- Architecture Comes of Age in Israel (above)
- Stone Evokes Bernini in New Orleans
- Plastic Laminate Combines Light Diffusion, Sound Control
Consoweld Laminated Plastic Beautifies Walls, Saves Construction Time on Telephone Building

The use of Consoweld laminated plastic as surfacing for walls cut construction time three weeks on the Greenville, Ohio, Telephone Company building, according to C. W. Fry, of Fry Construction Company.

Consoweld Saved 3 Weeks... The architect, Ferd E. Freytag, recommended laminated plastic to eliminate the three-weeks' drying time for plaster before delicate electronic equipment could be installed. Another brand of conventional 1/16-inch thickness, originally considered, would have had to be cemented to plywood. Consoweld 10, 1/10-inch thick, could be applied directly over the gypsum-board walls. Another factor in the choice was Consoweld Twin-Trim matching moldings, which provide unbroken areas of color.

Woodgrain Patterns Used Throughout... Consoweld Platinum Walnut pattern is used in the business office, entrance hall, stair hall, and corridor. The long-distance switchboard room has Harvest Brown Birch on the walls; in the operators' lounge is Honey Maple, and in the office of Manager H. F. Clapper, the walls are Consoweld Red Mahogany pattern. According to Contractor Fry, Consoweld cost no more than plastering and painting, and its use enabled his company to complete the job several weeks earlier.

Because of its freedom from dust, dirt, and maintenance, Consoweld is extremely desirable for telephone buildings and other locations where electronic equipment is used.

Mail the coupon for more information on how you can save time and money by using Consoweld on walls, wainscoting, and counter tops for buildings and homes.
ARCHITECTURE COMES OF AGE IN ISRAEL
Medical Center Is Newest Major Building

JERUSALEM, ISRAEL—The upsurge of good design in Israel described on page 91 is made patent by one of the largest projects to approach completion—the Hadassah Hebrew Medical Center. Designed by Architect Joseph Neufeld, New York, the Center contains a 500-bed hospital, 40-bed maternity pavilion, outpatient clinic, nursing school and residence, medical school, dentistry and pharmacy schools, clinical research and student laboratories, lecture halls, main auditorium, and synagogue.

A unique feature of the Center is the radial nursing unit...
for the acutely ill. In the center of each floor, a core contains doctor's room, main nursing station, treatment room, pantry, etc. Radiating from this core are units of two 4-bed rooms and subnursing station. Convalescent patients are treated in the adjacent rectangular follow-up unit, which permits cost savings through use of a less specialized staff. Eight-bed wards and service core are flanked by two nursing and lounging corridors, which can be used alternately in winter and summer.

Exterior treatment of the Center reveals the grid pattern of reinforced-concrete structure. Squares between the exposed columns and ledges are filled with either stone, white or red brick, or sculptured precast, with half the aperture containing an aluminum window-wall unit.

Seeing Israel recently on a swift but thorough twelve-day photographic trip was more than enough to make one realize that this young nation has arrived at a maturity far exceeding that of [some other] older nations.

The architects of Israel are entering a new era of design thinking, resulting in the formation of a new design generation. This is an era of new materials, of more open and relaxed structural concepts. But the seriousness of the architects is still evident in their fervent devotion to function. The buildings are perhaps the most successful ones in the world from a climate-control point of view. The scarcity of wood has necessitated that masonry, concrete, marble, and the plentiful limestone be used to the fullest extent.

New uses of building materials and more daring solutions are resulting in great changes in the architectural map of Israel. This is certainly apparent in the view of the Dan

New Israeli Buildings: Winston Churchill Auditorium, Haifa (above), Sharon & Idelson, Architects; Apartment Building, Tel Aviv (right), Dov Karmi, Architect; Hebrew University Classroom & Administration Building, Jerusalem (below), Dov Karmi, Architect.
Hotel which shows, in the background, a glimpse of the almost frantically designed and constructed apartments of the Thirties.

As more funds are being made available for public buildings, and with a system of competitions for design awards, young architects are appearing. There have been private funds provided for museums and concert halls and universities. All this has hastened the pace. Indications are that there are no limits for Israel’s needs for new communities. The architect’s position and responsibility place him in the fore. A gigantic program of nationwide planning is his job.

New Israeli Buildings: Dan Hotel, Tel Aviv (above left), A. H. Fancher, Architect; Helene Rubenstein Pavilion, Tel Aviv (above right), Karmi & Rechter, Architects; Frederic Mann Auditorium, Tel Aviv (left), Karmi & Rechter, Architects; Archeological Museum, Tel Aviv (below), Bauman & Whitkower, Architects.
ARCHITECTURAL BULLETINS

- Eastern Air Lines announces that its new terminal at New York International Airport will be the largest passenger building in the world for use by a single airline. The terminal, now under construction, has a lobby with 220 by 130 ft of uninterrupted space (more than the arena of Madison Square Garden). Driveways for buses, taxis, and private cars discharge passengers in an enclosed area adjacent to the lobby. Building is so designed that there is no stair climbing for passengers. The late Chester L. Churchill, Boston and New York, was architect.

- Façade of new library wing for Harvard Divinity School will be of limestone and glass. Building will have three floors for stacks below ground, and two stories above ground for reading, study, and office space. Construction will start this spring, and the wing will be followed by an additional building at a later date. Architects: Shepley, Bulfinch, Richardson & Abbott.

- Edward Larrabee Barnes will receive 1959 Brunner Memorial Prize in Architecture of National Institute of Arts and Letters. The $1000 award will be presented by Henry R. Shepley at the Joint Annual Ceremonial of the Institute and American Academy of Arts and Letters on May 20 . . . Twin first prizes in AIA's Sixth Annual Journalism Award Competition went to Frederick Gutheim and George McCue. Gutheim won $500 for his article on New York's Lincoln Art and Culture Center in October, 1958, Harper's, and McCue won a like amount for his articles on architecture in St. Louis Post-Dispatch.

- International Grand Prize of Architecture and Art, of the French magazine, L'Architecture d'Aujourd'hui, has been awarded to Japanese Architect Kenzo Tange. Tange won award for two works completed in 1958: Art Center in Sogetsu (shown) and Hotel de Ville in Tokyo. In awarding the prize, the Jury noted that the architect combines "very diverse qualities with an unusual felicity: taste in plastic investigation, strength of invention, excellent use of materials and quality of detail; and . . . has revealed himself as a very personal creator, whose approach to contemporary architecture derives from the great Japanese . . . tradition."

- Construction has started on the Hall of Records for County of Los Angeles, Calif. Building, which will be in Los Angeles Civic Center, will have eight floors plus basement and penthouse in main area. Exteriors will be of ceramic veneer and granite. Sun-control system of south façade will consist of series of 120-ft-high, aluminum louvers which will adjust with movement of the sun. Architects: Neutra & Alexander, Honnold & Rex, the late James R. Friend, and Herman C. Light.
The threatened destruction of Le Corbusier's historic, but sadly neglected, Villa Savoie at Poissy elicited a message of concern from P/A to Andre Malraux, French Minister in Charge of Cultural Affairs. The following reply was received from the Ministry of National Education: "Monsieur: The French Minister-in-Charge of Cultural Affairs, M. Andre Malraux, has asked that I acknowledge receipt of your telegram, which he found of great interest. For some time, he has been concerned regarding the threat hanging over the Le Corbusier Villa, known as Villa Savoie, at Poissy, an expression of modern architecture with which he is familiar and which he admires. In other words, the concern expressed in your telegram coincides exactly with his own sentiments, and his desire to try to save the villa. He has therefore taken the necessary measures to accomplish a surcease to the plan to demolish the Le Corbusier house. We must advise you that French law does not recognize an edifice designed by a living artist as belonging in the classification of an historical monument. The Minister, nevertheless, intends to try to find some solution that will reassure those eminent friends of French art in America, and throughout the world. Thanking you for the confidence you have expressed in him, the Minister wishes to convey his assurance of his serious attention to the matter."

As part of the summer-session program of University of Michigan, a Seminar will be held in Ann Arbor on June 29, on the subject of the Development of the American City. Participants will include: Dean Philip N. Youtz; Planner Charles Blessing; and P/A Editor Thomas H. Creighton.

U. S. Exhibit at the Casablanca International Trade Fair is divided into three sections: geodesic dome housing the Circarama shown at Brussels World's Fair; central open area showing exterior displays; and a Unistrut building containing indoor exhibits. Theme of the exhibit is "New Techniques for Better Products." Designed by Stowe Myers, with Michael Griva and Murray Kasman.

Feature Exhibits Building at National Orange Show, San Bernardino, Calif., provides a vast, clear-span area for the exhibiting of citrus products. Major annual show is usually in mid-March; building can be used other times for different exhibit and assembly purposes. Long arched roof creates deep, buttresslike overhang at sides of building, shielding exhibitors and viewers from sun and rain. Architects: Harwell Hamilton Harris, Dallas, Texas, and Jerome Armstrong, San Bernardino.

Oceanic Hotel on Mombasa Island, Kenya, Africa, uses trade winds of the Indian Ocean to provide natural air conditioning. Hotel, located four degrees south of the Equator, is perched atop a cliff overlooking island’s harbor. Ducts on front of hotel (left) catch breezes from sea and cause them to be circulated through structure. All bedrooms are on seaward side (right).

"Form Givers at Mid-Century" is name of architectural exhibit prepared by American Federation of Arts and sponsored by a national magazine. Opening of exhibition at Washington's Corcoran Gallery coincided with 50th Anniversary Convention of Federation. Show goes to New York's Metropolitan Museum of Art in time to open on the late Frank Lloyd Wright's birthday, June 8. Subsequent showings will be in Boston, Pittsburgh, Minneapolis, and Richmond. Architects other than Wright included in the exhibition are Gropius, Mies, Breuer, Saarinen, Wallace K. Harrison, Stone, Philip Johnson, Buckminster, Fuller, Sullivan, Neutra, Aalto, Le Corbusier, and Skidmore, Owings & Merrill.

Los Angeles’ Bunker Hill redevelopment project will consist of a 24-acre residential plaza with 3100 apartment units; 16-acre commercial plaza; 6-acre hotel and 14-acre motel sites; and shopping and office provisions. Plan, by Charles Luckman Associates with William L. Pereira, will divide the currently semislum area into three separate sections.


- Exhibition covering the career of renowned Italian engineer Pier Luigi Nervi was displayed recently at New York Architectural League. At a banquet in honor of Nervi (he was kept from attending by doctor's orders), John E. Burchard, MIT, and James Johnson Sweeney, Director of Guggenheim Museum, paid tribute to the structural designer, and Architect Marcel Breuer reminisced about his collaboration with Nervi on design of UNESCO Building in Paris. Shown in exhibit was 1960 Olympic Sports Palace. Illustrated is interior of perimeter gallery.

- Committee has been formed to investigate possibility of restoring Chicago's historic Auditorium Theater by Louis Sullivan and Dankmar Adler. Sum of $2,700,000 is to be raised to meet cost of restoration of great auditorium, which in its 70-year history has been used as opera house and concert hall, musical theater, World's Fair entertainment area, World War II Servicemen's Center, and, currently, part of Roosevelt University. Auditorium would serve as setting for cultural programs for Chicago and the university. Chairman of restoration committee is Mrs. John V. Spachner.

- A farm wagon drawn by two black horses bore the coffin of Frank Lloyd Wright from Taliesin East to a small chapel in the Wisconsin pines on April 13. Following a brief service there, Wright was buried near the country cemetery where most of his forebears rest.

  Both Taliesin workshops will continue to function as part of Frank Lloyd Wright Fellowship Foundation, under the presidency of his widow, Olgivanna Lloyd Wright. Projects on the boards or under construction will be supervised by the Foundation, including a memorial chapel near Taliesin East where Wright's body will eventually rest, and a fireproof, air-conditioned vault where the late architect's drawings will be stored.

  There will be a Memorial Service and Dinner at Taliesin East on June 8, Wright's 90th birthday. The occasion will afford the Fellowship the opportunity to discuss in detail future plans of the Foundation.

  Wright's obituary and an evaluation of his work appear on pages 135-142 of this issue of P/A.
STONE EVOKES BERNINI IN NEW ORLEANS

NEW ORLEANS, LA—Two-level colonnades embracing a 500-ft-wide piazza will extend from the Mississippi River levee to the proposed new International Trade Mart here. Architect Edward Durell Stone, New York, has designed a romantic, Berniniesque scheme for this complex, which will be approached via a landscaped, befountained mall at the foot of Canal Street.

The project includes four elements: a 190-ft-high office and exhibition tower; a long, capacious building to house auditorium and parking facilities; the colonnaded piazza; and the mall. The office tower will rise from 17 to 21 stories, with approximately 300,000 sq ft of office and exhibit space. The two top floors will contain restaurant, bar, and tourist attractions, offering views of New Orleans and the river. Except for the open gallery around these floors, the tower will be shielded with white brise-solies, and the vertical ribs will be sheathed in gold-anodized aluminum. The four-story auditorium-parking building will accommodate 600 cars. The top-floor auditorium will have 75,000 sq ft of space. A set-back penthouse will contain a cafeteria and administrative offices. Bridges will connect the auditorium and the tower, and continue around the larger building to the upper level of the colonnades.

The lower level of the colonnades is expected to shelter sidewalk cafes and bazaars. At the center of the piazza will be a large double fountain sending aloft two jets of water—one muddy brown, symbolizing the Mississippi; the other crystal clear, representing the Gulf of Mexico.
A NEW DEVELOPMENT IN DESIGN OF OFFICE SPACES TO MEET PRIVACY REQUIREMENTS

...AND A PRACTICAL APPROACH TO TRANSMISSION PROBLEMS

IDEAS
NEW AND NEWSWORTHY
FROM
OWENS-CORNING FIBERGLAS:

THE WEAKEST LINK CAN BREAK THE CHAIN OF SPEECH PRIVACY

BACKGROUND NOISE

PARTITIONS

DOORS

NOISE LEAKS

CEILINGS

PRIVACY REQUIRED
Enclosed office spaces can now be more accurately designed to meet the degree of speech privacy required. Owens-Corning Fiberglas*, in cooperation with Bolt, Beranek and Newman, acoustical consultants, has conducted tests to determine human tolerance to speech passing from one enclosed space to another. The tests prove that people will be satisfied to work under a wide range of speech privacy conditions, depending upon the type of office or job they have.

The physiological aspect of noise tolerance has been incorporated into a "Speech Privacy Analysis" which can be used to select the components—ceiling, partitions, doors, etc.—for the degree of privacy required.

Several factors must be considered in the design of office enclosures: privacy required, background noise level, transmission loss of the walls and ceilings and noise leaks. A satisfactory design results from balancing the privacy required and the existing background noise against sound loss through enclosing surfaces.

The "Speech Privacy Analysis" equates the values of these elements in a graphical manner and tells at a glance the relative efficiency of components to assure the degree of privacy required.

Your Fiberglas representative will be happy to show you how the "Speech Privacy Analysis" demonstrates the importance of dealing with each facet of enclosure design.

The ceiling is an important part of any enclosure design. Its primary purpose is to absorb sound. There is a wide variety of attractive Fiberglas Acoustical Ceiling products to satisfy nearly all requirements for effective sound absorption. Owens-Corning Fiberglas Corporation, Dept. 63-E, National Bank Building, Toledo 1, Ohio.

*Fiberglas, Owens-Corning Fiberglas Corporation, Dept. 63-E, National Bank Building, Toledo 1, Ohio.
D.C. Airport To Be Jet-Age Prototype

by Frederick Gutheim

Perhaps the most intriguing thing about Eero Saarinen's new terminal building at Washington International Airport is that the architect succeeded in reducing the size of the structure by one-third. This is the showcase for airport design. The Federal Aviation Agency is doing this job itself, and for an organization that usually sits in judgment in the work of others, it is not an invitation to daring innovation. Yet what has emerged is nothing if not bold. It will influence the design of all subsequent jet airports. It is likely that most future airports will regard the standards, routines, and equipment that are being worked out at WIA as prototypes. The airport is at Chantilly, Va., some 23 miles west of Washington.

The device that will shape the future jet airport is the mobile lounge. It is a hybrid—part vehicle and part building. Its 15 ft width and 60 ft length removes it from the category of vehicles, but it is self-propelled and will carry 80 passengers from the terminal to the plane. Until the mobile lounge departs, it is an organic part of the airport terminal building, to be entered by passengers after their check-in is completed and in which they wait for take-off. The lounge then moves from its terminal dock to the plane under its own power and over special roadways. Approaching the plane, the lounge establishes connection by means of an enclosed, adjustable ramp, and the passengers enter.

The mobile lounge permits a much smaller, highly centralized terminal building (as distinguished from a finger plan with departure lounges). European airports which do not require long walks under escort from terminal to plane have improvised bus arrangements or, in the case of Frankfort and Amsterdam, special low-platform buses. At WIA the greatest advance is seen as a reduction in the amount of walking required—only 350 ft as contrasted to an estimated 650 to 1400 ft in present-day airports (exclusive of hikes from the parking lot and interchanges).

The actual mobile lounge design is still to come from the concept revealed last month in Washington. No designer has been chosen; no prototype of the $100,000 vehicle has been built. Both jobs in a package contract are expected to start momentarily. The problems to be dealt with include a structure to provide passengers with comfort and to shelter them from the noise, blast, and fumes from jet planes, not merely those now in use but the second generation of jets which will be in operation by about 1965.

The new airport itself is staggering in its scale. Runways are 11,500 ft long, with additional flight paths of twice that distance at either end. Standing at the edge of the dense woods at the eastern end of the field you look down six miles of cleared area—at the Blue Ridge Mountains. Mere buildings will disappear in this truly majestic setting, and so far there is no hint of what Saarinen will produce except for the bare functional outline, and the promise that the beginnings shown in the TWA terminal he proposed for New York's International Airport will be continued. One thing more is clear: the building will have to be expansible. Washington is expected to have 156,000 international passengers a year by 1965, and 464,000 by 1975!
Favorable first impressions are assured when you combine fresh design with quality merchandise. Certigroove cedar shakes give you the best of both. The deep-etched striations add interest to a wall and mask joints between shakes. Double-coursing with shakes creates bold shadow accents for home exteriors as well as superior insulation in all kinds of weather.

Available in a wide array of colors, applied under controlled factory conditions... Certigroove cedar shakes answer your need for an exterior wall material with design versatility, low applied cost and enduring good taste.
In the days when there were still country stores, the customary company of debaters usually included a visiting snap-gallus pundit who claimed the gift of telling the precise number of apples in a barrel simply by looking at it. Challenged for performance, he would announce, "That one there contains exactly two hundred and sixty-eight apples!" Out of evident caution he would add, "If it ain’t that it’s less." Then, walking away, he would fling back over his shoulder, "Or more!" Today’s politico-economic outpourings contain exactly two hundred and sixty-eight apples!

A conservative view of the economic outlook was taken by William Hurd Hillyer, vice-president of New York’s largest bank. Speaking before the Institute of Investment Banking at University of Pennsylvania’s Wharton School of Finance, the Chase Manhattan executive was explicit: "Inflation and economic growth are no more compatible than marijuana and individual health." Inflation, he explained, "produces a momentary exhilaration, as is the case with all narcotics, but successively larger doses are required." Butler believes that "we must learn how to avoid inflation if we are to achieve the growth . . . of which we are capable." This he estimates as a potential doubling of individual output every 18 years. He leaves his hearers to compare this modest rate with growth of inflationary media during the past three decades. Fifty-one members of Economists National Committee on Monetary Policy go still further and in a personally sponsored statement come out flat for re-establishment of the gold standard as the one effective anchorage against the inflationary spate. Only by re-establishment of gold convertibility can confidence in the dollar be restored both at home and abroad, committee members declare. While this statement is being digested by the money world, Uncle Sam is paying 4% for funds on Treasury Bonds and Notes.

Our page does not customarily go further than a terse recital of financial news as it affects architects. Butler's blunt fact-facing, however, makes opportune a home-wrought inflationary theorem, which may have the merit of novelty and hence be newsworthy: inflation reflects the time-lag between a cash economy and the transition to a credit economy. Such a transition falls into two areas: consumer credit, including the erection of buildings, may be bridged by means of self-liquidating bonds and mortgages; but the Government must needs create a recurrently mounting budget deficiency to bridge the chasm. Whatever may be said favorable to expanding credit in the consumer area, nothing but "creeping inflation" can emerge from the printing press devices to which Government is driven in its efforts to balance an impossible shortage. "Under these circumstances" the privately issued Biddle Survey finds it "shocking" to discover well known economists pushing for more inflation by means of budgetary deficits on a planned basis—this while "our gold reserves are slowly melting." In such a context permanent building construction of a capital type still tends toward stability.

Experts’ Opinions on Inflation Analyzed

by William Hurd Hillyer

Plus signs predominate in Dun & Bradstreet’s weekly business statistics report; the most recent shows a 102% rise in steel-ingot production above the ’58 comparable period. Other hikes: electric power production, 9%; crude oil production, 15%; freight carloadings, 13.4%; bank clearings, 6.8%; stock prices, 38%. Of these, both steel and stocks reflect a hedging movement by buyers. Wholesale food prices and number of business failures, on the other hand, are respectively 6.7% and 9.2% down. In these mixed tendencies the architect should feel no cause for immediate worries. The picture is typical of a post-recession comeback with a pre-inflationary background.

An overdue recovery has been effected in the lumber business. The Federal Reserve Bank of San Francisco reports a sharp reversal in the two-year downward trend of production and prices throughout the Pacific Coast District. This turnabout, says the bank, followed a nationwide upsurge in building, chiefly residential. Because hardwood is scarce, veneers for plywood and allied products are obtained almost exclusively through imports from the Orient. Increased construction costs in all categories using wood products are strongly indicated by such developments.

A conservative view of the economic outlook was taken by mutual savings banks at their quarterly conference in New York. They see the gradually rising capital outlook as a good omen—though lags in auto and other industries, plus continued unemployment are still of some concern. They recognize "a little inflation" as "impracticable and harmful." Similarly minded is the First National City Bank of New York, which says "the outlook for business in 1959 continues favorable" and declares that most observers remain unshaken in the expectancy of an upward movement in production and trade, though "uneven and moderate." The Federal Reserve Bank of Chicago is impressed by the steel recovery and looks for progress "on a broad front." Business activity continues to upsurge and personal income is hitting a $362 billion adjusted annual rate; these are the factors cited by the Federal Reserve Bank of St. Louis.

Fallacy of "growth" objective is exposed by the Guarantee Trust Company of New York in its current survey. What the Department of Commerce calls gross national product—the total estimated money value of all goods and services within a specified time—is subject to distortion. Money, we are reminded, is the only common denominator available to measure the wide variety of goods and services produced. It is, however, an imperfect unit of measurement, because the purchasing power thereof changes as prices rise and fall. Variations in the gross national product are therefore reflected in two sets of changes. They are warped by changes in the amount of goods and services and in their prices. Like other catchwords, says the trust company, "economic growth" does not hold up under analysis.
ENTIRELY NEW

Par-TEX III-D
Par-TEX EXTERIOR SIDING • EXTERIOR PACQUA

MODERN
DRAMATIC
DURABLE
BEAUTIFUL
EASY TO INSTALL
ECONOMICAL
EASY TO FINISH
AVAILABLE...
Prime Coated

Pacqua, Inc., long the leader in the particle board industry, now has perfected the dramatic new Par-TEX III-D EXTERIOR SIDING. Par-TEX III-D gives your construction that new, modern 1959 high-style look and is extremely strong, durable and economical. Used for exterior siding, dramatic interior feature walls and room dividers, fences, carports, breezeway ceilings and gable ends.

Par-TEX III-D FITS ANY ARCHITECTURAL STYLE

It means true modern distinction and quality construction. Comes in 4' x 8' panels 5/8" thick that are easy to install. Eliminates high labor costs . . . material wastes.

CAN BE PAINTED OR STAINED

Par-TEX III-D can be painted, stained or finished natural and will absolutely not check. No ugly knot holes . . . split proof.

- 100% EXTERIOR Phenolic Resin Glue
- HOT PRESSED
- VERTICALLY GROOVED

NO EXPOSED JOINTS

Par-TEX III-D has shiplapped edges that permit the continuity of the vertical grooved pattern with no evidence of joints.

Contact us today for more information
Exclusive National Sales Representation

PLYWOOD SERVICE, Inc.
P.O. Box 78, TWX RS-S4-U
Dillard, Oregon

SEND FOR FREE BROCHURE

Manufactured by
Pacqua, Inc.
Dillard, Oregon

Managed by
Pacqua, Inc.
Dillard, Oregon

Manufactured and perfected by the largest manufacturer of diversified particle boards in the nation.

For more information, turn to Reader Service card, circle No. 303
May 1959 103
ANNOUNCING
SOUND-SEAL
a new acoustical
lay-in panel...

stops annoying sound transmission

Representing another first in the acoustical industry for AMC... SOUND-SEAL paneling acts as a barrier against the transmission of sound from room to room, over ceiling-high, movable wall partitions. This economical, lightweight paneling can be designed to fit many modular building requirements. Constructed of steel... laminated with honeycomb cells...

filled with an absorbing element; SOUND-SEAL assures structural rigidity as well as high acoustical absorbence.

Contact us now for more complete information about this unique new acoustical lay-in paneling... we would be pleased to provide you with more information about its remarkable characteristics...

ACOUSTICS MANUFACTURING CORPORATION
17210 GABLE • DETROIT 12, MICHIGAN

Pioneers in large modular steel and aluminum acoustical panels
Outlasts conventional paint coatings by many years

NEW GLID-TILE

...beautifies and upgrades at the same time!

It pays to specify GLID-TILE for heavy traffic areas in offices, schools, institutions and plants, and for problem areas in food processing plants because of its resistance to impact, abrasion and most chemicals. GLID-TILE is a special polyester resin spray finish that lasts a lifetime. It is comparable in beauty and durability to glazed, ceramic or structural tile, yet the initial cost is substantially less.

GLID-TILE gives masonry block, concrete, plaster, wallboard, metal and wood surfaces a tough, protective finish nearly twenty times as thick as the average paint film in a standard two-coat system. And it is far more durable. For example, tests have shown that under heavy impact, a sub-surface of concrete broke before the GLID-TILE finish was destroyed!

It's almost impossible to scratch or mar GLID-TILE. Most acids and solvents, plus alkaline detergents, grease, oil and hot water won't harm it.

New GLID-TILE is available in eggshell or glossy finishes of almost any pastel color—in plain, spatter or web effects.

The tile-like finish seals and smooths the entire wall including mortar joints—for fast, easy maintenance.

Walls in high-traffic areas retain their tile-like beauty for many years.

For complete details, attach coupon to your company letterhead and mail.

The Glidden Company
Dept. PA-559 • 900 Union Commerce Bldg. • Cleveland 14, Ohio

PROFESSIONAL
MAINTENANCE FINISHES
The Glidden Company
900 Union Commerce Building, Cleveland 14, Ohio

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

May 1959 105
LUPTON unites personalized Comfort-

**NEW SYSTEM COOLS, HEATS, VENTILATES**

Now, you can not only cool and ventilate, but heat as well with LUPTON's new Comfort-Conditioning Curtain-Wall System. LUPTON Comfort-Conditioning units, operating as heat pumps, are satisfactory for all heating purposes during change of season, and wherever winter design temperatures are not extreme. Furthermore, these units can be furnished with supplementary heat to take care of all heating requirements, regardless of winter design temperature.

**INSTALLATION COSTS DROP 40 TO 60%**

Unlike central systems, LUPTON Comfort-Conditioning requires no unsightly, expensive cooling towers, ductwork, plumbing connections, or condenser units... only electrical connections. Each unit has single control for temperature, fan, and exhaust for odor- or smoke-removal, allowing individual room regulation. This provides a major rental feature and lowers air-conditioning costs. Wide separation between outside air intake and discharge prevents air from re-circulating... results in faster, more efficient operation for heating or cooling.
Conditioning* with curtain walls

WIDELY FLEXIBLE SYSTEM

With all panels sized uniformly, you can readily expand or decrease Comfort-Conditioning capacity at small cost. LUPTON's two Comfort-Conditioning units—heavy-duty, for severest cooling requirements, and lighter-duty, for most applications—are interchangeable in themselves or with shelving, bookcases, or storage cabinets. You get a complete exterior-interior wall, with nothing protruding on the outside, a sill of normal depth on the inside. Also the LUPTON system gives you great opportunity for variation in spandrel proportions and surface treatment.

We are prepared to give, during sketch stages of building design, 'not to exceed' appraisals of installation and operating costs of LUPTON Comfort-Conditioning used in connection with LUPTON Curtain-Wall Systems.

LUPTON ALUMINUM CURTAIN WALLS AND WINDOWS

MICHAEL FLYNN MANUFACTURING COMPANY

Main Office and Plant: 700 E. Godfrey Ave., Philadelphia 24, Pa. New York, N. Y.; Chicago, Ill.; Cincinnati, Ohio; Cleveland, Ohio; Los Angeles, Calif.; Stockton, Calif.; Dallas, Texas. Representatives in other principal cities.
At Detroit's Pavilion Apartments, Youngstown "Buckeye" Conduit is being attached to electrical control box.

**Accent on Excellence**

**Youngstown "Buckeye" steel conduit**

Detroit's new, modern-as-tomorrow Pavilion Apartments, designed by architect Mies Van Der Rohe, has lifetime electrical wiring protection—thanks to Youngstown "Buckeye" Rigid Steel Conduit.

Electrical systems that function improperly are a bad investment. To be sure your installations are both safe and efficient, always specify "Buckeye" Conduit. It's been the consistent choice of leading architects, contractors and building owners over the years.

When you specify "Buckeye" Conduit, the high standards of Youngstown quality, the personal touch in Youngstown service will help you create electrical wiring systems with an "accent on excellence".

---

**Carefully selected Continuous Weld Pipe**

is first accurately threaded. Next, the pipe is thoroughly cleaned by pickling. Then it is immersed in a bath of molten pure zinc. A special process is used to remove it from this bath so that a clean, smooth zinc coating remains on both inside and outside. Then a coating of tough, transparent lacquer is baked on both inside and outside surfaces, providing a smooth raceway through which wires may be easily fished. This is Youngstown's long-lasting, trouble-free, easy bending hot galvanized Buckeye Conduit.

---

**PAVILION APARTMENTS, DETROIT, MICHIGAN**

**OWNER:**
Herbert S. Greenwald, Metropolitan Corporation of America, Chicago, Illinois

**ARCHITECT:**
Mies Van Der Rohe, F.A.I.A., Chicago, Illinois

**GENERAL CONTRACTOR:**
Herbert Construction Corp., Chicago, Illinois

**CONSULTING ENGINEER:**
William Goodman, Chicago, Illinois

**ELECTRICAL CONTRACTOR:**
Post Electric Co., Dearborn, Michigan

**CONDUIT SUPPLIER:**
Commerce Electric Supply Co., Farmington, Michigan

---

Youngstown, Youngstown, Ohio

THE YOUNGSTOWN SHEET AND TUBE COMPANY

Carbon, Alloy and Yoloy Steel

---

For more information, turn to Reader Service card, circle No. 307
PLASTIC LAMINATE COMBINES LIGHT DIFFUSION, SOUND CONTROL

Noise-Reducing Luminous Ceilings Possible with Material

The problem of sound reflection and absorption by over-all luminous ceilings may have been solved with the introduction of a lightweight, translucent acoustical element containing a clear core of rigid vinyl plastic, faced on both sides with porous cellulose film. The core is about ten mils thick, and is perforated with holes about 1/16" in diameter and 5/32" on centers. Material developed by Bolt, Beranek & Newman.

Available in either flat or corrugated form, the material is offered as the acoustical equivalent of 3/4" perforated mineral tile, while at the same time very satisfactorily diffusing fluorescent light over large areas. It has a noise-reduction coefficient of .70. A backing air space is required for ideal sound absorption; the depth should lie between two inches and three feet to obtain high coefficients. Uses aside from luminous ceilings include sound absorbers, duct lining, back-lighted wall lighting, space dividers and screens, and preformed acoustical units.

Contrex Company manufactures the material as "Sound-sheet," and it is also available from the Wakefield Company as "Super Wakon."

Contrex Company
Wakefield Company

May 1959
Sprayed-Asbestos Insulation Aids Acoustics
Blanket of sprayed "Limpet" asbestos applied to inside of precast, reinforced-concrete shells forming vaulted nave and tower of St. Mark's Lutheran Church, Norwich, Conn., achieves desirable acoustical climate as well as satisfying primary thermal insulation role. Layer is 1 1/8" thick, provides noise-reduction coefficient of .85, and "U" factor of heat transmission of .17 Btu/hr/sq ft/°F. John MacL. Johansen was architect.

Keasbey & Mattison Company

Wall Covering Insulates, Controls Sound
"Curon," a 1/4" thick, multicellular plastic wall covering is said to offer effective insulation and noise control. Material comes in 10"x10", 10"x20", and 20"x20" tiles, 24" and 48" wide rolls 10 and 20 ft in length (the latter in tweed finish). Available in 24 standard colors and a number of scenic wall panels. May be used on both finished and unfinished wall surfaces. Reported to be inert to bacteria and fungus growth. Fabrics by Jack Lenor Larsen have been backed with "Curon."

Curon Division, Curtiss-Wright Corporation

Sound Barrier Reduces Noise Transmission
Sound barrier increases sound insulation through suspended acoustical ceilings and over partitions between adjacent areas. Barrier is installed from underside of concrete arch or floor above, down to top of partition above acoustical ceiling, increasing sound-transmission loss through system to 40 decibels. Consists of flexible incombustible asbestos, aluminum, and mineral wool unit. Standard length, 36"; standard heights, 24", 36", 48".

Elolf Hansson, Inc.

Acoustical Tiles Installed on Grid System
Noncombustible, acoustical fiber-glass ceiling panels are said to reduce as much as 90% of room noise. "Panelglas" consists of lightweight (0.20 lb/sq ft), "lay-in" units with white-painted, leather-textured under surface. Panels are 2'x2' or 2'x4', and 1 1/4" thick. Can be used with simple, inexpensive grid suspension system. So constructed that glass fibers on front are always in tension and those in rear are always under compression, panels form smooth, taut ceiling. White, textured surface is capable of reflecting 78% of room light.

Johns-Manville Corporation

Acoustical Roof Deck Easily Laid
Standard drilled acoustical roof deck reportedly offers high sound-absorbentiveness plus effective insulation and strong structural support. Long edges of roof decking have a tongue and groove joint which permits adjoining units to mesh readily. Taping with a wood block fits the panels snugly.

Simpson Logging Company
Insulation Baffles Enhance Gym Acoustics
Long strips of "Ultralite" glass-fiber insulation hung in criss-cross fashion form interesting and acoustically effective grid pattern for ceiling of Foster High School Gymnasium, Seattle, Wash. Strips are 24" wide and 2" thick. Openings between strips permit natural light to come through from translucent roof panels. Metal clips hold material to wires pulled taut with turnbuckles. Architect of school is Ralph H. Burkhard.
Gustin-Bacon Manufacturing Company

Hardwood Provides Band-Room Acoustics
Hardwood in various forms was selected for wall and ceiling acoustical applications in the band room of a Bremerton, Wash., high school by Architects Branch & Branch. Simpson 3" roofdeck was used as the ceiling. Evanite perforated "Corru-board" was installed on two opposing walls, flat surface hardboard at far end, and angular, sound-deflective walls of polished fir wainscot were used. "Corru-board" was applied directly to studs over a 2" mineral wool blanket. Hardboard was applied by nailing through the perforations with sheet metal screws.
Evans Products Company

Sound Trap Silences Air System, Duct Noises
Design of "Aircoustat" sound traps is based on principle developed to silence noise of aircraft jet engines. System consists of fibrous sound-absorptive materials to suppress high frequencies, an intricate steel structure to silence middle frequencies, and special resonators to retard low frequencies. All elements encased in a galvanized steel shell. Smallest unit is 2' long, largest is 8' long. A 2" metal extension on all units permits them to be installed like ductwork.
Koppers Company, Inc.

Cork Tile Subdues Indoor Pedestrian Noise
Cork tile, said to be most highly resilient of floor coverings in hard surface group, is composed of 200 million air cells per cubic inch, resulting in an air content of 50% of the mass by volume. Improvement of structural materials making possible thinner floor structures calls for consideration of floor covering materials, such as cork, which absorb the noise of traffic footfall. Installation shows 5/16 gage cork tile used in National Housing Center, Washington, D. C.
Dodge Cork Company

Steel Deck Aids Acoustics, Is Loadbearing
Perforations in "Milcor Acoustideck" are located in vertical webs as close to neutral axis as possible, enabling minimum loss in section properties and loadbearing capacities. Deck yields high sound-absorption with only about 2½% open area and equivalent of ½" thickness of sound-absorbent blanket. Available in several finishes: bonderized and baked epoxy-base synthetic-enamel primer; Ti-Co galvanized; Paint-Tite galvanized; and aluminum. Acoustical batts are quickly placed in voids by erection crews after steel deck has been welded into position.
Inland Steel Products Company
Prefabricated Band Shell Is All Aluminum
Overly "Hi-Fi Band Shell" employs baffles on sides and ceiling to diffuse rebounding echoes; is suspended from rear by three aluminum cantilevers. Inner and outer sides of shell are of structural aluminum and plastic sandwich panels. Size of shell may vary to accommodate 40 to 120 musicians. Co-operating with Overly in design of shell were Aluminum Company of America, Pittsburgh Architects Schell & Deeter, and bandmasters throughout the country. Overly Manufacturing Company

Playground Furniture Has Sculptured Look
"Senior Space Station" is one of 31 age-graded play devices. The three shell-like forms are made of aluminum, and accessory parts are made of plastic-coated steel. Device accommodates 25 children playing at the same time in a minimum space of 18'x9'. Cost is $1000. Playground Corporation of America

New Construction Molds Seating
Formpressed upholstered seating from Denmark uses lightweight frames cast to form. Durable, comfortable, 3-person sofa, lounge chairs, and occasional chairs designed by Hans Olsen are available. Mills-Denmark

Roof Deck Performs Three Functions
"Structur-Acoustic" roof system acts as structural deck, acoustical ceiling, and poured insulation. Can now be used with rigid board insulation also. In addition to ceiling application, product can be used for interior liners of curtain walls, soundproof partitions, and surfaces of existing partitions. May be ordered in wide range of pastel colors; ceiling version is vinyl-primed for field painting. Granco Steel Products Company

Acoustical Treatment Given Auditorium Dome
The vast retractable dome of Mitchell & Ritchey's new Pittsburgh Civic Auditorium will be covered inside with perforated metal sheet for noise-control purposes. "Diamontex" lay-in panels are available in either 23⅜" x 23⅜" or 23⅜" x 47⅜" sizes. Larger panel has a deep center groove, assuring satisfactory stiffness and the appearance of two ft sq module. Company's "Acousti-Vee" panels can be used for wide spans with a tee-bar suspension system. Diamond Manufacturing Company

Bricks That Stay Clean
Silaneal 772 retains original color of brick, prevents development of efflorescence (green or white stains on finished masonry walls) caused when water enters brick—treatment consists of dipping or spraying each brick when it leaves the kiln with a dilute water-solution compound which bonds a thin, invisible, silicone deposit to the pore surfaces of the brick, rendering it completely water-repellent. Reduced suction rate allows faster laying up of courses of brick—finished walls can be cleaned without acid wash; thereafter, normally collected dirt easily washes off with water. Dow Corning Corporation

(Continued on page 118)
Sealed for a Golden Age with the
"ADHERENTLY" DIFFERENT SEALANT

Polysulfide sealant custom-tinted gold for America's first golden skyscraper — 575 Lexington Ave., N. Y. C.

based on
THIOKOL
LIQUID POLYMERS

"575" reflects architecture's contemporary golden age — the era of the curtain wall. Its gleaming spandrels, mullions and window frames are made of gold-anodized aluminum. They are beautifully and lastingly sealed with a THIOKOL polysulfide base compound tinted gold to blend with the golden hue of the structure.

Only THIOKOL polysulfide type sealants “live” with a building... bond tenaciously to its surfaces, bend, stretch and compress with its movement. They join together any combination of materials with weld-like strength, while their rubbery give-and-take quality withstands the stress of traffic, wind, weather, aging and thermal change.

Coupon brings full information, mail it today.

For more information, send coupon to Thiokol Chemical Corp., Dept. 33, 780 N. Clinton Ave., Trenton, N. J. In Canada: Naugatuck Chemicals Division, Dominion Rubber Co., Elmira, Ontario.

Gentlemen: Please send complete details about polysulfide sealants based on Thiokol liquid polymers.

1. Company
2. Street
3. City
4. State
5. Your Name

Building 575 Lexington Ave., N. Y. C.
Architect Sylvan Bien, Robert L. Bien
Contractors Sam Minskoff & Sons, Inc.
Curtain Walls Reynolds Metals Co.
Sealant Polysulfide by 3M

For more information, turn to Reader Service card, circle No. 308

May 1959 115
Sound Baffle Suitable for Large Areas
Spherical suspension baffles feature new method of rear horn loading which spreads sound evenly throughout large areas. Use of bass reflex principle brings out natural full range in bass frequencies. Baffles originally designed for special needs of New York's Roosevelt Raceway; now on general market. Company's other models include acousti-louvered trim rings, trim squares, and baffles louvered to match air diffusers. (Left)
Soundolier, Inc.

Precast Marble Tile Easily Installed
"Venezia" Italian marble tile consists of colored-marble chips cast in colored cement. Installation is simple; there is no need for grinding, polishing, or metal strips—tile is just placed on one inch bed of mortar. Available in a number of colors including black, off-white, pink, and gold. Suitable for floors both indoors and outdoors.
Continental Agencies

Texture Livens Wool Carpet
Available in 11 colors or custom-dyed in minimum lengths of 60'; Town and Country is a random loop round wire carpeting in 12' or 15' widths. Mitin mothproofed, Dura Bond backed, it retails for approximately $13.50. (Above left)
Katherine Rug Mills

Bubble Lamps In Clusters Are Introduced
A variation of George Nelson's bubble lamps—of plastic and steel—is available. From two to six round or elliptical bubbles on the fixture may hang at different levels. Supported by a metal canopy in white, chrome, or brass which is marked with decorative spheres in birch or walnut, they retail from approximately $50 to $90.
Howard Miller Clock Company
Richards Morgenthal (National Distributors)

Carpet Has Custom Colors, Durability
Woven of 70% wool and 30% nylon yarns in an interestingly varied cut-pile surface, Forecast is available in Lacquer Red, Shantung Beige, Bamboo Beige, Ming Green, Tonkin Beige, Canton Blue, Cathay Beige, Mandarin Gold. Approximate retail price: $14.95.
Archibald Holmes & Son

Acoustical Plaster Is in Two Shades of White
Spray-on gypsum acoustical plaster has noise-reduction coefficient of .55 to .60; will not burn or support combustion. In application, it gives coverage of eight to ten yards per 1/2" thickness. Comes in two shades of white: Super White, which has light-reflective coefficient of .70; and White, with a rating of from .67 to .69.
Bestwall Gypsum Company

Decorative Asbestos Blind Is Developed
A new yarn of asbestos fibers reinforced with glass fibers, developed by Johns-Manville, was used in this handsome, fireproof, mildew-resistant, insulating drapery. Installed at Dorado Hotel, Puerto Rico, by Ann Hatfield Associates, the white, open-weave blind now may be custom-ordered.
Lozano-Fisher Studios
Of equal importance to the selection of specification grade material is the follow-through that assures your client the quality you specified was installed. Arrow-Hart simplifies this problem by marking all wiring devices in its Specification Grade Line with the well-known H&H. Only Arrow-Hart's highest quality wiring devices carry this trade-mark—a trade-mark you can count on... a trade-mark you should look for.

Write for the H&H Specification Index Chart—designed to simplify your specification problems to:
Controlling Ventilation Noises presents the results of a research project undertaken by Armour Research Foundation to develop a complete noise-rating method for fan units. Brochure presents data which will enable the selector of fan units to use fan noise ratings to predict noise levels in areas being ventilated. Areas of problem discussed are: physics of noise; fan-noise prediction methods; fan-noise reduction (ducts, turns, splitters, plenums, etc.; outdoor noise (made by fan exhaust). Examples are thoroughly documented in text, tables, and charts: examples of fan-noise calculation for a factory office; and examples of fan-noise calculation for a gymnasium used as a sports arena (basketball games), as a dance floor, and as an auditorium. Other tables and charts give additional data on noise control and its requirements. An extra set of noise-problem and calculation worksheets is included with each booklet.

DeBotherat Fans, Division of American Machine and Metals, Inc. (Bulletin A78, 50-p.)

A continuous blanket acoustical treatment is described. The Cafco sound-shield— a proportioned blend of highly-refined mineral fibers and inorganic binders, machine-applied to form a fissured, level, continuous blanket which may be textured or colored as desired. Incombustible, has low thermal conductivity, is clean and easy to apply, offers wide design flexibility. Surface may have smooth, fine, medium, or coarse travertine texture, and monolithic application provides a surface uninterrupted by joint patterns, dropped corners, and grid systems.

Columbia Acoustics and Fireproofing Company (4-p.)

Calculating Room Noise Levels

Prediction of room noise levels caused by internal noise sources is subject of paper which describes method of measuring noise levels in 'sones' rather than decibels. System takes into account both frequency and sound pressure, more accurately measures effect of noise on the human ear. Specifically, paper deals with fans, but system is applicable to other noises, providing they are similar to one another. Manufacturer also offers a Propellair fan-noise calculator slide rule (illustrated), which can be used for other noises, so long as they are similar to one another.

Propellair Division of Robbins & Myers, Inc. (12-p.)
Acoustical ceilings, available in various "appearance" groups which offer attractive ceiling designs for many kinds of interiors. Finishing and maintenance information, specifications, installation methods, included. Fully illustrated.

Armstrong Cork Company (AIA 39-B, 35-p.)

Acoustical Paneling in Various Materials
Folder presents comprehensive data on Epco acoustical materials. Products include perforated sheets available in hardboard, steel, aluminum, galvanized, stainless steel, and plywood. Properties, fabrication, surface treatments, etc., are explained—suggested recommendations for specifying, installation data, new paint information, are included.

Erdle Perforating Co., Inc. (7-p.)

Wall and Ceiling Acoustical Products
Catalog describes line of acoustical materials: Styltone (non-combustible, fissured, mineral tile); Panatone (non-combustible, perforated, metal-pan, acoustical system); Claritone (hollow-core, drilled, wood-fiber tile); and Perforated Asbestos Board. Patterns available include random-fissured, regular and random-perforated, unperforated, and sputter effect. Complete physical, acoustical characteristics of each product provided, including flame-resistance, light-reflectance, sound-absorption coefficients,—also sizes, thicknesses, installation instructions.

Baldwin-Hill Company (AIA 39-B, 8-p.)

Integrated Radiant-Acoustical-Ceiling Package
Brochure describes Simplex aluminum flush-panel acoustical ceiling—direct suspension-type ceiling specially suited to commercial, institutional buildings. Some listed features are absence of all cross furring for ease of installation, 100 percent accessibility to concealed overhead utilities, flexibility of size for latitude of design; incombustibility, resistance to moisture, 85% noise-reduction coefficient, permanent finishes for lowest maintenance—panels are available in mill-waxed, anodized (clear and colored) and baked white enamel, in 12" widths, lengths to 5'. Drawings show installation procedure; photographs of current uses, included.

Simplex Ceiling Corporation (AIA 39b, 8-p.)

AIR AND TEMPERATURE CONTROL

Sound Traps Silence Air-Systems Noises
File sheet illustrates Aircoustat air-system noise silencer, balanced to silence noise in all frequencies—of all-galvanized, corrosion-resistant, maintenance-free, and fireproof heavy-gage steel construction, with 2' metal extensions mounted like ductwork. Comes in convenient sizes and small units easy to handle and install (from 25 lb, 2' length to 500 lb, 8' length)—stock models form multiple units for meeting unlimited airflow requirements.

Koppers Company, Inc. (2-p.)

Easy to Install Air-System Filter Frames
Folder details installation procedure for Glasfloss improved self-locking steel frames for central air-filtration banks in commercial and industrial air-conditioning systems. Die-fabricated from 18-gage rolled steel, lightweight frames are made in 20"x20" and 20"x25" sizes to receive standard Glasfloss filters—both available for 2" and 4" filtering depth, finished in black enamel. Can be assembled into either flat or V-banks. Drawings show succession of steps in assembling.

Pittsburgh Plate Glass Company (2-p.)

Air Diffusers Offer Application Flexibility
Catalog illustrates concealed air diffusers especially designed for increased appearance appeal, and noiseless, draftless, air distribution in acoustical ceilings. Contains 16 sections dealing with operation and styling of Perfair outlets. Features include interchangeable cores for varied patterns; built-in Agi-flex direction controllers allowing downward air stream deflection in varying degrees; positive control. Available square or rectangular, in sizes to conform to standard tile dimensions.

Air Devices, Inc. (16-p.)

Heating and Ventilating System for Schools
Brochure describes and illustrates operating principles and components of school heating and ventilating system. Comfort Curtain principle places air supply openings around perimeter of building. Special advantages are said to be: elimination of underfloor piping channels, boiler rooms and flues; absence of central station boiler plant; easy servicing and maintenance. Other features are accurate, responsive temperature control—whisper-quiet performance. Although designed for classrooms, can be adapted to other building types.

Lennox Industries, Inc. (AIA 30-A, 28-p.)

CONSTRUCTION

Custom Curtain Wall Adapts to All Building Types
Catalog discusses curtain-wall systems adaptable to every exterior design. Included are typical sections for large flat panels, designed for speedy enclosure of medium- and high-rise structures; light commercial grid for multistory buildings; structural aluminum grid, a versatile system for low-rise buildings—the latter providing wide variety of panel materials and window types. Descriptive material (Continued on page 195)
CHEMISTRY creates versatile new building materials

New materials created in chemists' beakers are taking their place among those produced by the saw, the refractory and the blast furnace. These new products supplement traditional building materials, giving architects improved flexibility in all types of building designs. They are polychemicals—lightweight, easy to fabricate materials that resist the attacks of moisture and time. One of them, a superior insulation manufactured by Dow, has many useful applications in creative construction for the progressive architect.

MOTEL CHAIN USES STYROFOAM®...
CUTS INSULATION, PLASTERING COSTS 33%

A better building at lower cost is the aim of every architect and client. That's why Travelodge Corporation is "sold" on a new construction method using Styrofoam. Styrofoam is simply adhered to the interior of a masonry wall with a mastic adhesive and then plastered over. By thus eliminating furring, lath and batt insulation, Travelodge saves enough to insulate and plaster every fourth unit free!

Travelodge finds that Styrofoam provides a more durable base for interior plaster than 3/8" lath. They also find that Styrofoam has a permanently low "K" factor because this insulation stays dry. In their words, "Our selection of Styrofoam was based on tests of the insulating value of different materials. After two years use, we found that our heat and air conditioning costs stayed well within the predicted low range."

Styrofoam has been used in Travelodge motels in Indianapolis, Toledo and Cleveland and will be used in four new motels now under construction.
STYROFOAM insulates three more ways in N.Y. high school

In cavity wall and foundation

Styrofoam keeps the students warm in Westbury High School. As a cavity wall insulation it acts as a vapor seal as well as insulation against extreme temperature differences which produce undesirable condensation in the cavity. As a foundation perimeter insulation, it eliminates the solid masonry path between slab and foundation.

In both applications, the low “K” factor of Styrofoam stays low. For Styrofoam won’t absorb water...resists rot, mold, and deterioration. It offers permanent insulating effectiveness that pays off in warm, dry, comfortable interiors.

...in walk-in refrigerators

Styrofoam was specified for still another task in Westbury High School. Large walk-in refrigerators in the food service area were insulated with Styrofoam to keep heat gain to a minimum. Styrofoam has been used in industrial cold storage plants for over a decade. Its long-lasting insulating efficiency makes it ideal for low-temperature applications of all types.

LATEX PAINTS resist chemical attack. As soon as water evaporates from freshly applied latex paint, a tough film forms that is highly resistant to chemical attack. This means paint stays new looking longer...resists discoloration and bacterial action.

ROOFMATE forms own moisture barrier. Unique cell structure provides unyielding resistance to water and water vapor...reduces vapor build-up and resulting blisters and leaks. Retains insulating efficiency for many years.

WANT TO KNOW MORE?

New Dow building products fashioned from polychemicals are improving quality and trimming costs in many building projects. For more information about any of them, write to us on your letterhead today.

Specify Dow Building Products for your designs

STYROFOAM™ • SCORBORD™ • SARALOY™ 400 • ROOFMATE™ • POLYFILM™ • LATEX

*Trademark ♦ Patented applied for

THE DOW CHEMICAL COMPANY
Midland, Michigan

DOW
and project photos of features and appearances of each of three basic curtain-wall series, suggested specifications, provided.

Albro Metal Products Corporation (12 p.) 214

Construction and Maintenance Products
Brochure contains thumbnail descriptions of 21 leading building "savers" for plant maintenance and restoration (products designed for floor treatment, waterproofing, damproofing, roof-coating, as well as paints and protective coatings). Specifications, application data, information on product features facilitate selection of specific product to meet most frequent maintenance or construction needs.

L. Sonneborn Sons, Inc. (Brochure BP6030, 4-p.) 215

Treated Wood Invulnerable to Termites, Decay
Presentation describes durability and versatility of wood as building product when pressure-treated with preservative salts. Wolmanized lumber and timber offer economical protection against termites and decay caused by moisture and humidity such as is found in tropical areas, are available in all conventional forms, in all standard sizes and thicknesses from $\frac{1}{4}$" to 1", for exterior and interior construction requirements.

Koppers Company, Inc. (AIA 19-A-3, 12-p.) 216

* Versatile Aluminum Mill Products

Brochure aids in pinpointing specific properties of aluminum products and applying them accurately to desired end use. Contained are sections on alloy and temper designations, fatigue and shearing strengths, various alloys available in foil, sheet and plate, wire, rod and bar, tubing and pipe, and extruded and structural shapes. Complete specifications included; fabricating and finishing techniques are summarized. Bibliography provides guide to available related literature and movies.

Reynolds Metals Company (18-p.) 217

Precast Concrete Floor and Roof System
Catalog describes precast hollow-core concrete floor and roof system (monolithically cast, long-span slabs, reinforced with prestressed steel), claiming simpler design, less supervisory requirement; dry, fast construction; immediate availability of deck for subcontractors' work; saving of 2" to 8" per story in wall height; smooth slab undersurface that needs only calking and painting to produce attractive paneled ceiling. Included are photographs, design data, detail drawings on use of Flexicore system with steel and reinforced concrete frames; plumbing; heating and cooling systems; electrical wiring—also complete information on recommended specifications.

The Flexicore Company, Inc. (AIA 4-K, 8-p.) 218

Recommended Practice on Concrete Finishes
Pocket "Manual of Recommended Practice for Cast-in-Place, Exposed, Architectural Concrete Finishes" provides standards for more accurately evaluating quotations for concrete finishing—prepared in specification form, to be used either in part or entirety, gives explicit detailed information regarding procedures to follow in accomplishing highest quality appearance for exposed concrete. In eight sections describing each phase of recommended practice from specifications through construction.

Concrete Industry Board, Inc. ($1.00, 15-p.) 219

DOORS AND WINDOWS

Alumilited Water-Tight Sliding Glass Doors
Catalog presents details on each model in Capri line of all-aluminum sliding glass doors—styles shown are Cadet (for 3/16" crystal and 1/4" plate); Cavalier (for 5/8" insulating glass); Continental (for 1" insulating glass and 1/4" plate). Available in 67 different stock types and sizes. Special sizes also furnished. All doors come in long-life Alumilit finish for maximum corrosion resistance.

T. V. Walker & Son, Inc. (AIA 16-E, 8-p.) 219

Traversing, Non-Traversing Blinds
Data sheet provides general and detail specifications for custom-made blinds, principally designed for large-scale projects. Materials, size and shape, type of operation, are determined according to individual requirements, tested in full-size mock-ups prior to installation. Some typical louvre materials include fabric (plastic-coated), aluminum (enameled or anodized, any color), sheet metal (enameled), molded or woven plastic, and fiberglass. Louvre widths vary from 2" to 11", extend to 30 ft length. Available in flat, curved, S-shaped, and tubular sections.

Sun Vertikal Blind Company (AIA 35-P-3, 4-p.) 220

Customized Residential, Commercial Garage Doors
Literature pieces in single file sheets present specification data on line of overhead-acting residential and commercial-industrial garage doors—cover the many material, construction, operating, styling features of line. Complete information on: Marvel-Life, guaranteed for life, hardboard panels; edge grain Douglas Fir stiles and rails; bored dowel, pressure-fitted construction; torsion spring mechanism; and styling with customized design. Data is available in individual pieces or complete set.

Crawford Door Company 221

(Continued on page 126)
G-E silicones help new houses look better, sell sooner

Masonry water repellents made with General Electric silicones are quick and easy to apply. They penetrate deep into the capillary pores of masonry, forming an invisible water-repellent shield. This eliminates those ugly stains caused by rain-splashed mud or by dust and dirt on the masonry surface. Rain runs right off, carrying dirt with it.

But that's just the beginning! Silicone water repellents help prevent surface salt deposits; retard chipping and cracking; minimize water penetration and resulting freeze-thaw damage. They keep moisture out, yet permit masonry to breathe—thus protecting interior surfaces against peeling and flaking.

A recent survey shows that home buyers expect to pay far more for this protection than the actual cost to you. Find out more about G-E silicones and what they can do for your new home—in appearance, protection and sales! Mail the coupon today.

General Electric does not make a water repellent but does manufacture basic silicone ingredients for the finished product. Water repellents made with General Electric silicones are available from leading manufacturers.

Progress is Our Most Important Product

GENERAL ELECTRIC

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

May 1959 123
H & K
PERFORATED
METAL
GRILLES
(Send for Grille Catalog)

H & K
Perforated
Decorative
MATERIALS
(Send for Catalog 75)

Harrington & King has been serving architects for 75 years with a wide selection of classic and modern designs in grilles and decorative materials.

H & K grilles are furnished in accordance with your specifications . . . in practically any type and gauge of metal . . . and in the finish desired. Perforations are clean and burr-free, margins are in alignment, and each grille is leveled and inspected before shipment.

H & K decorative patterns, from a vast selection of existing dies, are serving architects in many new and unusual ways. If your plans call for perforated materials, depend on H & K!

See Sweet’s File—30f/Ha

THE ALL-NEW

P&S

ROCKER-GLO

SWITCH

... the switch that looks right, feels right and is right for every type of wiring job.

Here at last! After intensive testing, Pass & Seymour, Inc., proudly presents ROCKER-GLO . . . the one switch that answers all your needs.

No matter how you choose to operate the new ROCKEER-GLO, the merest brush of a finger produces instant action . . . and ROCKER-GLO glows in the dark!

AVAILABLE in Despard inter-changeable type. Despard type mounted on strap and narrow rocker for tumbler switch plates. A specification grade switch, 15 and 20 amps, 120/277 volts A.C.

Send for brochure on Rocker-Glo
Dept. PA-559

PASS & SEYMOUR, INC.
SYRACUSE 9, NEW YORK

DEPT. 5352

REINHOLD PUBLISHING CORPORATION
430 Park Avenue, New York 22, N. Y.

PARKING

By Geoffrey Baker
and Bruno Funaro

Here are photos and plans of parking lots, ramp garages, parking decks, underground garages and elevator garages. Examples are drawn from large cities and small towns. There are suggested zoning requirements for parking and freight dock space.

To simplify the layout of parking space there is a special ten page section of easy-to-use diagrams and tables. These show parking patterns and stall sizes for most advantageous use of a given site under various parking conditions. 200 pages, 8½ x 11½, 225 illustrations. $9.50

DEPT. 5352

REINHOLD PUBLISHING CORPORATION
430 Park Avenue, New York 22, N. Y.
A COMPLETE NEW STAND­ARD DOOR LINE

DECORATIVE FLUSH DOORS

... offers the architect greater economies through standardization ... wide range of door constructions, new colors.

Alumilited ALUMINUM

with attractive ribbed design

DUSING & HUNT ADDS A NEW LOOK TO FLUSH DOOR DESIGNS

The DécorDor line marks an achievement ... an important step by Dusing and Hunt to present to architects one of the most extensive lines of flush doors ever offered to the industry ... steel fire doors, aluminum, wood veneers and vinyl-on-steel. Varieties of door designs, colors, and veneers, plus informative construction and door type data on the DécorDor line, are contained in a New Folder No. DH-D59 ... now available.

THE PyroDor LINE, supplemented with the DécorDor line is comprehensive — includes Underwriters' Labeled Flush Metal Doors, Metal Frames, Hardware and Door Accessories. Specifications and Details in 24 page Catalog DHS-2459.

Distributors are strategically located throughout the United States. Consult Sweet's Architectural, Plant Engineering or Industrial Construction Files or write direct.

DUSING and HUNT, Inc. 61 LAKE ST. N. LEROY, N. Y.

Over 50 Years Manufacturing Fireproof Doors and Metal Trim

For more information, turn to Reader Service card, circle No. 314
ELECTRICAL EQUIPMENT, LIGHTING

Guide to Lighting Layouts
File sheets contain information on four lamp types: (1) 300 ft wide beam flood lamp with rectangular beam pattern, and built-in reflector for lifelong clean light, for general flood or spot lighting; (2) Super-Hi fluorescent lamps for factory installations (both in and outdoor), claiming to increase light 2½ times over that provided by regular T-12 lamps, yet requiring no additional fixtures, for varied uses including even building exterior floodlighting; (3) high light-output deluxe color tone white mercury lamps with added warm color quality—and a square-shape eye-saving white light bulb, silica-coated on the inside. Westinghouse Electric Corporation 222

FINISHERS AND PROTECTORS

Color Finishes Promote Wood's Decorative Uses
Publication deals with applications of Rez sealer primers and exterior and interior color wood finishes—comprehensively illustrates uses of wood: in construction, as decorative wall material, for interior furnishings (tables, cabinets, bookcases, etc.). Two-color drawings and full-color photographs emphasize range of design possibilities in use of varying color tones, grains, and surface textures of wood. Book contains diagrammatic build-it-yourself drawings, discussion of wood strengths and features for best application results, surface preparation and color finish application information. Monsanto Chemical Company (56-p.) 223

INSULATION

* Insulating Marble-Faced Curtain Walls
Manual provides general description of lightweight claiming up to 50 percent less weight than standard marble veneer) insulative, weatherproof wall panels with Vermarco marble facings, designed and fabricated to combine virtues of real marble with desirable qualities of curtain wall systems. Discussed and illustrated are flush-mount, grid-wall, window-wall panels. Thicknesses including insulation core, in basic series 100, 200, 300, are 3", 1 1/4", 1 1/2". Available in normal sizes up to 20 sq ft surface area. Special reinforced panels can be made larger. Vermont Marble Company (AIA 17-A, 8-p.) 224

SANITATION, WATER SUPPLY, PLUMBING

Decorating Ideas for Bathrooms
Book contains full-color illustrations of contemporary bathrooms, aids in determining colors and arrangements, selection of fittings and fixtures. Provides a good source of decorating ideas for bathrooms. Kohler Company (20-p.) 225

SURFACING MATERIALS

Hardboard as Covering and Building Material
Booklet presents detailed drawings and descriptions on structural practices and principles in uses of hardboard—shows typical new-building, remodeling, attic, garage and farm applications. Available are: Weytex-all-purpose panel in standard, tempered and perforated types, thicknesses of 1/10", 1/8", 3/16"—width 4', lengths 8' to 16'; Weylite, a lower density economy panel, thicknesses 3/16" and 1/2"—width 4', lengths 8' to 16'; Weybase underlayment for floor coverings in 0.215" thickness, sizes 3'x4' and 4'x4'. Silvatek Products Division Weyerhaeuser Timber Company (8-p.) 230
NEW FREEDOM OF DESIGN—
UNIVERSAL LIGHTING DUCT HAS
5 METHODS OF SUSPENSION!

You can solve virtually any lighting fixture placement problem with Bull-Dog Universal Lighting Duct. The prefabricated, standardized duct is amazingly easy to assemble and offers a choice of five different suspension methods for either the 20-amp or 50-amp ratings. One or a combination of these methods will adapt to any structure... and meet any installation requirement quickly and economically.

"ULD" is a continuous electrical outlet, with conductors running the entire length of the duct. Duct sections telescope together mechanically and electrically by a plain coupling. Light fixtures connect quickly by means of twist-out plugs which can be added or repositioned at any point. Plugs are available for direct fixture attachment or will take a standard attachment cap. The duct both feeds and supports fixtures... can be easily relocated as lighting needs change.

Your clients will find Universal Lighting Duct is less costly than installed pipe and wire. And if the lighting plan is altered during construction, flexible "ULD" can be repositioned without costly "rewiring".

Inform your customer of the economies of Universal Lighting Duct. He'll find it is the most efficient, economical and flexible lighting duct system available. "ULD" is U/L listed.

BULLDOG ELECTRIC PRODUCTS DIVISION
I-T-E CIRCUIT BREAKER COMPANY
BOX 177 • DETROIT 32, MICHIGAN

For more information, turn to Reader Service card, circle No. 315

May 1959 127
DOOR CLOSERS THAT DON'T SHOW USED THROUGHOUT MIAMI'S NEW DUPONT PLAZA CENTER


Norton INADOR concealed door closers enhance beauty of clean-lined modern doors

There's no compromise on beauty of doors in this distinguished modern structure. Every one of its 250 interior doors is equipped with a Norton Inador, nearest thing to an invisible door closer now available. Inador's entire mechanism is fully concealed inside the top rail so that it cannot detract in any way from the smooth modern lines of door and trim.

The Inador mechanism is the ultimate of compactness, can be mortised into the top rail of any standard 1½" door. It's the ultimate in sturdiness, too...all the rugged, dependable power that only true liquid door closers can provide, plus the reliability, low maintenance and precision workmanship common to all Norton Door Closers. Current catalog gives complete data. Write for it today.

NORTON INADOR concealed door closers enhance beauty of clean-lined modern doors

Norton INADOR: For streamlined modern design; available with (A) regular arm and (B) holder arm...4 sizes to meet all standard requirements.

NORTON 750: New corner design with concealed arms, for all types of doors, particularly narrow-rail doors.

NORTON SURFACE TYPE: For all Norton Installations where concealment is not essential.

NORTON 703-N Compact surface-mounted type...1½ inch projection.

A continuing series of outstanding office buildings, hospitals, schools, churches and industrial structures using NORTON DOOR CLOSERS

Dept. PA-59, Berrien Springs, Michigan

For more information, turn to Reader Service card, circle No. 316
Power to the sky with

RISER DUCT
BY BULLDOG

Now, there's a sure way to get ample power as many stories high as you like—BullDog's new combination of high-performance Lo-X® duct and integral-mounted power panels.

It's a system where a low, balanced voltage-drop can be predetermined... where power loss is minimized... and where each duct section has an extra reserved current capacity inherent in its construction.

Other advantages: Power may be tapped off through the compact panels at any joint on the duct. Panels bolt easily to the bus bars... are available with I-T-E Molded Case Circuit Breakers through 800 amperes or with BullDog's famous Vacu-Break® Switching Units through 600 amperes. Provisions for current-limiting Amptraps® are optional to protect against dangerous high short circuit currents. And most panels have space for adding future circuits when the need arises.

Choose wisely, choose the finest. Choose Integral Panel—Lo-X Riser Duct by BullDog.

* Chase-Drawtmark registered trademark

BULLDOG ELECTRIC PRODUCTS DIVISION
I-T-E CIRCUIT BREAKER COMPANY
BOX 177 • DETROIT 32, MICHIGAN

For more information, turn to Reader Service card, circle No. 317
Now! Choose from a complete line:

3M Building Adhesives and Sealers for every bonding and sealing job

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


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

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

SEE WHAT 3M ADHESIVES CAN DO FOR YOU—These are but four adhesive products research-developed by 3M to improve your building installations, cut your building costs. 3M offers the widest range of experience and products for your adhesive, coating and sealer needs. Call your 3M Field Engineer. Or, for more information and free literature, write on your company letterhead, stating your interest, to: A.C.&S. Division, 3M, Dept. YD-59, St. Paul 6, Minnesota.

ADHESIVES, COATINGS AND SEALERS DIVISION

MINNESOTA MINING AND MANUFACTURING COMPANY

...WHERE RESEARCH IS THE KEY TO TOMORROW
Looking Forward to June  
PROGRESSIVE ARCHITECTURE

FOUR HOUSES OF WORSHIP
Perhaps our most noted designer of religious structures is Pietro Belluschi. In recent years, the Dean of the School of Architecture & Planning at MIT has done a number of new churches and temples, both alone and in collaboration with other architects, among them Skidmore, Owings & Merrill; Carl Koch & Associates; and Keyes, Leathbridge & Condon. JUNE P/A will examine four of the most outstanding of these recent structures.

THE CORPORATE NEIGHBOR IN THE SUBURB
A building increasingly familiar in our suburbs and our countryside is the branch office building or the headquarters office building. Three well designed examples of this type are featured in JUNE P/A—the work of Sherwood, Mills & Smith; Garfield, Harris, Schafer, Flynn & Williams; and Thomas T. Haynes, Jr.

Two additional buildings to be presented in June are the office building of Architects King & Lewis of Detroit, Michigan, and Littleton, Massachusetts, High School by The Architects Collaborative. The latter will be the first full presentation of this distinguished school.

INTERIOR DESIGN DATA for June will be devoted to handsome bank interiors. Materials & Methods articles will include a mechanical-engineering report on the Dorr-Oliver Building, new methods for reinforced-concrete design, a reappraisal of seamless-roll terne roofing, and a technical discussion of Venetian blinds.
The architect and pastor agreed that, because of its beautiful and ample country setting, St. Peter's "should not be limited to the usual rectangular form of church if another shape would centralize the altar more and give a greater sense of participation."

Architect Field volunteered, "Rilco's well engineered and detailed shop drawings of this unusual and somewhat complicated framing demonstrated a high competency in this field."

Martin Dyke and Sons, contractors, report "Rilco did a magnificent job of engineering the laminated members for the project. Due to the curves and angles involved in this unusual building design, it obviously was no simple task to coordinate the various members and to make a near perfect fit at all connections. In our opinion the cost would have been much higher if any other material had been used to obtain this design."

Rilco laminated beams and arches offer new design, beauty with economy for any structure. Rilco service engineers will be glad to consult with you. Write for information.

Write for Free Church Construction Catalog featuring wood laminated and fabricated structures.

District Offices: Newark, N. J. • Fort Wayne, Ind. • Tacoma, Wash.