

At left is a console-type Johnson Pneumatic Control Center installed in the National Bank of Detroit. Albert Kahn Associated Architects & Engineers, Inc. Panel at right is installed in the First Presbyterian Church, Elkhart, Indiana. Wiley & Miller, architects; Bevington, Taggart & Fowler, mechanical engineers,

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June 1961



ture and Condensation in Building Structures" is a technical manual covering moisture movement, condensation problems and modern methods for controlling moisture and vapor movements. Provides factual data illustrating how the installation of a true vapor seal isolates the structure from the site and eliminates the common problems of excessive moisture ... dampness, condensation, paint and insulation failures, efflorescense, etc. This manual was specifically produced to assist architects and engineers in protecting structures from moisture migration ... used in many colleges and universities. Originally published for sale ... now available free of charge through the courtesy of W. R. Meadows, Inc.

#### WRITE FOR YOUR COPY NOW!



#### **Resilient Flooring**

The 1961 catalog of floor products, 12 pages, shows the patterns and colors available in vinyl-asbestos tile, asphalt tile, and "vinylized" tile. Installation photos are also shown. Catalog includes abridged specifications. Azrock Floor Products, Division of Uvalde Rock Asphalt Co., Frost Bank Bldg., San Antonio 6, Texas.

On Free Data Card, Circle 236

#### **Plywood Paneling**

The 1961 catalog section, 20 pages, covers complete line of decorative plywood paneling. Illustrated are factoryfinished and unfinished hardwoods and softwoods, both domestic and imported. All types are pictured in color and described as to properties and dimensions. Dept. 6-60-11, Georgia-Pacific Corp., Equitable Bldg., Portland 4, Ore.

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#### Free Sample Book

Unusual offering is a comprehensive sample and data book on Darlington quality glazed brick and face brick ("the brick of architectural excellence in beauty, uniformity, performance"). Almost 50 replicas of the handsome, colorful products are set into covers of the notebook. Loose-leaf portion contains paper simulations of the products—"Staso" and "KolorspeK" glazed brick, and "Royal" face brick. Typical specs complete the extensive file. Central Commercial Co., 332 S. Michigan Ave., Chicago 4, Ill.

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### PROGRESSIVE ARCHITECTURE

REINHOLD PUBLISHING CORPORATION 430 PARK AVENUE NEW YORK 22, N.Y. Publisher.....D. Bradford Wilkin Editor.....Thomas H. Creighton News Editor .....James T. Burns, Jr.



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For more information, circle No. 385 JUNE 1961 P/A





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cial applications. For full details on uses in residential, farm, commercial and industrial areas, write for Data Sheet M60103.



EDWIN L. WIEGAND COMPANY Thomas Boulevard, Pittsburgh 8, Pa. For more information, circle No. 405 equal." Mastic Division, The Ruberoid Co., 500 Fifth Ave., New York, N. Y. On Free Data Card, Circle 232



#### Ceramic Tile for Schools

Illustrated with more than 30 large color photographs, *Ceramic Tile for Schools* presents 20 pages of design treatments used in schools and colleges throughout the country. Attractive design potentialities, new shapes and sizes, lower installation costs, and lowest maintenance combine to make ceramic tile appropriate for many areas of today's schools. American Olean Tile Co., 1000 Cannon Ave., Lansdale, Pa.

On Free Data Card, Circle 233

#### **Color Comparison Chart**

The 1961 color-comparison charts for asphalt tile and vinyl asbestos tile have been issued. Published annually, these charts have become well recognized for their usefulness, as they give the latest line-up of the various tile patterns available from Armstrong. Azrock, Bonafide, Congoleum-Nairn, B. F. Goodrich, Johns-Manville, Kentile, Matico, and Tile-Tex. Asphalt and Vinyl Asbestos Tile Institute, 101 Park Ave., New York 17, N. Y.

On Free Data Card, Circle 234

#### **Plastic-Surfaced Panels**

Data folder, 4 pages, gives detailed information on "Marlite" line of wall and ceiling panels. Included are data on characteristics, dimensions, uses, properties, adhesives, installation, and specifications. Publication is punched for a three-ring binder. Marsh Wall Products, Inc., Dover, Ohio.

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DRAWING WITH PEN AND INK, REVISED EDITION by ARTHUR GUP-TILL. Here is a complete revision of Guptill's famous work on pen and ink drawing. Step-by-step instructions plus hundreds of detailed drawings guide the reader through the beginning and advanced techniques of pen and brush. Includes almost a hundred examples of ink drawings by famous artists such as Searle, Topolski, Dufy, Legrand, Kley, Raleigh and others. April 1961, 8¼ x 10¼, 160 pages, fully illustrated. \$8.95

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ARCHITECTURAL PRESENTATION IN OPAQUE WATERCOLOR by CHRISTIAN E. CHOATE. A logical rather than an imitative approach to the subject fully spells out the fundamentals and advanced techniques of architectural illustrations in color. The book teaches by making clear the various approaches to illustrative processes in place of merely supplying examples to follow. Over 200 black and white illustrations and 16 pages in full color accompany the text. 1961, 160 pages. \$12.50

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turns on a floodlight, takes a moving picture, and rings an alarm bell. No installation necessary; units plug into standard outlet. Photolarm, Inc., 15006 Wick Blvd., Allen Park, Mich. On Free Data Card, Circle 227



#### New Stool Bases Leave Floor Clear

Two new cantilevered stool bases, of cast-iron and tubular-steel, have been introduced for "floor-clear" installation. Both of the new designs are available in a choice of standard heights—20", 22", 24", and 26". Data sheet, 2 pages, gives full dimensions, floor-mounting details, and spacing information. Sales Division, Chicago Hardware Foundry Company, Commonwealth Ave., North Chicago, Ill. On Free Data Card, Circle 228

#### Mobile Classroom Units

Six mobile "Classroom Helpers" are described in new catalog sheet, 2

pages. Designed to meet modern educational requirements, the units are equipped with rubber casters to permit easy handling by teacher or pupil. They are attractive and colorful, in addition to providing valuable, flexible storage space. The units are a doublesided book cart, a book cart with closed back, a utility cart, a clay cart, a toy cart, and a toy shell. Data sheet contains photos, descriptions, and dimensional drawings. Grade-Aid Corp.,

46 Bridge St., Nashua, N. H. On Free Data Card, Circle 229

#### Guide to Remote Control of Garage Doors

New 8-page booklet answers four common questions about door operators: What is a garage-door operator, what are its benefits, what does it cost to own and operate, and what brands can be relied upon? Door Operator and Remote Controls Manufacturers Association, 110 N. Walker Dr., Chicago, TIL.

On Free Data Card, Circle 230

#### SURFACING MATERIALS

#### One-of-a-Kind Design in Vinyl Wallcoverings

A new method for blending individual ideas with "Vicrtex" wallcovering patterns for exclusive effects is explained in new Handprints on Vicrtex. Some of the unlimited design possibilities made practical by this new custom approach to wall decoration are shown by close-up photos of sample combinations. The wide range of effects that can be achieved through the use of harmony or contrast is discussed. Information regarding samples is also listed in the 4-page booklet. L. E. Carpenter & Company, Inc., Empire State Bldg., New York 1, N.Y.

On Free Data Card, Circle 231

#### **Resilient Tile Specs**

New Guide to Architects' Specifications for Resilient Tile, 14 pages, has been published. The guide contains complete specifications for asphalt, vinyl asbestos, solid vinyl, and "Polymerite" tile. Polymerite is a new product that has just been introduced at the same price level as asphalt tile. It conforms to several specifications not met by asphalt, and according to the manufacturer there is no "or



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June 1961

interested in reinforced-plastics molding, the booklet describes each molding technique and lists its specific advantages and applications. Also given are physical and chemical properties of parts molded by each method. Reinforced Plastics Division, The Society of the Plastics Industry, Inc., 250 Park Ave., New York 17, N.Y.

On Free Data Card, Circle 224



#### Varied Uses of Plexiglas

Plexiglas in Architecture, 20 pages, is published to assist architects and builders in the use of Plexiglas acry-

lic-plastic sheet. The booklet discusses Plexiglas in skylights, window glazing, spandrel panels, luminous walls, luminaires and luminous-ceiling panels, illuminated façades, and lettering. Properties and characteristics of the material are described in detail; installation photos and drawings are included. Rohm & Haas Co., 222 West Washington Sq., Philadelphia 5. Pa.

On Free Data Card, Circle 225

#### Quiet Phone Booths

Folder, 4 pages, describes line of "Acousti-Booths," open-construction acoustical telephone booths. Units are available for wall, floor, or free-standing installation. With no doors to open, booths can be entered easily even by persons laden with packages. Ample shelf space is provided, and luggage is safely deposited on floor. Booths are always clean and airy, yet acoustical efficiency permits quiet and private telephoning even in noisiest areas. Suggested locations are passenger waiting rooms, industrial areas, etc. Architectural Products Division,



Burgess-Manning Co., 749 E. Park Ave., Libertyville, Ill. On Free Data Card, Circle 226

#### **Burglar Alarm Devices**

Information on new electronic burglar alarms is contained in two, 2-page data sheets. "Photolarm" and "Photolarm, Jr." have hidden cameras to photograph burglars in action. Units are fully automatic, tamperproof, and portable. When burglar crosses an invisible projected beam, the device







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Continued from page 112



than fixed walls up to seven times its weight and twice its thickness. Advertising Dept., The E. F. Hauserman Co., 6800 Grant Ave., Cleveland 5, Ohio.

On Free Data Card, Circle 222



#### **Ornamental Metalwork**

New catalog, 20 pages, aids in the design and selection of ornamental metalwork. It includes many scale drawings of suggested designs fabricated from stock malleable iron ornamental castings, and suitable for railings, columns, balustrades, gates, fences, verandas, space dividers, and other applications. Architectural drawings of typical applications are given, together with information on materials, production, and cost. Julius Blum & Company, Inc., Carlstadt, N.J.

On Free Data Card, Circle 223

#### Molding Techniques For Reinforced Plastics

The six basic techniques used by the reinforced-plastics industry to mold thousands of products-from pleasure boats to nose cones for missiles-are explained in a 10-page, letter-sized booklet. Intended as a convenient guide for design engineers and others

square units of GEOCOUSTIC on the walls of the auditorium with each block separated. Absorption and reflection of sound were brought under control by the use of the "patch technique"—long recognized as a most effective method for handling sound treatment in a room. The use of the patch technique is made physically and economically practical by the material of which GEOCOUSTIC units are made. Their cellular glass composition delivers high acoustical absorption in a strong, rigid mass of minimum size and thickness.

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Plainview High School Auditorium, Long Island, N.Y. Architect: Knappe and Johnson, New York, N.Y. Acoustical Consultant: Michael J. Kodaras, Long Island City, N.Y. Acoustical Contractor: Jacobson and Company, Long Island, N.Y.







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This remarkable result was obtained by placing 131/2"



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**ectum** 

First floor dormitory room illustrates the acoustical benefits of a Tectum Form Plank ceiling. Doubly functional, it serves first as a form material for the concrete slab of the floor above; as an acoustical ceiling after concrete cures.

#### Continued from page 108 ELECTRICAL EQUIPMENT Hospital Lighting Guide

Recommended lighting levels for 112 specific areas in the modern hospital are given in new 24-page manual. *Hospital Lighting Manual* also contains illustrations of well-designed lighting installations. A breakdown of the various types of lighting equipment available, and suggested lighting layouts, are included. Every hospital area is covered: those which are for patient care, public and traffic, administrative and service. Day-Brite Lighting, Inc., 6260 N. Broadway, St. Louis 15, Mo.

On Free Data Card, Circle 216

#### School/Office Fixtures Have 83 Per Cent Efficiency

New "Decathlon Series 21" fixtures for schools and offices demonstrate over 80 per cent efficiency and provide



more light in the useful zone, according to 4-page catalog. Fixtures are constructed in 4' and 8' lengths, and can be installed on stems or directly on the ceiling surface. Litecraft Manufacturing Corp., 100 Dayton Ave., Passaic, N.J.

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#### FINISHERS/PROTECTORS Maintenance and Repair of All Floors

Comprehensive and fact-filled bulletin, 8 pages, gives directions and specifications for the proper care of all types of floors, new or old. According to the bulletin, a complete floor-maintenance program should be included with the architect's specifications, to insure proper finishing of the job and to provide for continued upkeep. Data is given for concrete, terrazzo, ceramic



tile, marble, wood, asphalt tile, vinyl, cork, and conductive floors. Huntington Laboratories, 6300 State Rd., Philadelphia 35, Pa.

On Free Data Card, Circle 218

#### SANITATION/PLUMBING

#### Fountain Nozzles

New data file on decorative fountain spray nozzles, 26 pages, has been published. The new bulletin describes company's full line of nozzles—hollow-cone, solid-cone, and flat-sheet spray nozzles; jet nozzles; adjustable nozzles; and mushroom-spray nozzles. Complete specifications are given for each type, including sizes, capacities, and spray characteristics. A section of the bulletin illustrates typical applications, with detailed drawings of the spray effect of the various types of nozzles, including dimensions of spray height, diameter, cone, etc. Schutte & Koerting Co., Cornwells Heights, Bucks County, Pa. On Free Data Card, Circle 219

#### **New Sink Designs**

Catalog supplement, 4 pages, has been issued by "nation's oldest and largest manufacturer of stainless steel sinks," to cover 1961 products. Highlighted in the catalog is the "250 Plus" unit, a combination of regular size bowl with an extra-large compartment to accommodate large kitchen utensils, giving a total of 250 cubic inches. Also featured in the supplement are new lavatory units for powder room and bath. Elkay Manufacturing Co., 2700 South 17 Ave., Broadview, Ill.

On Free Data Card, Circle 220

#### SPECIALIZED EQUIPMENT

#### Draperies Control Heat, Muffle Sound

Method of controlling solar heat, muffling sound, and diffusing light with "Fiberglas" draperies is detailed in new 12-page brochure. Technical data is included on thermal efficiency for various window-shading devices, along with light-transmittance values and noise-reduction coefficients. Case histories of some of the country's largest high-rise buildings, using glass-fiber draperies to control environmental effects, are given. Publication of brochure is by prime contractor, who furnishes fabrics, track, and installation. Fenestra Fabrics, Inc., Subsidiary of Glass Fabrics Inc., 620 N. Almont Dr., Los Angeles 46, Calif. On Free Data Card, Circle 221

#### Two New Systems of Movable Walls

Manufacturer of movable interior walls has announced the publication of new literature on its two newest products, "Signature" and "Delineator." The brochures, 32 and 16 pages respectively, contain complete product details and specifications, suggested applications, and installation photos. The Signature system makes use of a 2¼" universal post, permitting the same slim lines in two-, three-, and four-way conditions as in a one-way connection. Another of numerous advantages cited is greater sound privacy than any other movable wall, more *Continued on page 116* 

#### Newest, most highly automated post office in nation

has just been completed in Detroit, Michigan. The cost: \$23,000,000.

Architects & Engineers: Giffels & Rosetti, Inc. General Contractor: Barton-Malow Company, Detroit Masonry Contractor: Smith Fireproofing Company, Detroit



## used in Detroit post office

of the metal in Keywall reinforcement maximizes shrinkage resistance.

You would think that a reinforcement with such obvious advantages would necessarily cost more. Not so.

Mr. C. T. Hessee, president of Smith Fireproofing, the masonry contracting firm, says, "I find that Keywall is the most economical masonry wall reinforcement we have used."

It makes sense to use Keywall. Try it on your next job.

#### KEYSTONE STEEL & WIRE COMPANY Peoria, Illinois

For more information, turn to Reader Service card, circle No. 345





## **Keywall masonry reinforcement**

"Most economical masonry wall reinforcement I have used,"

SAYS MASONRY CONTRACTOR

Sixty percent of Michigan's mail flows through the new Detroit Post Office—a marvel of automation. One example: the "Mail-Flo" system can move trays of mail between sorting points at a rate of 8 million pieces an hour.

Everything is on a grand scale in this building. More than 10 miles of Keywall were used to reinforce the masonry partitions.

Because Keywall is of uniform width and easy to place accurately, it won't protrude past the surface of the wall; permits clean, smooth striking of joints.

And the fact that Keywall doesn't thicken the joint when it's lapped is a point in its favor.

Perhaps even more important is that the distribution

## Both wide open

You could design the file on the right into a  $12\frac{1}{2}$ "-deep wall space facing a narrow aisle and forget about aisle blocking when the compartments are opened.

-27 3/4"-

For this file has no drawers to eat up valuable space. Wide open, with all contents visible and reachable, this file projects only 6" (8" for legal size).

Even if this file were not built into a wall, you could save your client a fat 30% of floor space.

To recommend them, you would specify Y&E Pro-Files.\*

The idea that makes Pro-File work to your advantage is a neat patented Rock-A-Tilt mechanism which in sketch looks like this.



EMPTY FILE CLOSED

The center of gravity remains within the shell, even with all the compartments loaded and open. These files may be stacked to the ceiling with no fear of overbalancing or tipping.

Design them into walls. Utilize them as divider half-walls, back to back, or built in under bookcases or shelving. Or, better, use your own imagination. If you would like specification litera-

- 6" -

ture on Y&E Pro-Files, tear out this ad and mail it to us with your name and address.

Since we also build darn good standard files, like the one on the left above, we'll send you specifications on them, too, if you'll just ask. \*Patented



A STERLING PRECISION CORPORATION 1093 Jay Street, Rochester 3, N.Y. commercial, industrial, and recreational purposes, and gives condensed data on available sizes and weights. The material is fireproof. Keasbey & Mattison Co., Ambler, Pa.

On Free Data Card, Circle 207

#### Literature on Aluminum

Six new booklets on the use of aluminum in architecture have been published. The most comprehensive of these is the 36-page Industrial Building Products, which includes details on corrugated roofing and siding, sandwich wall, field-formed flashing, and fasteners. Roofing and Siding Products, 8 pages, gives descriptions and specifications on batten roofing, corrugated roofing, V-beam roofing and siding, ribbed siding sheet, and perforated corrugated sheet. Depicting aluminum as the "architects' metal" is the 8-page Aluminum in Architecture, describing the advantages of aluminum, its specifications. finishes, and properties. Color chips are included. Others in the current series of booklets are Exterior Wall Products, Products for Industrial Building Construction, and Gravel Stops and Copings. Aluminum Company of America, 774 Alcoa Building, Pittsburgh 19, Pa.

On Free Data Card, Circle 208

#### Working Guide for Curtain-Wall Design

Curtain-Wall Index, 72 pages, is a working guide for determining the wall system most applicable to a particular building. Standard - system types are detailed in duplicate so that they may be detached for study and further development. Other available dies are illustrated in full scale opposite the details. Booklet is handsomely and effectively designed. The Michaels Art Bronze Co., Inc., P. O. Box 668, Covington, Ky.

On Free Data Card, Circle 209

#### Grid Framing System Is Simple, Versatile

"A radically different concept, Kawneer's 'Core' building system," is presented in handsome 20-page booklet. The system is simple, yet versatile; component parts have only four basic shapes, which have been developed to give 14 basic parts, and from these, 36 assemblies can be formed. Core does not need to be used in conjunction with other systems, because it is a complete building exterior system in itself. (However, other Kawneer

systems can be easily adapted into it.) The basic idea of the Core system is that by joining two components of the system, any needed member can be produced. With these members, one can build up, out, and/or around. And by the use of a few simple adapters that are part of the system, one can integrate most Kawneer building front components into the system, such as entrances, windows, facings, fixed lights, and insulating panels. The net result is that Core system can be used for any building exterior, new or old, single or multistory, within the system's lenient physical limits. Booklet shows basic components, explains the system, and provides specifications. Kawneer Company, 1105 N. Front St., Niles, Mich.

On Free Data Card, Circle 210

#### New Catalogs on Steel Deck and Floors

Three new bulletins on steel deck and floors are available, with a total of 48 pages of information. New section property and load tables are an important inclusion in the revised catalog sections. Titles of the bulletins are Steel Deck (for roofs, sidewalls, partitions, ceilings, and floors); Long Span M-Decks (to eliminate roof beams and roof purlins, and to provide complete structural roof and combined roof-ceiling); and M-Floors (for electrified sub-floor construction). The R. C. Mahon Co., P. O. Box 4666, Detroit 34, Mich.

On Free Data Card, Circle 211

#### Southern Pine Millwork

Technical Data on Southern Pine: Architect's Bulletin #13, 12 pages, discusses millwork. Presented in the bulletin are a specifications guide, recommendations for treatment, information on designing special millwork, a pattern guide, and a crossindex to all standard moldings. Among Southern Pine's qualities are strength, good nail and screw holding power, resistance to abrasion, and fine finishing properties. Southern Pine Association, National Bank of Commerce Building, New Orleans 4. La.

On Free Data Card, Circle 212

#### Lightweight Concrete

The 1961 issue of Perlite Lightweight Concrete Aggregate Data Catalog, 4 pages, is currently available. With de-

tails, specifications, and data, bulletin describes uses of perlite aggregate for roof decks, floor fills, granular-fill in-sulation, and heated and unheated grade-level slab floors. Load-test data and typical mix designs are detailed graphically. Perlite Institute, Inc., 45 W. 45th St., New York 36, N. Y. On Free Data Card, Circle 213

#### **Cold-Weather Masonry**

Latest 4-page edition of Technical Notes on Brick and Tile Construction discusses the construction of masonry in cold weather. Bulletin presents recommended specifications, general protection requirements, data on storage of materials and preparation of mortar, and special precautions. Structural Clay Products Institute, 1520 18 St., N.W., Washington 6, D. C.

On Free Data Card, Circle 214

#### DOORS/WINDOWS

#### The Story of Glass

Revised edition of This Is Glass, 68 pages, gives a comprehensive picture of glass and glass-ceramics. It reviews



the history of glass, and describes the expanding role of glass in industry, science, electronics, lighting, and the home. Booklet also includes a section "Pyroceram," the new glasson ceramic material. A preview discusses the extensive research with these glass and glass-ceramic materials. Corning Glass Works, Corning, N. Y.

On Free Data Card, Circle 215 Continued on page 112

#### AIR/TEMPERATURE

#### Electric Heating of Classrooms

Application of electric heating to the "Comfort Curtain" system of classroom heating is described in new 6page bulletin. The brochure explains application of heat pump for both heating and air conditioning, application of resistance electrical heating to the Comfort Curtain air-distribution method, and techniques for applying additive cooling. Types of furnaces and styles of electrical duct heaters are pictured. Also illustrated are the bookcase-duct and wall-duct types of classroom equipment. Lennox Industries Inc., 200 South 12th Ave., Marshalltown, Iowa.

On Free Data Card, Circle 200

#### Specifications, Prices, on Ventilating Units

Contractor's Buying Guide, 66 pages, describes specifications, installation techniques, and list prices of "Trade-Wind" home and commercial equipment. Products include ventilating fans, range hoods, bathroom ventilating units, electric heating equipment, automatic exhaust fans. Guide is  $3\frac{1}{2}$ " x 8" in size, an excellent on-the-job reference book. Trade-Wind Division, Robbins & Myers, Inc., 7755 Paramount Pl., Pico Rivera, Calif.

On Free Data Card, Circle 201

#### New Monthly Publication

First issue of *The b.t.u.*, 4-page illustrated bulletin, has been published. To be issued monthly, the bulletin provides information on new trends, and technical data and case histories on radiant heating, cooling, and acoustic ceilings. Write (on letterhead) to: Architectural Products Division, Burgess-Manning Company, 749A East Park Ave., Libertyville, Ill.

#### CONSTRUCTION

#### **Basic Roofing Manual**

New 1961 Built-Up Roofing Manual, 52 pages, reflects a new approach to the organization of information and specifications for Barrett - bonded roofs. Directed primarily to architects, the manual was prepared in consulta-

tion with architects and the editors of Sweet's Catalogs. Of particular importance is the new version's emphasis on basic requirements for troublefree, built-up roofing installations.

Included are new roofing specifications that reflect intensive field and laboratory research. These new specifications require a coated base sheet over all forms of roof insulation. Recommendations are also offered for temporary roofing to protect new roof decks from weather and permit other trades to operate until the application of roof insulation and built-up roofing is practical. The manual gives specifications for each type of bonded roof, discussing fully both pitch and asphalt applications on all types of roof deck. Greater emphasis has been given to the advantages of fiberboard roof insulation. In addition, many flashing details are depicted. Product News Section, Barrett Division, Allied Chemical Corp., 75 West St., New York 6, N. Y.

On Free Data Card, Circle 202

#### Revised Specs for New Expansion Joint

Technical data sheet, one page, gives revised specifications for the expansion joint using "Saraloy 400" flexible flashing, and "Ethafoam" polyethylene foam. The three revisions make a substantial contribution to improving



efficiency of operation of these products. Data sheet itemizes new procedures, and gives detail drawing. The Dow Chemical Co., Midland, Mich. On Free Data Card, Circle 203

On Free Data Cara, cricic =0

#### Curtain-Wall Sealants

Preformed Sealants for Curtain-Wall Construction, 4 pages, describes and illustrates the manufacturer's various synthetic-rubber products for sealing, supporting, spacing, and imparting resiliency to the glazing units used in curtain-wall construction. Specifications, details, and installation instructions are provided for structural gaskets (which suspend panels free of the rigid structural framing mem-



bers), and for both wet-seal and dryseal compression gaskets (rubber extrusions which band the edges of the glazing panels). Also included is descriptive information about setting blocks and spacer shims for conventional glazing of low-rise buildings and store fronts. Pawling Rubber Corp., Pawling, N. Y.

On Free Data Card, Circle 204

#### Asbestos-Cement Faced Sandwich Panels

An up-to-date architectural and engineering manual, on asbestos-cement faced sandwich panels for interior or exterior use, has been published. The 28-page manual contains both application information and design data for "Gold Bond Asbestone Panels." It covers such uses as curtain-wall applications with both asbestos-cement and aluminum-batten systems, roof deck and window-wall construction, and interior partitions. National Gypsum Co., 325 Delaware Ave., Buffalo 2, N. Y.

On Free Data Card, Circle 205

#### Nonshrinking Mortar

The use of nonshrink mortar to achieve better results in 12 important construction operations is shown in new 4-page Bulletin E-38. Operations include waterproofing walls and joints; grouting building columns, machinery, and anchor bolts; calking sewer-pipe joints; patching defects in concrete; and setting floor brick and quarry tile. Illustrations of these areas are shown in a large building cross-section, with references below to further publications on each of the subjects. The Master Builders Co., Division of American-Marietta Co., 2490 Lee Blvd., Cleveland 18, Ohio.

On Free Data Card, Circle 206

#### **Traffic-Bearing Tile**

Folder, 4 pages, describes "Promenade Tile," a new traffic-bearing roof tile of asbestos cement. The folder illustrates some of the product's uses in providing usable roof space for

#### **NEWS** from Dow Corning

## This Brick Stays Beautiful



## **Silaneal Reduces Staining, Efflorescence**

This new auto showroom is truly a showplace — and will be for decades to come. Why? Because the architects specified brick protected with Silaneal<sup>®</sup>, the factoryapplied sodium siliconate treatment that helps brick repel water . . . prevents unsightly discoloration due to rain, dirt and efflorescence.

#### **How Silaneal Protects Beauty**

The chief cause of brick discoloration is water that carries soil. soot and other dirt *into* the brick . . . actually embeds the dirt in brick surfaces. Once inside, water also leaches salts *out* of the brick, forming efflorescence. But Silaneal treatment *controls* the absorption rate of high suction brick. Result: brick turns back water, keeps dirt outside where surface discoloration is rain-washed away. And when water cannot penetrate, ugly efflorescence is minimized.

#### **How Silaneal Improves Construction**

When high suction rate brick is placed on fresh mortar it immediately sucks considerable water out of the mortar. Thus, the mortar dries too quickly and shrinks, leaving a hairline crack at the interface of mortar and brick. But by treating bedding surfaces with Silaneal, suction rate is controlled; proper mortar hydration is permitted; shrinkage and cracks are eliminated; a stronger bond results; water leakage through the finished wall is reduced. Clean-up seldom requires more than just simple brushing. And maintenance is minimized because mortar does not crumble.

If you want more information on this new aid to constructing better brick buildings — including a list of leading brick manufacturers now supplying Silanealtreated brick — write Dow Corning, Department 6818.

NOTE: There are several brick manufacturers who produce brick having low suction which already perform similar to a Silaneal-treated brick. Little improvement in efflorescence control and reduction of dirt pickup could be accomplished by treating this type of brick with Silaneal. Silaneal treatment would not improve the laying properties of this type of brick.





### \$4,000 FOR ADDITIONAL INSULATION WILL BRING THESE ESTIMATED SAVINGS:

\$12,000 ON MECHANICAL EQUIPMENT—Original specifications called for one-inch fiberboard roof insulation. A Dividend Engineering analysis forecast that increasing the thickness to one and one half inches of Fiberglas<sup>†</sup> Roof Insulation would produce optimum heat savings. The added efficiency made it possible to predict a \$12,000 saving on the cooling equipment alone. \$1,800 PREDICTED SAVING IN ANNUAL OPER-ATING COSTS—\$784 on power and water; \$700 on financing; \$316 on depreciation and insurance. Without a Dividend Engineering evaluation to point out the optimum "thermo-economic" performance of the roof, \$1,800 would be wasted every year.

Let us show you how Dividend Engineering forecasts significant savings, and makes the comfort benefits of year-round air conditioning an economic possibility for more and more industrial and commercial structures. Just talk to your Fiberglas representative, or write: Owens-Corning Fiberglas Corporation, Industrial and Commercial Div., 717 Fifth Avenue, New York 22, N.Y.



#### DIVIDEND ENGINEERING DOLLAR-SAVING PROPOSAL

Cost of Heating	
& Cooling Equipment	
Original Specifications	\$32,000
Dividend Engineering Specifications	20,000
Predicted Saving	\$12,000
Additional Insulation Cost (in place)	4,000
Net Initial Saving	\$ 8,000
Projected Annual	
Operating Costs	
Original Specifications	\$ 9,947
Dividend Engineering Specifications	8,147
Annual Saving	\$ 1,800

OWENS-CORNING RESEARCH pioneers new ideas in Fiberglas



T.M. (REG. U.S. PAT. OFF.) O-C. F. CORP.

June 1961

## **DIVIDEND ENGINEERING**\* FORECASTS AN \$8,000 SAVING IN INITIAL COSTS AND \$1,800 IN YEARLY OPERATING COSTS AT NEW SPEIDEL PLANT AND RESEARCH LABORATORY

1/2" Fiberglas roof insulation = built up roof -stast deck\_\_\_\_\_

\*DIVIDEND ENGINEERING is a service Owens-Corning will provide to demonstrate to builders, designers, management and financial groups that optimum use of Fiberglas materials can result in reduced initial and operating costs and improved building performance.



Plant and Research and Development Laboratory: Speidel Corporation, Industrial Division, Warwick, Rhode Island Engineers and General Contractors: Bowerman Brothers, Providence, Rhode Island

## IT'S WHAT YOU CAN'T SEE

WHEN YOU SPECIFY FLOOR TREATMENTS you demand visible proof of performance—approvals, recommendations by Flooring Manufacturers, Contractors and their Associations—U/L proof of liability protection—and field service by manufacturer's representatives.

For over half a century the invisible ingredient—Hillyard experience—has created highest performance standards. Endless research in techniques of manufacture, researching raw materials, finalizing formulations, timely raw material buying in world markets, continual testing and precise laboratory controls guarantee you uniform high quality products.

The first trademark-registered drum design in our industry—the blue and white checkerboard container—for generations has protected users with the promise— "You Know it's Right if it Comes in the Checkerboard Drum."

The final step—service in the field. Over 170 Hillyard trained "Maintaineers" serve as architect consultants and job captains —work with owners to prescribe maintenance—train the custodian. There's one near you — "On Your Staff — Not Your Payroll."

You'll see the difference when you specify Hillyard

On America's most Successful floors the Difference is



June 1961

The Denver Hilton I. M. Pei, Architects Jaros, Baum & Bolles, Engineers Geo. A. Fuller, Gen'l Contrs. Kerby Saunders, Inc., Mech. Contrs.

## CONNOR... Comfort link in The Hilton Chain

In these two handsome additions to Hilton hospitality, more than 5000 Connor air distribution units make a vital contribution to the comfort of travelers, conventioneers, and hotel employees. Virtually every product that Connor manufactures —from famous Kno-Draft overhead diffusers to Pneumavalve-equipped Series 45 P valve attenuators—is installed in these glamorous new buildings.

In the 900-room Denver Hilton, 1100 feet of Connor's attractive, functional KLS linear diffuser were used to complement the interior's essentially rectilinear pattern.

The Pittsburgh Hilton—800 rooms and 24 stories—features many Connor linears, squares, and rounds.

Leading architects, engineers, and contractors agree that Connor's complete line offers the ideal combination of function and design . . . a combination that suits a wide variety of structural demands.

Representatives in principal cities.

The Pittsburgh Hilton William B. Tabler, Architects Jaros, Baum & Bolles, Engineers Turner Construction Co., Gen'l Contrs. Limbach, Mech. Contrs.

CONNOR ... for Constant Comfort Conditions





tured and erected by patentee, Up-Right, Inc., in either steel or aluminum. Company believes greatest use for system is in tetrahedron space frames used as diaphagm or cantilever structures for clear span buildings. Frames can be flat, arched, or domed. In span range of 100 to 200 ft, cost per sq ft is said to be competitive with other roof structures. Up-Right, Inc., 1013 Pardee St., Berkeley, Calif.

On Free Data Card, Circle 118



#### Minuscule Water Heater

"Microtherm" electric water heater is briefcase-size, weighs 16 lb, can be installed in homes or commercial buildings without large water storage tanks or lengthy double pipe lines. Its "Thermal Brain" unit senses temperature differential between incoming water supply in summer and winter and automatically monitors and controls flow and balances heat transferred to outgoing water at temperature consistent with preset standards. Accessory for washers, "Flow Touch" attachment, permits electronic precision control of flow and temperature as well as automatic cycling of fill, drain, and rinse operations. As heating unit, Microtherm can heat entire house. Advanced elements of its design include Union Carbide's new graphite, woven-fabric resistance element, and "solid state matter" controlled rectifiers. Unit has 10-year guarantee against defects in manufacture, and key components are UL approved. Thermotronics Corp., 548 Pan American Bank Building, Miami 32, Fla.

On Free Data Card, Circle 119



## **Streamline** COPPER TUBE AND FITTINGS FOR A MODERN PLUMBING SYSTEM...

A modern plumbing system, fabricated from Streamline copper tube and fittings, is the mark of quality in any home. Such a system costs no more than one made of rustable materials yet has many outstanding advantages. Plumbing contractors like copper's ease of handling and installing. Builders like the spacesaving feature of copper drainage (standard 3" stack fits within a 2" x 4" partition . . . "furring out" is eliminated). Everyone likes the durability of Streamline supply and drainage systems. Copper quality costs no more, so why not specify and install Streamline tube and fittings?

Just Released ! New, Complete 66 page Streamline Plumbing and Heating Products Catalog S-361 ... Write today for your copy.

MUELLER BRASS CO. PORT HURON 27, MICHIGAN

metal ground (as shown). Choice of lacquer color is wide; metals can be pewter, bronze, brass, silver, or combinations of them. Custom designs can be executed. Stock designs can be seen by appointment only through d'Argout-Ferguson, Inc., 6 East 79 St., New York 21, N.Y.

On Free Data Card, Circle 112



#### Table for Ultra Group

Two-drawer walnut table with oiled walnut or Formica top stands on metal base finished in satin or polished chrome or in satin brass. Standing 14½" high and 28" square, the table is designed to co-ordinate with desks, chairs, and conference tables in the Ultra Group. Illustrated brochure of the complete line is available from the manufacturer, Robert John Co., 821 North Second St., Philadelphia 23, Pa. On Free Data Card. Circle 113



#### Metal-Base Tables

New polished chrome, steel-based tables have tops of clear or smoked glass, marble or slate. Bases for round tables are 3-legged with black or chrome stretchers; square and rectangular tables are 4-legged with same choice of stretcher finish. Cocktail table (shown) is 36" in diameter, 16<sup>1</sup>/<sub>2</sub>" high, and retails for \$330 f.o.b. New York. Cumberland Furniture Corp., 4 East 53 St., New York 22, N.Y.

On Free Data Card, Circle 114

#### Pedestal "Torchiere"

Lily-shaped standard lamp finished in satin white hard-baked enamel has a mogul socket for 100-200-300 w bulb providing indirect illumination. Tap-



ered tube, 64<sup>1</sup>/<sub>2</sub>" high, flares to top reflector, which is 11<sup>1</sup>/<sub>2</sub>" in diameter. Retail \$66 from Nessen Studio, Inc., 317 East 34 St., New York 16, N.Y. On Free Data Card, Circle 115

#### Pure White Sealant Won't Stain or Fade

New "Thiocaulk" sealant overcomes the problems of fading and staining that have plagued the industry since the introduction of polysulfides. Brilliantly white when applied to marble, limestone, brick, porcelain, or cement surfaces, the product stays white with virtually no dirt pickup. The achievement of a pure stable white makes possible the creation of any color to match or harmonize with surrounding surfaces. Manufacturer states that Thiocaulk's adhesion to nonporous and primed porous surfaces far exceeds that of conventional calking compounds. Its watertight seal has a calculated life expectancy of 20 to 25 years; its rubber-like flexibility is maintained at temperatures from -65 to 250 F. Joint expansion of 200% can be absorbed without breaking the seal. Steelcote Manufacturing Co., 3418 Gratiot St., St. Louis 3, Mo.

On Free Data Card, Circle 116

#### **Elegant Clock Designs**

New line of Howard Miller clocks, created by George Nelson & Co., is a series of six elegant designs to complement or accent their surroundings. The clocks are all built-in; the



works case is buried in the wall, and "numerals" and hands are supported away from the wall. Materials are brushed brass, brushed chrome, and natural or anodized aluminum. Hands are available in white or black finish. Sizes range from 12" to 16" in diameter. Howard Miller Clock Co., Zeeland, Mich.

On Free Data Card, Circle 117

#### 300-Person Grandstand Has Aluminum Structure

Grandstand in Florida's Cypress Gardens for viewing water skiers is constructed of two basic parts—identical struts and identical joints—joined in octahedron and tetrahedron shapes. The 13,000 struts and 3000 joints were assembled in sections at the site and erected by an unskilled five-man crew using simple tools. Struts and joints are heat-treated aluminum alloy in natural satin finish, clear lacquerdipped. System of octahedron-tetrahedron structures is being manufacis  $\frac{5}{8}''$  thick, consisting of the insulating board faced on one side only with the prefinished hardboard. Matching doors are 6'-8" 7'-11", and the interlocking components are made from kiln-dried wood painted a light beige. Literature on the product has a series of enlightening detail drawings. No framing, studs, taping, or painting is required, and tight spline joints assure alignment of the components. Simpson Timber Co., 2041 CE Washington Bldg., Seattle 1, Wash.

On Free Data Card, Circle 106

#### Aluminum Backs Up Glass Spandrel

"Huetex," a polished glass spandrel panel, combines its glass outer surface with a metallic-faced inner surface to achieve better insulating values. A sun-fast ceramic enamel (from a selection of many colors) is applied to the inner face of the glass panel and aluminum backing is bonded over it. The aluminum reflects heat and also protects the enamel coating. Combination of the polished panel and a nonreflective, patterned glass panel also in the Huetex line provides opportunity for varied façade treatments. American-Saint Gobain Corp., 60 E. 42 St., New York 17, N.Y.

On Free Data Card, Circle 107

#### Splines Are Backbone of Air-Distributing System

New controlled method of air distribution can use any kind of suspended acoustical-tile ceiling to form a plenum. The "Vent-Spline," an extruded plastic member, is minutely ad-



justed from within the room to provide almost infinite air-distribution patterns within the area. This acoustical-ventilating system permits freedom of acoustical-tile selection from standard manufacturer's stock, freedom of partition and furniture relocation, and freedom from air stratification. Savings—compared to other ceiling ventilating systems and conventional diffusers—are obtained through omission of duct work and diffusers. Acoustical Div., Elof Hansson, Inc., 711 Third Ave., New York 17, N.Y.

On Free Data Card, Circle 108



#### Bathroom Fittings in Marble

Neatly designed hot and cold handles characterize new line of bathroom fixtures. Basin set (shown), shower, tub, and shower-tub sets have handles and release controls topped with white, rose, or black marble. Fixtures are available in six finishes: satin and polished brass, satin and polished chrome, and satin and polished gold (that's what they say—gold). Gold and brass surfaces are protected by baked enamel finish. Artistic Brass Inc., 2857 E. 11th St., Los Angeles 23, Calif.

On Free Data Card, Circle 109

#### Vinyl-Covered Cork Tile Now in Parquet Pattern

Armstrong's Custom Vinyl Cork Tile has appeared in a parquet pattern in which each  $9'' \ge 9''$  tile has seven resin-bonded ribbons of cork, laminated side by side. All vinyl cork tiles have a layer of clear vinyl fused into the cork surface under extreme pressure to give it a durable wearing surface. Armstrong Cork Co., Lancaster, Pa.

On Free Data Card, Circle 110

#### Roll-Aside Units Increase Storage Space

New storage system that mounts standard steel shelving in pairs, back to back, thereby increasing capacity significantly, was used recently in the



securities department of a New York bank, expanding storage area from 2460 linear feet to 3600. Shelving is mounted on four-wheel mobile bases that roll along tracks affixed to the floor. Rows of the shelves are placed before a fixed row with only 3 in. between the rows. Access to any unit is accomplished simply by rolling it aside at the proper location. Mobile Storage Div., Dolin Metal Products, Inc., 315 Lexington Ave., Brooklyn 16. N. Y.

On Free Data Card, Circle 111



#### New Designs; Old Technique

New heat and alcohol-resistant lacquer panels made in France after the 17th-Century technique of André Charles Boulle are adaptable as table tops, ornamental doors or screens, and as abstract wall hangings. Regnard-Saladin builds up a lacquer background around a metal inlay or, conversely, fills a lacquer design into a



#### Stoneware Wall Tiles Designed by Craftsman

A group of sculptured, stoneware wall tiles by Eloise Norstad Harmon received an International Design Award from AID at its recent awards dinner. Virginia Frankel Gallery, exclusive distributor of the tiles, also received an award. The Gallery, a contract art service for architects and interior designers, represents artists and craftsmen who work in various media.

The tiles, each 12" square, are individually hand-sculptured, with no two bearing the same design. Suitable for both indoor and outdoor use, they can be turquoise, green, metallic blue, black, antique white, or a variety of earth colors; they also are available in flat textures. The tiles are drilled for wall bolts or may be set in cement. They are designed according to the requirements of each installation. Mrs. Harmon feels that modern architecture can use some of the decorative elements inspired by other eras. Virginia Frankel Gallery, 235 East 58 St., New York, N.Y.

On Free Data Card, Circle 102



#### Case Breakers Break Space Barrier

Substantial savings in cost and space are provided by new 100-amp, twoand three-pole circuit breakers, the smallest ever available for use as main breakers. Designated "EQ-P" (for plug-in connection) and "EQ-B" (for bolt-in connection), the new breakers replace much larger E-frame breakers that formerly were needed for 100-amp ratings in residential, commercial, and light industrial applications. Only 27/8" high, and 2" or 3" wide, the new breakers can reduce mounting-space requirements by as much as two-thirds. I-T-E Circuit Breaker Co., 1900 Hamilton St., Philadelphia, Pa.

On Free Data Card, Circle 103



#### Air Duct Performs Three Functions

New "Armaglas Duct" is air duct, thermal insulator, and sound absorber in one unit. It is molded from fine glass fibers and encased with an airtight vapor barrier. Duct is manufactured to same inside diameters as standard galvanized sheet metal furnace pipe. It is furnished in six-ft lengths, ready for installation with standard galvanized sheet metal fittings, air boots, register boxes, and other fittings commonly used with round sheet metal ducts. K factor of the duct is 0.22 at 75 F. When in place, duct has a noise reduction level of 2 to 3 db per ft; a six-ft section reduces loudness of airborne duct noise by more than 50%. Additional advantage is that, when air conditioning is added to furnace unit, ducts need not be insulated and vapor sealed. Armstrong Cork Co., Lancaster, Pa. On Free Data Card, Circle 104

#### Sealant Resists Heat and Cold

A silicone rubber sealant is available that is always ready for application without heating or refrigeration. Called "Dow Corning 780," the sealant is said to be the first material of this type to be offered commercially. Before application, it retains its smooth, "toothpaste-like" consistency despite wide variations in temperature. After curing, the sealant retains excellent flexibility and adhesion from -80 to 350 F. The material cures to a dry, tack-free surface less than an hour after exposure to moisture in air. It requires no catalyst or pre-mixing. Dow Corning 780 is nonstaining and



may be applied to light-colored masonry and other porous materials. Company offers a five-year written warranty on the properties of the material. A recent use (shown) was application between Pyrex tubes that serve as windows on the research tower of Wright's S.C. Johnson & Sons complex. Sealant has eliminated severe water and dirt leakage that had afflicted the building. Dept. WTR, Dow Corning Corp., Midland, Mich.

On Free Data Card, Circle 105



#### Partition System of Wood-grained Hardboard

Simpson Timber Company's new partitioning system is surfaced with random-grooved, wood-grained hardboard with a vinyl surface that makes it washable, stainproof, scuffproof, and fadeproof. There is a choice of Cherry Mist (silver-gray) or Cherry Mocha (dark brown) wood-grain patterns, or the surface can be a factoryapplied opaque prime if a paint finish is desired. The components have a solid core of wood-fiber insulating board, which provides structural rigidity and an adequate amount of sound insulation. The partitions and paneling may be cut at the job site with a hand or power saw.

The partitions are 2' x 8' and 2' x 10', 15/8'' thick. Matching paneling

Products

## Skin-Supported Geodesic Dome for Many Uses

BAXLEY, GA. Filtered Rosin Products Co., subsidiary of Monsanto Chemical Co., has introduced a line of lightweight domes that will be marketed under a license with R. Buckminster Termed "Geospace," Fuller. the domes are field-assembled from 45 triangular sections of "Fomecor" board (1/2"-thick rigid plastic foam board laminated inside and out with heavyduty, 69-lb kraft paper). Each section comes dipped in a weather-resistant, plastic-based coating. The skin-supported shelters provide 350 sq ft of floor space and 3000 cu ft of usable shelter. Uses include any kind of emergency or temporary shelter, plus a number of other applications, such as for recreation pavilions.

In construction, an erection mast is set up and the first assembly of panels mounted thereon. As assembly proceeds, the mast is raised to make room for the next "course" of panels. When the dome is complete and attached to the base ring, the mast is removed. Panels can be bolted and/or glued together. Cost of dome: \$345. Filtered Rosin Products Co., Baxley, Ga.

On Free Data Card, Circle 100



## New Fluorescent Shape Widens Design Possibilities

CLEVELAND, OHIO A thin, square fluorescent lamp has been introduced and described as "one of the most significant product innovations since General Electric introduced the first fluorescent lamp in 1938."

The 115%" square, 11/2" thick lamp is designed to fit a 12" square module, and features a face plate configured with 13/4" embossed squares. Since average brightness is about 3200 ft-L, the embossing helps diffuse the light. Louvers may be fitted into this grid to provide further light control. Lamp may be used singly or in groups, and is appropriate for built-in, surfacemounted, suspended, and free-standing applications. It operates at either 80 or 50 w; at 80 w producing 4800 lm or an efficiency of 60 lpw, and 50 w producing 2900 lm or 58 lpw. Rated life of the lamp is 7500 hours. Lamp is composed of two glass squares, one the face plate and the other having an open trough which snakes across the lamp six times, compressing a 5'-long arc path into the lamp area. General Electric Co., Nela Park, Cleveland 12, Ohio.

On Free Data Card, Circle 101



### CUSTOM EFFECTS in ORNAMENTAL GRILLES at low cost!



IRVICO'S mass production of "ALUMINUM GRIDSTEEL" now enables the designer to achieve the "custom look" in grillework economically.

"ALUMINUM GRIDSTEEL" is a honeycomb mesh that allows great flexibility in scale and texture, and diversity of application. Its third-dimension affords varying degrees of opacity depending on angle of view.



"ALUMINUM GRIDSTEEL" is available in rigid or flexible panels of various sizes ... anodized, painted or mill finish.

Write for colored brochure IMAGINEERING in ALUMINUM "GRIDSTEEL"®



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Continued from page 90 time it takes to get the measures out of committee and onto the Congressional floor. Chances for Urban Affairs must continue to be counted dim--in spite of the President's call for such a department in his budget message; and chance for a Transportation Department must be set at practically nil.

At this point, it is hard to assess what will be done with the appropriations measures themselves. Much will depend both on the domestic and international situations when those bills finally come up for approval. However, the odds favor considerable cutting in President Kennedy's proposals, even though the totals will come out higher, in most cases, than those proposed by former President Eisenhower.

Senator Monroney's \$75-million program for airport construction, however, seems likely to get through with little change. Among other things, it represents a compromise with the Administration, and now has full backing from the White House.

#### **FINANCIAL**

Strong evidence of a persisting business upturn continued to come in during the past month, bolstering P/A's own optimism about construction industry prospects for the rest of this year and extending into the future.

As shown in the charts, (p. 88), private industry continued to plan heavy construction spending-though the current chart is pushed out of normal balance by a whopping program (\$500 million) on the part of U.S. Steel to replace and expand its facilities.

And there were ample additional signs:

The Department of Commerce's "Survey of Current Business" indicated a "definite firming tendency," showed new orders for durable goods going up (in March) for the second consecutive month.

Value of total new construction put in place in March was set at \$3.9 billion by the Census Bureau-up 8 per cent over February, and even with March a year ago.

Steel fabricators reported that their business rose too, in March, with bookings reaching about 295,739 tons. This is still below what it was a year

ago, but well up over February. And the U.S. Savings and Loan League reported that mortgage loans made during March were up 18 per cent over a year ago-marking the third consecutive month this year that loans have topped previous highs. That would indicate loans totaling \$1.4 billion within the month-near an all-time high.

By E. E. Halmos, Jr.

## building material because it's waterproof it's cellular glass





New FOAMGLAS-BOARD presents the quality of FOAMGLAS in an easy-to-handle new size,  $2' \times 4'$ , for fast, economical, trouble-free roof installation. 1/2' FOAMGLAS is sandwiched between specially laminated sheets of kraft paper, reducing the number of insulation joints.



FOAMGLAS Insulation clears the air beneath this roof. Cold outside temperatures contrasting with a hot, humid interior atmosphere, had caused a fog-like condensation. FOAMGLAS roof insulation eliminated the problem. And the incombustibility of FOAMGLAS was an Important extra-benefit here.



RCA selected FOAMGLAS to insulate porcelain enamel panels for vast curtain wall areas at their Cherry Hill Project, Camden, N.J. FOAM-GLAS remains moistureproof in all kinds of weather and contributes important rigidity to the panels.

#### PITTSBURGH

The sealed glass cell composition of FOAMGLAS makes it completely impervious to any form of moisture. On roofs, it remains dry even if the roof leaks.

See how these important FOAM-GLAS benefits can work for you. Write for our Building Insulation Catalog. Pittsburgh Corning Corporation, Dept. AB-61, One Gateway Center, Pittsburgh 22, Pa. In Canada: 3333 Cavendish Blvd., Montreal, Quebec.



## **FOAMGLAS**<sup>®</sup> Insulation ... a better ... a better insulation because



### Designing a drive-in entrance?—consider THE BEAUTY OF ROLLING GRILLES BY CORNELL



Cornell Motorized Rolling Grille : Drive-In Bank : Petroleum Club, Denver • Architect C. D. Strong • General Contractors : N. G. Petry Construction Co.

#### Light and airy as a butterfly in appearance ...yet they give "ROLLING STEEL DOOR" protection

The functional beauty of Cornell Rolling Metal Grilles is in accord with the contemporary design of the above bank, where light and vision are essential.

When open, Cornell Rolling Grilles roll up completely into a coil box—out of sight and out of mind. Coil box can be concealed in the ceiling and the side guides let into the wall.

When closed, Cornell Grilles provide a positive barrier against entry. Widely used since 1931 to protect store fronts, counter openings and to partition school corridors without obstructing light, air or vision.

Cornell Butterfly Design Rolling Grilles are available in galvanized or stainless steel, bronze and in silvery satin or color Anodized aluminum manual or motor operation. For complete details, see Sweet's or write for general catalog.





#### **CORNELL ROLLING STEEL DOORS**

Cornell Rolling Doors have been progressively improved since 1854. New weathering and silencing features, and availability in aluminum, bronze and stainless make them architecturally correct for all types of contemporary buildings. was little evidence of any opposition) such changes would obviously open up a lot of previously closed doors for architects.

## Construction Funds in Depressed Areas Bill

That \$451-million "depressed areas" bill signed by the President early in May came through approximately as the Administration wanted it—but the bill, in its details, represents a lot of hard-fought compromises.

Most important victory for President Kennedy was House agreement (after a four-week battle in conference committee) to go along with socalled "back door" financing of the \$300 million in loan authority granted for the four-year program: financing the program by direct Treasury funds, rather than annual appropriations (and Congressional review).

But the conferees wrote in strong language to prevent "pirating" of labor from one area to another, and required that 10 per cent of the financing for new plants be supplied by state or local governments, 5 per cent by private investors. And, most significantly, House conferees insisted on —and won—the inclusion of a provision that the Secretary of Commerce (who will run the program through an administrator) must utilize other existing agencies to the fullest extent, to avoid duplication of existing staff and facilities.

It is this last provision, incidentally, that has made some critics dubious that the new legislation will accomplish anything very much in its stated objective of aiding depressed areas anything more, that is, than could have been done under existing legislation.

For the construction industry and its practitioners, however, the legislation seems to offer the prospect of a lot of new work. In brief, here are key items:

\$100 million for urban plant construction loans, including cost of clearing land and construction, and, in some special cases, equipment;

\$100 million for construction of plants in rural areas;

\$100 million for public facility loans —urban and rural areas may borrow up to 100 per cent of the cost of improving industrial water supplies, sewers, railroad spurs, etc.;

\$75 million for public facility grants —which won't have to be repaid;

\$4.5 million for technical assistance grants, for hiring of planning talent to draft local programs;

\$14.5 million for occupational retraining and retraining subsistence payments to workers. Urban renewal: Federal Government can make grants of up to twothirds of net cost of clearing slum areas. (In this case, funds would come from existing urban renewal programs.)

#### Construction and the Minimum Wage

Nobody—either in top labor or in management circles—seems able to find those one million construction workers that Administration proponents have said will be brought under provisions of the minimum-wage laws.

Best guesses in Washington are that, out of an estimated total of five million, the number of construction workers who are not already receiving well over \$1.25 an hour, or who aren't covered by overtime provisions in their labor contracts, amount to not more than a few thousand.

Only exceptions anyone seems willing to mention are a few unskilled laborers in the Deep South—and in some areas of the housing industry, where many workers customarily work more than 40-hour weeks (often in the guise of independent contractors themselves) for flat hourly rates.

So basic effect of including construction under the minimum wage laws can be twofold: increased pressure by unions to maintain their traditional differentials; and greatly increased paper work for contractors.

On other labor aspects in Washington, chances of a "common situs" picketing bill seemed very dim, under the concerted attack of organizations such as the Associated General Contractors; and very particularly in the light of testimony before Senate committees on how labor disputes have held up work on vital missile-base construction work.

Oddly enough, agreement on a nostrike pact between AGC and the building trades (WASHINGTON/FINAN-CIAL NEWS, MAY 1961 P/A) may also affect chances of any further legislation in this area: Congress finds it hard to see the need for legislation, when labor and management seem to have outlawed strikes anyway.

#### Business: Help Me, But Don't Regulate Me

The apparently unfavorable reaction of the business community to the President's tax program (which would, in effect, stimulate purchase of up to \$3 billion of new construction material and equipment each year) is a little surprising at first glance.

But, on closer examination, it comes out this way: Businessmen would prefer a program that would give con-

cessions to all business, regardless of whether they invest in new plant and facilities or not; they don't like the balancing proposals (to make up for losses to the Treasury) that would eliminate foreign "tax havens," bring closer scrutiny of amounts claimed as inventory, tighten up on expense accounts. And, very particularly, business doesn't like the idea of withholding taxes on all dividends and interest, and repeal of the \$50 exclusion and 4 per-cent tax credit on dividends. They fear these last proposals would kill off a lot of private investment in company stocks and bonds.

The tax program proposed, however, would mean a lot for constructionat least from companies that are prepared to invest in new plants right away. It would permit subtraction from the tax bill of: 10 per cent of the first \$5000 spent on new plants and equipment; 6 per cent of spending in excess of 50 per cent of the depreciation allowance (and not more than 100 per cent of it); 15 per cent of any spending beyond this point. Under this formula, a company that spends \$2 million could thus, in addition to a \$1 million depreciation allowance, deduct a total of \$180,500.

#### Down to the In-Fighting

The real legislative battles are being joined now, as the Congressional session begins to get into the traditional July "homestretch."

So far (into mid-May, anyway), Congress has been concerned with matters of relatively lesser importance, on which really basic divisions between political philosophies don't exist: No one is really opposed to aiding children of unemployed parents; or raising minimum wages for underpaid workers; or building factories in chronically depressed areas.

But with these matters now pretty well cleared away, the key programs come up—programs about which a lot of heat has been generated, and on which there are deep divisions of opinion.

These include the half dozen Senate bills, and more than a dozen in the House on school aid; the various proposals for aid to housing; the proposals for establishment of two new Cabinet departments (Urban Affairs and Transportation); and, of course, the various appropriations bills for regular operation of the Government, as well as for some newly proposed operations.

As has been mentioned in these columns previously, the odds still favor some sort of a school program though those odds are getting shorter in direct proportion to the length of *Continued on page 94* 

90

## **Eastern** announces a major breakthru in acoustical ceiling construction!

Patents applied for



## exclusive LEV-O-MATIC installation

needs no tools! The ingenious new Lev-O-Matic End Clip is a pivoting cam-lock which snaps in place by hand for positive, permanent, level-perfect attachment. It makes a single cross tee adaptable to rectangular as well as ashlar patterns without extra parts.



## new bridging tee needs no clips... no bending or crimping! New end tab design provides

a snug, secure fit — instantly . . . automatically! Full  $1\frac{1}{4}$ " bulb-shaped web on bridging tee, as well as cross tee, increases load carrying capacity up to 90%, permits wider spans, effects additional savings in material and installation. 2' O.C. pre-routing eliminates measurement.



Complete comprehensive catalog of Eastern's new acoustical grid suspension systems with LEV-O-MATIC now available. Write for yours today.

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Street		
City	Zone	State


One of the most important bits of news for architects and other professionals was contained in a little - noted passage in the President's message to Congress on "Ethics in Government Agencies," and in the accompanying "suggested" law to make corrections in agency practices:

By E. E. Halmos, Jr.

It would permit professionals who serve as part-time consultants to Government agencies to do business with the Government even with the agencies with which they are concerned.

At present, such consultants are barred from Government business (together with their firms and partners) under interpretations of conflict-ofinterest statutes.

Said President Kennedy: "These restrictions [under conflict-of-interest] prove an even more formidable barrier to the part-time consultant who works in a partnership, since he and his partners would be excluded from participation . . [which is] a severe and unnecessary penalty for contributing to public service. It is possible to cite many examples of excessive restrictions which serve no ethical purpose, but effectively bar the Government from using available talent. . ."

"The [accompanying] bill establishes special standards for skilled individuals whose primary activity is in private, professional, or business life, but whose skills are used by the Government on a part-time, or advisory, basis. By permitting such individuals to carry on private business, even business with the Government, as long as there is no direct conflict between their private and public work, ethical principles are maintained and a wide range of abilities are made available to the Government."

Implementing the President's words, the bill as presented to Congress sets up a special definition—"Special Government Employee"—for consultants. The term is defined as including: "A Government employee . . . who is retained, designated, appointed, or employed (1) to perform, for a term not to exceed 130 days during any consecutive period of 365 days, temporary duties including conduct of spe-



BT USE OF PROCEEDS						
USE OF PROCEEDS	APPROVED		DISAPPROVED			
	AMOUNT	NO	AMOUNT	NO		
EDUCATION :	E CONSTRUCTION OF THE					
ELEM. & SEC.	52,865,000	59	25,954,000	23		
OTHER	480,000		20,004,000			
ROADS & BRIDGES	315,000	3	830,000			
WATER & SEWER	6,093,000	17	1,010,000	4		
OTHER UTILITIES	300,000			4		
HEALTH & WELFARE		0				
RECREATION	750,000	4	and the second second	0		
PORTS & AIRPORTS	3,635,000	2				
INDUSTRIAL	1,085,000	4	THUE DAY DAY THE AND I			
REFUNDING		0				
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ADMIN. & OFFICE BLDG.		0				
UNCLASSIFIED	1,400,000	3	245,000	2		
TOTALS	\$ 66,923,000	94	\$ 28,039,000	30		

BOND ELECTIONS SCHEDULED AS OF MARCH 1 1961

BOND ELECTIONS SCHEDULED AS OF MARCH 1, 1961					
MONTH	AMOUNT	USE OF PROCEEDS	AMOUNT		
JANUARY FEBRUARY MARCH APRIL MAY JULY JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER NO DATE SET	357,612,000 266,896,000 22,010,000 7,750,000 	EDUCATION : ELEM. & SEC. OTHER ROADS & BRIDGES WATER & SEWER OTHER UTILITIES HEALTH & WELFARE RECREATION PORTS & AIRPORTS INDUSTRIAL REFUNDING FLOOD CONTROL PUBLIC HOUSING VETERANS AID ADMIN. & OFFICE BLDG. UNCLASSIFIED	157,041,000 17,623,000 36,934,000 306,371,000 917,766,000 13,976,000 153,248,000 602,000 26,300,000 26,300,000 9,897,000 256,204,000		
TOTAL	\$ 1,959,067,000	TOTAL	\$ 1,959,067,000		

cific litigation . . . (2) to serve with compensation as a consultant, adviser, or member of an advisory panel, board, committee or commission on an intermittent basis; or (3) to serve without compensation other than expenses. A reserve officer of the Armed Forces . . . shall be classified as a special Government employee while on active duty solely for training (unless otherwise a regular Government employee) . . .

"Except in the course of his official duties, a special Government employee shall be subject to prohibitions . . . only with respect to a transaction involving the Government in which he has at any time participated personally and substantially as a Government employee... Nothing in this section shall prevent a special government employee... from assisting another person in the performance of work under a contract with or for the benefit of the United States, provided the head of such employee's agency shall have certified in writing that, in his opinion, the national interest will be promoted by permitting such employee to assist ..."

If approved by Congress (and there



### **PROJECT TURNKEY - INTELEX ELECTRONIC POST OFFICE, Providence, Rhode Island**

The thin-shell concrete roof structure and steel tie beams were CAFCO treated for sound control, fire retardancy, and elimination of concrete finishing costs.

Here's real DESIGN FREEDOM . . . and INSTALLATION ECONOMY! Cafco Sound-Shield quietly follows the parabolic contours of the nation's first, fully automated post office building, Project Turnkey, Providence, Rhode Island. A continuous Cafco "blanket" of INTEGRALLY HARDENED fiber was mechanically applied to Turnkey's sweeping ceiling in a SINGLE APPLICATION.

CONTOUR ADAPTABILITY speeds the job. Joint alignment, scribing, fitting and other operations required for preformed acoustical materials are eliminated. MONOLITHIC Cafco may be applied directly to exposed beams, metal deck, concrete and other wall and ceiling surfaces with facility, efficiency and economy. Travertine textures fine, medium and coarse fissuring - with complete COLOR SELECTION and UL-tested fire retardancy further distinguish Cafco Sound-Shield installations from coast

to coast and throughout Canada. Our catalog in Sweets Architectural File (39-B-1) further details Sound-Shield advantages.

For design freedom and job economy, consult your Cafco sales engineer or contractor. Cafco-trained contractors, servicing the construction industry in 50 states, Canada and Australia, are equipped to provide every specification and job service.



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Stanhope, New Jersey

CAFCO BLAZE-SHIELD, Structural Fireproofing 📕 CAFCO SOUND-SHIELD, Acoustical Treatment 📕 CAFCO HEAT-SHIELD, Thermal Insulation



### Church with Earthworks in Arizona

Scottsdale, Arizona, home town of Taliesin West, will have a new church by Wright's heirs, Taliesin Associated Architects (William Wesley Peters, Chief Architect). Ascension Evangelical Lutheran Church, which will sit at the foot of Mummy Mountain, will consist of a multidomed sanctuary and a semicircular wing containing classrooms and offices. The sanctuary roof will be topped with a series of polygonally patterned domes that will graduate upward to the highest dome, over the altar.



### Art in Geriatric Architecture

Two studies for integrated art for a home for the aged project in Massachusetts show care in providing for art at the proper stage of a project at the beginning. The models were prepared by Krokyn & Krokyn of Boston for the Hebrew Home for the Aged in West Roxbury, Mass. Top photo shows a study for an interior wall of the synagogue, and the bottom picture is of the model for the sculptural wall at the main entrance. Joseph D. Weiss is consulting architect for the project.



### Glass, Concrete Tower For Tallest Apartment

A 35-story co-operative apartment building at 190 East 72nd Street on Third Avenue will be Manhattan's first sheer tower residential building and its tallest as well. "Tower East" (they all have a name!) will rise without a setback above a one-story base and will occupy only 25 per cent of its site. Façade of the building will feature exterior concrete columns on the easterly and westerly sides and a sheer structural concrete wall on most of the north and south sides; tinted glare-resistant glass will be used. The 132 suites (only four to a floor) will have corner exposures and a 37-ft continuous glass wall spanning both living and dining room areas. They will also have outside kitchens. Parking for only 80 cars will be provided. Architect: Emery Roth & Sons.

### CSI Awards Fellowships at 5th Annual Convention

Five members of the Construction Specifications Institute were made Fellows at its Fifth Annual Convention in New York City on May 22-24. Harold R. Sleeper was made a Fellow posthumously on the basis of his achievements in science and education. J. Stewart Stein of Chicago, Harry C. Plummer of Washington, Rolf T. Retz of Sacramento, and H. Griffith Edwards of Atlanta were made Fellows on the basis of their achievements in service to the institute. Other activities at the convention included a speech by Philip Will, Jr., President of the AIA, over 100 exhibits of building materials, and panel discussions dealing with specification writing problems.



Section CC. Selected cells are used for electrical, telephone, and for air ducts. Electrical fittings by Conduflor Corp., Cleveland.



First Floor Framing. Corridor floor was cast in place with corridor bearing walls. Flexicore clear-spans from corridor walls to outside walls.

#### Minoru Yamasaki & Associates, Architects, Birmingham, Michigan



Hollow cells in Flexicore precast, fireproof floors are used for electrical and telephone wiring, and as air ducts for warm air heating, air conditioning and ventilating at American Concrete Institute Headquarters, Detroit.

For more information on this project, ask for Flexicore Facts No. 82. Write The Flexicore Co., Inc., Dayton, Ohio, the Flexicore Manufacturers Association, 297 S. High St., Columbus 15, Ohio or look under "Flexicore" in the white pages of your telephone book.

# HOW TO USE CELLULAR CONCRETE DECKS FOR ELECTRICAL AND AIR DISTRIBUTION



Section DD. Corridor walls are sole support for roof.



cent dedication of a New York City courts building he designed. Lescaze said the architect should be the chief of a team, chosen by himself, which includes the artist and sculptor.

The New York Times snatched the torch from Lescaze's hand and, in an editorial, said that "For the architect to select the team is a reasonable and even imperative arrangement if our public buildings are not to run the risk of aesthetic scrambling." The *Times* went even further, and, echoing the theme of the AIA Convention in Philadelphia, wrote: "The problem, actually, goes far beyond that of a single building. A master plan for the relationship of the elements composing such projects as city centers is as necessary aesthetically as it is prac-



### National Medical Library Has H-P Roof

National Library of Medicine in Bethesda, Maryland, is currently under construction. The rectangular building will be sheathed in limestone and granite and will have a roof composed of four connected hyperbolicparabaloids over the public catalog area and main reading room. The two floors above grade will be steel framed; three stack floors below

grade will be reinforced concrete. A fourth, below grade level, will contain mechanical equipment. A "History of Medicine" reading room will receive special interior treatment. There will be seating space for 206 readers in the 231,855-sq-ft structure. Architect: O'Connor & Kilham; Structural Engineer: Severud-Elstad-Krueger Associates.



### Additions for L.A. Culture Center

The new Los Angeles Music Center (p. 62, SEPTEMBER 1960 P/A) by Welton Becket & Associates has been joined by two other structures—an 1800-seat theater and an 800-seat forum (whatever that is)—in an attempt to infuse culture into the City of the Angels. The forum will be a circular building 132 ft in diameter, set in a sunken garden. It will be surrounded by a sculptured mural. The building will have a round stage to be

raised or lowered depending on the attraction. The theater will be joined to its neighbor by a white marble colonnade and, in addition to its being used for drama and musical comedy, will house musical events too intimate for the 3200-seat music hall. The three structures together will be known as "The Music Center," and will be dedicated as "A Living Memorial to Peace." Peace? With a bunch of prima donnas scheduled to show up?



tically. Architecture, traditionally the

mother of sculpture and painting, has

social responsibilities today on a scale

not even approached in the past. A

very large part of that responsibility

is the creation of a harmonious en-

vironment from the hodge-podge of

our cities."

Bravo, Times!

### Nursery for Physically Handicapped Children

A one-story steel and masonry structure will be the Nursery Building for handicapped children at the Lapeer State Home and Training School in Lapeer, Michigan. The 50,000 sq ft building will contain 200 beds in five wards. Each ward has small, fenced-in playyards with pools and sand boxes. Architect: Linn Smith Associates, Inc. of Birmingham, Mich.



### Sheraton-Cleveland Adds Ballroom-Exhibit Space

A three-story, 400-car garage partially concealed by a precast-concrete screen will form the base of the ballroom-exhibition hall addition to the Cleveland-Sheraton Hotel. The twostory, 35,722 sq ft ballroom-exhibition space will be sheathed in limestone and supported by reinforced-concrete columns. The elliptical ballroom and the 167-booth exhibition area are designed to attract more convention trade to the city. Architect: Perry, Shaw, Hepburn & Dean of Boston.

the Abuilding

flows through finite matter in seemingly infinite variations - and creative imagination quickly catches up a new material which signals a happy union of the practical with the esthetic

### **HYDRO-T-METAL®**

HYDRO-T-METAL is a new alloy of titanium, copper and high-grade zinc, with traces of manganese and chromium. Distinguished architects throughout the world have discovered its esthetic, economic and material advantages. They are now specifying HYDRO-T-METAL where rolled copper or other conventional metals were once used. We invite your request for further information about this remarkable alloy. HYDROMETALS, INC.

NEW YORK, 405 Lexington Avenue, New York 17, N.Y., YUkon 6-3636 . CHICAGO, 230 No. Michigan Avenue, Chicago 1, III., STate 2-1917

### Continued from page 78

will be dark gray, heat-absorbing glass. The absence of interior supporting columns in the office areas will allow great flexibility in layout. The 1,100,000-sq-ft building will be surrounded by a block-square, landscaped plaza of natural stone. The groundfloor lobby will be enclosed in glass and set back from the perimeter columns. An underground concourse will connect the basement with a sevenlevel, block-square parking garage. Architect: Skidmore, Owings & Merrill of San Francisco.

### Subaqueous Venice

Architectural lecturers who would be



### Stanford to Get Bay-Style Union

Tressider Memorial Union at Stanford University, designed by Spencer & Lee, will be an inviting example of the Bay Area style. Lower level of the two-story union will contain bowling, billiard, and ping-pong facilities, barber shop, store, travel agency, and dining areas both indoors and outdoors. Second floor will have office, music and reading areas, lounges, and an exhibit area. A banquet-ballroom will be added later.



### WHERE WAS MOSES WHEN THE LIGHTS WENT ON? (World's Fair Frolics, Cont'd.)

Things continue to move resolutely backward out at Flushing Meadow Park, headquarters of the 1964-'65 New York World's Fair. Speaking at Brandeis University, Fair Fuehrer Robert Moses gave the design philosophy-or lack thereof-of the exposition: "The Fair administration belongs to no architectural clique, subscribes to no aesthetic creed, favors no period or school, and worships at no artistic shrine. . . There will be no predominating architectural concept." The man to whom AIA once -for some reason-gave its Allied Professions Medal said, "I get a little weary of the avant garde critics who see in a World's Fair only an opportunity to advance their latest ideas, to establish a new school of American planning, architecture and art, and place their individual seal on one grand, unified, integrated concept which will astonish the visitors from the hinterlands and rock the outer world." Having thus cavalierly dismissed the latest ideas, a new school

of American planning, architecture and art, and concepts which would astonish and amaze, Moses said that his administration's message to potential exhibitors is that ". . . we don't care whether you are a traditionalist, modernist, or eclectic. The exhibitor makes his choice. Fair officials who issue a blanket invitation to all comers need not lean toward the smugness of the traditionalist or yield to the exigency of the avant garde, nor sit with the eclectics. They have no position at all except as benign spectators."

Unfortunately, Brandeis students were not the only persons to hear these commandments from Moses' own Mount Sinai; the Fair broadcast them to all of Western Europe in special advertising inserts in the Paris edition of the New York Herald-Tribune and the International Edition of The New York Times. The ads also showed pictures of his big piece of costume jewelry, the Unisphere. So much for American prestige abroad!

struck dumb if they did not have that good old slide of Piazza San Marco to talk about may indeed be mute in a few decades. This commendable state of affairs, however, is the only happy aspect of news from Venice that the city is sinking into her lagoon at a faster rate and that the Piazza and the ground levels of St. Mark's Basilica and the Doge's Palace may be under water at high tide 30 or 40 years hence. Principal causes of the accelerated sinking are thought to be the drawing of water from the subsoil through artesian wells, erection of large buildings on sites formerly occupied only by gardens, dredging of canals, and lapping of waves produced by vaporetti and other power craft. Possible means to slow the sinking before the city is awash are prohibiting the use of the wells and (eventually) blocking the passages connecting the lagoon with the Adriatic Sea. The latter method would permit the control of the level of the lagoon (which would become a lake) by a system of pumps and locks.

### They Like Us Somewhere

Governor Robert Meyner has proclaimed the week of June 4th to June 10th as "Architects' Week" in New Jersey. He commended the profession for bringing the rich, full life to Jerseyites.

### NATIONAL DRAWING COMPETITION

If the recent article, "Architects Can Draw Again" (pp. 134-143, MARCH 1961 P/A), was correct, a number of architects should be entering "Drawings U.S.A.," the 1st Biennial National Drawing Competition conducted by the St. Paul Gallery and School of Art. Prizes of \$2500 and purchases for the permanent collection of the museum will be given. Judging will take place October 27-28, and the exhibit will be shown from November 16 through December 22. About 75 of the drawings will be selected for a traveling exhibition following the St. Paul show. Entries must be delivered by October 1 to the St. Paul Gallery, 476 Summit Ave., St. Paul 2, Minn.

### Lescaze: Let's Put the Architect in Charge

A plea for architectural control of related arts going into a building was made by William Lescaze at the re-

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### Brotherhood House for NYC Garment District

A four-story, steel-frame building called Brotherhood House is planned for Seventh Avenue and 40th Street in New York. It will house a 300-seat synagogue on the first floor, and the remaining space will be occupied by Brotherhood House headquarters. Second floor will contain a 400-personcapacity meeting room, which can also serve as a ballroom for 260 people. The upper two floors will hold seminar rooms, administrative offices, and a library. Two elevators will serve the building. Exterior materials will include limestone, glass, and bronze. Architect: William Lescaze; Mechanical Engineer: Jaros, Baum & Bolles; Structural Engineer: Charles Mayer.

### Puerto Rican Bank Plans Central Office

Banco Popular de Puerto Rico will begin construction of its new central office building in San Juan early this summer. Architect is Chauncey W. Riley of New York City, designer of the original Banco Popular Headquarters Building in downtown San Juan, which was published in *Pencil Points*, P/A's predecessor (p. 89, FEBRUARY 1941). The project includes a 25-story, reinforced-concrete office building, a shopping center, and space for 1000 cars. Shear walls at ends of



Cross Tower, Concourse for City Building

When completed in 1964, Philadelphia's Municipal Services Building will climax more than ten years of study aimed at integrating the city's administrative departments in one facility. The 21-story building will be built on Reyburn Plaza opposite City Hall and diagonally opposite Penn Center. Occupying almost the entire site below street level, a concourse area called the Municipal Services Center will bring together a variety of public services-licenses, permits, tax payments, information, etc. This concourse will be able to handle 2000 people at a time, will be connected to subways and a 600-car underground garage, and will be illuminated by a

series of light wells and a block-long open court.

As designed by Vincent G. Kling, the reinforced-concrete tower will be cruciform in plan, occupying only 25 per cent of the landscaped, street-level plaza. The plan, with mechanical services at the core, opens up a maximum number of offices to the light. The tower will be faced with precast stone panels, off-white in color, which will project 14" beyond the spandrels to give a strong façade pattern. Windows will be tinted bronze, with double panes 5" apart having a dead air insulating space to contain built-in vertical blinds. Construction will begin in May 1962.



the tower structure will absorb lateral stresses in case of an earthquake or hurricane. Extensive landscaping will include fountains on the plaza near the main entrance and also on the setback roof. Facilities will include an employees' club, a 300-seat auditorium equipped with stage and stereophonic cinema, and equipment for private radio broadcasting. The top floor will contain a private dining club, while the main roof area will be public observation space with a view of the ocean and the mountains. Tower windows will be small, in order to protect the offices from tropical sun. Mechanical Engineer: Tizian Associates; Structural Engineer: Throop & Feiden.



### Tennessee Gas Tower in Houston by SOM

A 33-story tower faced with glass and anodized aluminum will be completed in early 1963 for the Tennessee Gas Transmission Company in Houston, Texas. The glass walls will be set back 5 ft from the face of the building and *Continued on page 82* 

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### PERSONALITIES

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sett, to be complete — at the recent Philadelphia convention.

Florence Knoll's intensive design background started with a degree from Cranbrook Academy, study time at the Architectural Association in London, and a degree in architecture from Illinois Institute of Technology, where she studied under Mies. She married the late Hans Knoll in 1943 and went to New York as partner of Hans Knoll Associates and head of the Knoll Planning Unit. Knoll Associates. Inc., was formed in 1946. Since then, the practice has grown to include showrooms in 11 cities throughout the U.S., and with Knoll International, Ltd., showrooms in 21 foreign countries. Since Knoll affiliated with Art Metals Company a year ago, the Planning Unit has undertaken the much-to-be-desired goal of improving office furniture design.

Perhaps the most distinguishing

hallmark of the Knoll operation is the use of architects as furniture and fabric designers. Her stellar list of designers includes Mies, Eero Saarinen, Sven Markelius, Breuer, Nakashima, Abel Sorensen, and Pierre Jeanneret. The third dimension is also the haunt of sculptors Bertoia and Noguchi, Knoll's nonarchitect designers.

Today, Florence Knoll spends her home life in Miami as the wife of Harry Hood Bassett, whom she met several years ago when Knoll was doing his bank in Miami. She makes constant lightning trips to New York to keep an eye on the business. Soon, the Bassetts will have a summer place in the Hamptons on Long Island, designed by Craig Ellwood and Peter Blake.

New director of the Solomon R. Guggenheim Museum is 40-year-old THOMAS M. MESSER; he comes from directorship of Boston's Institute of Contemporary Arts. . . MARTIN L. FRIEDMAN is new director of Walker Art Center in Minneapolis. . . . First Lieutenant GERALD F. OUDENS of the Air Force Medical Service received National Capital Award, presented annually to an outstanding young architect in the Washington area; he has been working on new approach to planning Air Force hospitals.

"The view his assistants and associates take of him reads like a take-off on the Boy Scout oath: fair-minded, polite, generous, flexible, humorous, patient, decisive, interested and encouraging, constructively critical." So Reginald R. Isaacs, Director of the Department of City and Regional Planning of Harvard's Graduate School of Design, writes P/A about his friend Chester Nagel.

The man with these imposing references studied under Gropius, then taught and worked with him for many years, first at Harvard, then as a member of The Architects Collaborative. On the subject of architectural education, he still quotes Gropius on Zen Buddhism: "Develop an infallible technique, then place yourself at the mercy of inspiration." He believes that the student must be helped to develop a purpose outside himself toward which to work, that he must be made to see "the grandeur of nature's order" and how to translate this to the uses of man, using the tools provided by our technology. Nagel cites the need for the practicing architect to continue to learn: "I believe we serve best when we search incessantly as lifetime scholars."

Service is evidently one of the



touchstones of his approach to architecture. Isaacs notes that most of the projects he undertakes are social in nature—for education, health, or housing. Nagel's dedication is seen in his comment, "I have found in the philosophy of Gropius a mission as broad and compelling as any within the clergy or medicine. The sad state of most of our man-made environment is evidence surely of the need for visions and actions of consequence."

How does a graduate of TAC run his own office? Nagle (who set up his own practice in 1958) states that he maintains close contact with all jobs from start to finish. Staff members function as assistants "at the highest possible levels of their individual abilities." He says that their contributions to design and planning are often of a major character. As one who has consulted on projects with Nagel, Isaacs says: "In Chester Nagel's practice, there is actual collaboration with landscape architects, city planners, engineers and others as being equals . . . There is also team operation for the young architect members of the firm."

In his home study, Nagel keeps a large collection of *objets trouvés* shells, grasses, plant forms. To him, they recall nature's efficiency of form which he attempts, in his designs, to translate into architecture. He also derives from them a "sense of peace and communion" with those areas of the spirit where—he quotes Shelley— "the owl-winged faculties dare not soar."

Sketches by Romino Corbellity

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# Vast Seat Lift Begins Lifting in Pittsburgh

PITTSBURGH, PA. While gentlemen in Philadelphia were still abed, nursing AIA Convention hangovers, your intrepid News Editor was bouncing through the bumpy New York-to-Pittsburgh air in a two-engine Grumman Mallard to see the first public working of the immense seat lift in Pittsburgh's still-a-building Public Auditorium.

The trip and the *mal de l'air* were worth it, for the largest-yet lift operation is an impressive sight.

A 116' x 68' section of the arenatype seating of the auditorium is situated over a 118' x 64' stage and may be raised for concerts, musicals, and the like. Total number of seats lifted to expose the stage is 2100. Four hydraulic plungers, 125/8'' in diameter and 42'-1'' long, raise and lower the seat section. Total weight lifted by the jacks is 445,000 lb. There are actually six gleaming steel cylinders, three on each side of the stage. One on each side serves as a locking post to secure the section in the up position. The jack assemblies are kept level with each other by a cable equalizing system similar in operation to a parallel ruler. Cylinder

assemblies at each side are trunnionmounted top and bottom.

The dome was designed by Mitchell & Ritchey. Rotary Lift Division of



Dover Corporation manufactured the lifts, and Marshall Elevator Company of Pittsburgh installed them. Work on the dome continues apace.



Seats in place complete "bowl"-type seating of Pittsburgh auditorium.



2100 seats raised by "Oildraulic Seat Lift" expose 118' x 64' stage.

# SUGAR-CUBE STRUCTURE FOR CENTURY 21





SEATTLE, WASH. The "theme" exhibit for Seattle's Century 21 Exposition will be housed in clusters of modular boxes that will rise under the great roof of Paul Thiry's Theme Building like a mountain of sugar cubes.

Designed by Donald Deskey Associates, Inc., industrial designers, the exhibit will have as its theme "The Environment of Man in the 21st Century." It will deal with seven "major and interdependent areas" of man's life: housing, business and industry, communications, transportation, food production and distribution, education, and recreation and leisure time. On the ground floor will be exhibits of research and development on products and services that will affect man in these areas. Entering the maze of cubes which will depict life in Century 21, the viewer will move through

its spaces via ramps and ascending and descending platforms. He will see the entire exhibit in about half an hour, then return to the ground floor by means of a broad ramp. An estimated 3000 people per hour will visit the building at peak hours, and traffic patterns consequently have been carefully planned.

Back in New York, we are still stuck with the "Unisphere!"









wing will contain administrative and other offices. Connected to the Congress Hall will be a 17-story tourist hotel. This structure will be triangular in plan, with an elevator and mechanical core surrounded by three guest rooms on each floor.

The Utrecht Building in Rotterdam 3 is a rental office building with all floors planned on a flexible modular system. The structure is notable for its use of art, unusual in a speculative building of this type. An example is the ceramic and metal wall mural by César Domela 2.

The "resort village" for children recovering from polio near Arnhem 4-7 is neatly planned to provide varied experiences using a few basic shapes, simple materials, and a little related art, such as the mosaic by Karel Appel on the administration building 4. Six of an eventual ten pavilions 7 have been constructed for the children. Each pavilion accommodates six boys and six girls, plus matron and staff. Centrally located on the site 5 are the cone-roofed utility and heating building, which contains the caretaker's apartment on its second level, and the sports building, which contains, in addition to gymnasium and swimming pool, a butterfly-shaped bath for water therapy. The tower 6 is for visitors to look over the entire development. Over-all exterior wall material is white, glazed brick. According to Oud, "The white color is chosen to give the children gay surroundings."



# Recent Works of a Pioneer: J.J.P. Oud

WASSENAAR, THE NETHERLANDS This is the year Le Corbusier receives his AIA Gold Medal and is lauded, together with Mies, Gropius, and Wright, as one of "The Four Great Makers" by Columbia University. What of another pioneer of the modern movement, almost coeval with Mies, Gropius, and Corbu—J.J.P. Oud, co-founder with Mondrian and van Doesberg of De Stijl?

After working first as official public architect, then with a private practice in Rotterdam for 36 years, Oud moved to the smaller city of Wassenaar seven years ago and set up shop. His practice has been quite successful there, ranging from large Governmental complexes to individual residences. Several of Oud's recent works are shown on these pages.

Perhaps the most impressive commission now in the Oud office is the Congress Building of The Hague 1. To be situated next to the Municipal Museum, designed by Berlage, the Congress Hall will contain under one roof an assembly auditorium, music hall, theater, cinema, conference rooms, delegation rooms, permanent and rental offices, restaurant and snack bar, and, in the basement, eight bowling alleys and halls for fencing, table tennis, and billiards. On the main level, the large hall will be separated from the smaller music hall and theater by a winter garden where delegates and visitors may relax and recreate themselves. A long, narrow June 1961



# LE CORBUSIER IN THE U.S.A.

The door from Customs at New York International Airport opened, and out popped Le Corbusier, waving the rolled-up plans for Harvard's proposed Visual Arts Center. On hand to greet him were Dean José Luis Sert of Harvard (who immediately took the plans), Dean Charles R. Colbert of Columbia, Professor James Fitch of Columbia, and such long-time Corbu cronies as sculptor Costantino Nivola and Architect-Planner Paul Lester Weiner. Thus began a whirlwind visit during which le maître received the Gold Medal of the AIA and an Honorary Degree of Doctor of Humane Letters from Columbia University.

Receiving his medal from President Philip Will, Jr., at the AIA Convention in Philadelphia, Corbu delivered himself of a few brief observations on a life spent in the service of architecture: "Great things are made out of a multitude of little things, and those little things are daily, successive, without end from morning to night. Daily life is made of perserverance, courage, modesty, and difficulties." And, later: "Today's problems remain in front of us-the world explodes; not only technology changes every day.

"I am going to make my definitive confession: I am living in the skin of a student."

The following day, when at Columbia to receive his degree as part of the School of Architecture's Four Great Makers series, Corbu spent the afternoon with students, and, after a celebrity-studded banquet in the evening, accepted his degree with a wise, Corbu-illustrated discourse on his philosophy of planning for cities of humans. Then, to the strains of Gaudeamus igitur from the Columbia Choir, he marched out to address crowds waiting for him in the rain.

The next morning, Le Corbusier flew back to Paris.



Sert, Fitch, Corbu at Idlewild Airport.



Corbu accepts Gold Medal of AIA. AIA President Will at right.



Columbia architectural students hear Corbu at an afternoon session.



At Columbia banquet, Sert toasts Corbu as Dean Colbert looks on.



# Up-in-Air Administration and Research Building

BLOOMFIELD, CONN. The new administration and research building for Emhart Manufacturing Company will appear to hover over a rural hilltop here. Architects Skidmore, Owings & Merrill have designed an elevated, one-story administrative unit describing a hollow rectangle in which are situated a courtyard and the groundlevel research facility. Emhart is a manufacturer of packaging and glass machinery, presses and feeds, and aerial lifts.

Administration building will sit on a reinforced concrete structure of columns supporting radial beam sys-



tems, somewhat evocative in feeling of Nervi's structure for the International Labor Exposition Pavilion in Turin (p. 63, NOVEMBER, 1960 P/A). Employees and visitors, after leaving their cars in parking areas beneath the administrative floor, will enter the building through a central entrance court. Thanks to this court and complete peripheral fenestration, 90 per cent of the main floor space will be within 40 ft of the window wall. Floor space will be completely flexible for possible future alterations. Syska & Hennessy is Consulting Mechanical Engineer.

# Spacious but Stylish City Building for L. A.

LOS ANGELES, CALIF. Headquarters for Los Angeles' Department of Water and Power will be the largest office building in the West and one of the largest in the world (1,683,405 sq ft as compared to Pan Am's 2,400,000). Excavation began in May near the city's new Cultural Center (see BULLE-TINS). Office is expected to employ 4000 by 1990, bringing together functions now in 11 city buildings.

The 15-story tower will rise from a rectangular moat, which will sit on a podium, with parking garages on three sides. The pool will have eight fountains. Structure will be steel frame with floor slabs projecting beyond the glass walls for shade. Olive-black granite will sheathe the columns; mullions will be olive-anodized aluminum. The entrance will be reached by a black slate bridge across the moat. Customer service departments and a display area for electrical appliances will be on the main floor. The floor below will hold an 800-seat cafeteria and an auditorium.

Architect and Engineer: Albert C. Martin & Associates; Consulting Architect: Ladd & Kelsey; Landscape Architect: Cornell, Bridgers & Troller.





DARTMOUTH FIELD HOUSE: ANOTHER U.S. DESIGN BY NERVI

HANOVER, N.H. Second major project by Pier Luigi Nervi in the United States is a \$1.5 million field house for Dartmouth College. It joins the Port of New York Authority's uptown bus terminal in Manhattan, now under construction.

The arched roof of the field house will be composed of a diagonally-intersecting latticework of reinforced concrete. The units will be precast on the ground and positioned from a movable scaffold. When in place, they will be joined with steel reinforcing rods and concrete will be poured in the channels between the units. The structure will include an 11-lap wood track, baseball practice, high jump, pole vault and weight throw, practice tracks, and a lacrosse court.

The form of the vast field house roof (above) will be reminiscent of the famous hangars Nervi did for the Italian Air Force in the late 1930's, since destroyed. Unfortunately, as in much of the work by engineer-designers, the force and delicacy of the structure is lost as soon as the "architecture" is put on. Campbell & Aldrich are Associate Architects.



Enclosed, Nervi's dramatic structure becomes just another field house.

# AIA Convention Memorabilia: the Call to Arms

PHILADELPHIA, PA. Time and time again at the AIA Convention, attendants were exhorted to the architect's prime role in forming our cities. Keynoter Sir William Holford: "The architect cannot solve [Governmental crises and built-in obsolescence]; but if he took a more active and pervasive part in helping to solve them and in opening a vista to a more interesting future, I firmly believe the crises would be infinitely less acute." HHFA Administrator Robert C. Weaver: "You will have in your hands . . . a major part in shaping the urban life of this country. What you do will influence the lives of millions yet unborn, for decades yet to come. No other generation of architects had before it such an opportunity or such a challenge. America waits for your response." Lewis Mumford, on what we have accomplished so far: "Too often, under the illusion that they have assisted in an urban birth, the planners and architects have actually performed a hysterectomy." Bruno Zevi: "The very significance of the architectural profession is at stake. In the process of city-making, there is



Von Moltke, Bacon, Kling, Stonorov, Larson, Pei, Geddes.

no second, or third, or fourth place that architects can occupy: either they come in first, or they are going to be the last." Edmund N. Bacon, Director of Philadelphia City Planning Commission: "The architectural profession has been propelled into a central position in the formation of our current society. If we fail our profession now, we will have failed the society of which we are a part."

As an evidence of what *can* be done for the city by architects, the men responsible for Philadelphia's great resurgence explained their accomplishment to the convention in a staged demonstration (*above*) that almost became "a city planning ballet."



Elevation (top) shows entrance between masses of chambers and below suspended office floors. Longitudinal section below.

The two floors containing legislative offices will be similar in plan; legislators' offices will be located around the periphery. As on all floors, public circulation is provided for in the gallery around the open court. Committee rooms will be between the offices and the court on both sides of the building.

The "cornice" floor crowning the

columns will be the largest one in the building. It will contain staff agencies responsible to the administrative branch of the Government. A specially designed concrete frieze will probably surround this floor.

The executive level will be under the overhanging crown canopy of the roof, amid lanais looking out toward Punchbowl and the ocean. The governor and lieutenant governor will occupy suites on either side of the court, with appropriate offices for assistants and conferences provided. The crown of the court will be over this floor.

The architects hope to include art, native artifacts, and lush planting in the colonnade circling the legislative chambers and on all levels of the galleries surrounding the central court.



Site photo: Iolani Palace, left; Capitol, center; Library, right. Group will be in new Honolulu Civic Center.



# Colonnade and Court to Mark New Hawaii Capitol

Building To Stand In Rectangular Moat

HONOLULU, HAWAII. The long search for a capitol for our fiftieth state has ended with the selection of a design evocative of the ambiance of the South Seas. Architects are Belt, Lemmon & Lo of Honolulu in association with John Carl Warnecke & Associates of San Francisco. Cyril W. Lemmon is Architect in Charge of the project, and John Carl Warnecke is Director of Design.

The new capitol will share grounds with Iolani Palace, which has been the traditional headquarters of Government since 1846. (The existing palace was completed in 1882.) To create the site—which will also contain the existing Library of Hawaii a street between the capitol and the palace ultimately will be depressed to provide a landscaped area between the buildings.

Focus of the proposed capitol will be a great, building-high court. Approach will be via broad concourses over the fountained moat that will surround the building. The capitol will be on axis with a gigantic East Indian banyan tree that graces the palace grounds, and the tall columns which rise from the moat to spread their capitals at the cornice-floor of the structure are said by the architects to echo the lines of the tree.

Beneath the hovering office floors of the building, the Senate and House chambers will appear as curved masses on either side of the great court. The visitors' galleries will be entered from the court; legislators will enter their chambers at the lower level via elevators. Areas for attorneys and public hearings will be between the chambers at the lower level.



Lofty columns, reminiscent of forms of native trees, spring from moat surrounding capitol.



Air view shows court penetrating structure. Executive level at top.

June 1961



# New city hall at Hamilton, Ontario ...

 This impressive \$10,000,000 municipal building exemplifies the spirit of the "Ambitious City." The exterior is a harmonious blending of aluminum curtain walls, gray glass and Georgian white marble. The interior is air-conditioned throughout — features high-frequency lighting, a penthouse cafeteria.

And it's sound planned with Webster Electric Teletalk ! A completely integrated system of 200 Teletalk desk intercoms serves every facet of operation with fast, two-way voice contact. The mayor and board of control secretary may contact each department head as well as the garage service building several hundred feet behind the main structure. Most of the 17 departments function as separate systems with key officials interconnected to other departments.

Teletalk, the versatile, self-contained intercom, saves steps, cuts interoffice traffic with the flick of a switch. Available in a wide variety of models to meet all intercommunication needs, it can be adapted for paging, general announcements — even data gathering.

Teletalk can be purchased, or leased on a low-cost plan. See your Teletalk dealer\* for details and a demonstration in your office.

\*Listed in the Yellow Pages under "Intercommunication Systems"



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