FIRST UNITS OF SOCIETY HILL OPEN
REDEVELOPMENT FOR WOONSOCKET, R.I.
SIDE-BY-SIDE TOWNS PLAN RENEWAL
HOUSTON TO GET MAJOR AUDITORIUM
GALAXY OF FORMS IN SAN DIEGO
EVOCATIVE MIDWEST DORMITORIES
THREE-USE PROJECT SET FOR PHOENIX
WALK-TO-WORK HOUSING IN NORFOLK
NEW ADDITION TO NEW HAVEN GALLERY
WASHINGTON/FINANCIAL NEWS
PRODUCTS: LEARNING MACHINES
MANUFACTURERS' DATA
Of course you don’t flip a coin to select a hardwood flooring contractor. But many are chosen simply on a “low” bid basis, without consideration of all factors involved.

Client approval and your professional reputation depend upon expert workmanship as well as quality flooring. To protect and benefit your client and yourself, you naturally want to do all you can to be sure you have a competent flooring contractor.

You can be sure, if:

- You include in your specifications a wood flooring section. Do not list wood flooring in carpentry or millwork.
- You designate a quality wood floor system requiring installation by an experienced, fully qualified flooring contractor.
- You establish his responsibility for the complete installation from subfloor to finished floor.
- You insist that “low bids” on alternate flooring systems be listed according to:
  - Sub-contractor
  - Proposed alternate system
  - Manufacturer co-signing performance guarantee

When you specify Robbins’ hardwood flooring systems you call for both quality materials and expert installation. Contractors who install Robbins flooring are selected for their experience, high standards and business competence. They make possible the Robbins guarantee, countersigned by the hardwood flooring contractor with whom you deal personally.

Find out more about your nearest Robbins franchised installer. For his name, write Robbins Flooring Company, Dept. PA-363, White Lake, Wisconsin.
FIRST SOCIETY HILL BUILDINGS OPEN

PHILADELPHIA, PENNSYLVANIA. On land once sold by William Penn to the Free Society of Traders, a group formed to help him promote and settle Pennsylvania, the first units of the handsomest project in Philadelphia's famous redevelopment program have opened.

The Society Hill portion of the Washington Square East Redevelopment Project was the subject of a noted competition some years ago, won by I. M. Pei's designs for Webb & Knapp. The Pei plan [pp. 170-175, OCTOBER 1960 P/A and pp. 142-145, JANUARY 1961 P/A] called for a complex of three tower apartment buildings, town houses in rows and a quadrangle, shopping facilities, and the rehabilitation of fine old houses on the site. The first completed portion consists of the town house quadrangle near the projected apartment towers. When all elements are completed, Society Hill will become a "super-super block" interlaced with pedestrian walkways, plazas, courts, and service access routes.

The town houses are three-story brick structures with simple, dignified façades designed to blend with the fine old Federal buildings of the area. Each dwelling unit has an arched entrance from the street giving onto a hallway, where the visitor takes a circular stairway (right) to the second-floor living room and library (the latter can be converted to the master bedroom). Ground floor contains dining room, kitchen and breakfast room, and the top floor has three bedrooms and two baths. Second floor balconies overlook the street and interior court on each side.
WOONSOCKET, RHODE ISLAND This textile mill city of 47,000-plus is suffering the ills of many such New England municipalities—loss of industry, decline in population, a tendency of remaining enterprises to become moribund. Unlike similar cities, Woonsocket has decided to do something to resuscitate itself by redeveloping and revitalizing its central business district. Early in 1962, concerned citizens gathered to study the problem. With the plans and advise of Providence planning firm Blair & Stein Associates and its consultants, Architect Rai K. Okamoto, San Francisco, and economists Dr. Roy Gerard and Dr. Morris Budin, Project Magic WAND (Woonsocket Action for a New Downtown) was developed.

Focus of the 10-year renewal plan is on Main Street as it traverses three points: Market Square, Depot Square, and Monument Square. At the center, Depot Square, would be a new City Hall atop a series of terraces. A library and educational center would be in this area also. All along the street, new shopping and business facilities and remodeled older structures would attract customers back downtown.

Parking Lots for Half-and-Half Municipality

Westerly and Pawcatuck are small cities one of which (Westerly) is in Rhode Island and the other (Pawcatuck) in Connecticut. Although separated by the Pawcatuck River, they form, in effect, one continuous municipality, and it is in this form that they are treated in the downtown development plan by New York Architect Charles James Koulbanis.

Presently lining the river as it flows through the center of town are business structures, warehouses, and loft structures, most of them dating from the 19th Century. Many of these structures are candidates for renovation and renewal; others have outlived their usefulness. What Koulbanis proposes—and it is a proposal that will startle many architects and planners—is to build a culvert 600’ long over the river in the CBD and convert the space into a huge car park. This would make the reconverted and new buildings, which would otherwise be looking onto the river, into a downtown shopping center. There would be a small park at the end of the parking area, and a small island upstream from the bridge would be developed as a recreational spot.
HOUSTON TO GET FOUR-CAPACITY AUDITORIUM

HOUSTON, TEXAS On land donated by the city and with $6,000,000 from Houston Endowment, Inc., the Jesse H. Jones Hall for the Performing Arts, designed by Caudill, Rowlett & Scott, will feed the cultural appetites of Houstoners by 1965.

The auditorium, named after Franklin D. Roosevelt's last Secretary of Commerce, will feature curved walls faced with travertine sheltered behind a classic colonnade sheathed with granite panels. A roof-high, glazed entrance will reveal the dramatic 65-ft-high terraced Grand Lobby. Generous tiered foyers at box, mezzanine, and balcony levels will also overlook the main lobby floor. Stage will be the largest in Houston, and will be adjustable from 60' to 36' in width and 28' to 18' in height. All but the top 6' of the stage tower will be housed under the deep, flat roof of the building. A block-long civic plaza is being considered for the site across from the auditorium, to sit atop an underground parking garage.

A notable feature of the hall will be that it can be adjusted to four different seating capacities. For occasions requiring full seating, the entire auditorium will be opened to its 3004 capacity (see A in sections, top, right). For a crowd of almost 2400, ceiling panels will be lowered to the balcony rail (B). The mezzanine will be screened off by electronically-controlled panels for an audience of around 2000 (C). About 1800 (D), will be accommodated by screening off the last five rows of the orchestra.

Plan (right): 1 stage; 2 orchestra; 3 boxes above; 4 green room; 5 lobby; 6 ticket booths; 7 stairs to offices below; 8 receiving room; 9 stars' dressing rooms; 10 stage door.
SAN DIEGO, CALIFORNIA. Marine Park is a recreational-educational area proposed for Mission Bay Park here. Described by the architect, Victor Gruen Associates, as “a new approach to the aquarium-type park,” the project will feature many types of exhibits dealing with the world’s ocean life.

There will be five major exhibits: a theater with underwater viewing facilities showing large sea mammals; a “reef building” with four great tanks showing reef denizens in natural settings; an exterior lagoon for whales and other large specimens, with an adjoining amphitheater for viewing; a separate aquarium for small sea life; and a pool and exhibit space for showing Japanese pearl diving and pearl culture. In addition, there will be a Hawaiian pavilion, outdoor pools for seals, otter, and water birds, and snack bars and other concessions. Materials to be used will emphasize natural look in the parklike setting—rough-sawn wood and stone.

Of architectural note is the disparity of forms selected for the various buildings. The theater (1) will have a long, swooping roof to house the underwater show; the Hawaiian pavilion (3) will recall the indigenous architecture of the islands; and the reef building (3) will have a rather formal design compared to the rest of the project.
Minnesota Dormitories Have Noted Ancestor

NORTHFIELD, MINNESOTA The outspoken critics of Eero Saarinen's Ezra Stiles and Morse Colleges at Yale University will be beside themselves when they see the designs for the men's and women's residence halls at St. Olaf College in Northfield, Minnesota. Fans of the Saarinen creation, on the other hand, may be either enthusiastic about or bemused by the project by Sovik, Mathre & Madson, for Yale is the unmistakable primate of St. Olaf in this case. Is this bad? Opinions will differ, but it will be interesting to observe a somewhat similar solution at work in a small, rural college, as contrasted with that in a large, urban university.

High-rise dormitories are proposed for St. Olaf's to (1) avoid the monotony prevalent in repetitious low-rise units, (2) repeat the informal irregularity of the hilltop area, and (3) through vertical emphasis and use of materials, to blend with the more traditionally designed structures of the college. In both dormitories, from 25-30 students (a grouping found desirable by many deans of men and women) will occupy each floor in irregularly-shaped two-student rooms around a core containing showers, toilets, elevators, stairs, study, and laundry. No two rooms on any floor will be similarly shaped. Studies by the college indicate that these halls will cost no more than conventional halls. They will have stone exterior walls with steel casement windows.
BIG-SCALE REGIONAL ART IN PHOENIX

PHOENIX, ARIZONA Sand castings reflecting the regional art of the Southwest will enliven the end, mechanical brokerage office at ground level in the proposed "Phoenixia, Arizona Executive Center," by Daniel, Mann, Johnson & Mendenhall of Los Angeles. The project is expected to provide a business, commercial, and residential center in this rapidly growing city. The city-block area will encompass three high-rise buildings situated around a central "helicoid" sheltering a shopping area: a 12-story apartment building, a 20-story hotel, and a 16-story office building. There will be garden apartments and cabanas in a recreation area between the apartment building and the hotel.

Whoever named "Phoenixia" should know that the name refers to a civilization that flourished in the Eastern Mediterranean region from approximately 1250 B.C. to about the 4th Century B.C., whereas "Phoenix" was, of course, named after the fabulous avian symbol of death and resurrection sacred to the Egyptian sun god.

Housing for a Growing Norfolk

NORFOLK, VIRGINIA This city, which has had a 43 per cent population increase in the last decade, and is currently undergoing such improvements as the Civic Center and Medical Towers by Vincent G. Kling (with Childs & Smith), is experiencing a growing need for urban housing. To answer this need at least partially, a competition was held among developers not too long ago for a project on Smith's Creek, an offshoot of Elizabeth River, which flows past the city. Winner was the design by Otto E. Reichert-Facilities for Samuel and Harry Berger of Philadelphia.

The residential development, named "Golden Towne" by its sponsors, will be ideally located about halfway between downtown Norfolk and the new Medical Center—about a five minute walk in either direction. Since the site is blessed with a view worth looking at, the architect has proposed a slab apartment building and a cruciform apartment tower overlooking plazas sheltering two levels of parking. At the edge of the plazas, and appropriately blocked off from noise that may emanate from any recreational activities taking place there, will be the town houses, which will also enjoy uninterrupted views of Smith's Creek and the river. The lobbies, terraces, and promenades of the project will be embellished with especially-commissioned sculptures, murals, and fountains; more physical tenant amenities will include a marina on the creek, swimming pool with adjacent dressing rooms, and a milk bar. In addition to underground parking, there will be open-air parking screened by trees at the rear of the site, between the apartment buildings and the access road to the development.
NEW HAVEN, CONNECTICUT This city of 152,000 is rapidly becoming one of the country’s outstanding galleries of mid-20th-Century architecture. Of course, Yale helps with buildings by Saarinen, Rudolph, SOM, and Johnson, but the town is doing almost as well as the gown: cf., Carlin’s firehouse, an SOM school, Rudolph’s garage, and now, an interesting union building by William Mileto and John Fowler.

Designed for the Teamsters, Chauffers & Helpers Union, the building will basically be a hollow square of offices elevated above a central meeting hall. Mileto states that the building must house the private functions of the president, secretary, and committees, plus the more public activities such as meetings, health checkups, receipt of subscriptions, and inquiries. There will be two entrances to the meeting hall, one from the street (above), and one from the parking lot (right). The president will have a separate entrance off the drive to the parking lot. A stairway at the front will take union members to the public waiting room. The 150-capacity meeting hall will admit light during the day through a continuous perimeter skylight, and the areas between the hall and the offices (called “cells” by the architect) will be side-lit. All “cells” will be top-lit. Materials will consist of concrete block walls, reinforced concrete beams, and heavy timber planks. Structural: Herman Spiegel; Mechanical: John Altieri.
1. To insulate masonry walls well:

2. Start with Styrotac® bonding adhesive.

5. Take wallboard. (Forget the vapor barrier.)

6. Styrotac goes on.
3. Specify Styrofoam® FR insulation board. It prevents moisture absorption and migration; keeps its low "k" factor (0.261) permanently.

4. Styrofoam FR is pressed into place.


For more information, turn to Reader Service card, circle No. 317
AIA AWARDS

For the first time in its 108-year-history, the AIA has awarded a citation to a U.S. President for his work for, and interest in, superior design and planning. The recipient, appropriately enough, is John F. Kennedy, who is probably the most active and efficacious chief executive in this field since Thomas Jefferson.

Five Honor Awards and eight Awards of Merit will be presented for architecture at the AIA Convention in May. Honor Awards: the late Eero Saarinen for the Ezra Stiles and Morse Colleges at Yale; Anshen & Allen for International Building, San Francisco; Minoru Yamasaki and Ralph M. Parsons for Dharan International Airport, Saudi Arabia; Skidmore, Owings & Merrill (New York) for addition to the Knox Art Galleries, Buffalo, N.Y.; and Joseph Salerno for the House of Worship, Rowayton, Conn. Awards of Merit: the late Eero Saarinen for TWA Terminal, Idlewild; Skidmore Owings & Merrill (New York) and Nolan, Norman & Nolan for John Hancock Building, New Orleans; Harrel & Hamilton for Riverside Apartment Tower, Oklahoma; Edward D. Stone for addition to General Community Hospital, Carmel, Calif.; East Tennessee Chapter AIA for Market Square, Knoxville; The Architects Collaborative for academic quadrangle at Brandeis University (Benjamin Thompson, Partner in Charge); Marquis & Stoller for house in Mill Valley, Calif.; and George Nemeny and the late J. J. Levinson for house in Kings Point, N. Y.

AIA will complete its wrap-up of contemporary greatness at the May convention with the awarding of its Gold Medal to Alvar Aalto.

Medals in associated fields will go to Isamu Noguchi (Fine Arts); R. Buckminster Fuller (Allied Professions); Paolo Soleri (Craftsmanship); and G. E. Kidder Smith (Architectural Photography). Citation to an Organization will go to the American Craftsmen’s Council; and the Edward C. Kemper Award will be received by Samuel E. Lunden of Los Angeles.

Scheduled to be made Honorary Members of AIA for “distinguished service to the profession” are Dr. Kenneth John Conant, professor emeritus of architecture at Harvard; Rev. Dr. Edward S. Frey, Director, Commission on Church Architecture, Lutheran Church in America; Charles D. Gibson, Chief, Bureau of School Planning, Dept. of Education, State of California; Dr. Walter Littlefield Creese, new Dean of the School of Architecture and Allied Arts, University of Oregon; and Ernest P. Mickel, Washington Editor of F. W. Dodge.

Robie House Fund

A fund for the restoration of Frank Lloyd Wright’s Robie House has been established with a view toward collecting $250,000 from the structure’s admirers throughout the world. Recently, the deed to the house was presented to the University of Chicago by William Zeckendorf, chairman of the board of Webb & Knapp, Inc., who moved in and acted to save the building when it was threatened with destruction a few years ago. Information can be obtained from, and contributions sent to, Ira J. Bach, Chairman, Committee for the Preservation of the Robie House for the University of Chicago, Room 1066, City Hall, Chicago 2, Ill.

EDUCATION

The Paolo Soleri workshop, sponsored by Arizona State University, will emphasize the wash-away silt technique of producing scale models and sculpture. The five-week workshop, which begins June 17, seeks non-Arizona State applicants who have completed two years of architectural design or studio work. Final applications must be sent to James W. Elmore, Director, School of Architecture, by April 1... William Str onde, architectural engineering chairman for the American Society for Engineering Education,
the new McQuay

**Seasonpak WATER CHILLER**

matches Seasonmaster and Seasonmaker air conditioning systems

**SEASONPAK WATER CHILLERS**

Three models: Dualpak, 60—150 H.P.; Monopak, 25—75 H.P.; Unipak, 7 1/2—15 H.P.

**SEASONMASTER AIR CONDITIONERS**

Three basic models in 44 sizes from 700 to 38,100 cfm.

**SEASONMAKER AIR CONDITIONERS**

Five basic lines, 13 models, 63 sizes from 150 to 3,200 cfm.

McQuay gives you the new Seasonpak water chiller, designed to combine with the famous Seasonmakers and Seasonmasters to provide a fully integrated air conditioning system. The Seasonpak enables McQuay to offer one of the most complete lines of air handling equipment in the industry, allowing you to specify a complete air conditioning system with components engineered to match each other and built to meet your requirements exactly—and all from one manufacturer, with no extras to buy. The Seasonpak, economically producing maximum system efficiency when installed with McQuay air handling and fan coil equipment, is completely modern and fully proven in field service. Like the famous Seasonmakers and Seasonmasters, the Seasonpak is built to the same high standards of quality that have characterized these McQuay products for years. For more information on the new Seasonpak—and the complete systems McQuay now offers—write McQuay, Inc., 1638 Broadway N.E., Minneapolis 13, Minn.
has joined the Texas A&M faculty to direct graduate research in structures. Other newcomers at Texas A&M are assistant professors Guillermo Vidaud and Weldon C. Steward, and instructors Steve M. Vaught and David G. Woodcock. The University of Washington, Seattle, has established two departments from its College of Architecture and Urban Planning, naming Meyer Wolfe chairman of Urban Planning and Victor Steinbrueck acting chairman of architecture. Staff additions at the University of Virginia are: Peter Faller of the Technische-Hochschule, Stuttgart, as lecturer in architecture, and Donald H. Miller, who recently completed a research fellowship at Delft, as assistant professor in city planning.

**COMPETITION**

The Government of Kuwait has announced a competition, open only to registered U.S. architects, for the design, construction supervision, and eventual demolition of that country's pavilion at the New York World's Fair. Competition prizes will be $4,000, first; $3,000, second; and $2,000, third. Winning architect will be engaged for supervisory and demolition operations, and will be reimbursed in accordance with standard AIA fees. Project information from Embassy of Kuwait, 2500 Calvert St., Washington, D.C.; fair information from Charles Poletti, Vice-President, International Affairs and Exhibitions, New York World's Fair Corp., Flushing Meadow Park, Flushing 62, N.Y.; competition announcement from Commodity and Export Promotion Staff, Business and Defense Services Administration, Room 4217, U.S. Dept. of Commerce, Washington 25, D.C.

**Two for the Transit**

Two proposals for transit systems have come down the pike in recent weeks, one emphasizing in-town, metropolitan transportation, the other suggesting new means of car-less commuting. The "Transit Expressway" system proposed by Westinghouse Electric Corporation's Industrial Systems Group will recall to many the "Monorail" introduced at Seattle's Century 21 Exposition. The system utilizes a 20-passenger car (operating in trains of from 1 to 10 units) traveling at speeds up to 50 mph on a trespass-free, aerial, closed-loop expressway. The 8600-lb cars (present rapid transit rail cars weigh about 60,000 lbs) would travel on a roadway of two precast, prestressed concrete beams supported by concrete piers at 44-ft intervals. Guiding principles would be four horizontal rubber guide wheels riding against the curbs of the roadway. Dual tires would be used on each wheel to guard against flats. Automation of traffic, speed, and other operating factors would be used "to the maximum extent consistent with safety and reliability standards." A system that would function as an artery to stream commuters into cities, as well as get people around town without clogging the streets with automobiles, was proposed by Automation Management, Inc., of Westboro, Mass. Called "staRRcar" (below)—which stands for self-transit rail and road car system (automation hasn't caught up with the English language yet, obviously)—the system features small units called, naturally, "staRRcars," which the commuter can drive like a car to a spur track giving onto a main track leading into the city. The unit is automatically accelerated to 70 mph upon entering the main track, and joined to a train of similar units, all operating under the same propulsion. (This enables the traveler to have his hands free for finishing his coffee, reading his paper, or any other entertainments that may come to mind.) When his "staRRcar"...
HIGH-RISE IN A HURRY

Major apartment builder specifies INCOR® for both summer and winter construction

Underhill Construction Corp., a leading concrete contractor in the New York metropolitan area, has established an enviable reputation for skillful, on-schedule construction of high-rise apartment buildings. Shown here are a few of the current Underhill projects.

To maintain efficient, streamlined schedules in both winter and summer construction, Underhill specifies concrete made with "Incor" High Early Strength Portland Cement. The early service strength of this concrete saves in finishing time, permits stripping forms sooner, and allows maximum construction speed.

With selective use of Lone Star Portland Cement and "Incor" 24-Hour Cement, the contractor has complete flexibility in setting up concreting schedules. Job practice often suggests, for example, that "Incor" be used for the first four days of a five-day week, switching to regular Lone Star on Friday for weekend curing. Such selective concreting results in maximum efficiency and economy.

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

INCOR®

24-HOUR CEMENT

CAROL TOWERS, Manhattan—One of the tallest reinforced concrete apartment buildings in New York; 34 floors. Architect: PHILIP BIRNBAUM; Engineer: ROBERT ROSENWASSER; Ready-mix Concrete: COLONIAL SAND & STONE CO., INC.

PENN STATION SOUTH, Manhattan—Ten buildings in a 5-block area, accommodating 2,820 families. Architect: HERMAN J. JESSOR; Engineers: FARKAS & BARRON; General Contractor: COMMUNITY SERVICES, INC.; Ready-mix Concrete: M. F. HICKEY CO., INC.

UNIVERSITY TERRACE, Brooklyn—Three 24-story towers containing 978 apartments. Architects: KELLY & GRIEZEN; Engineers: FARKAS & BARRON; General Contractor: TISHMAN CONSTRUCTION CORPORATION; Ready-mix Concrete: RYAN READY MIXED CONCRETE CORP.

YORKSHIRE TOWERS, Manhattan—Twenty-one-story tower with 700 apartments. Architect: SLINGERLAND & BOOS; KAY & KAVOVITT, INC.; Ready-mix Concrete: COLONIAL SAND & STONE CO., INC.
approaches the desired exit in the city, the commuter (presumably in full control of his senses by now) presses dashboard buttons that cause the car to leave the main track automatically, decelerate, and enter a garage especially designed for the unit. Since individual cars would not be owned, but used instead on a special license and commutation ticket system, the garage would be set up on a first-in, first-out basis. As soon as he has downed his last post-work martini, the householder could return to the garage, hop into the first "starReCar" on line, and zip home to the madame blithe as a sparrow (and as unexpected, perhaps, given the absence of the good old train schedule).

Icosahedron House
House project in New Jersey by Mat Kuten of New Hope, Pa., is based on a truncated icosahedron, or twenty-sided polyhedron. (This one is a polyhedron of 12 pentagons and 20 hexagons having all sides equal, and acting as bases for 12 pentagon pyramids and 20 hexagon pyramids with all apaxes in a sphere.) Main level features an open plan with living area, dining area, kitchen, and master bedroom around a central fireplace. A spiral staircase leads down to the children's bedrooms, and there is a bedroom balcony over the master bedroom, bath, and kitchen. The owner plans to construct a funicular railway on the precipitous site.

Greece-y Kid Stuff
Not exactly kid stuff, but a lot of fun, were the "columns" designed by New York architect Rolf Myller as decor for the Athenian Ball at the Plaza Hotel in Manhattan. The affair is the annual get-together of the Athens (Greece) College Alumni Association. Not exactly kid stuff, but a lot of fun, were the "columns" designed by New York architect Rolf Myller as decor for the Athenian Ball at the Plaza Hotel in Manhattan. The affair is the annual get-together of the Athens (Greece) College Alumni Association. Not exactly kid stuff, but a lot of fun, were the "columns" designed by New York architect Rolf Myller as decor for the Athenian Ball at the Plaza Hotel in Manhattan. The affair is the annual get-together of the Athens (Greece) College Alumni Association. Not exactly kid stuff, but a lot of fun, were the "columns" designed by New York architect Rolf Myller as decor for the Athenian Ball at the Plaza Hotel in Manhattan. The affair is the annual get-together of the Athens (Greece) College Alumni Association.

Church Houses Elders
Martin Luther Tower is a project by St. Marks Lutheran Church in San Francisco for a 12-story apartment house for the elderly, designed by Donald Powers Smith. The building will contain 51 studio apartments and 72 one-bedroom apartments. The total project also includes a recreation building, a landscaped garden courtyard, and a parking area for residents. Cost is expected to be $2,012,000.

PERSONALITIES
New president of the American Society of Landscape Architects is John Ormsbee Simonds, Pittsburgh. The 1963 R. S. Reynolds Memorial Award sculpture will be created by Dimitri Hadzi. Cooper Union Alumni Association "Alumnus of the Year" is William Lukacs, director of Research in Buildings and Furnishings Dept. of YMCA National Council.

CALENDAR
"An Examination of the Shopping Center as a Nucleus of Intercity Activity" is the theme of the 1963 Urban Design Conference to take place at Harvard Graduate School of Design, April 26-27. 67th annual meeting of the National Fire Protection Association will be in Portland, Ore., May 13-17. "New Horizons for Engineering" is theme of the combined Design Engineering Conference/Design Engineering Show, New York, May 20-23. 1963 Spring Seminar of the American Institute of Design and Drafting will be held May 23-24 at Wayne State University, Detroit. American Society of Landscape Architects will have its 64th annual meeting in Pittsburgh, June 23-26; theme is "The Landscape Architect and Public Parks." Second Pacific Rim Architectural Conference will be held in Mexico City, October 12-18; discussion topic will be "Consequences of Design."
The wall supports the compartment

Bond the dividing partitions to the wall under pressure—an exciting new concept in toilet compartment design. No ceiling suspension... No floor support—simply use the wall to anchor and support the compartment installation. No rust can start at the floor. Ease in maintenance and cleaning. Simplicity of design line creates a strikingly handsome installation. Write for complete information.
I'm in the roof deck business. We tell architects and contractors they don't need any reinforcement with our deck.

"After all," we say, "Decks are only required to be designed for uniform static loads. Why worry about impact loads?"

And when workmen dropped materials on the deck after the roofing material was on, well...nobody got wise that the material beneath was shattered. After all, the roofing material covered it up.

But things got a little sticky when a building inspector jumped from a low parapet onto one of our unreinforced decks. His replacement was very unreasonable about okaying the deck.
"Besides," we say, "our decks do have some impact resistance. If a 75 lb. man falls 6 inches onto our deck he won't bother it a bit. If he doesn't do it too often."

Well, we sold a few of our roof decks at first. But after they were up, it seemed when wheelbarrows loaded with heavy materials turned off the runs, spider cracks showed up in our unreinforced deck.

If you're not interested in one of our unreinforced roof decks, I have a nice line of pencils and shoelaces.

This advertisement published by the makers of KEYDECK that remarkably good roof deck reinforcement.

For more information, turn to Reader Service card, circle No. 331
THE EDUCATION BILL — ITS CHANCES

Washington's intense concern with education this year is no surprise to observers. But it is no guarantee that any bills will get through Congress that will amount to very much.

Starting off with the President's own huge proposal, which could run to $4.5 billion over a period of years, the education proposals have been coming thick and fast since the current session started.

They range from a dozen or more bills in both Houses that would give parents extra tax exemptions (up to an extra $1000 a year in some cases) for children who are college students, to Senator Humphrey's plan for a sort of "study now, pay later" loan to help cover estimated costs, to Senator Bartlett's plan for a sort of "supplemental" spending bill, in the Washington jargon—that has already started.

More $ From Highways

Architect/engineers could get some help on highway work, if Congress okay's a new bill that would raise limitations on their fees from 10 to 15 percent.

The 10 per cent limitation is written into the 1956 Highway Act, which limits fees to 10 per cent of Federal participation. Amid pressures last year, the Bureau of Public Roads cracked down further and limited the fees to a percentage of contract prices instead of on estimated costs.

But the new bill (S 626), introduced by Alaska's Senator Bartlett, recognizes that the limitation is inadequate, since, as Bartlett said, "the complexities of modern highway planning . . . have increased such costs substantially."

While on the matter of highways, incidentally, note that persistent comment on the part of architects on the minimal attention given to aesthetic considerations in highway construction seem to be having some effect.

Several of the speakers at the recent Washington session of the Highway Research Board also took architects to task for failure to consider the impact of their roads on surrounding land.

Limiting Labor

You can take it for granted that Congress will pass some sort of legislation this session to restrict labor's powers.

The long-drawn-out newspaper strikes in New York and Cleveland, the month-long longsho'men's strike, plus increasing stoppages in missile and defense construction work, have worn Congressional tempers very thin.

Several bills have already been introduced in both Houses to curb union power. Many of them would place union operations under antitrust laws in some way.

Favoring Labor

Construction workers, however, would gain some advantages—and architects would have to anticipate some higher costs—from proposed changes to the Davis-Bacon act, which controls rates of pay on Federal construction projects.

The bill (S 450) would require contractors to pay only the "prevailing hourly rates," as determined by the Labor Department, but also "prevailing contractor payments" to (a) health and welfare funds, (b) retirement funds, and (c) apprenticeship funds.

These reforms have long been pushed by construction unions to keep non-union "outside" contractors out of established local areas, or at least force them to pay into union-managed funds.

FINANCIAL

While the debate over the growth—or lack of it—of the national economy continued in Washington, the construction economy seemed to be rocking along in unspectacular but healthy shape.

For one thing, prices of FHA-insured new home mortgages leveled off during December, indicating an easing of a money market that had been tightening steadily for some months.

For another, there was a definite upturn in planning for industrial construction of all kinds during December. Utilities also were greatly expanding their plans for new construction.

Voters also had given the industry a major boost by approving during November local bonds totaling $1.9 billion, which represents 87 percent, by value, of the total submitted. After months of rejecting proposals at the polls, voters surprisingly approved a whopping percentage of bonds proposed for administrative and office buildings, okaying $277.1 million's worth, as against $25.1 million disapproved.

The one uncertainty remained the housing field. In 1962, the industry racked up an estimated total of 1,454,700 new starts—up 11 percent over 1961. But builders were still being very cautious about the coming year. Not only were they uncertain of the effect of the antidiscrimination order, but also of further restrictions in new income-tax recommendations. These would have the effect of reducing deductions for interest payments on home mortgages and local taxes. If these recommendations are enacted into law, they could have a serious bearing on the attractiveness of home ownership.
That Have Made History

Roofing history was made with the introduction of the Flintkote Monoform Roofing System employing the ingenious Flintkote Sealzit roofing gun. This amazing gun does all the work of the conventional crew—does it better, does it faster. It applies special Monoform compounds simultaneously with chopped reinforcing glass fibers, forming a tough weather resistant monolithic protective membrane. Whatever your concept of shelter surface... conventional flat... soaring curve... advanced geometric design... let Flintkote Monoform take over! Monoform Roofing is UL approved for new construction, class B for 20-year bondable application. The Flintkote Sealzit roofing gun is manufactured under the following U.S. patents: 2,787,314; 2,933,125; 3,033,472; 3,039,702 and D-187,504. Other U.S. patents pending. Patented in Canada. World wide patents pending.

For more information, turn to Reader Service card, circle No. 323
Porch of the Maidens, or the Caryatids, Erechtheum — facing the Pantheon and the central area of the Acropolis. Height 18 feet.
BEAUTY THAT ENDURES

Announcing dramatic new FISSURA tile and board for ceilings with a new depth of beauty

New Fissura acoustical ceiling tile and board captures the classic elegance and beauty of fissured travertine marble. This totally new Lo-Tone product from Wood Conversion Company has deeper fissures that give this striking pattern a new depth of beauty. Its white surface provides excellent light reflection.

New Fissura tile is available in \( \frac{3}{4} \)" thickness with tongue and groove kerf, as well as in butt joint, kerf and rabbeted. This assures a completely level ceiling and eliminates the need for splines between the edges of the tiles. This new ceiling tile can be installed by all regular application methods — including adhesives, Salco staples and concealed "Z" systems.

The new Fissura tile is available in "rights" and "lefts." This permits patterns to be installed at right angles, or in line, as desired. The architect has complete freedom and flexibility of the ceiling design.

New Fissura is available in the following types of products: F/R tile and ceiling board, ventilating tile and board, vinyl coated ceiling board, attenuation factor (AF) tile, and standard mineral tile and board.

Find your local Lo-Tone Acoustical Contractor in the Yellow Pages, or write direct to: Wood Conversion Co., St. Paul 1, Minnesota.

LO-TONE®
"FISSURA"
MINERAL ACOUSTICAL CEILING TILE AND BOARD

Section of new FISSURA tile shown ACTUAL SIZE.
"Will our new laboratory require special sinks for special corrosives?"

Not if you are careful to specify U. S. Chemical Porcelain Sinks. For these are the laboratory sinks with time-proven ability to handle all corrosives safely.

Years of continuous service in leading hospitals, universities and industrial laboratories throughout the world attest to the everlasting durability of solid chemical porcelain under all types of corrosive conditions. Acids, alkalies, caustics, solvents—hot or cold, mixed or concentrated—a "U. S." sink handles them all. Commonly used cleaning solutions (such as potassium chromate and concentrated sulphuric acid) which may attack other materials cannot harm "U. S." porcelain sinks. With normal routine rinsing even hydrofluoric acid presents no special problem.

Scratch-resistant, stain-free, smooth "mist gray," "surf-green" or sparkling white glazed surfaces assure a lifetime of beauty. No honing or scouring is ever required. High mechanical strength and superior heat-shock resistance for years of reliable, maintenance-free service.

Your Laboratory Furniture Dealer can give you complete details. See him or write for your free copy of new Bulletin L-8R describing over 50 standard sizes and many styles.

CHEMICAL CERAMICS DIVISION

U. S. STONEWARE
AKRON 9, OHIO
TWO ELECTRONIC LEARNING SYSTEMS

New line of electronic language laboratories is thoroughly modular to permit a basic initial installation expandable as needs require and finances allow. System expansion is said by the manufacturer to be as easy as plugging a light cord into a wall outlet. A variety of recording systems is available in the line, including two exclusives: reusable magnetic disc and tape magazine. Shown are several of the units in the new line. Because of its modular construction, the teacher's console (above, left) may have one, two, or even more pedestals, depending on the program sources required by the curriculum. The TRW “Mobile Lab” (center) has 10 positions, expandable to 20 or 30. Recording, programming, and individual supervision are incorporated into the movable unit. It can be converted easily into part of a larger lab system by becoming an end pedestal of the teacher's console. Student positions (above, right) may be either boothless type or with sound absorbing partitions. Thompson Ramo Wooldridge, Inc., 6326 Huntley Rd., Columbus 24, Ohio.

On Free Data Card, Circle 100

An electronic learning system said to bring this type of instructional technique within every school budget and provide for a variety of classroom requirements is manufactured by American Seating. One feature is the “Consollette” (left), a unit designed for use in standard classrooms. Student headsets can be installed at desks or tablet-arm chairs, and as many as 60 positions connected to the console through standard floor jacks. Five lesson sources are available, and students may be instructed or monitored individually. The portable “Suzette” (right) is an itinerant teaching aid with five lesson sources (three-track taped deck, four-speed phonograph, and teacher's voice) and nine headsets. Students listen to either tape or record and respond individually to teacher. Line also features “Chancellor” electronic learning center with 11 lesson sources and provision for student-to-student conversation. “Deluxe” model has 19 lesson sources, student-to-student conversation, and provision for 14 lessons. American Seating, 901 Broadway NW, Grand Rapids 4, Mich.

On Free Data Card, Circle 101
Cantilevered Legs

Desks and cabinets initiate the AIV line of office furniture from Peerless. The design is one of the first fruits of U.S. Steel's promotional program, which offers designs by Peter Muller-Munk Associates to manufacturers. The AIV line features center post cantilever “V” legs of mirror chrome steel; desk pedestals are suspended from the “Spiracor” top. Variety is offered in back panels (half or full length), finishes (painted steel, wood, plastic laminate, etc.), and drawer fittings and accessories. Peerless Steel Equipment Co., Unruh & Hasbrook Ave., Philadelphia 11, Pa.

New Shapes for Glass Block

Glass block, called here “shadow tile,” has received interesting new shapes. The one shown is a modified hexagonal shape recessed within a 12” x 6” rectangle. The other design features a deep longitudinal rib down the center. Also new from the company is the color “Royal Gray,” styled for sun-control purposes. Kimble Glass Co., Subsidiary of Owens-Illinois, P.O. Box 1035, Toledo 1, Ohio.

On Free Data Card, Circle 105

Silk-Screened Formica

New from Formica is a silk-screening process for plastic laminates which gives line-for-line replicas of fabric, artist’s sketch, caning, maps, wallpaper, or printed page. Size may be the same as the original or different. Formica’s current library of silk-screenings contains 30 designs; unlimited possibilities are available with custom designs. Cost is estimated at $.75 to $2/sq ft, depending on complexity and quantity. Shown here is a guestroom whose bookcase wall swings away to expose kitchen and bar, a design by Renny Saltzman, AID, for Formica’s recent group of Second Kitchens. The linen print used on the sofa has been silk-screened onto Formica for cabinets and wine rack along the back wall. Formica Corp., Subsidiary of Cyanamid, Cincinnati 32, Ohio.

On Free Data Card, Circle 106

Compact Water Heater

P-K’s “Compact 400” is a completely new packaged steam hot-water heater, which combines high recovery capacity and optimum heat transfer in an extremely small space. A unit with recovery capacity of 10,500 gph, for example, measures approximately 56” x 53” x 46”. A key feature of the Compact 400 series is the patented “Anticipator,” which senses hot-water needs with speed and accuracy. The entire unit is factory-insulated, and whenever possible, complete assembly is done at the factory. Maintenance

New Collection by Cherner

Industrial designer Norman Cherner has designed an extensive new line for this company, formerly known as Robert Barber, Inc. The group, which contains more than 70 pieces, includes desks, conference tables, credenzas, lamp and coffee tables, pull-up chairs, lounge chairs, swivel chairs, sofas, benches, and ottomans. Two main subgroups are: one all in wood (mostly walnut); and the second a chromed steel collection with accents of wood or (as shown) travertine. Robert Benjamin, Inc., 6 E. 53 St., New York, N.Y.

On Free Data Card, Circle 102

Moisture-proof “Cocoon” for Cigar Warehouse

What is probably the world’s largest “humidor” has been erected at Port Newark, N.J.—a large marine terminal—as a distribution warehouse for the Consolidated Cigar Corporation. Since a constant high relative humidity had to be maintained within the building and there could be no vapor transmission or condensation through any part of it, a practically maintenance-free container for the storage of smokes had to be designed by Roushey, Smith & Miller and the cigar company staff. The designers selected exterior steel wall panels sandwiched with foamed-in-place “Hetrofoam,” a one-shot, rigid system offering heat stability, excellent K-factor, dimensional stability, low water absorption, and low moisture permeability. The material will not distort at temperatures
Prudential takes out "insurance" against vibration...with lead

Main-line railroad trains create vibration adjacent to the new 52-story office building now being erected in Boston by The Prudential Insurance Company of America. That vibration, however, never reaches the pleasant plazas surrounding the building. Where the plaza floor slabs rest on their supporting walls, they are bedded on a double layer of one-inch lead pads. These pads (cut section shown below) are a laminate of lead, asbestos, and steel sealed in lead sheathing. They stop vibration in its track. Other modern buildings which muffle subway, railroad, or highway vibration with lead pads include the Pan Am Building, the Waldorf-Astoria Hotel, and many, many others.

Look into lead whenever you have a problem from heavy machinery, cooling towers, or any other source of severe vibration. For complete technical information relating to your area of interest, write today. Lead Industries Association, Inc., Department N-3, 292 Madison Avenue, New York 17, N. Y.
Reduced Costs in Hydronic Installations

Attempting to reduce costs of hydronic installations to compete with warm air in medium-priced new construction markets, American-Standard has developed several new products: two light-weight, cast-iron boilers, gas or oil-fired, that are lower-priced than any cast-iron product now on the market; ½" heating element to permit use of smaller piping and connecting; new tools to cut material and labor costs that could reduce job costs as much as 15 to 20 per cent. New tools include a jig by which length of ½" or ¾" copper tubing can be quickly bent to form smooth, one-piece connection between the baseboard element and tubing below floor joists. In addition, a new system of design method allows more accurate equipment selection. American-Standard, Plumbing & Heating Division, 40 West 40 St., New York 18, N. Y.

Multiple Units Preserve Building’s Silhouette

Multiple, five-ton rooftop cooling units to take the place of multi-ton central systems on low-rise buildings have been introduced. The 5' x 4' x 2½' units can be easily shifted to different locations in cases of short-term leases. “Market-Aire” system represents a large saving in ductwork, which is here measured in inches rather than feet. Each unit is individually controlled with its own thermostat, allowing for zoned cooling. Texas Products Manufacturing Co., Inc., 919 Taylor St., Waco, Texas.

For more information, turn to Reader Service card, circle No. 109
Residential Lighting by L-M offers wide variety, highly styled designs

Line Material, long a leader in styled outdoor lighting, offers a complete line of units for residential and commercial applications. These units provide soft, low-level illumination. The optical systems reduce and almost completely eliminate glare. Light is directed out and down where you want it.

The units are constructed to provide long service, eliminating replacement cost. Weatherproof construction, and easy access for cleaning and relamping, are additional features. All are available with or without photo controls. These units excellent for outright or term sales or leasing programs.

Authorized L-M Distributors, or L-M Field Engineers, will be glad to provide technical data, and lighting application data of engineering service where required. Call your distributor, your nearest L-M office, or write Line Material Industries, Lighting Dept., Milwaukee 1, Wisconsin.

Traditional Lawn-Glo™, authentic Early American carriage lamp design, all aluminum, with prismatic shatter-proof panels that provide scientific light control. For lamps through 150 watts incandescent or 100 watts mercury. In black and gold, and white and gold.

Style A Contemporary Lawn-Glo; all-aluminum; weather-proof; large reflector and easy-maintenance features. For post-top mounting. All contemporary style Lawn-Glo units available in choice of eight decorator colors. For lamps through 150 watts incandescent.

Contemporary Style C, for post-top mounting. Excellent for patio, gardens, motel grounds.

Contemporary Lawn-Glo-Style B—with bracket for wall mounting. For door-ways, porches, walks.

Wall-Mounted Traditional Lawn-Glo; same as the post-top unit but with cast aluminum bracket.

L-M's new Styled Suburbanaire® is a new version of the original dusk-to-dawn lighting unit used in thousands of farmyards, commercial and neighborhood lighting locations. Mercury or incandescent; glass or plastic refractor; choice of 8 colors. Open refractor reduces maintenance, makes it simple, easy, economical.

L-M's new Stylette™ Post Top Light provides glare-free lighting for a wide variety of applications—residential, motels, hotels, schools, stations. Through 405 watts incandescent with glass refractor; 200 watts with plastic refractor. Choice of 8 colors, seven light patterns with glass refractor. 3-inch mounting collar.

"BETTER LOOKING — BETTER LIGHTING"

L-M's new Stylette™ Post Top Light provides glare-free lighting for a wide variety of applications—residential, motels, hotels, schools, stations. Through 405 watts incandescent with glass refractor; 200 watts with plastic refractor. Choice of 8 colors, seven light patterns with glass refractor. 3-inch mounting collar.

“BETTER LOOKING — BETTER LIGHTING”

For more information, turn to Reader Service card, circle No. 404
**AIR/TEMPERATURE**

**White-Room Engineering**

Environmental control of “white rooms,” and their exacting demand for controlled air filtration, temperature, and humidity, is the subject of new 12-page bulletin from American Air Filter. Bulletin discusses the development of the white room and the need for super-clean air, and illustrates a typical layout of a dust-free complex. Air-filter performances required, plus filter recommendations for various room classifications, are shown in chart form. Also described is AAF’s packaged approach to the environmental control of dust-free rooms. Dept. PD, American Air Filter Co., Inc., 215 Central Ave., Louisville 8, Ky.

On Free Data Card, Circle 200

---

**CONSTRUCTION**

**Thin-Shell Construction**

*Forming Thin Shells,* 28 pages, is the second major bulletin by Dow on the use of “Styrofoam” in thin-shell construction. (Earlier bulletin discussed the expanded polystyrene as a plaster base, as a core material for concrete sandwich panels, and as a form liner for on-site casting of concrete roofs.) New publication describes and illustrates advanced techniques that make possible economical construction in this country of thin-shell buildings. It discusses the use of Styrofoam as a form liner, semistructural form board, and structural form board to create the desired shell surfaces and to act as a support for the application of the structural roof material. In so doing, Styrofoam remains an integral part of the roof as permanent insulation, effective vapor barrier, and base for interior finishes, after the shell material has attained strength and is a self-supporting structure. Bulletin presents case studies, engineering data, references, and specs. Plastics Sales Dept., The Dow Chemical Co., Midland, Mich.

On Free Data Card, Circle 202

---

**Slate Types and Specs**

The many types and uses of Pennsylvania slate are illustrated in an informative 4-page bulletin. Photographs differentiate between ribbon stock and clear stock, and show surface alternatives of natural cleft, honed, and sand-rubbed. Sketches suggest a variety of ways in which slate can “enhance every architectural feeling”—interior and exterior paneling, baseboards, lintels, roofing, interior and exterior window sills, patios and walks, shower stalls, stair treads, hearths and mantels, counter tops. Bulletin includes table of properties and results of corrosion-resistance tests, as well as specs covering workmanship, sizes, setting, and cleaning. The Structural Slate Co., Pen Arny, Pa.

On Free Data Card, Circle 201

---

**Masonry Wall Reinforcing**

*Comprehensive Data File on Masonry Wall Reinforcement* consists of a 36-page technical booklet on “the original masonry wall reinforcement with truss design.” The foreword states that the file has attempted to draw together all the major recommendations proposed or adopted by agencies of the Federal Government, private research organizations, and, of course, the Dur-O-waL Company, in as complete and objective a manner as possible. Various sections then set forth data and details on use in combination with control joints, in composite masonry walls, (Dur-O-waL in lieu of headers), in stacked-bond masonry, in cavity walls, and with glass block. Other sections discuss Dur-O-waL truss design and butt-welded construction, the merits of galvanizing, and mortar-mix specifications for unit masonry. Dur-O-waL National, Inc., P. O. Box 150, Cedar Rapids, Iowa.

On Free Data Card, Circle 203

---

**Structural Framing**

New 28-page manual of architectural details for “Penmetal” structural framing has been issued by Penn Metal Company. Illustrations show connection details for the various sections when used both as an integrated framing system and in conjunction with heavy steel beams, wood framing, and masonry. Included are floor, ceiling, and roof systems; load-bearing walls; curtain walls; and high-bay walls. Also shown are methods for the attachment of various collateral materials, bracing details for wind and seismic loads, and fabricating and welding data. Penn Metal Co., Inc., Parkersburg, W. Va.

On Free Data Card, Circle 204

---

**High-Strength Stainless**

The high-strength and cost-saving advantages of the 200-Series stainless steels are presented in a new 28-page booklet from Union Carbide. Discussed in detail are the compositions, Continued on page 88
UP AND OCCUPIED
IN DAYS*,
NOT 32 WEEKS!

UNCLE BILL'S DISCOUNT STORE
CLEVELAND, OHIO
deHamel Construction
Company, Contractors,
Raymond A. Davies,
Architect, Cleveland, Ohio

(*60 days in this case, from ground-breaking to grand opening)

... because V-LOK interlocks!

Macomber’s V-LOK Steel Framing System is engineered to reduce construction costs, advance occupancy. All interlocking connections are seated with a hammer blow ... provide unequalled framing rigidity and strength. And exclusive V-Section chords are nailable for faster decking. Result: You get a stronger, more rigid frame faster ... lower your building cost per square foot. Practical, too. The V-LOK system includes room to grow ... permits wide design latitude for loading, clear heights, roof type, bay areas. And V-LOK is compatible with modern finishing materials and techniques.

For FREE 48-page design manual, return this coupon today.

MACOMBER
CANTON 1, OHIO
SUBSIDIARY OF SHARON STEEL CORPORATION
ALLSPANS • V-LOK • V-PURLINS • ROOF DECK • BOWSTRING TRUSSES • MACOFORM • STRUCTURAL STEEL

For more information, turn to Reader Service card, circle No. 407
Why buy bits and pieces?

Onan provides a complete package for your standby power installation

Why buy standby power piecemeal? Even if you get all components together on schedule and properly assembled, which supplier do you call for service?

You avoid the buck-passing that invariably occurs when you have multi-supplier responsibility when you specify Onan. We take complete responsibility for supplying everything in the installation... from line transfer controls to fuel tanks. Available in Gas, Gasoline, Diesel Models to 230 KW.

The complete package is factory assembled and checked out under load. Each individual component is right. And they work right together. Your local Onan distributor will be on hand for start-up and run-in checks.

When you specify Onan, you have one local source for service. Forever. No matter what part of the system needs service—whenever required—one local phone call to your Onan distributor takes care of it.

Why don't you call your Onan man next time? He'll work with you and the electrical contractor all the way. He'll recommend the best location for the plant, best fuel system, best cooling system. And don't be surprised if he recommends less power than you had thought necessary.

You'll find your local Onan distributor listed in the Yellow Pages, Thomas' Register, Sweet's. Ask him to send you a copy of Bulletin F-170 “Unit Responsibility.” Or, write the factory, 2515 University Ave. S.E., Minneapolis 14.

ENGINE/GENERATOR DIVISION

Studebaker CORPORATION

PERFORMANCE CERTIFIED

We certify that when properly installed and operated this Onan electric plant will deliver the full power and the voltage and frequency regulation promised by its nameplate and published specifications. This plant has undergone several hours of running-in and testing under realistic load conditions, in accordance with procedures certified by an independent testing laboratory.
Continued from page 81

Sheet-Copper Design

An excellent 140-page publication, Design Principles and Techniques of Sheet-Copper Construction, is the sixth edition of Revere's Copper and Common Sense, which began reporting, in 1945, the results of extensive research into the causes of failure in modern sheet-metal constructions. Revere's research has determined, beyond question, that such failures are the consequence of improper design. This same research led to the recognition of the importance of columnar strength and of other critical factors involved in the proper design of sheet-metal work and to the compilation of recommended procedures for the guidance of the architect and the sheet-metal worker. In this design manual, there is a discussion of the behavior of copper under stress and a review of the research that has led to new design principles. Then follow 46 sheets of design details and installation techniques. Final portion of the bulletin is a data section giving properties, thicknesses, weights, expansion factors, and estimating and sizing information. Revere Copper & Brass Inc., 230 Park Ave., New York 17, N.Y.

On Free Data Card, Circle 206

Seals and Gaskets

New 8-page catalog provides technical information on the full line of Wil-
there are places where SPEEDWALK® and SPEEDRAMP passenger conveyors do it best!

Places where people congest... where heart taxing walks or climbs are involved... where shopping carts, baby strollers, wheelchairs, etc. are needed... these are the places that SPEEDWALK and SPEEDRAMP Passenger Conveyor Systems are exclusively outstanding. Why... because SPEEDWALK and SPEEDRAMP Conveyors move crowds of people conveniently, effortlessly, and safely from point-to-point or between levels. Only SPEEDRAMP Conveyors can provide the exclusive Stephens-Adamson shopping cart attachment. Carts move effortlessly between levels and are automatically discharged without the handler touching them. Baby strollers and wheelchairs are easily conveyed without inconvenience or interruption to normal traffic flow. No other form of vertical transportation can offer this advantage. Economy is a big feature, too, with low initial cost and minimum maintenance. Stephens-Adamson has the priceless experience of installations from coast-to-coast and abroad. All this and beauty too. Investigate our claims—no obligation!

SPEEDWALK® and SPEEDRAMP PASSENGER CONVEYOR SYSTEMS
The Original "Moving Sidewalks" By

PRODUCTS DIVISION • STEPHENS-ADAMSON MFG. CO.
General Office & Main Plant, 45 Ridgeway Avenue, Aurora, Illinois
Plants Located in: Los Angeles, California • Clarksdale, Mississippi
Belleville, Ontario • Mexico D.F.

For more information, turn to Reader Service card, circle No. 362
March 1968

ARCHITECTURE NEWS REPORT

Full Specs on Upward-Acting Doors

File folder from Crawford contains specifications and latest developments on their “Marvel-Lift” upward-acting doors and door operators for industrial, commercial, and residential use. Several copies of a master specification and a short-form spec are provided; these can be conveniently edited by the architect and incorporated into the specs of a particular job. A postcard to be returned to the manufacturer insures that supplies of the specs will be available. Another helpful insert in the folder is a 6-page tabulation of parking dimensions of 1962 cars. Crawford Door Co., 20263 Hoover Rd., Detroit 5, Mich.

DOORS/WINDOWS

Film on Glass

The role of the architect is the theme of Point of View, a new 20-minute film produced by American-Saint Gobain. It stresses the architect’s choice of glass in bringing natural light into a building while reducing heat and glare, and illustrates the part that glass can play in today’s designs. In addition, the film shows how plate glass is manufactured, by taking viewers through the new A-SG plant at Greenland, Tenn.—from the giant melting tanks, through the cutting, grinding, and polishing operations, to final inspection and packing of the glass. Write to: American-Saint Gobain Corp., P.O. Box 929, Kingsport, Tenn.

Latest Data on Fire Doors

Latest engineering data on hollow metal and kalamein doors has been assembled in thick Engineering Manual for architects. The manual contains extensive specification information and dimensional data (with many full-scale details) on a broad range of products—steel frames, hollow metal doors, kalamein doors, tin-clad fire doors, industrial steel doors, and sound-insulating doors. In addition to the standard items shown, special assistance is available on unusual design and installation problems. Pioneer Fireproof Door Corp., Pioneer Industries, Inc., 401 Washington Ave., Carlstadt, N.J.

Insulating Glass

Brochure, 4 pages, describes “Viking Insulating Glass,” available in a broad range of sizes, thicknesses, and air spaces to accommodate a variety of project requirements. With these

Put everything on the roof... in style

WILLIAMS-BERMUDA FIBERGLASS PENTHOUSES*

Specifically designed to combine engineering functionalism with architectural considerations, the Bermuda-air Penthouse Model PH* weatherproofs as it conceals in an attractive fiberglass enclosure. Rooftop appearance need not require allowance for costly equipment rooms when equipment can be attractively installed under Bermuda-air Fiberglass Penthouses* in the most economical manner. Proven Bermuda-lite Fiberglass resists fire—will not rust, rot, corrode—has low-maintenance factor—retains its crisp appearance—comes in a wide selection of impregnated colors. Williams-Bermuda produces a full line of coordinated fiberglass products to protect and conceal almost any piece of rooftop equipment—regardless of size. Other fine Bermuda-air products in molded fiberglass—square and rectangular air intake, relief, and gravity ventilators, matching low stat roof fans, open top modular enclosures.
The new tax law is strict and will require a detailed record of all expenditures. Pocket Day-Timer is the one and only time and record diary which provides for and makes it easy to record proof of details as required by the Internal Revenue Service. Conveniently carried in your inside coat pocket, it also gives you, at your fingertips at all times, a permanent record of everything you must do and what you have done. The complete set includes twelve monthly booklets and separate folders for summarizing expenses and filing stubs and receipts together with sturdy file box and ball-point pen.

For FREE Literature including sample of new Expense Summary Form for use in reporting to employer or directly to the Treasury, attach coupon to your letterhead and send to...


FREE 30-DAY TRIAL

Please send Pocket Day-Timer sets checked below. Satisfaction guaranteed or money refunded. Start with current month unless otherwise specified.

- Complete sets with Black Plastic Wallet $9.85*
- Complete sets with genuine Ghana Cowhide Wallet $14.25*
- Complete sets with genuine English Morocco Wallet $14.25*
- Complete sets without wallet $8.75

Send check with order-postage, Fed. Excise Tax included.

SEND FREE LITERATURE (Pa. residents add 4% sales tax)

In Canada, order thru Day-Timers of Canada, Ltd., P.O. Box 580, Adelaide Sta., Toronto 1, Ontario. Prices slightly higher.

For more information, turn to Reader Service card, circle No. 397

What will it cost?

CHECK YOUR BUILDING PROJECT with reliable JOB COSTING figures

1963 ARCHITECTS ESTIMATOR and COST REFERENCE GUIDE

Supplies accurate preliminary unit building costs in convenient form. Here are all the important facts and figures on current unit costs for every construction job large or small from excavation to final sub-contractor. All costs in this invaluable book include mark-up, overhead and profit. Regarded by architects, engineers, contractors and subs in the building industry as the most comprehensive guide to normal profitable operation. Valued highly by industry and government in planning construction projects. Special section devoted to foreign building costs. Revised yearly, new edition just published.

$35

PROFESSIONAL CONSTRUCTION ESTIMATOR

$15

Gives the time it takes labor to complete each unit of work on any construction project. An essential aid to your operation. A companion book to the "ARCHITECTS ESTIMATOR".

THOSE IN THE KNOW SPECIFY

Refer to 1963 Sweet's Catalog, Code 35b

T&S BRASS AND BRONZE WORKS, INC.

128 Magnolia Avenue  •  Westbury, L.I., N.Y.
Area Code: 516  •  Edgewood 4-5104

For more information, turn to Reader Service card, circle No. 363
NOW!

3 NEW
P&S ROCKER-GLO
SWITCHES!

1. LIGHTED HANDLE ROCKRER-GLO
Pinpoints switch location in darkened rooms or hallways. Tiny, long-life neon lamp softly glows in OFF position only. Single pole or three-way. Rating: 15 Amperes, 120 Volts, A.C.

2. PILOT LIGHT HANDLE ROCKRER-GLO
Instantly shows when appliances or lights are on. Tiny red plastic jewel in rocker button lights in ON position only. Single pole only. Rating: 15 Amperes, 120 Volts, A.C.

3. REMOTE CONTROL ROCKRER-GLO
Momentary contact, center "off" switch. Designed especially for low voltage remote control applications — controlling large banks of lighting, operating stage curtains, etc. Single pole, double throw. Rating: 10 Amperes, 48 Volts, A.C.

For more information write Dept. PA-363

TECO products are available through over 130 distributors in 51 cities
When you have a wood fastening problem, call on us

TIMBER ENGINEERING COMPANY
1619 Massachusetts Avenue, N.W., Washington 6, D. C.
For more information, turn to Reader Service card, circle No. 366

For more information write Dept. PA-363

REINHOLD BOOK DIVISION
Dept. M-359; 430 Park Avenue, New York 22, N. Y.
Two Walk-ins, one at normal temperature and the other at low temperature, installed at the Lora Little Elementary School, Stanton, Delaware.

Specifications prepared by Thomas M. Donohue, A.I.A., 3807 Kirkwood Highway, Wilmington 8, Delaware.

**Bally pre-fab walk-ins**

all-metal coolers and freezers

World's most advanced design. New materials and construction techniques offer architects an opportunity to provide tremendous refrigeration advantages to their clients.

Urethane 4" thick (foamed-in-place) has insulating value equal to $8 \frac{1}{2}$" fibreglass. Standard models can be used as freezers with temperatures as low as minus 40° F. Urethane has 97% closed cells... cannot absorb moisture... ideal for outdoor use.

Speed-Lok Fastener designed and patented by Bally for exclusive use on Bally Walk-ins. Makes assembly accurate and fast... easy to add sections any time to increase size... equally easy to disassemble for relocation.

New foamed door, so light in weight it ends forever the "hard pull"... the "big push". Door is equipped with new type hand lock (with inside safety release) and convenient foot treadle for easy opening. Also has special hinges that close door automatically. Magnetic gasket guarantees tight seal.

Self-contained refrigeration systems combine balanced capacity condensing units and refrigeration coils. Mounted and hermetically sealed with necessary controls on small wall panel. Simplifies installation. Four-hour factory test assures quiet, efficient, trouble-free operation.

Write for Free Architect's Fact File which includes 12-page brochure... Specification Guide... and sample of urethane wall construction.

See Sweet's File, Section 25a/Ba

Libraries or auditoriums, schools or commercial buildings... no matter what the lighting requirement, Kliegl experts have always been able to provide the solution that saves time and money and produces a lighting system to meet exacting specifications. Over five decades of Kliegl broad experience in reflector and optics craftsmanship can help solve your lighting problem, too. For your next project, why not simplify your lighting problem by calling on Kliegl assistance.

Kliegl Model 2158 Downlights provide widespread distribution of light with low brightness and high efficiency.

Our lighting advisors will be pleased to assist in the planning of any installation, using standard or special units to meet your requirements. Full details on request.

For more information, turn to Reader Service card, circle No. 309
Look what can be done with

**AirWall® PNEUMATIC PARTITIONS**

...use a double-run with an airspace between to separate "noisy" type of functions.

...build temporary halls and rooms where you want them—when you want them... change them at will.

...build a room within a room... ideal for dressing rooms, private caucus areas, etc.

...set up a checkroom or ticket booth. Utilize panels as traffic guides near entrance doors or as privacy shields throughout the room.

...a series of panels set up in a curved arrangement provide a dramatic backdrop or focal point of interest.

Take one large area with ceiling and floor—and add AIRWALL Pneumatic Partitions and you have provided an entirely new and flexible method of dividing this area to meet your client's space requirements.

AIRWALL Partitions can be used anywhere in the area... they do not require floor or ceiling tracks and can be moved at will in a matter of minutes. Just set the panels in place, add air and for all practical purposes you have a moveable interior wall that looks and functions like a permanent wall.

AIRWALL Panels can be finished to complement the surrounding decor... best of all, they are economical to purchase or lease and require no installation or erection costs. Write for complete information.

**Electrical Equipment**

**New Fixture Designs**

The new "Honeycomb" line of residential lighting fixtures by Moe is presented in 8-page color catalog. The Honeycomb fixtures are produced en-
Neoprene and HYPALON® Roofing Systems

The search for a practical, durable covering for free-form roofs is ended. Now you can design roofs with complete freedom—striking shapes, dramatic contours, bright colors.

Fluid roofing systems based on Du Pont Neoprene and HYPALON® synthetic rubber are the answer. Properly applied to concrete, plywood or other hard roof decks, these systems provide flexibility, tested and proved toughness, watertightness and low-cost maintenance. They resist heat, cold, sun, ozone, abrasion, oils, chemicals and flame.

For factual data and a list of suppliers or for technical questions, write E. I. du Pont de Nemours & Co. (Inc.), Elastomer Chemicals Department PA-3-CB, Wilmington 98, Delaware. In Canada, write Du Pont of Canada, 85 Eglinton Ave., East, Toronto 12, Ontario.

Neoprene & HYPALON®
SYNTHETIC RUBBER
RELIABILITY

For more information, turn to Reader Service card, circle No. 319
Q. HOW CAN YOU BE SURE YOUR LIGHTWEIGHT INSULATING CONCRETE IS APPLIED TO EXACT SPECIFICATIONS?

A. Call the Permalite roof deck applicator or franchisee in your area. They know exactly how to meet your specs on weight, strength, 'K' factor and fire resistance. They're experienced, and backed by the successful placement of more than 400,000,000 square feet of perlite concrete roof deck.

Permalite®
Largest Selling Perlite Aggregate in the World.

LIGHTWEIGHT INSULATING CONCRETE
Great Lakes Carbon Corporation • 612 South Flower Street, Los Angeles 17, California

PERMALITE EXPANDED PERLITE AGGREGATE IS PRODUCED BY THESE LICENSED FRANCHISEES FROM PERLITE ORE MINED BY GREAT LAKES CARBON CORP.

For more information, turn to Reader Service card, circle No. 389

Lightning Protection

Comprehensive 48-page handbook covering every possible protection against lightning-fire damage is available from Independent Protection Co. Individual sections discuss exterior and built-in (concealed and semi-concealed) lightning systems for all types and shapes of buildings, as well as for trees, smokestacks, and chimneys. Diagrams and charts clarify the information. All rules and regulations set forth in the manual meet or surpass latest code requirements. Independent Protection Co., Inc., 1603-09 S. Main St., Goshen, Ind.

On Free Data Card, Circle 212

Lowest-Cost Developer

Rotolite describes its completely new 42" diazo print developer in 4-page brochure. The "Thermomatic" features a self-contained heated roller which assures, for the first time on low-cost whiteprinters, good color tone on black-line prints as well as blue-line. The heating unit also allows faster development in a smaller travel area and therefore permits a more compact machine; over-all dimensions are 56" x 7" x 5", for wall or table mounting. Also shown in brochure is the Rotolite "Expeditor" with an outstanding list of features—lowest diazo whiteprinter on the market ($258.50), lowest cost per copy (1½¢/sq ft), takes paper up
New Partitioning Line of Simplified Design

Aetna announces a new partitioning line called “Aetna Wall Designer Series”—a movable partition in the fullest sense of the term. The new design features a single-unit, universal, extruded-aluminum post permitting four-way access without supplementary fastening devices. Post covers, interlocking keys, and link plates have all been eliminated, making for faster and more economical erection, dismantling, and reerection. Typical of the extent to which this partitioning system has been simplified is the black vertical strip, a gasket which doubles as a decorative element when not receiving a panel component. Aetna Steel Products Corp., 730 Fifth Ave., New York 19, N. Y.

On Free Data Card, Circle 214

Ink Specs Chart

A 2-page ink specification chart has been issued by Higgins Ink Co., covering Higgins carbon inks for art and drafting purposes. Aimed at those who prepare originals for reproduction, the chart relates the correct ink to the surface and to the instruments being used. Also tabulated are methods of erasure or removal. Higgins Ink Co., 271 Ninth St., Brooklyn 15, N. Y.

On Free Data Card, Circle 215

The design and construction of custom industrial and commercial doors to meet your esthetic and functional requirements is a specialty with Richards-Wilcox. From Ark Doors, Industrial and Fire Doors, Blast Doors, Radiation Doors, Straight Doors, Curved Doors, Large Doors, Small Doors, whatever type you want—R-W can supply them plus all of the necessary hardware and electric operators where required. When remodeling remember that the use of custom-fit doors can provide greater economy than rebuilding openings to accommodate standard doors.

Your local R-W Applications-Engineer is a specialist in this field—he would appreciate the opportunity of consulting with you in regard to your door problems.
AROUND AND AROUND

...in the same old circles? Sooner or later you'll come around to Flintkote Insulrock® roof decking and formboard. Structural. Non-combustible. Insulating. Acoustical. These features and more, all in one contemporary material, make Insulrock ideal for many of your best jobs. See your 1963 Sweets for the latest Insulrock advantages. Or write for your free 1963 Insulrock catalog.