

Progressive Architecture's Monthly Digest of Buildings, Projects, People and Products November 1968

LOOPS CUT TERMINAL COSTS



DALLAS-FORT WORTH, TEX. An air passenger departing from the Dallas-Fort Worth regional airport will arrive by car on the roof of a loop-shaped, two-story terminal, step onto an escalator, and in seconds be at the gateside waiting area for his flight. The concept, if approved by the city councils of the two cities, would give arriving passengers one of the shortest boarding strolls to be found at any contemporary airport. It would bring air transportation almost full circle from the days when one could step from a Pierce Arrow at the edge of a grass airstrip and walk directly up the steps into a Ford Trimotor.

Designed in an eight-week charette by Hellmuth, Obata & Kassabaum of St. Louis, and Brodsky, Hopf & Adler of

New York, the concept proposes 16 semicircular terminal buildings to flank the linear highway that was once the backbone of the Tippets-Abbett-McCarthy-Stratton 2mile-long megastructure terminal (see pp. 140-141, JULY 1968 P/A), an earlier proposal. While retaining the linearity of the TAMS proposal, the Obata-Adler scheme substitutes individual terminals, each capable of handling 18 jumbo jets (or 21 conventional-sized jets), for the megastructure. Instead of driving up spiral ramps to interior parking ramps, persons arriving by automobile will be able to park in areas (inside the loop) directly in front of their departure gate. According to one spokesman, the maximum walk envisioned from parked

car to boarding lounge, under this arrangement, would be something like 250'.

The question arises, of course, of how to get to one's car if one returns to another gate after a day or week away, and the designers are currently thinking of some sort of intra-terminal transit, perhaps something as familiar as buses. The emphasis of the Obata-Adler scheme has been on the time-pressed departing passenger, who, as often as not, arrives at a terminal minutes before flight time to face a half-mile run. Traditional terminal facilities will be located in peakroofed structures at the center of each loop's parking areas, and, within the loop, perhaps between every other gate, will be a snack bar and newsstand.

According to an independent estimator in Dallas, the Obata-Adler scheme will save \$30 million; if not that much, at least "it is reasonable to assume that it will save money," says one spokesman. And savings alone should appeal to the city councils that have to approve or disapprove the first revenue bonds.

#### THE ARTS IN MINNEAPOLIS: THE LOBBY IS THE CONNECTION

MINNEAPOLIS, MINN. Everyone who cares at all about the theater is acquainted with the Minnesota Theater Company and its Tyrone Guthrie Theater, but fewer art lovers are aware of the Walker Art Center, a lively neighboring institution. Now, both institutions are expanding physically and their new facilities will be linked by a common lobby.

As a permanent, professional repertory company far from Broadway, the Minnesota group was hailed in 1963 as a shot in the arm for American drama; its new theater was a test of a new type of plan — a combination of Greek and Elizabethan seating around a thrust stage.

Since the time the theater opened, the company has continued to perform at the high standard audiences and critics had hoped for, but with increasing difficulty because of cramped quarters backstage.

That the Guthrie Theater Foundation is currently conducting a fund drive for construction to correct this problem is not surprising. When the theater was built, 20% of its original plan was cut from architect Ralph Rapson's designs. A new addition, de-signed by Edward Larrabee Barnes, would increase production areas, with carpentry shop, studios, and a rehearsal room on the ground-floor level, with the stage and costume shops and administrative offices on the second floor. Part of the present backstage area will be remodeled to include a new costume and design studio, press office, snack bar, and lounge. The construction will not alter the auditorium, inner lobbies, or façade of the theater.

If the Guthrie Theater is well known outside Minneapolis, the Walker Art Center right next door is just beginning to gain stature among





The huge, new, 183-acre Battelle-Northwest Richland Research Center, housing a portion of the facilities of one of the largest independent research laboratories in the nation, echoes in its facade of deep brown Mo-Sai the colors of the surrounding eastern Washington

hills. The exposed aggregate Mo-Sai units provide structural bearing walls, windowalls, spandrels, fascia elements . . . and even face the cooling tower and appear again in the decorative planters.

Projecting reinforcing bars were used to bond Mo-Sai units to the poured-in-place concrete. Splice plates bolted to threaded inserts align adjacent Mo-Sai units.

Glass was set directly into the Mo-Sai units with aluminum stops. The largest Mo-Sai units were 8' 6" wide by 31' in height. All units were shipped over 200 miles from the Mo-Sai plant in Seattle, where they were factory-made to high Mo-Sai quality-control standards, and scheduled to arrive at job site to coordinate with precise erection schedule.

> Battelle-Northwest Richland Research Complex Architects-Engineers: Naramore, Bain, Brady, and Johanson — Seattle, Washington General Contractors: Charles T. Parker Construction Company — Portland, Oregon

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American art museums. Built 41 years ago, Walker Art Center was conceived as a regional, if not purely local, institution, with limited funds and appeal. Since then, however, it has emerged as one of the country's leading contemporary museums, with space requirements for exhibitions that were undreamed of in 1927. Furthermore, attendance has increased twoand-a-half times in the last 10 years. And lack of space is only one of the Center's problems; one side of the building has settled 14" below the other.

Having decided to go ahead with new construction, the Walker Art Center teamed with the Guthrie, for efficiency, economy, and aesthetics, to commission Barnes and develop a common architectural program. Since Walker's entrance faces what soon will become a freeway, and Guthrie's main entrance is next to Walker's loading dock, Barnes chose to design a new entrance and lobby common to both institutions. Off the Art Center's lobby will be the Center Book Shop, a 350-seat auditorium, and an audiovisual orientation center for visitors to the museum.

The new museum structure is planned as a six-story, rectangular helix with the three gallery floors connected by stairs and elevators in a central core. The plan combines the advantages of 19th-Century museum planning (all galleries open on the entrance lobby) with the currently popular type of plan that guides visitors from one gallery into another in a predetermined sequence. At Walker, all galleries will be accessible from the lobby, but will be effective, for exhibitions, either in series or as separate spaces. Ramps lead around the perimeters of some galleries. The high-ceilinged spaces are suitable for exhibiting large sculptures or can be partitioned off for smaller displays.

The fourth and fifth floors contain open sculpture courts; the fifth also carries a restaurant and open-air dining terrace. The design culminates in a tower devoted to a study center and members' conference room. Says architect Barnes of his design, "Inside, the new Walker Art Center will be all white space - simple volumes flowing into each other. The exterior walls and roof will be treated as one continuous surface. Works of art, trees, stone, light and shade are what count - not competitive architectural detail."

Together, the Art Center and the Guthrie need \$6,200,-000 to begin construction.



#### **OBITUARIES**

J. Travis Fleishel, 83, died September 9. He was a long-standing member of the Southern Pine Association and its Board of Directors, and served several years ago as vice-chairman of the Southern Pine Industry Committee. He was also president of the Fleishel Lumber Company. Herbert Kliegl, son of the founder of Kliegl Bros. Lighting, died October 3 at the age of 64. An inventor and developer as well as a manufacturer of new lighting products, he was for many years an extremely important contributor to theater lighting design. At his death, he was president and chairman of the board of the firm.

#### ARCHITECTURAL WORK SEEN SETTLING AFTER BANNER YEAR

According to a recent poll of 183 economists, members of the National Association of Business Economists, the U.S. economy will expand briskly throughout 1969. They admit there may be what *The Wall Street Journal* quotes them as calling a "brief hesitation" late this year and early in 1969 as inventories are adjusted. But despite the expected brief lull, they see the economy expanding about 6% next year.

This optimism does not necessarily apply to architects, according to P/A's annual business survey, the only one in the country that forecasts architecturally designed construction. Carried on a wave of inflation and rising costs, last year's architectural work reached record levels. For 1969, there is widespread evidence that the same conditions - especially astronomical labor costs - will act to slow down architectural design. Although 58.9% of the firms responding to the survey report gains in work since last year, over-all dollar volume of architectural business will slump. Hardest hit will be small firms, whose generally smaller commissions are the first to be priced out of a rising market. "In our area, labor cost is dictating the small office out of business," writes the owner of a one-man office from Lansing, Michigan. "I have lost 90% of my 1969 work because of increased labor and construction costs." 'His complaint is echoed by a respondent from San Leandro, Calif., who notes, "There has been no rise in California for the past two years. Due to credit and the war, only the largest firms - those doing public work and very large commercial work - are busy. A larger dollar volume does not necessarily indicate greater construction cost per project." He blames the static situation there on what he sees as an "overabundance of one- and two-man offices."

In Cleveland, a four-man office continues the lament: "Our experience has been that capital expenditures by the private segment of the economy have been shelved, in contrast to public works i.e., schools, hospitals, etc. —



Not every office has work in each building category. Bar graph shows the average dollar volume of work done in each category by firms having work in that category.

which appear to be on the increase in activity, despite the economy."

As 1968 swings into full view, the outlook may, of course, change for the 19.5% of offices that expect a work decrease. If the economy does prosper, as expected, it may carry architecturally designed projects along with it. And, judging from the quality of the response sampled above, the offices that are currently languishing are exactly those whose clients would be most effected by uncertainty. If incomes rise, imitating costs, these clients may overcome their hesitation.

#### Defense and Space Work Triples

Although only 3.8% of respondents report work for defense and space, they are doing a lot of it - enough, in fact, so that, if the work were distributed evenly, a hypothetical average office would have more than three times more defense and space work on the boards than it had at this time last year (Table III). Most active category of work in this same hypothetical office will be in the commercial area, replacing education, which this year accounted for about 21% of the work and

#### TABLE I

Number of Firms Reporting and Regional Distribution

Region	No. of Firms	% of Firms
Northeast	162	26.8
California-Nevada Hawaii	89	14.7
North Central	69	11.4
Great Lakes	66	10.9
Southeast	59 1 36	9.8
Western Mountair	1 36	6.0
Northwest	35	5.8
Texas	33	5.5
Gulf States	29	4.8
Central States	26	4.3
Total Response	604	100.00

Percentage of respondents in the Northeast and the Central States has fallen off slightly, and those from the Western Mountain, North Central, Great Lakes, and California-Nevada-Hawaii have risen slightly. Others remain much the same as last year. which next year will represent only 11.4%. Although private residential work will rise slowly from its 1968 slump, the rise will be neither steep nor significant, reflecting the strangle-hold rising costs have on small investors.

Shifts in other categories are mostly slight, and can be attributed to the general drop in the amount of work available at this time for 1969. For example, multiple residential will account for 15% of all work, compared with 13.7% this year, but will represent only some \$760,000 worth of construction instead of this year's \$1 million. Only about half as much work will be in health, industry, and public use on a percentage basis, but the percentage of urban design work will more than double. In this connection, it is probably significant to note that 34.3% of all work will be for the government - Federal, state, and local.

Despite the general slowdown in architectural work for next year, five areas of the country report gains: the Central States, the Gulf States, the Northwest and Alaska, the Western Mountain States, and California-Nevada-Hawaii. These increases are all relatively

## TABLE IIDollar Volume in theAverage Office by Region

The average office in the Northeast is this year's dollar-volume leader, taking over from Texas, where the dollar volume average has fallen by 34%. Last year, work in Texas spurted to twice its usual pace. In 1969, it will settle back slightly, although it still remains higher than in the past. The Northeast takes over the national leadership despite a decrease in business there.

#### U.S. MAP SHOWS DOLLAR VOLUME AND NUMBER OF EMPOYEES IN AVERAGE ARCHITECTURAL OFFICE BY REGION



# TABLE IIIDollar Volume Averages and% Distribution of Workby Types of Buildingsin All Regions

Type of Building	% of All Firms' Work	\$ Volume in Average Office
Commerce (High Rise) (Low rise) Residential	23.4 (20.1) ( 3.3)	1,185,685 (1,008,559) ( 167,212)
Multiple (High Rise) (Low Rise)	15.0 (9.7) (5.3)	760,004 ( 581,702) ( 268,553)
Defense and Space Con- struction Education	14.2 11.4	719,518 577,641
Health Urban Design Redevelopmen Industry	t 7.4 5.5	456,232 374,960 278,686
Religion Other Public Use Residential	3.8 3.2 3.0	192,547 162,145 152,011
Single Private Recreation	2.4 1.7	121,608 85,399

Last year's leading category of work, Education, falls far off the pace for 1969. Replacing it is commercial work, with residential coming, as usual, not far behind. Most startling change this year is in Defense and Space Construction, which accounted for only 2.6% of all work in last year's survey, and which in 1969 will account for 14.2%. This large volume is handled by only 3.8% of the nation's offices (see Table IV).

#### TABLE IV Activity of Architectural Firms in Types of Buildings

Types of Buildings	% of Firms Reporting Current Work		
Commerce	60.3		
(Low Rise)	(48.5)		
(High Rise)	(11.7)		
Education	43.3		
Residential Multiple	42.5		
(Low Rise)	(30.7)		
(High Rise)	(11.7)		
Residential Private	36.7		
Religion	27.3		
Health	25.9		
Industry	21.5		
Public Use	20.5		
Recreation	20.5		
Other	14.2		
Urban Design &	11.8		
Redevelopment	5.6		
Defense and Space	3.8		

Most U.S. firms have work in more than one category, so percentages add up to more than 100. Percentages are roughly comparable to those a year ago.

#### TABLE V Specialization of Architectural Firms

Types of Buildings	% of Firms Doing Only This Type of Work		
Education	3.5		
Commerce	2.2		
(Low Rise)	(2.0)		
(High Rise)	(0.2)		
Residential Single Private	2.0		
Health	1.2		
Residential Multiple	1.2		
(Low Rise)	(0.7)		
(High Rise)	(0.5)		
Religion	1.0		
Industry	0.5		
Other	0.5		
Public Use	0.3		
Recreation	0.2		
Defense and Space			
Construction Urban Design and	0.2		
Redevelopment	0.0		
Total	12.8		

Total specialization has increased slightly since last year. No firms specialized in Urban Design and Redevelopment. Education replaces Commerce as the most popular specialty.

#### TABLE VI Sizes of Architectural Firms

Size of Firm by \$ Volume of Work on Boards	% of Nationa Total
Under \$1 Million	28.3
\$1-10 Million	64.1
\$10-50 Million	6.3
\$50 Million or Over	1.3
Total	100.00
Size of Firm	% of Nationa
Size of Firm	% of Nationa
by Number	Total
by Number	Total
Up to 4 Employees	55.4
5-9 Employees	25.8
by Number	Total
Up to 4 Employees	55.4
5-9 Employees	25.8
10-19 Employees	10.8
by Number	Total
Up to 4 Employees	55.4
5-9 Employees	25.8
10-19 Employees	10.8
20-39 Employees	4.5
by Number	Total
Up to 4 Employees	55.4
5-9 Employees	25.8
10-19 Employees	10.8

Percentage of firms with up to 4 employees is off 6.6 percentage points. And firms with from 5 to 9 employees have increased 6.4 percentage points. At the same time, firms with from \$1-10 million worth of work on the boards have increased 4.5 percentage points, and firms with over \$10 million worth of work have slipped four percentage points. small, while work in the Northeast, this year's second most active area, will be off 28%. But despite this decrease, the Northeast will be 1969's most active area, replacing Texas, where work will drop 35% to a level more typical of past levels in the state.

#### Low-Rise Commercial Is Top Category

In 1969, for the second year in a row, Low-Rise Commercial work will provide activity for the greatest number of firms (Table IV). And it will be the leading category in seven of the ten regions. Education will be next most active leading three of the ten regions: Northeast, Western Mountain, and Texas.

Half in Preliminary Design At this time, 41.5% of work on the boards for 1969 is in the working drawings or specifications stage. This is slightly less than the 45% last year at this time. Slightly more than half the work (50.8%) now underway for next year is in preliminary design.

#### Specialization

The number of firms with work in only one category (12.8%) is up a couple of percentage points over last year (Table V). Education is again the most popular specialty, regaining the lead from Commerce and Residential Private, which were the two leading specialties last year. No firms show solitary work in urban design and redevelopment.

#### Percentage of Very Small Firms Drops

There is some indication that rumblings from the profession are true: Costs and competition and indeed the changing nature of the profession are squeezing the very small office. The percentage of very small offices (up to 4 employees) has dropped to 55.4% from 62% a year ago. At the same time, the average office has 8.9 employees, up from 7.5 twelve months ago. The percentage of firms with from five to nine employees has increased six percentage points, to 25.8.

In dollar volume, 92.4% of the firms have less than \$10 million worth of work on the boards for 1969. Of this

slice, the biggest (64.1%) is done by firms having from \$1 to \$10 million worth of work underway. This is an increase of 4½ percentage points over last year, and most of that has come out of the percentage of work done by the very large firms. The hypothetical average firm has \$5,067,032 worth of work under way, and has been in business 13.6 years.

#### Yesterday

When asked the reasons for the growth in architectural practice over the past 15 years, most respondents point to the steady growth of the economy and population during a period of prosperity. They talk of the need of building specialized structures to house a technological society. And many mention the increasing awareness of laymen toward architecture and architects. A seven-man firm in Honolulu puts it this way: "An educated general public is more able to distinguish between good and indifferent architecture. Clients, recognizing this, will budget accordingly for good planning, design, landscaping, art work, etc.

#### Tomorrow

What about the year ahead? The pessimism of many architects is offset by an optimistic belief in the architect's ability to adjust. A five-man Lakeland, Florida, office says the cost squeeze means "greater pressure for 'cost-effectiveness planning' or whatever you choose to call more efficient architectural planning." And many, of course, mention the ineveitability of prefabrication, a process whose effects may be felt during the coming year. A Clifton, N.J., firm summed up the feeling: "Prefabrication and industrial production of the essential parts of buildings will take place as a result of the inability of management to solve the continuing increase in labor wage rates and the essential character of labor. There are signs already that industry is getting into the construction business in ways not attempted before. These developments will have a tremendous impact on practice."

It is probably indicative of the political climate in this election year that almost no one expects the Presidential change to have much effect on either the economy or architectural practice. But the role of government is noted: A small Detroit firm sees increased controls by governmental agencies (FHA, State Insurance Commission, etc.) over standards, as they establish priorities. And the computer seems to have come of age as an influence. It is often architects by mentioned across the country. A threeman office in Pennsauken, N.J., writes that "computer use is becoming more widespread; its use will affect not only design procedures, but client requirements as well."

And, as usual, many respondents believe that architectural design will be vastly influenced by "what the magazines show."

There is, of course, the chance that the outlook for 19.5% of offices that expect less work next year will change as 1969 comes into full view. If the economy does prosper, so may architecturally designed construction.

#### TOWER ABOVE GRAND CENTRAL LACKS LANDMARK CERTIFICATION

NEW YORK, N.Y. The saga of the mammoth 55-story office building to be planted on the roof of Grand Central Station grew stranger still last month as the Landmarks Preservation Commission denied the application of the developer, Union General Properties, Ltd., of London, for a certificate of "no exterior effect."

In what seemed to be a bit of legal maneuvering calculated to obscure the issue, Union General applied for a certificate it could have no real hope of obtaining. Under the New York landmarks law, the owner of a landmark may change the interior of his structure in any way he wants so long as the exterior is preserved. Marcel Breuer's plans for Grand Central Terminal and the office structure above it call for changes in the ground-level front of the terminal on 42nd Street (see p. 46, AUGUST 1968 P/A). Under the circumstances, it took peculiarly convoluted legal reasoning to apply for a certificate of "no exterior effect." Once the certificate was denied, the builders even met with the commission to appeal the decision. The appeal was, of course, denied.

What the developers must now do, and what, it seems, they should logically have done in the first place, is apply for a certificate of "appropriatness." In any case, the plans will have to be reviewed again by the commission, and at this time approval does not seem likely. In turning down the first application, the commission commented in part: "Your 55-story tower would be an addition to a designated landmark which would effect the external appearance of that landmark." And it is probably not reading too deeply between the lines to see that a majority of the commission views the tower, let alone the physical changes to the structure beneath it, as inappropriate. Mayor Lindsay seems to agree with the commission. He issued a statement that said in part: "The city cannot lightly accept the consequences of construction of this building, affecting as it does the quality of planning and design in this city."

The developer naturally disagrees, and says he has "every intention of proceeding with the building." The next move is his.

#### COMPETITIONS

Application forms for the 1968–1969 Design In Steel Award Program are now available from the program's sponsor, the American Iron and Steel Institute. Awards will offer recognition to architects, engineers, designers, and artists for imaginative use of steel. Deadline for entries is January 17, 1969. Write for details to: AISI, 150 E. 42 St., New York, N.Y. 10017 ... Nominations are now being received for the 1969 Thirteenth Annual Reynolds Memorial Award for distinguished architecture using aluminum. Anyone interested may submit nominations until February 3 by writing to: The Reynolds Award, AIA, 1735 New York Ave., N.W. Washington, D.C. 20006 . . . The General Building Contractors Association announces opening of the Eighth Annual



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abroad in the creative and performing arts are available for the academic year 1969-1970. Applicants must be U.S. citizens; students who hold a doctor's degree are ineligible. Obtain details from academic advisors at schools and universities or from: Information and Reference Services Division, Institute of International Education, 809 United Nations Plaza, New York, N.Y.

#### FIRST MULTITUDE ON NUN'S ISLAND



MONTREAL, CANADA Two thousand persons are now living on Nun's Island, the 1000acre island in the St. Lawrence River, where Metropolitan Structures Inc. is building a new town for 50,-000 persons. Completed is the first of five residential communities on the island, and design work is underway on the second.

In the first community are 805 dwelling units, which shortly will house 3000 persons. Included in the community are a 15-story apartment tower designed by Mies van der Rohe (1), five three-story garden apartments (2), and a series of three- and four-bedroom townhouses (3) designed by Stanley Tigerman of Chicago, and nine four-story elevator apartment houses (4) designed by Philip David Bobrow of Montreal; Bobrow was also the Montreal architect for Mies and Tigerman. These first units are located in a wooded area on the island's south shore, overlooking the St. Lawrence, but with skyline views of downtown Montreal. Rentals run from \$110 for a one-room studio apartment to \$345 for a four-bedroom townhouse. Also in operation are a community center with swimming pool and golf course and a 16,000sq-ft shopping center.

Next development will be a 25-acre community with 1200 units in eight six-story and four three-story apartment houses, and 95 townhouses by Edgar Tornay of Montreal and consulting architect Donald Lee Sickler of Baltimore. Mies will consult with Tornay on two high-rise apartment houses. Construction of this segment is scheduled to get underway this fall. Johnson, Johnson & Roy of Ann Arbor did the Nun's Island master plan.







#### CALENDAR

An Interprofessional Conference on Education for Environmental Design will be held November 11-13 at the Center for Continuing Education at the University of Notre Dame. The conference will be conducted by the Interprofessional Commission on Environmental Design, an alliance of six professional societies. For details, write to: ICED, American Society of Civil Engineers, 345 E. 47 St., New York, N.Y. 10017 . . . The Annual Meeting of the Aluminum Association will convene November 20-22 at the New York Hilton Hotel, New York City. Write for information to: Aluminum Association, 420 Lexington Ave., New York, N.Y. 10017 . . . The Eighth Annual Construction Contracts and Specifications Institute will be presented by the University of Wisconsin and Region 7 of the Construction Specifications Institute November 21-22 on the university's Madison campus. For further information, write to: Dwight D. Zeck, Institute Director, 725

Extension Bldg., 432 N. Lake St., University of Wisconsin, Madison, Wis. 53706... The Third Annual Meeting of Automated Procedures for Engineering Consultants, Inc., is scheduled for November 21-22 at the Hilton Inn, Dallas, Tex. Members and guests will demonstrate computer program's for duct design and piping system design. Further information about the meeting and the organization is available from: Alan H. Smith, Executive Director, 3616 Mid-Pines Dr., Dallas, Tex. 75229 . . At the Annual General Meeting of the Architectural Institute of British Columbia, scheduled for December 6 in Vancouver, the principal speaker will be architectural critic Allan Temko. Precise program information is obtainable from: AIBC, 567 Burrard St., Vancouver 1, B.C., Canada . . . The Winter Meeting of the National Society of Professional Engineers will be held January 15-18 in the Stardust Hotel, Las Vegas, Nev. For registration blanks, write to: NSPE, 2029 K

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St., N.W., Washington, D.C. 20006 . . . The 1969 Annual Meeting of the American Institute for Design and Drafting has been planned for January 22–24 at the Deauville Hotel, Miami, Fla. Sessions scheduled include one on "Manpower Planning and Acquiring" and one on "More Profitable Management." Additional details may be obtained from: AIDD, Suite 610, 305 S. Andrews Ave., Fort Lauderdale, Fla. 33301 ... The 18th Annual International Heating and Air Conditioning Exposition, to be held at Chicago's International Amphitheater, is scheduled for January 27–30. Write for exhibit information to: International Heating and Air Conditioning Exposition, 200 Park Ave., New York, N.Y. 10017.

#### THE PINK SILK AIRPLANE AND OTHER EVENTS



NEW YORK, N.Y. There, outside the Architectural League building in New York City, stood James Lee Byars wearing yards of enveloping red acetate and a black broad brimmed hat. "He looked like a pink pilgrim," said one observer, and he may be just that. Byars' journey has taken him to Japan seven times, where he studied paper and fabric making and lived alone in the mountains. More recently, it took him to New York, where he was the recipient of the J. Clawson Mills Grant from the League. For almost a month this fall, he presented what he called plays in which he posed open-ended questions such as "What does 'pretend' mean?" and "Is selfconscious option enough?" Mostly, the plays took the form of Byars sitting in an all-white room surrounded by yards of supple fabric, talking with visitors, whom he drew skillfully into his scene. "I want people to come and develop an awareness about their perceptions, their behavioral cycles, what they eat, their life styles," he told one visitor. Twice, during the weeks at the League, Byars' plays moved outside. Once, he gathered persons into a mile-long communal garment of red acetate and paraded around the block. Another time, in Central Park, he had two persons wear hats connected by a mile of red acetate to explore the possibilities of "communication" at that distance and under those conditions. Just what he found out is not certain, but almost everyone who came across them seemed to be willing to be drawn into the plays. "I was amazed at the reception my ideas had in New York, when I first came back from Japan," says Byars, who found the Japanese more used to persons loping around the countryside in pink silk.

Among the things Byars would like to do is stage his plays on plazas or sidewalks in front of buildings, making his scene a sort of ever-changing sculpture that could add to the buildings' ambience. He might, he thinks, even stage events to commemorate certain special days, such as Thanksgiving or Christmas. With his love of brightly colored, softly textured fabrics, Byars might add something to the city with his staged events. But at least one urban planner thinks differently: "A city has enough going on without creating something artificial on top of it."

#### A GHIRARDELLI SQUARE IN BROOKLYN? WHY NOT?



BROOKLYN, N.Y. The main downtown shopping center in Brooklyn does a business that makes any retailer's head whirl with green dollar signs. Already there are four main department stores in the four blocks of Fulton Street that make up Brooklyn's equivalent of Herald Square, and another, Klein's, a discount house, is planning to build on the old Fox Theater site. But with all this retail activity, commercial office space has gone begging. The Williamsburg Savings Bank tower a few blocks away has a 15% vacancy rate, probably because many firms prefer a Manhattan location, just five minutes away by subway.

Yet the area is ripe. It seems possible that more modern office space could become as popular as retail space, and with the revitalization of some of the surrounding residential areas (see p. 54, JULY 1968 P/A) the walk to work in Brooklyn may become more and more popular.

One local business is counting on it. Barton's is the third largest candy producer in the country. With ideas of expanding, the company went to the City Planning Commission to request a change in the surrounding zoning from commercial to light indus-trial. Barton's sits astride Fulton Street at Flatbush Avenue, in an area that has three major subway stops, a Long Island Railroad station, the Brooklyn Academy of Music, Long Island University, and the Brooklyn Hospital. Obviously, the area has great potential. But for what? And how do you realize it?

Barton's now employs about 700 persons, and expansion of their own plant would mean 500 more jobs. Further commercial development on the 5 acres the company has assembled around its present plant could provide a lot more. The City Planning Commission's Urban Design Group thought the addi-



Visionary sketch shows how a Fulton Street Shopping Mall might radiate from Barton Plaza.



## **Use Ceco's Steelform**

TenMain Center Office Building and Parking Facility, Kansas City, Mo. Monolithic reinforced concrete design/Robert P. Ingram, developer/ Charles Luckman Associates, architects/Marshall & Brown, associate architects/Howard, Needles, Tammen & Bergendoff, engineers/Winn-Senter Construction Company, general contractor/506,354 sq ft of standard Ceco steelform services/ 2,900 tons of fabricated reinforcing bars by Ceco.

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tion of office space, as well as more light industry and commercial space, might bring people into the area, for reasons that are not entirely clear, and they approved Barton's industrial expansion with the stipulation that they provide office space too.

At this point, Barton's turned to New York architects Katz/Waisman/Weber/Strauss. Sidney Katz had just come back from San Francisco, impressed with Ghirardelli Square and the Cannery, and the whole scene seemed just right to him. Barton's is a chocolate manufacturer. Ghirardelli was a candy manufacturer. And the design scheme Katz's firm came up with has many features of the West Coast developments - in addition to an office tower. Besides, the candy factory will be in operation, adding to the bustle of activity. It is an intriguing idea. Barton's is trying to arrange financing, and, according to local rumor, at least two department stores are anxious to help.

The architect's scheme provides 600,000 sq ft of commercial space. Staggered around a central open space (Barton's Plaza) will be several restaurants, a triple phase cinema, specialty shops, and a small department store. Below grade will be parking space and direct connections to the existing subway stops. Perhaps one of the most desirable aspects of the plan is a ramp across Flatbush Avenue connecting the entire project, and, indeed, all the amenities around it to Fulton Street. The City Planning Commission would like to see Fulton Street turned into a mall; and perhaps if Barton's can bring dream to reality, the area will not only revive but also become homogeneous.

#### **SCHOOLS**

The National Institute of Mental Health recently awarded a \$99,000 research grant to the Department of Architecture, University of California at Berkeley. The grant is to be used for an 18month study of the application of behavioral research and systems design methods to the planning of institutional buildings, including housing, health, educational, and social service facilities. Sim Van der Ryn, associate professor of architecture, is directing the study. Participants include psychologist Robert Sommer, sociologist Carl Werthman, economist Claude Gruen, systems planners Michael Teitz and Horst Rittel, and architect Roslyn Lindheim. The group would like to hear from people currently planning facilities that incorporate innovative program or design approaches . . . The Department of Architecture of the University of Illinois at Urbana has made a change in its professional curriculum. The program will terminate with the degree of Master of Architecture after six years of study. Formerly, a bachelor's degree was awarded upon completion of five years of work. To be initiated in 1969, the revised program will also offer a Bachelor of Science in Architectural Studies to students who have finished their fourth year . . . Thomas R. Vreeland. Jr., has been appointed head of the architecture program of the UCLA School of Architecture and Design. He will establish the school's first course in architecture, scheduled to begin in 1969 with graduate-level instruction. Previously, the school has limited its instruction to the field of urban design. Vreeland was formerly chairman of the department of architecture at the University of New Mexico . . . The State of Alabama's first master's degree in city and regional planning is offered this year by **Auburn University.** The program is operated by a committee whose members are drawn from architecture, agricultural land use, economics, engineering, geography, political science, public administration, and sociology. Students with undergraduate degrees in any of these areas will be generally qualified for the master's degree program.

#### THE ART OF MAKING THE MAGIC BOX



NEW YORK, N.Y. "Magic box" was Le Corbusier's epithet for the museum, and in his time he designed quite a few of them, although not all were built. Several of the uncompleted projects, however, were and are among the strongest influences on 20th-Century museum design. In the past two months, visitors to New York's Museum of Modern Art have had a chance to see them, along with the works of numerous other museum architects.

"Architecture of Museums," as the exhibition is called, presents 71 museums of 22 countries in the form of models, photographic murals, and slide projections. The collection is composed predominantly of buildings completed during the 50's and 60's, perhaps as part of the "culture boom" that has caused museum attendance to increase 500% in 30 years to a current annual rate of 300 million. The show does include, however, a few 19th-Century examples for historical background, and several unbuilt schemes of the present century, such as Corbu's Endless Museum.

The purpose of the exhibit remains slightly clouded, unless it is to illustrate the overwhelming proliferation of magic boxes during the past two decades; but for connoisseurs of museum architecture, all the approaches to the delicate problem of housing art and artifacts are there for contemplation. Although one might wish for more plans and sections or interior photo-

graphs, the evolution of various methods is easily traceable in individual applications. For example, Mies's new National Gallery of Berlin (see p. 108-113) and Marcel Breuer's Whitney Museum in New York illustrate, respectively, the unattainable ideal of totally anonymous background for the display of art works and its often impractical opposite: the museum that is of itself a work of art. And Kevin Roche, John Dinkeloo & Associates' new Oakland Museum (see photo), represented in the exhibition by a very large model, becomes in itself a sort of paradox, seeming to encompass both ends of of the spectrum at once. Called by its designers a "non-building," its halfburied terraces are nevertheless the overwhelming determinants of both interior and exterior environments. Emphasis on the museum as environment, as a natural part of civilized life, is exemplified in the photographs of Louisiana, a musem near Copenhagen, Denmark, designed by Jørgen Bo and Vilhelm Wohlert in 1958. I.M. Pei & Partners' just opened Everson Museum in Syracuse, N.Y., is, on the other hand, a sophisticated variation on the blank-walled cube, with emphasis on display techniques. And, controversial though it remains, there is Frank Lloyd Wright's Guggenheim Museum, whose helical plan represents an extension of the principle applied by Corbu in his National Museum of Western Art in Tokyo, also on view.

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**OUR 60th YEAR** 



#### **COMPONENT DORMS MAY SAVE 12 %**



BERKELEY, CALIF. After three years of development, the University of California and the Educational Facilities Laboratory announced a partial prefabricated system for student housing. Bids, which came in this fall, were accepted for all elements of the system except the bathroom; this component may be rebid. By using the system, which will represent approximately 55% of all building costs, the university expects to save 12% of the cost of conventional building. Known as URBS (University Residential Building System), the system will be used by the university in a three-year, \$30- to \$60-million construction program that will provide housing for from 4500 to 9000 students.

In all, there are five components in the system:

(1) Structure-Ceiling. Designed by Hellmuth, Obata & Kassabaum in collaboration with Interspace, Inc.; commissioned and participated in by the Portland Cement Association. It has precast concrete inverted double-T beams supported by cast-inplace transverse beams, precast columns and shear walls. Floor is cast-in-place concrete over discardable metal forms on the inverted-T stems. Void between the floor above and the ceiling below is used for ventilation and utility distribution.

(2) Partitions. Designed by Vaughan Interior Walls, Inc., in collaboration with U.S. Gypsum Corp. Laminated gypsum panels with gypsum studs are removable from either side of the wall. Wall panel surfacing includes vinyl, epoxy paint, rough wood, chalkboard and tackboard.

(3) Heating-Ventilation-Cooling. Design by Ayres & Hayakawa. Component provides forced-air heating distribution from multizone units that provide for approximately 2000 sq ft of floor area. (Ducts and ceiling diffusers do the distributing.) Return air moves through the structural cavity. There will also be individual room control and automatic climate control. Cooling is optional.

(4) Furnishings. Designed and provided by the Simmons Co. A bed, desk, an adjustable height upholstered plastic shell chair are all metal framed. Storage units are made to attach to partition fittings.

(5) Bathrooms. Designed by the Crane Co., and provided by the Johnson Washer Co. A glass-fiber shell comes in three parts with a built in bath tub/shower. Cast iron lavatory and china water closet are surface attached.

The architect was Ezra Ehrenkrantz; his firm, Building Systems Development, Inc., was consultant.

## WASHINGTON/ FINANCIAL NEWS

by E. E. HALMOS JR.

Price-Bidding Deleted — Fast footwork in Congressional backrooms saved architects and engineers from a fate many of them consider worse than death: a flat legal provision requiring price-bidding for A-E services.

The provision was contained in an otherwise innoccuous amendment to the annual military procurement appropriations bill. It simply required that the military services must receive bids for any purchase above \$2500.

By the time anybody realized the implications of that wording, the bills had moved out of committee hearings on both sides of the Capitol, and were on the floors for debate and final passage.

It was too late for amendment or change, but representatives of AIA, CEC, and other professional groups managed quick visits with key legislators.

Result was insertion of "language" into the official record of the debate on the measure, to the effect that Congress didn't mean to include A-E work.

Said Mississippi's Senator John Stennis: "It is not intended that this language will operate to require the selection of architectural and engineering firms on the basis of price quotations." Similar comment was inserted in House records.

Importance is that courts usually take such comments into account when attempting to decide the intent of Congress in passing a law.

Last-Minute Congressional Decisions — The cliff-hanger on bidding was one of several close decisions that came through as Congress was attempting to pack its bags for the journey home.

Another was defeat of a determined effort to exempt publications of nonprofit organizations (such as AIA, ASCE, the AMA, the U.S. Chamber of Commerce) from a ruling by the Internal Revenue Service that their income is taxable.

Still another was the death

of measures in both Houses that would have extended Federal safety and health regulations to all projects in which Federal money is involved in any way (whether through grants, loans, insurance, guarantees, or any other method). And with it were killed two other bills that would have affected the handling of construction labor by vastly extending the powers of the controversial Equal Employment Opportunities Commission, and extending the President's hand in dealing with "national emergency" strikes.

And there was more: a bill (passed in the Senate and okayed routinely by House committees) that would have increased allowable weights, lengths, and widths of trucks on the Interstate highways.

There were some cuts, under budget estimates, but the bills that became law contained substantial amounts for construction: \$14,500,-000,000 for housing and urban development; \$5,500,-000,000 for transportation; \$1,800,000,000 for military construction; \$1,400,000,000 for general public works.

Budget Cuts Left to Administration—But Congress didn't really indicate where further cuts should be made to bring general Government spending in line with a \$6 billion cutback that it had ordered, thus leaving the whole burden on the Johnson Administration.

Predictably, the Administration immediately announced that it would chop \$200 million from highway spending (by deferrals of contract awards and other means), carefully "leaked" other information on job layoffs, closing of various Federal installations, and the like.

With equal predictability, Congress screamed "foul" and filled pages of the Congressional Record with denunciations of Administration actions on the highway money, and with hastily introduced bills to exempt pet projects from any spending cutback. Most of these attempts failed, thus leaving the whole question of how much the Government will actually spend (and where and when it will be spent) exactly where it was before: in the hands of the Administration.

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Armstrong, 4211 Watson St., Lancaster, Pa. 17604.



# PRODUCTS

**NEW FACE FOR STAINLESS STEEL** 

REPORT

NEWS

Terne-Coated Stainless steel was created especially for the architectural field as a roofing and weather-sealing material. TCS is 304 nickel-chrome stainless-steel sheet, coated on both sides with Terne alloy (80% lead, 20% tin). This alloy has been used for over three centuries as a protective coating on carbon steel, but this is its first commercial production as a coating for stainless. The coating is achieved by a hot dip process that is said to assure a "consistently uniform surface that actually forms a metallurgical bond with the stainless steel." TCS, when properly installed, is said never to need maintenance; it weathers to a uniform dark gray; and it will not produce discoloration on other building surfaces as the result of wash-off. Other qualities claimed by the manufacturer for TCS are: a coating anodic to stainless steel, which therefore sacrifices itself to protect the core metal; more resistance to corrosive attack under exposure to severe industrial, chemical, and marine atmospheres than either uncoated stainless steel, copper, lead-coated copper, or aluminum; a greater resistance to denting and buckling than equivalent gages of either copper or aluminum. Unlike copper and ordinary stainless steel, TCS is said not to require pre-tinning to be soldered; and the relatively high percentage of tin in the alloy considerably enhances the "solderability, bond, and workability" of TCS. Follansbee Steel Corp., Follansbee, W. Va. Circle 100, Readers' Service Card

Circle 100, Readers' Service Car

#### CONSTRUCTION

Energy-absorbing EAR. Plastic-like, Energy Absorbing Resin (EAR), is available as a solid and as a foam. As a foam, it is said to float, be non-burning, lightweight, moldable, and energy-absorbing; as a solid, it has impactabsorption, is fire retardant, and has ease of fabrication qualities. In either form, it has sound-deadening and vibration-damping potential for industrial and architectural installations. Norton Co., 1

60 Products

New Bond St., Worcester, Mass. 01606. Circle 101, Readers' Service Card



Don't fence me out. An aluminum coating on a chain link fencing fabric and barb wire is claimed to prolong life (before maintenance) up to three to five times longer than the hot dipped galvanized variety. The appearance is said to be smooth, and when used with a smooth round post framework and bevel-edge bands that offer little foothold, the fence is "less climbable than other types." Page Fence, American Chain & Cable Co., P.O. Box 390, Wilkes Barre, Pa. 18703. Circle 102, Readers' Service Card

Respiratory coating. A spray-Textane coating, applied Type II, is said to eliminate film failure by allowing a normal transmission of water vapor. Special acrylic resins are said to prevent yellowing of the coating; an almost unlimited color choice is provided by a wide range of graded ceramic aggregates. The coating may be installed over most masonry backings; it is said to work well for feature walls, murals, and facias. Desco International Assoc., P.O. Box 74, Buffalo, N.Y. Circle 103, Readers' Service Card



Acoustical office furniture. Known officially as TAG (Task Administrative Group), and unofficially as "fuzzy," all vertical surfaces of this convertible office furniture are made of an acoustical material called Artitex. Claimed to absorb and disperse sound, Artitex is a textured nylon material that is abrasion-resistant and may be vacuum cleaned. In office

landscape design, where floor to ceiling partitions are rapidly disappearing, furniture must be able to control random noise. Snap-on front and side panels give flexibility to the TAG desks and tables, as do mobile drawer sets; also available are convertible chairs, storage units, and freestanding curved panels. Art Metal Inc., Jamestown, N.Y. *Circle 104, Readers' Service Card* 



Visibility, or desk-perception. A game table and shelf unit combine to form a desk that may be looked through as well as looked at. The table is 28" high, 32' sq, and the shelf and drawer unit measures 32" x 15" x 9". The stylized Captain's chair, with its inflatable backrest, measures 28" x 171/2" x 211/2"w. All are constructed of plexiglas with Susan chrome hardware. Lewis, 10 E. 76 St., New York, N.Y. 10021. Circle 105, Readers' Service Card



Chairs that gang. An absence of visible fasteners makes the Libra II stack chair equally handsome whether used alone or ganged together. Libra II, like its forbear, Libra I, is constructed of a molded one-piece plastic shell and supported by a chromeplated steel frame, but, in addition, it has welded arms with curved plastic arm rests. Color is molded in; the choices are: white sand, black, dark olive, leather tan, royal blue, and brick red. Domore Office Furniture, Inc., Elkhart, Ind.

Circle 106, Readers' Service Card



Underfoot dimension. Visual texture is not sufficient for designer Verner Panton, who pays homage to the three-dimensional in his 100%-wool, geometric rug design, entitled "Omega." The pattern consists of circles, squares, and cut-outs; the rug is available in white, beige, gray or brown, 7'-3" x 7'-3", or as a wall panel, 7'-3" x 1'-5", or 7'-3" x 2'-10". Unika Vaev Corp., 979 Third Ave., New York, N.Y. 10022. Circle 107, Readers' Service Card



plenum lighting. Limited Manufactured in three sizes for wattages from 100 to 500, the Annulite ceiling fixture has an over-all height of just slightly more than the length of the lamp itself, yet is said to retain an efficiency of 60.5%. This is attributed to the use of a stepped reflector and an annular aperture. Several reflector finishes are offered, as well as a semirecessed and pendant-mounted model. Rambusch Co., 40 W. 13th St., New York, N.Y. 10011.

Circle 108, Readers' Service Card

Illuminating effects. The Quadrille 6 and the Quadrille 6 Multi-Groove are both expansions of a square tube downlight series; both offer intensity and width of beam variations, as well as wall wash. Quadrille 6 may be



St. John's University Library, Collegeville, Minnesota Marcel Breuer & Associates, architects Johnston-Sahlman Company, structural engineers Gunnar I. Johnson & Son, Inc., contractors Ceco Steeldome Service for waffle-pattern monolithic concrete joist construction

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semi- or fully-recessed, surface- or stem-mounted, and can be installed singly or in 4-unit modules (quads). Both are available in a choice of apertures and finishes. Lightolier, 346 Clarement Ave., Jersey City, N.J. 17305. Circle 109, Readers' Service Card



Egg-crate louver. The acrylic Demicel light diffusing louver is produced from Acrylite molding compound by the hot manifold process from a custom-designed mold, said to insure consistently high quality, economically achieved. The resulting louver is lightweight, breakage-resistant, and has stability. long-range color Wilson Research Corp., Erie, Pa. Circle 110, Readers' Service Card





Pedestal drafting table. The "versatility" drafting and drawing table is said to be compact, and a complement to regular office furniture; it

may be further used as an addition to an in-line Dial-A-Torque installation. Board sizes range from 32" x 42" to  $43\frac{1}{2}$ " x 84"; finishes are Gray or Island Green. Ham-ilton Mfg. Co., Two Rivers, Wisc. 54241.

Circle 111, Readers' Service Card



Scale models. As an addition to its 1967 line of model building materials, the manufacturer has introduced 100scale cast metal airplanes and trucks in a variety of scales; all are designed as aids in the construction of finished and study models, presentations and displays. Said to have an embossed surface useful for both renderings and model making. Architectural Models, Inc., 361 Brannan St., San Francisco, Calif. 94107. Circle 112, Readers' Service Card



Textured metal. Essex is one of many metal patterns said to add strength to light gage metals and to eliminate monotonous expanses of flat metal facias or partitions. Patterns can be produced in thicknesses from .012" to .018" in stainless, and from .012" up to .025" in aluminum, copper, and brass, providing a diverse texture that can, nevertheless, be easily cleaned. The metal texture can be laminated to other metals, as well as to wood, cement, and asbestos board, Ardmore Textured Metals Inc., Woodbridge Ave. at Main St., Edison, N.J. 08817. Circle 113, Readers' Service Card

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## MERS'DATA

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Circle 201, Readers' Service Card

#### AIR/TEMPERATURE

Fume-scrub system. Constructed entirely of polyvinylchloride, this "building block" air-washer system is said to eliminate necessity of tailoring units for each installation. The system incorporates standard components that permit custom installation with allowance for later additions as capacity requirements increase. Two types of washer are described: the vertical opposed flow type, and the horizontal cross-flow model. Includes typical specs for each, parts and fittings, capacity and dimensional data. Catalog. 14 pages. S. & E. Mfg. Co., 3533 Cardiff Ave., Cincinnati, Ohio 45209. Circle 202, Readers' Service Card



Temperature planning. Entitled "A Plan for All Seasons," this catalog contains electrical heating units from baseboard to ceiling, for residential, commercial, and industrial installations; also furnaces. A complete air-conditioning equipment line is presented, in addition to freeze protection products, thermostats, and controls. Included are photos, descriptions, sizes, installation drawings, and a rating chart for over 200 models. 12 pages. Berke Electric Mfg. Corp., P.O. Box 365, Michigan City, Ind. 46360.

Circle 203, Readers' Service Card



Calefacient catalog. Product catalog of electric blast coil duct heaters is filled with application and design information for both custom and standard heaters. Also contains accessory and control equipment, wiring diagrams, and sample specs. Data geared primarily to engineers. 96 pages. Industrial Engineering & Equipment Co., 425 Hanley Industrial Ct., St. Louis, Mo. 63144.

Circle 204, Readers' Service Card

#### CONSTRUCTION

PVC-plus panels. AVR-Duraform building panels, made of asbestos-reinforced rigid vinyl, are said to combine the resiliency typical of other plastic panels with the structural strength of asbestos-cement. For use as siding, roofing in industrial, commercial, and institutional applications. Data sheets list type, size and thickness variations; mechanical, electrical, thermal and chemical properties; loadbearing charts. A table compares Duraform with other conventional materials. Bulletin. 17 pages. Kaykor Products Corp., Yardville, N. J. 08620.

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Partition glass. Patterned and wired glasses in 36 variations are designed to provide varying amounts of visibility, security, and light transmission in applications as windows, walls, partitions, skylights, and clerestories; coordinated doors available. Thickness, light transmission, weight, dimension, and finish specs for both patterned and wired glass. Photos. Booklet. 15 pages. American Saint Gobain Corp., P.O. Box 929, Kingsport, Tenn. Circle 206, Readers' Service Card

Two-faced. Spectra-Glaze, modular, pre-faced concrete masonry blocks are available in a variety of constructional shapes; the special facing may be one-sided or two, and is also available in a variety of textures and patterns. The facing compound is said to become an integral part of the block itself. Spectra-Glaze has applications in commercial, industrial, and institutional facilities. Tech data, test results, composition, size, shape, color possibilities, and installation methods. Spec/ data sheet. 4 pages. Burns & Russell Co., P.O. Box 6063, Baltimore, Md. 21232. Circle 207, Readers' Service Card



Finishing touch. Claimed to be ideal for curtain-wall and sandwich panels, Glasweld is said to be dimensionally stable, permanently colored, water-resistant, incombustible, and optically flat in appearance. Other uses are: exte-rior facing, with soffit and molding additions; interior walls and base, ceilings, partitions. Available in 24 colors and two sand finishes. Contains thickness, size, and weight data, details, properties, test ratings, load charts. Booklet. 35 pages. Color. Glasweld Dept., U.S. Ply-wood, 777 Third Ave., New York, N.Y. 10017. Circle 208, Readers' Service Card

#### DOORS/WINDOWS

Guidelines for steel doors. Developed to establish criteria for the selection and use of standard steel doors, booklet describes types of doors available, and, in table form, indicates proper use of these doors in apartment, dormitory, hospital, office, school, and hotel installations. Includes: door type; style; construction; minimum thickness gage for panels; rails; standard door design nomenclature. Steel Door Institute, 2130 Keith Bldg., Cleveland, Ohio 44115. Circle 209, Readers' Service Card Frames and sashes. Complete line of architectural/monucommercial/indusmental. trial, and detention/institutional windows are constructed of either aluminum or steel. Information concerning special Bayco color finish and Bayseal weatherstrip, mastic surround for cement installations, and accessory mechanical operators and industrial doors. Details, dimensions; complete details and specs available in individual product folders. Catalog. 36 pages. William Bayley Co., Springfield, Ohio 45501. Circle 210, Readers Service Card

ELECTRICAL EQUIPMENT

Taking no risks. Technical booklet descirbes electrical equipment for hazardous areas. Guide to application, selection, and installation of wiring, plugs, controls, fixtures, and finishes; covers a wide range of explosionproof products. Full illustrations, details. Also a run-down of hazardous areas, Articles 500-503 and 510-517 of 1965 National Electrical Code. Catalog. 80 pages. Appleton Electric Co., 1701 Wellington Ave., Chicago, Ill. 60657.

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#### FINISHES PROTECTORS

Architectural cosmetics. Adhesive, coating, and sealant catalog, in chart form, lists specifications Government and Federal stock number descriptions, intended application, and the corresponding adhesive, coating, or sealant, to meet the requirements. Also lists properties and container sizes for many products. 20 pages. 3M Company, 3M Center, St. Paul, Minn. 55101 Circle 212, Readers' Service Card You talk "zoning" with your client when you plan lighting, heating, air conditioning, and the flow of materials, production and people. We talk "zoning" when helping you design internal communications to attain maximum efficiency in the free flow of vital information.

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NEWS REPORT

Comprehensive coverage. Manufacturer's guide to all waterproofing, restoring, protective and corrective products for masonry and cement includes description and specs for each; also, necessary surface preparation. Products are for both interior and exterior use, above or below grade. 4 pages. Tamms Industries, 8000 Joliet Rd., Box 64, Lyons, Ill. 60534. *Circle 213, Readers' Service Card* 

#### FURNISHINGS

Rectilinear desk styles. The 3200 Series Desks include standard double- and singlepedestal models, as well as typewriter machine and desks, typing units, credenzas, worktables, and convertible desk combinations. Available in various acrylic enamel finishes; brushed or polished chrome hardware; range of plastic laminate tops. Schematics and dimensions. Booklet. 19 pages. J. A. Andrews, Steelcase Inc., Grand Rapids, Mich. 49501.

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OFFICE EQUIPMENT Die-cut templates. All templates are said to be qualitychecked for size, symmetry, and spacing; they include house plans, plumbing fixtures, furniture, windows, and many geometric series. Also, technical electrical, more flow-plan and lettering templates. Describes each, including standard sizes; many templates have slide-easy lower edge. Catalog. 16 pages. Timely Products Co., Box 416, Baltimore, Ohio 43105. Circle 215, Readers' Service Card

#### ROOFING

**Ribbed decking.** EPIC steel roof deck may be narrowribbed for short spans, or wide-ribbed for longer spans; it is made of lightweight galvanized steel, covered with Korad A, an all-acrylic polymer film that carries a 15-yr guarantee. Included are: uniform load charts for 18-, 20-, and 22-gage decking; properties per foot of width; standard details; design and architectural specs. Available in 24" width, in lengths up to 32". Booklet. 8 pages. EPIC Metals Corp., 1844 Ardmore Blvd., Pittsburgh, Pa. 15221 Circle 216, Readers' Service Card



Fabric specs. Fabric finishing service guide offers information about flameproofing, stainproofing, and specialty finishes for both natural and synthetic fiber fabrics. Finishing services are in accordance with state and national standards; certificates of flameproofing are issued. Fabric is said to be processed and delivered within 24 hrs of its receipt at finishing plant. Brochure describes crush velvet, cure, resize, deodorization, fab-bac, mildewproof, mothproof, stabilizing and shrink process; also Scotchgard and ZePel. Pick-up service is offered only in the L.A. and N.Y. areas, but delivery in any area may include a dozen drop-shipments. Includes prices, specs, and properties of finished fabric. 8 pages. Perma-Dry Div., Kiesling-Hess Finishing Co., Inc., 519 W. 38th St., New York, N.Y. Circle 217, Readers' Service Card

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## NEXT Month In P/A

SACRED TO SECULAR. Many religious bodies are realigning their basic approaches along sacred-secular lines, with more emphasis than formerly on the latter. This, naturally, is having a noticeable effect on the design of buildings for church groups. A major article on the phenomenon will appear in December P|A, with significant illustrated examples from California, Missouri, Texas, and New York.

SUPERTRUSS. The Alcoa Building by Skidmore, Owings & Merrill in San Francisco's Golden Gateway Center brings that redevelopment up to date architecturally. A first-hand observation will appear in December.

CONCERN. Carlin, Pozzi & Associates designed the New Haven Regional Center for Mentally Retarded Persons with care, compassion, and concern. It will be featured in December P/A.

**EXTERIOR EXTROVERTS.** P/A has covered the great new things going on indoors with Supergraphics. This article, to appear in December P/A, will show what is going on outside in the same supergenre.

TECHNOLOGY. Neon! Earthforming! Non-manual switching! Phenomenal spanning systems!

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