company</td>
<td>65</td>
</tr>
<tr>
<td>Presscon Corporation</td>
<td>42</td>
</tr>
<tr>
<td>Brown &amp; Roby</td>
<td></td>
</tr>
<tr>
<td>Progressive Architecture</td>
<td>55</td>
</tr>
<tr>
<td>Reinhold Publishing Corp.</td>
<td>20w-a, 20w-d, 182, 190, 192, 198, 202</td>
</tr>
<tr>
<td>Rixson Closers, Div. Rixson, Inc.</td>
<td>200</td>
</tr>
<tr>
<td>Motivation Dynamics</td>
<td></td>
</tr>
<tr>
<td>Robertson, H.H. Company</td>
<td>13</td>
</tr>
<tr>
<td>Bond &amp; Sturr, Inc.</td>
<td></td>
</tr>
<tr>
<td>Sargent &amp; Company</td>
<td>165</td>
</tr>
<tr>
<td>Hepler &amp; Gibney, Inc.</td>
<td></td>
</tr>
<tr>
<td>Schokboten Products Corp.</td>
<td>205</td>
</tr>
<tr>
<td>Chuck Weber, Inc.</td>
<td></td>
</tr>
<tr>
<td>Shew-Walker Company</td>
<td>185</td>
</tr>
<tr>
<td>J. Walter Thompson Company</td>
<td></td>
</tr>
<tr>
<td>Sidelskraft Div., St. Regis Paper Co.</td>
<td>157</td>
</tr>
<tr>
<td>Reynolds &amp; Foster, Inc.</td>
<td></td>
</tr>
<tr>
<td>Sloan Valve Company</td>
<td>161</td>
</tr>
<tr>
<td>Reinke, Meye &amp; Finn, Inc.</td>
<td></td>
</tr>
<tr>
<td>Southern California Edison Co.</td>
<td>20w-b, 20w-c</td>
</tr>
<tr>
<td>Gray Advertising, Inc.</td>
<td></td>
</tr>
<tr>
<td>Spenceret Associates</td>
<td>24, 25</td>
</tr>
<tr>
<td>David W. Evans &amp; Associates</td>
<td></td>
</tr>
<tr>
<td>Stanley Works - Door Operation Equip.</td>
<td>37</td>
</tr>
<tr>
<td>Churwp &amp; Calma, Inc.</td>
<td></td>
</tr>
</tbody>
</table>

**January 1968 P/A**
Stanpat Products, Inc. ... 53
Morton Advertising, Inc.

Steel Joist Institute ... 33
Bata-Hodgson-Newswanner, Inc.

Stow/Davis Company ... 7
Sweet & Co. Advertising, Inc.

Suburban Manufacturing Co. ... 200
Elida Advertising Company

Temco, Inc. ... 172
Doyne, Inc.

Thermproof Glass Company ... 18
Film Associates of Michigan, Inc.

Thiokol Chemical Corporation ... 189
MacManus, John & Adams, Inc.

Trend Mills ... 201
Sweet & Company Advertising, Inc.

Troy Sunshade Company ... 191
Parker Advertising Company

U.S. Steel Corporation ... 212
Hatten, Barton, Durstine & Osborn, Inc.

Uvalde Rock Asphalt Co. ... 2nd Cover
Glenn Advertising, Inc.

Vogel-Peterson Company ... 76
Ross Llewelyn, Inc.

W & F Manufacturing, Inc. ... 208
Rico-Armstrong Associates, Inc.

Webster Electric Company ... 51
Franklin/Mantern Company

Weis, Henry Manufacturing Company ... 31
Ash Advertising, Inc.

Weyerhaeuser Company ... 57 thru 60
Cole & Weber, Inc.

Wide-Lite Corp., Div. Esquire, Inc. ... 199
Ritchie Advertising Agency

Wiedemann Industries, Inc. ... 182
Warren & Littenberger Advertising, Inc.

Wilson, Ralph Plastics Co. ... 31

Wolcott H. Johnson

Wiedemann Industries, Inc.

Zero Weather Stripping Co., Inc. ... 174

Batten, Barton, Durstine & Osborn, Inc.

Hallenbeck, John & Adams, Inc.

Ritchie Advertising Agency

Wier
dom
ci
c

Huntington, John & Adams, Inc.

Ritchie Advertising Agency

Sweet & Company Advertising, Inc.

Troy Sunshade Company

Parker Advertising Company

U.S. Steel Corporation

Reinhold Publishing Corporation

A subsidiary of Chapman-Reinhold, Inc.

Detroit Office

Telephone: Enterprise 6704

Michael J. Hanley

District Manager

Cleveland Office

John F. Kelly

District Manager

San Francisco Office

Jobson, Jordan, Harrison & Schulz, Inc.

57 Post St., San Francisco, Calif. 94104

392-6794 Area Code 415

Cyril B. Jobson, Charles S. Harrison

Los Angeles Office

Jobson, Jordan, Harrison & Schulz, Inc.

1901 W. 8th St., Los Angeles, Calif. 90057

483-8539 Area Code 213

Peter Schulz, Kenneth E. Jordan

Atlanta Office

Robert L. Watkins Associates

505-805 Peachtree Bldg., Atlanta, Ga. 30308

TRinity 4-6427 Area Code 404

Harmon L. Proctor

On Readers' Service Card, Circle No. 342

Valuable Bookmark

Tear along dotted line, place in Sweet's File No. 32S (Hartmann-Sanders Wood Columns) and whenever you want full and complete information on classical columns and their complementary components, just call 312-439-5600 collect.

If you don't have Sweet's, call collect today and we'll send you our Wood Columns catalogue.

HARTMANN-SANDERS
COMPANY

1717 Arthur Avenue
Centex Industrial Park
Elk Grove Village, Illinois 60007
design in steel saves $80,000 on two-deck parking garage

Two designs were prepared and bid simultaneously on this parking garage in Decatur, Illinois. The first used a reinforced concrete frame for the upper deck, the second used a steel frame.

The structural steel design won at a bid price of $1,160,000—$80,000 less than reinforced concrete. This translates as a saving of $111 per car for the 725-car garage—$1,710 per car for concrete and $1,600 per car for steel, including demolition and site preparation costs.

The garage is a rectangular shape 400’ x 321’. The second level consists of 32’ x 28’ bays using composite beams and girders of A36 steel. Columns are A36 steel. Field connections were made with ASTM A325 high strength steel bolts.

For more information on our construction products, contact the USS Construction Marketing Representative through our nearest sales office or write United States Steel, P.O. Box 86 (USS 5098), Pittsburgh, Pa. 15230. USS is a registered trademark.

Owner: City of Decatur, Illinois
Architects: Engineering Service Corporation
Structural Engineers: The Engineers Collaborative
Steel Fabricator: Mississippi Valley Structural Steel
We're not going to be hush-hush about it any longer.

There's more than a small difference between Acrilan® acrylic fiber and all other carpet fibers. Enough difference to be called a gap.

True, any carpet fiber you can name has its good points. There's the luxury of wool. The toughness of nylon. The spotlessness of olefin. The static resilience of polyester.

But it's also true that there's only one fiber that gives you all of those good points, plus a few more of its own, all rolled up in one carpet. And that's Acrilan.

Considering the facts, should you ever specify any other kind of carpeting?

Not if you want to cover your clients' every demand.

After Acrilan®, nothing else comes close.
"ATTENDITE TRAVERTINAM OMNES EXISTIMATI!

Tesserae travertinae fabrefactae Kentilio Flooro marmoriares travertiniores in foro quibusquam visae sunt. Non mirandum est has in favore omnium perseverare quibus solum venustatum diuturnumque jucundum sit!"*

*(The Romans would have loved it! Kentile Travertine looks more like travertine marble than anything else made by anybody else. It was a hit right off. And today, all roads still lead to Kentile Travertine, Vinyl Asbestos or Solid Vinyl. Numerous colors, thicknesses, sizes. Voca legatum a Kentilio. Which means, of course, call your Kentile® Representative.)*

KENTILIIUM FLOORUM