Azrock – the almost perfect floor...

Azrock vinyl asbestos tile serves more shopping center requirements more perfectly than any other type of flooring. Yet it costs less than half as much as it did 20 years ago. And today it’s a better floor. Here’s why you can specify Azrock with confidence:

- Styled to coordinate with contemporary interiors
- Long lasting durability
- Fire safe, will not support combustion
- Shock proof
- Easy, economical cleaning and stain removal
- Resilient underfoot comfort
- Lowest motion resistance
- Non-allergenic, mildew proof, no odor retention
- Exceeds federal specifications
- Low-cost maintenance
- Low initial cost

More vinyl asbestos tile is used in retail stores, discount centers, and chains than any other kind of flooring. Make shopping pleasant for customers and cut maintenance problems with low-cost Azrock vinyl asbestos tile—the best floor for shopping centers.

Floor shown: Custom Travertine, one of over 150 colors and styles.

Write for free samples and No-Wax Maintenance information. Azrock Floor Products, 524A Frost Bldg. San Antonio, Texas 78292.
Circle No. 335, on Reader Service Card
Remodeling or expanding...there are Steelcraft doors and frames to fill every opening.

Take out the old and the weak... put in a new Steelcraft steel door and frame entrance system. Steelcraft doors can be easily installed in any type of existing frame or they can be installed by replacing the existing one with a new steel frame. Modification to fit existing conditions can be made instantly by your local Steelcraft distributor. He is ready to serve your remodeling requirements.

Steelcraft Manufacturing Company

9017 Blue Ash Road, Cincinnati, Ohio 45242 U.S.A.
Phone (513) 791-8800
An American-Standard Company
Want to save space?
Oasis will meet you halfway.

We’ll meet you at the water cooler which extends just 9½” from the wall.

That’s our semi-recessed model designed to do more than just save space. It conceals the plumbing. It’s easy to install because it comes with a steel mounting box.

It even comes with a full 5-year warranty. The industry’s strongest.

This water cooler is available in 13, 7 or 5-gph capacities. And you have a choice of decorator finishes.

Fully-recessed models available too.

See details in Sweet’s. Or call your Oasis distributor, listed in Yellow Pages. The “Quality you take for granted” is part of every Oasis water cooler, humidifier and dehumidifier—products of Ebco Mfg. Co., Dept. PA-5, 265 N. Hamilton Rd., Columbus, O. 43213.
Progressive Architecture

November 1972

The future of the past

Preservation in context
Discussing preservation at a P/A symposium, nine experts go beyond buildings to the broader implications of ecological and social problems

Saving places for people
Four cities—Louisville, Seattle, Lockport and Lowell—approach the task of preserving neighborhoods with different methods, and different results

Conservation and the built environment
British architect Peter Melvin describes UK conservation laws, economic viability and design criteria for fitting new buildings into old sites

Portfolio
Salvaging a site: Burroughs Corp., Detroit
Yesterday's grace, today's usable space: Cooper Union, New York City
Prairie school commercial: Merchants Bank, Winona, Minn.
Yesterday's grace, today's usable space: Cooper Union, New York City

Specifications clinic

Products

Lighting

Books

Directory of advertisers

Reader service card

Cover: On a Beaux-arts building in downtown St. Louis, florid plaster figures support a Moderne light cornice while seeming to pay homage to an air conditioner; David Morton photo.
Introducing

A soft step forward

COMFORT

This is Quiet Zone Vinyl Corlon flooring. Quiet, beauty, durability, and easy maintenance—all in one new floor. But softness and comfort are the first things you notice about it.

A 125-mil-thick layer of Cushioncord foam vinyl bonded to the back makes walking and standing a pleasure—and makes Quiet Zone truly different from traditional types of commercial vinyl flooring.

QUIET

Another feature of Quiet Zone's Cushioncord backing is the way it muffles noise from footsteps and falling objects. This provides a great advantage in offices, schools, and public buildings where a little noise goes a long way.

Yet Quiet Zone isn’t “mushy.” Wheels on carts and furniture roll over it easily, and seams stay sealed. Six decorator colors coordinate with just about any interior styles.
Quiet Zone™ also gives you the kind of toughness you expect in vinyl flooring. It's reinforced with a tough layer of fiberglass-reinforced vinyl. This adds dimensional stability plus resistance to impact damage.

Quiet Zone has excellent flame-spread resistance also. It has a flame-spread rating of 75 or less in the ASTM E-84 Tunnel Test and has a rating of less than 4.0 in the UL-992 Chamber Test.

One of the most important things a floor can be is practical. This is where Quiet Zone vinyl really shines. Its virtually nonporous surface provides stain resistance. Spills wipe right up. And its richly textured, subdued pattern not only blends with every decor but also helps disguise dirt and traffic marks, seams, and subfloor irregularities.

Quiet Zone flooring is everything you need in a modern floor. Armstrong will send you everything you need to know about it. Mail coupon to Armstrong, 309 Watson St., Lancaster, PA 17604.

NAME ______________________________________
TITLE _____________________________________
COMPANY __________________________________
ADDRESS _________________________________
CITY ______________________ STATE ______ ZIP ______
Letters from readers

Views

Canada controversy

Before any of your many talented readers of the September issue about glorious Canada get the idea that all is perfect and unspoiled here, please read my notes on the real everyday life. I'm a New Jersey transplant living in Toronto for the past three years. Next month I'm leaving for the U.S.A., and the old country never looked so good.

If the reader decides that Canada is the place for him, bring plenty of long underwear, chains, ropes and snow tires. Winter starts in late October and ends in the beginning of April. Consider also the career side of the picture. The few good buildings here don't make up for the destruction wrought upon Toronto itself and the suburbs. Did you know that over half the total population of greater Toronto lives in apartments, mostly hi-rise? Most of the single unit housing in the metropolitan area makes Levittown look like a baronial estate. Due to sky rocketing land prices, many families are forced to buy duplex-type houses, separated from the next family by a cinder block wall and a bit of plaster. Some of these homes are just a few yards from a busy road and roads into the city from these "estates" are too small, badly planned or nonexistent. Public transportation is a bad gamble on a busy morning. Is this all beginning to sound familiar? No, I am writing about Metro Toronto, Ontario, not the U.S.

Graduates with legitimate diplomas and credentials can start to work for as low as $90 a week. If after four hard years they work up to $200 a week, they still can't expect to be paid overtime for the extra hours put in. Inflation is running away with the Canadian dollar as well. There are no wage or price restrictions. Cars, same as U.S. models, cost $400 more, clothes 30 percent more, televisions twice as much and food prices are just spiraling away!

The people here, though poorer than we, do want many of the same things Americans want. They have many of the same problems and will encounter new ones. In our constant American quest for heroes, let's not look to the North; let's look to our own backyards, cities and suburbs. If we work hard enough and well enough we can still create our own better tomorrow.

Kristina DeBaylo
Don Mills, Ontario

We finally did it! Canada broke into the columns and made its stage debut. We extend our appreciation to you. However, after reading the articles devoted to Canadian architecture, I feel that a few comments are in order.

As for statements such as our cars and gas stations looking like YOURS, Canadians speaking YOUR language (p. 92), certainly we are influenced by the U.S.A. Your imperialistic habits assure that.

Harsh criticism of our mountains, prairies and cities as written is well warranted. We have seen what has happened to many American cities, and we trust that we will not repeat the same total error.

Carol Jaye Rowan
Vancouver, B.C.

Making cities smaller

Are cities an anachronism and is mankind merely flogging a dead horse by perpetu-

[continued on page 10]
cheer leader

Superb school door control; Rixson X-5 thin slab floor closers, out of sight and the vandal's way... Firemark ionization detectors and electromagnetic door releases, for instant response to danger and the immediate confinement of lethal smoke.

Ask the specialists in school door control and fire/life safety:

RIXSON-FIREFMARK, INC.
9100 West Belmont Ave., Franklin Park, IL 60131
In Canada: Rixson-Firemark, Ltd.
If granite is strictly for building exteriors, why didn’t someone tell Union Bank, San Francisco?

There are those that hold that the place for granite is the outside wall for that big, monumental building that comes along once every century. But the building owner and the management of the Union Bank of San Francisco and their architects had other ideas. They liked the warm, natural colors of granite. They were aware of how polished granite resists weather, stains and all types of traffic as no other building material is capable. They knew it requires virtually no maintenance. Doesn’t fade or deteriorate. And that it would fit into their plans on a cost-in-place basis. So it was employed. On the plaza to cradle a fountain and pool. As exterior furniture. Inside it was used as facing for walls on the first floor, in heavy traffic areas. Focal points that at once blend and accent. Warm. Lasting. Beautiful.

Information on the wide variety of rich granite colors and new fabrication techniques is yours for the asking. Also information on flooring, paving and other “points-of-distinction” applications. Talk to our Customer Service Department (612-685-3621). See us in Sweet’s Catalog No. 4.1/60.

subsidiaries:
Lake Placid Granite Company
Jay, New York
Texas Granite Corporation
Marble Falls, Texas
Raymond Granite Company
Raymond, California
Cold Spring Granite (Canada) Ltd.
Lac Du Bonnet, Manitoba
over 20 producing quarries

Union Bank Building
50 California Street
San Francisco

Owner:
West Coast Life Insurance Co.

Architects:
Exterior and lobby
Welton Becket and Associates
Bank interior
Anthony Heinsbergen and Company

General Contractor:
Haas and Haynie Corporation
These fears arise from reflecting upon the fates which overtook many cities and city states that have flourished and then passed into oblivion since the dawn of recorded history. However, people continue to abandon permanent places of residence in the wide open spaces.

It is interesting to note that over a decade ago a study was made by planners and demographers at one of New England's most renowned universities concerning cities. A figure of 300,000 people was reached as the maximum number that could be efficiently accommodated, all things considered, in a concentrated and populated area. Unfortunately, those in authority seem to have chosen to ignore the results of this research.

Crime, ghettos, racial strife, drug abuse, overcrowding and pollution are just a few of the many obstacles to decent living which we continue to encounter—with the promise of even more to come. As we are admonished that our world is over-populating to the danger point, paradoxically we are informed that agricultural engineers have succeeded in the irrigation of desert country in the western United States, the Mid-East and Australia. In a matter of a few years these areas will become food producing fields and pastures.

If this is the case, perhaps the threat of over-population must be viewed as a city problem rather than a world problem. A combined research and operational program is needed whereby the population mass could be directed away from, rather than concentrating it into ever enlarging metropolitan centers. Some method must be found so that the economic, sociological and cultural advantages of cities could be realized in small but industrially energetic communities.

As matters now appear, advantages and profits are to be realized in the cities, but they seem to be restricted to speculators, real estate corporations, land developers, builders, financiers and the very affluent. The remainder of the urban populations, due to spiraling prices and inflation, are compelled to lead progressively more marginal forms of existence.

Let us hope that any future buildings which are to be designed by our profession will impress posterity by being monuments to a generation's artistic, scientific and technological prowess and not merely tombstones in metropolitan ruins.

Creighton Aquin, MRAIC-NCARB
Montreal

Is this the Octagon House and the new AIA Building in Washington, D.C.? Unsigned.
How Connor's clean design keeps your design cleaner.

Behind the crisply styled face of Connor's new perforated air diffuser is a breakthrough that keeps ceilings looking better longer. The breakthrough consists of two discs, mounted one above the other in the neck of the diffuser.

The discs are perforated so that a gentle flow of air bleeds constantly downward through the face plate.

This creates an air buffer that keeps circulating room air from grazing the diffuser face plate and depositing dust. It works like this:

Result: Far less smudging. Ceilings stay cleaner longer.

**Fine tuning**

The discs also give this new Connor diffuser some unique performance characteristics that will interest your consulting engineer.

They move up and down to control the volume of air, sideways to control the pattern of air. This permits "fine tuning" of the diffuser to achieve just the right level of comfort at every outlet.

**See it**

Connor's new perforated diffuser is available square or rectangular. And Connor supplies mounting systems for any type of ceiling.

Ask your Connor representative to show you the new perforated diffuser. He's in the phone book under Air Distribution Equipment.

Or write for our new perforated diffuser brochure.

Connor Engineering
DANBURY, CONNECTICUT 06810 A DIVISION OF JENN-AIR CORPORATION
"There has to be an easier way to make these revisions."

You've got a drawing that has to be revised, with new details to be added. You could redraw the whole thing, making the necessary changes in the process. But why not do it the easy way, with the help of a sharp, clear reproduction on Kodagraph film or paper? From that reproduction, cut out the portions that are still useful, and tape them to a new drawing form. Then, make your revisions, redrafting only the portions that need changing. Finally, use Kodagraph film for a perfect print of the completed drawing.

For more ideas on saving design time with Kodagraph materials, fill out and mail the coupon.

Shorten your drafting time with KODAGRAPh materials.

Please send me complete details on the design shortcuts possible with Kodagraph materials.

Name ____________________________
Position ____________________________
Company ____________________________
Address ____________________________
City ____________________________ State __________ Zip __________

Eastman Kodak Company
Business Systems Markets Division
Dept. DP890, Rochester, New York 14650

DRAWING REPRODUCTION PRODUCTS

Circle No. 348, on Reader Service Card
This treated wood needs no maintenance

Now you have a new architectural product to design with... a product that needs no painting or staining... a product that eliminates recurrent replacement costs. This siding, paneling, bench, decking... even the laminated A-Frame have been pressure treated with OSMOSE K-33® the “clean” preservative. The treatment imparts a pleasing green color to the wood and allows it to weather uniformly without expensive annual maintenance.

If specified, a special water repellent can be added to the Osmose K-33 to reduce surface weathering, improve dimensional stability... and give you a building material which requires no maintenance. We call this combination WEATHERSHIELD™ But, whether you specify wood treated with Osmose K-33 or WeatherShield... you get wood that is impervious to decay and insect attack.

Osmose pressure treated wood is available through the 90 affiliated Osmose treating plants in the U.S. Contact one of them or write for our special information packet. It describes architecturally designed jobs which have utilized both Osmose K-33 and WeatherShield.

SOUTHERN OFFICE. 1016 EVEREE RD., GRIFFIN, GA. 30223
...this mark means:

Peace of mind on a rainy day.

On a rainy day it's a comforting thought for your customers to know that the structural lumber in their home is dry. And every grade-marked piece of Southern Pine lumber you buy with the SF mark on it is just that: pre-shrunk, dried to give greater strength and endurance to a home.

The stable quality of pre-shrunk Southern Pine structural lumber insures against uneven floors, windows, doors and other costly defects. It's highly resistant to weather and wear. Its stability in size minimizes shrinkage causing reductions in width and thickness. And the resulting tightness guarantees maximum efficiency in heating and cooling.

There are many other reasons why you should always specify and buy Southern Pine, a product of the member mills of SFPA. For more information write to Southern Forest Products Association, P. O. Box 52468, New Orleans, Louisiana 70152.

SOUTHERN FOREST PRODUCTS ASSOCIATION
POST OFFICE BOX 52468, NEW ORLEANS, LOUISIANA 70152
Even in the Dark Ages of audio-visual presentation, nobody was ever in the dark long about its effectiveness.

Here was an indispensable tool for enlightened corporate communications, on every level. Audio-visual equipment was a must!

So they took professionally designed and efficiently planned interior space, and cluttered it up with unwieldy screens. Took acoustically engineered conference areas designed for noise reduction, and moved in clattering projectors. Took painstakingly designed rooms with controlled illumination for esthetic effect and maximum visibility, and turned off the lights.

Back to the Dark Ages. \( \Box \) But now there's the AV-COM.

SEE HOW THE JMC AV-COM™ SAVES YOUR DESIGN ESTHETICS AND IMPROVES YOUR CLIENTS' COMMUNICATIONS

Now with the AV-COM you can design in an entirely self-contained rear projection audio-visual presentation system — providing your client with most of the advantages of sophisticated and expensive custom facilities — but at the cost of a single, completely prefabricated module.

Sound motion pictures, slides and transparencies convey information directly to the brain—in the audio-visual form the brain understands best, remembers longest. Facts and data, training and education, policy and product news—every kind of information—all reaching more people, more accurately and completely, and in less time, than ever before.

Available with screens from 36 inches square, in single or dual image, the AV-COM uses 16mm sound motion pictures, 35mm slides and overhead transparencies to turn your client's conference or training area into a "Theater for Progress." It creates a communications environment for the presentation of information in the most direct and natural way, through sight and sound together.

Rear projection means no noisy projectors. No unwieldy standing screens. No darkened rooms to interfere with note-taking or audience attentiveness. With models measuring from 33 inches in depth, the AV-COM can be recessed into any wall, fitted into a shelf arrangement, or installed to meet any interior design requirements.

Ready to use, the AV-COM plugs into any convenience outlet. Simple in its basic components, it has a patented optical system, which includes pre-set special front surface mirror and projector positions. This permits the projectors to be used separately and returned to the unit without re-adjustment. All projectors are in true optical alignment.

The non-glare rear projection screen accommodates horizontal, vertical or square images. Features include remote control, custom accessories and cabinets in a choice of finishes. Guarantee covers optical alignment and electrical controls.


*Multiple Units

For more light on the subject, see us in Sweets. Ask for advance 1973 Sweets insert. Call (area code 212) 682-3452, or use the coupon below.

JEROME MENELL CO., INC.
30 East 42nd Street
New York, N. Y. 10017
Area Code 212 682-3452
Introducing Stanley's new, concealed wiring, continuous conductor, electric hinge. The first hinge of its kind, it hides almost any kind of security circuit you can dream up... signaling closers in case of fire... operating electric locks... identifying unauthorized entry... you name it. You have electric power in any door position.

With all the trim, innocent look of our regular CB1900 hinge, once installed it reveals no electrical parts. The wiring, protected behind the hinge leaves, is tamper-proof. And there are no contact points to deteriorate.

This is just one of a new line of electric hinges newly developed by Stanley. Offering you a whole new approach to security systems. Learn more. Write Stanley Hardware, Division of The Stanley Works, New Britain, Conn. 06050.

In Canada: The Stanley Works of Canada, Ltd.

Circle No. 386, on Reader Service Card
"Big Stan" going up 80 stories with new idea in elevator shafts

USG® CAVITY SHAFTWALL SYSTEMS are going up fast at the new Standard Oil Company (Indiana) headquarters building on Chicago's lakefront. This original concept was developed by United States Gypsum working with architects and general contractors. It combines the speed of gypsum panel installation with easy erection from the corridor side. And in-place costs are so convincingly low, these systems are also being installed at Sears Tower, Chicago, One Shell Square, New Orleans, and other megastructures nationwide. For good reasons:

Faster Installation. Takes less manpower, less time to build. 
Gets elevator cars running sooner.

Lighter Weight. Only 10 lbs. per sq. ft., 78% lighter than masonry. Reduces dead load to save on structural steel.

Eliminates Extra Work. System includes vertical chaseway to speed installation of electrical conduit.

Meets Any Design Need. Simplifies handling of special heights at lobby and mechanical floors. Unique design of steel components allows for ceilings up to 18 feet high, shaft pressures up to 15 psf.

UNITED STATES GYPSUM
BUILDING AMERICA

CLEARPRINT INVITES YOU TO VERIFY A GHOST STORY

Seeing is believing. With this simple test you can see for yourself why leading engineers and architects demand Clearprint Technical Papers. Made from a 100% rag stock, they have a perfect working surface. Highest erasing qualities insure against ghosting. Clearprint doesn't change. Its stability, strength, transparency and printing qualities remain unchanged even after extended exposure to age, atmosphere, heat, and light. If you aren't using Clearprint now, try this comparative test on the paper you are using. Write for samples, sizes and prices.

CLEARPRINT PAPER CO.
1482-67th Street, Emeryville, California

☐ Send me Clearprint samples, with prices, for the following uses:

Name__________________________________________________________
Firm___________________________________________________________
Address_________________________________________________________
City________________________State______Zip___________
The developer of Denver's Greenwood Plaza had two thoughts in mind when design planning began for his three-building office complex: Design to give occupants full advantage of the view; but design so that the building will not intrude into the beautiful, natural setting.

The architects concurred. They chose PPG's Solarban 575 Twindow reflective insulating glass and the new matching Solarban spandrel units to complement the earthy tones of the aggregate structural units. The matching appearance of the Solarban glass units and the spandrel units (a new glass-metal type) combine to give the impres-
sion of solid glass walls, with uniform reflectivity of the naturalized surroundings.

This total glass approach helps settle the development into its site, and also preserves the natural feeling of spaciousness.

A great deal of practicality enters the picture, too, since the high thermal performance of the Solarban 575 units contributes significantly to occupant comfort. And the matching, reflective Solarban spandrel units outperform conventional single-glazed spandrel products in both U-value and shading coefficient. Solarban spandrel units are opaque and need no backup material for visual purposes. And because of the low U-values, field installation of backup insulation material is not required.

See PPG about Solarban Twindow units—and the new matching spandrel units—for your next building. Early in the design stages. Write PPG Industries, Inc., One Gateway Center, Pittsburgh, Pa. 15222.

Developer: The John Madden Company, Denver, Colorado
Architect: Kirkham-Michael & Associates, Omaha, Nebraska

PPG: a Concern for the Future
Circle No. 377, on Reader Service Card
"FreeSpace" for Your Clients

Put all your files in one fourth the area

With Lundia FULLSPACE® Mobile Filing and Storage Systems

Now you can "free" valuable floor space. It's a matter of record. In business firms nationwide, Lundia FULLSPACE systems are saving space, retrieval time and money. FULLSPACE occupies about one quarter the floor space of drawer files of equal capacity. Suppose your drawer files and aisles occupy 400 sq. ft. FULLSPACE of equal capacity saves space for other purposes by requiring only 100 sq. ft., or you can put four times the filing and storage in existing space.

Swedish-designed Lundia FULLSPACE mobile wood shelving has no equal . . . for efficient management of general files, records, computer tapes, printout forms, ledgers, books, stationery, supplies of all kinds, and even parts inventory.

When you select FULLSPACE for centralizing records-keeping and storage, you really have something working for you. Ask how FULLSPACE can pay for itself. Have a Lundia representative survey your requirements, present a free layout, and provide a cost estimate.

Your installation date will be met. That's in the record, too.

CALL FRANK BROWN COLLECT
217-423-3451

OR WRITE TODAY FOR COMPLETE DETAILS

LUNDIA
The World's Record Holders

LUNDIA, MYERS INDUSTRIES, INC. DECATUR, ILLINOIS 62525

Circle No. 366, on Reader Service Card
## P/A names advisory panel

This month brings the first meeting of the newly organized P/A Panel, an eight-member advisory board set up to provide a way to check the magazine’s editorial course against the changing interests of the architectural profession. The interdisciplinary panel is not just a list of impressive names for the masthead; it is to be a working panel, meeting yearly with P/A’s editors for wide-ranging and free-wheeling discussion which will help P/A better serve its readers.

The first P/A Panel includes: William Bagnall, dean, School of the Boston Museum of Fine Arts and principal, Bill Bagnall Associates; Michael Brill, president, Buffalo Organization for Social and Technological Innovation, Inc. and professor, State University of New York at Buffalo; David Crane, dean, School of Architecture, Rice University and partner, David A. Crane & Partners; Craig Hodgetts, partner, Works (West) and faculty member, Department of Architecture and Urban Planning, University of California, Los Angeles; Theodore Liebman, chief of architecture, New York State Urban Development Corp., Walter Netsch, design partner, Skidmore, Owings & Merrill, Chicago; Joseph Newman, vice president, Tishman Research Corp. and Tishman Realty Corp.; Herman Spiegel, dean, School of Architecture, Yale University. Members will be replaced on a rotation basis, so that each one will serve a maximum of two consecutive years.

## Fort Worth’s Kimbell: art housing art

It took a full week of parties to celebrate the opening of Louis Kahn’s Kimbell Art Museum in Fort Worth, Tex. last month. Reactions of guests ranged from “superb” to “superlative.” The only complaints heard were from those who would have to come back another time to view the collection because the building itself demanded so much first-night attention.
1 Two unequally sized loft office spaces and a central service core make up the Federal Aviation Administration's Northwest Regional Headquarters at Boeing Field near Seattle. The building, depressed 5 ft below grade and surrounded by an earth berm, consists of two floors and a partial third floor, set back because of visibility requirements for the airport's main runway. Structure is pre-cast concrete. Mel Streeter AIA & Associates are architects; engineers are Kelley, Pittelko, Fritz & Forssen (s); Benjamin S. Notkin & Associates (m) and Sparling & Associates, (e).

2 Two sky lighted courtyards, one formal, the other a market center, connected by arcades lined with shops are the key features of Circle Court Shopping Center, being built on urban renewal land near the Chicago Circle Campus of the University of Illinois. Each courtyard will have a ramp system connecting the four shopping levels and roof parking. Completely air conditioned, the center will include a bank and offices, supermarkets and shops; service areas will be screened by brick walls and main entrances marked with plants and graphics. Metz Tran Olson & Youngren, Inc. are architects for $5 million project; engineers are C.A. Metz Engineers, Inc. (s) and Environmental Systems Design, Inc. (m).

3 A new civic office tower is linked with the existing office building by a public concourse to form a civic plaza for the Santa Clara (Calif.) County Government. The concourse includes a visitor reception center, new judicial chambers, a board room and a meeting hall. An elevated pedestrian bridge links the plaza with nearby parking structure. The tower provides 11 stories of office landscaped office space; The judicial chambers include a 252-set assembly area along with supporting facilities. Exterior of the tower is weathering steel and reflective and clear glass; frame is steel. Architects are the Los Angeles office of Caudill Rowlett Scott and Albert A. Hoover & Associates.

4 Band shell proposed for Chicago's Grant Park will occupy a lakefront site now used for parking. The parabolically arched space frame will be covered with transparent glazing and act as an acoustical shell as well as a shelter, providing seats for 3000 people under cover; 5000 more people could be seated on the earth berm beyond the covered seating area. Beneath the park, which will surround the band shell, will be a two-level parking garage for 3700 cars. C.F. Murphy Associates are architects.

5 Recycling old buildings in Brooklyn's Bedford-Stuyvesant neighborhood will provide a block-long complex for shopping, community services and recreation. The project is organized as three interconnected yet different squares; the first provides a supermarket, drug store and a medical clinic; the second, a skating rink that can double as an amphitheater. The third is an existing court in an old industrial building which will be turned into an entertainment center, complete with three movie theaters and a restaurant. Upstairs will be crafts workshops and a film studio. Arthur Cotton Moore Associates are architects.

6 Walden School alumnus Edgar Tafel designed the $2.5 million addition to the New York City private school's 70-year-old Renaissance building. The four-story annex will include a gymnasium, auditorium, kindergarten and laboratories and allow the school enrollment to grow from 400 to 650. The stucco and brick exterior will blend with the old building.

7 About 80 percent of the 212,065-sq-ft building designed for the College of Architecture and Design at the University of Michigan, Ann Arbor, will be used as studios and workshops for students in art architecture and urban planning. Designed by Swanson Associates, the $8.5 million building will have an exterior of brick and steel panels; glazing will be bronze glass and studio areas will be sky lighted. The building will consist of three 2-story rectangular sections; between two of them will be an open courtyard for display of sculpture and architectural models.

8 New home for the National Association of Home Builders was designed by Vincent G. Kling & Partners for an odd-shaped site in Washington, D.C. Trapezoidal building will take up less than half the site; the rest will be landscaped with trees, plazas, pools and a fountain and waterfall. The building itself will have long glass walls on the north and south, with the south wall of solar glass sloped outward to reduce heat loads. Structure is poured-in-place concrete with post tensioned beams; ends of the building are sheathed with brick. Engineers are: David Geiger-Horst Berger, PC (s); Robert J. Sigel, Inc. (m,e).
The low-down on glue-down!

"Jute is the key to successful glue-down, we have found from long experience."

... says Gary Feverston (standing), sales manager, Don Mendenhall's CarpeTalk, Dayton

Double Jute-backed carpet glued down in H.E.W. *facility

Don Mendenhall's CarpeTalk met rigid standards with this H.E.W. installation. Double Jute-backed carpet adhered directly to subfloor without attached or separate pad passed all tests with flying colors.

Initial cost was lower than other carpet systems. Easy mobility for wheels and casters was gained, with no pads under secretarial chairs. Overall adhesion ruled out split seams and "bubbling." Carpet's advantages in sound absorption, maintenance savings, aesthetics, insulation, comfort underfoot and improved morale were preserved.

Mr. Feverston stressed that "Jute is the key" for these and other reasons:

- Jute's mesh weave and fibrous composition accept and retain adhesive, for secure bond to subfloor or previously installed hard-surface flooring.
- Jute is over twice as thick as other no-pad backings. Cracks in old flooring aren't felt underfoot or outlined. Area for sealing seam edges is double.
- Unmatched dimension stability, vital with floor cut-outs.
- Carpet comes up cleanly, intact for re-installation.
- Helps carpets otherwise qualified meet fire safety codes.
- When carpet is rolled out, some floor adhesive penetrates the Jute mesh to the primary backing, for additional tuft bind and protection against delamination.
- For "stretch" installation in selected areas, jute hooks permanently taut on tackless gripper pins.

Write for free architectural guide specification and editorial report

*In new Montgomery County Administration Building in Dayton. Architects: Brown & Head, Dayton; Edward Durell Stone, New York
Kimbell's vaulted interior

Kimbell's vaulted interior

chanical, electrical and security functions are controlled from a single console.

Although the 9½-acre site was donated by the city of Fort Worth, both the museum and its collection are funded by the Kimbell Art Foundation, established by the late Kay Kimbell, industrialist and art collector. The Foundation, under the direction of Dr. Richard F. Brown, has added major acquisitions from throughout the world to the original collection. Because two nearby museums deal with American art, the Kimbell will display non-American works whose dates span some 4500 years.

Dr. Brown, formerly director of the Los Angeles County Museum of Art, has arranged the collection in what he describes as "the manner of a 14th Century private palazzo, where guests are shown objects chosen for their aesthetic quality and individual interest." His goal has been to acquire definitive works in excellent condition, and arrange them "so that they have conversations with each other." Looking at the museum as the Foundation's major acquisition, it is indeed a "definitive work in excellent condition."

Columbia University to sponsor architectural film festival

Amateur or professional 16 mm films relating to any aspect of architecture, planning or architectural technology are eligible for entry in a film festival to be held at Columbia University in April 1973. The university's school of architecture is the sponsor.

Films may be abstract or realistic; they may deal with historic or contemporary architecture, landscape or environmental issues, people as affected by architecture or architecture affected by humanity; whole cities or parts of them; the importance of building technology. Silent and sound films are eligible, and sound may be magnetic or optical. Preferred lengths are between 5 and 30 minutes.

Films will be reviewed by a jury of design professionals and film makers and cash prizes will be given. First prize will be $2000; second, $1000 and third and fourth, $500. All films selected for the festival will be copied by the university to be part of a film lending library, and will be described in a permanent catalog published in conjunction with the festival. All [continued on page 30]
films submitted will be listed in a bibliography in the catalog.
In order to enter a film, the following information must reach Columbia by Dec. 1, 1972: film title, subject matter, names of film makers; length, type of film (sound or silent, color or black and white) and any other miscellaneous information. Films themselves must be received by Jan. 1, 1973. Entries and requests for information should go to Francois Contino, School of Architecture, Avery Hall, Columbia University, New York, N.Y. 10027.

Reynolds Award time again

The AIA is now accepting nominations for the 1973 R.S. Reynolds Memorial Award. The prize, as usual, is a $25,000 honorarium and an original sculpture in aluminum. Nominations by architects or others may be submitted to the Reynolds Architectural Award Programs, AIA, 1785 Massachusetts Ave., N.W., Washington, D.C. 20036. Data binders describing entries must be postmarked no later than Jan. 22.

National Endowment for the Arts focuses on 'City Edges'

Problems of freeways, riverfronts, suburban fringes and other natural and man-made "edges of cities" will be the focus of a $500,000 program recently announced by the National Endowment for the Arts. Called "City Edges," the program will give priority to proposals and plans that call for broad interdisciplinary approaches and have real possibility of being put into action.

The deadline for grant applications is December 11, 1972; proposals are invited from individuals or from nonprofit organizations. Requests for information and application should go to Director, Architecture and Environmental Arts, City Edges Program, National Endowment for the Arts, Washington, D.C.

Hot dogs under the hypars

What looks like a forest of rusty steel morning glories is really a picnic shelter designed by Joseph Roth & Associates for Cook Field, Yonders, N.Y. The hyperbolic paraboloids, made of weathering steel, are of varied heights averaging 16 ft tall; they are 17 ft in diameter and weigh about 3 tons. One of them, inverted, makes a hood and chimney for the outdoor fireplace in the background.

Cost of each unit was around $8000, says Roth. The entire shelter came in under $4.75 per sq ft.
Lehigh conference on tall buildings looks at social problems

There aren't many limits to the heights of buildings these days, and those that do exist are social rather than structural. That's a quick one-sentence summary of a lengthy conference on the planning and design of tall buildings, held at Lehigh University in Bethlehem, Pa. during August. The conference drew some 600 engineers, architects and other professionals from 44 foreign countries and 33 states.

Numerous technical reports were heard, but the real message was that the importance of social and environmental concerns is growing. "Soft sciences (social, legal and behavioral aspects) are becoming just as important as, if not more important than, the 'nuts and bolts' of planning and designing tall buildings," Dr. T.C. Kavanagh, of URS/Madigan-Praeger, Inc. told the conference. L.E. Robertson, of Skilling, Helle, Christiansen, Robertson noted that "we could start erecting a mile high structure next year—but do we really want to? The question is not can such a building be built, but should it be built."

Kavanagh was the moderator of the conference's opening session, at which he suggested that the most important single factor in planning and designing tall buildings might be the "political and organizational ecology of the cities." Once characterized by a monolithic power elite that could get things done, American cities are becoming "polythetic" with greatly dispersed political decision-making processes. He contrasted recent attempts to raise height restrictions in Washington, D.C., with planning efforts in Moscow and San Francisco which deal with the height and bulk of buildings.

Jonathan Barnett, architect and educator with the City University of New York, pointed out some basic problems related to tall buildings. Ways should be found, he said, to relate tall buildings to one another, instead of letting them spring up wherever they can. Better land use should be sought, he said; in many cases high rise buildings are put up not because they are needed, but because they are signs of success. Citing London, San Francisco and Tokyo, Barnett called for better ways to make tall structures fit harmoniously in cities originally established without tall buildings. Another problem, he pointed out, is that many skyscrapers may be too small: "Maybe we should have 10 World Trade Centers instead of 40 Chase Manhattan Buildings."

Among the numerous technical reports were ones dealing with fire safety, wind loads, and earthquakes. Richard E. Lenke of Skidmore, Owings & Merrill told the conference that "present thinking (on fire safety) is to create safety zones within the building which would provide safeguards against smoke and fire beyond what is normally provided in buildings at the present time. These would have increased fire resistant construction and special heating, ventilating and air conditioning systems to provide smoke-free air and safety from fire during an emergency." More and more experts are becoming convinced that it is impractical to move large masses of people out of a building in a short time. Lenke's report also suggested such features as discontinuous stairwells and elevator shafts. Another report, by B. Rafeiner of Hamburg, West Germany, talked about the possibility of locks and baffles like those used on ships. "In high rise buildings, as in ships," he said, "rescue possibilities are limited."

Concern with winds had less to do with the danger to the building than with the danger to pedestrians from high winds (continued on page 32)
Free fence spec kit saves time, trouble!

Invaluable for planning chain link fencing. Kit includes drawings on styles, wire gauges, gates, fittings, framework. Also includes lab reports, work sheets and specifications.

Page® aluminized fabric lasts 3-5 times longer than the best of galvanized. Send for your kit today. Page Fence Division of Acco (American Chain & Cable Co., Inc.), P. O. Box 430, Bridgeport, Conn. 06602

News report continued from page 31

around tall buildings. At the base of tall buildings, winds can be strong enough to blow pedestrians off their feet, and there is the possibility of injury from broken glass or dislodged parts of buildings. Prof. Sean Mackey's summary of the wind committee's findings called for international cooperation in wind studies. Mackey, who is a professor at the University of Hong Kong, has constructed a 10-story building specifically collecting data on wind effects.

And in case anyone is worried, a number of authorities pointed out that a well-constructed tall building is actually a safer place to be during an earthquake than an ordinary building: "Tall buildings, with their improved structure and elements, can assure high resistability to earthquakes," said Prof. Kiyoshi Muto, president of the Muto Institute of Structural Mechanics. Raymond W. Clough of the University of California at Berkeley, added that he felt that any well-designed building in his state could survive a quake up to 8.5 on the Richter scale. He did point out that one problem in designing quake-resistant structures is that little is known about the effects of major earthquakes: "With respect to severer quakes, we are dealing with uncertainties, and are therefore not quite sure how best to prepare for them."

The conference was sponsored by the National Science Foundation, American Society of Civil Engineers, American Iron and Steel Institute and the International Association for Bridge and Structural Engineering. Dr. Lynn S. Beedle, director of Lehigh's Fritz Engineering Laboratory was chairman of the international committee that planned the conference, which was directed by Dr. Le-Wu Lu, also of Lehigh.

OAE affiliates with carpenters

To get more bargaining power, the San Francisco-based Organization of Architectural Employees has joined with the Carpenters Union. The affiliation will let OAE back up its contract demands with the 800,000 members of the Carpenters Union and AFL-CIO building trades councils, but OAE will remain independent, in name and policies.

Lowell, Mass. planning to recover minerals from trash

By crushing, screening, separating (by density and magnetic attraction) and floating (froth flotation), the city of Lowell, Mass. is planning to recover reusable minerals and metals from trash. It will all happen in a plant to be built next to the city incinerator; the "mineral beneficiation techniques" will separate and sort the residue from the incinerator into aluminum, zinc, copper, ferrous metals, glass, sand and a small amount of unreclaimed residue.

The process has been proved by the U.S. Bureau of Mines in a pilot plant in College Park, Md., but the Lowell installation is said to be the country's first full-scale, operating recovery plant. Initially, it will process 250 tons of residue a day; later it will reach its designed capacity of 670 tons a day.

For the city, there are a number of advantages, starting with a reduction in the land needed for solid waste disposal; compared with unincinerated waste, there is a 200 to 1 reduction, and with present incinerated residue, a 20 to 1 reduction. The sale of the minerals and metals will support the operation (once it is in operation) and other improvements to the town's...
Keep out the drips!

Use the Hickman System to grip those roofing felts forever.

We're the only system that has a true compression clamp to lock out the water by locking down the felts. (Mostly because we own the patent on it.) We're also the only system that works every time. Nobody has ever reported a failure in a Hickman Gravel Stop.

Further, we're less expensive (installed cost) than the ordinary kind of gravel stops that don't work perfectly. Don't be fooled by drippy imitators. Specify Hickman.

HICKMAN
Aluminum Construction Products
W. P. Hickman Company, Inc.
2520 Industrial Row / Troy, Mich. 48084 / Phone: (313) 549-8484

NEW from Hickman...

SERIES 100 FASCIA with "Snap-Tab" Installation

It takes a minimum of labor to install the Series 100 the quick and simple "snap-tab" way. This means economy in a narrowly-spaced fascia panel.

But this doesn't mean you sacrifice selection. The Series 100 comes in all the regular Hickman finishes and colors with a big variety of extruded battens. Perfect for use as vertical or mansard fascia, spandrels, and interior and exterior wall accents.

And something else...we cut the panels to the size you tell us. It's narrowly-spaced yet rugged. It's Hickman.

HICKMAN
Aluminum Construction Products
W. P. Hickman Company, Inc.
2520 Industrial Row / Troy, Mich. 48084 / Phone: (313) 549-8484

NEW from Hickman...

the GUARANTEED COPING COVER SYSTEM

We guarantee our new PERMASNAP COPING SYSTEM against water leakage. Period.

The secret is a styrene gutter chair at each joint that quietly carries water away.

We also make sure the system stays in place. Without expensive imbedded anchor bolts. A special adhesive replaces them. And it sticks against 60 lbs per square foot of uplift.

Permasnap Coping Covers are also simple to install. (It has to do with the "snap" in the name, but it's simpler if you see it for yourself.)

All in all, it's a pretty simple system. Only four parts. And we guarantee all of them. Specify Hickman.

HICKMAN
Aluminum Construction Products
W. P. Hickman Company, Inc.
2520 Industrial Row / Troy, Mich. 48084 / Phone: (313) 549-8484

NEW from Hickman...

Put on a happy fascia

One that stays happy, too. Because Hickman Modu-Line fascia panel systems completely eliminate oil-canning.

Modu-Line is a custom system. So it's available in any spacing you need from 4 to 24 inches. And comes in lengths up to 24 feet. You select from a big variety of battens, and a bunch of colors and finishes.

The result is a handsome, custom system. And one that lasts. Hickman. The flexible system that never flexes once you put it up.

HICKMAN
Aluminum Construction Products
W. P. Hickman Company, Inc.
2520 Industrial Row / Troy, Mich. 48084 / Phone: (313) 549-8484
A floor covering should be chosen not only to withstand the number of feet that will go over it, but for the particular type of feet as well.

That's why, when it comes to resilient floorings, GAF makes over 300 types, patterns, and colors—to try to have exactly the one you'll need.

For instance, for a medium traffic area you might choose new Fashioncraft floor tile. This 3/32" grade comes in a striking assortment of high-fashion designs, making it a worthy candidate for residential areas, too. Or ask us about the GAF Thru-Chip® lines which offer no-wax maintenance in heavy traffic areas.

But perhaps you'll decide sheet goods can do the job better.

In that case, GAF offers sheet vinyl that comes up to 12' wide, is cushioned for softness and quiet, and needs no waxing or scrubbing.

Whether you're catering to high heels, office furniture legs, or shopping cart wheels, consider GAF. After all, we've got over 300 different ways to help.

All are fire-safe; and meet Federal specifications where applicable.

For more information, contact: GAF Architectural Flooring, Dept. K-112, 140 West 51 Street, New York, New York 10020.
New life saver

Fire tested, the unique Smok-Chek III™ combines unequaled early detection capabilities* with automatic door closing...for optimum protection of patient occupied areas, with two-point hold-open convenience.

Smok-Chek III meets the new Model Building Code requirements and has been approved by Underwriters’ Laboratories. No better protection is available at comparable cost.

*California State Fire Marshal’s “Project Corridor” test data, 1972; available on request.

Ask the specialists in fire/life safety and door control for health care facilities:

RIXSON-FIREMARK, INC.
9100 W. Belmont Ave., Franklin Park, IL 60131
In Canada: Rixson-Firemark, Ltd.
I'm an architect
...what does cast iron soil pipe mean to me?

An excellent question, and one we are pleased to answer. From the welter of plans on your drafting table and the scores of trade magazines stacked behind your desk, it is obvious you are a man who likes to keep up with the state of the art.

It is also obvious that there would be little time left for work if you read everything that comes across your desk. Nevertheless, a few minutes is all it takes to bring yourself up to date on cast iron soil pipe.

Cast iron soil pipe, today, as the material preferred by most, if not all, forward thinking architects — has a rather interesting modern story to unfold.

Consider this: Tomorrow's hospitals, as well as other commercial and even residential multi-unit buildings, will be much more free of undesirable waste noises in the plumbing system, thanks to neoprene gaskets and plain-end cast iron soil pipe in the DWV systems of buildings now in the design process.

There has now been more than enough research and actual use to demonstrate beyond any doubt, that the NO-HUB® joint with its Du Pont neoprene gasket creates a sound barrier that reduces noise and vibration transmission almost to zero.

Rest assured, DWV systems using cast iron soil pipe are the quietest systems available today.

There's more to our story.

For industrial use, cast iron in combination with neoprene gaskets is the reason why it is now practical to install low cost condensate return systems. Modular DWV systems for “drop in” plumbing units are a working reality, and are now available in either NO-HUB® or compression systems.

If you design and write the engineering “specs” on every job that goes through your office, isn't it helpful to know that installation costs are definitely reduced by using NO-HUB®? The stainless steel clamp and neoprene gasket make the NO-HUB® joint installation quick and easy.

Better still, they produce a seal that will last the life of the pipe (which is virtually forever), resisting all corrosive elements that are usually associated with drain-waste-vent and sewer systems.

We must have something positive to offer, otherwise, how would we explain the fact that 31 million NO-HUB® joints have been installed in a single year, and that more than one million tons of cast iron soil pipe were installed last year alone.

Nor can you easily overlook the fact that every year, more cast iron soil pipe has been installed than any other material. There simply can be no doubt, cast iron soil pipe is manifestly the product of choice for drain-waste-vent and sewer systems.

Yes, time is at a premium, so we really hate to intrude on yours. But really, those stacks of magazines on your floor give mute testimony that you are a professional who means to keep up with the facts. Let us send you some of ours.

For a starter, the study you may find most helpful today is the two-year research study that is fully and completely detailed in our important, 32 page booklet on acoustics. Let us know of your interest. A simple postcard with your name will serve quite well.

Just ask for “Noise and Vibration Characteristics of Soil Pipe Systems.” It's truly very sound. That's our private little joke, of course.

CAST IRON SOIL PIPE INSTITUTE
2029 “K” Street, N.W.
Washington, D.C. 20006
incinerators. And of course, by recycling non-renewable minerals and metals, it will be a step towards conservation of some natural resources.

The cost for setting up the plant is $3.2 million, three-fourths of it coming from the Environmental Protection Agency; city and state funds are also being used. Raytheon Co., the city and the Bureau of Mines have spent the past year adapting the process for use at Lowell, and Raytheon will design and supervise construction of the facility, as well as run a year-long test, evaluation and demonstration program. The design should be ready in about a year, and construction should start after that; operation tests are expected to begin in mid-summer of 1974.

**Greek Revival revived**

High above the Hudson River opposite West Point, stand the sad remains of a small, dignified Greek Revival chapel. The oldest standing church in the archdiocese of New York outside Manhattan, the Chapel of Our Lady at Cold Spring is being saved by a local citizens' group out of genuine affection for the building, and also out of a strong commitment to the preservation of their cultural heritage.

The Catholic chapel was built in 1833 with funds and land donated by the Protestant supervisor of nearby West Point Foundry; it served the Irish immigrants employed there, where cannon were later made for use in the Civil War. Constructed of red brick coated with pink concrete and stucco, the chapel served its congregation through the Civil War, when most of its walls were weakened by cannonry testing against the mountains across the river. After the war the walls were repaired and strengthened, the nave was extended, two transepts added, and two Victorian steeples, one with a clock, were added. It was used for 40 more years, then closed in 1906 when the parish moved. Shortly after that it burned, leaving only the original structure; the upper walls had crumbled and the floors were destroyed, but most of the cedar beams and cross pieces remained intact. In the 1920s brewery owner Jacob Ruppert began a restoration, but reputedly lost interest when he was unable to purchase the building. In the '50s, a later attempt at restoration fell through, and finally, recently, the local administrator was directed by the archdiocese to sell the land and ruins. A local citizens' group purchased the parcel for $10,000 in 1971, and it was transferred to the Chapel of Our Lady Restoration, Inc., a nondenominational group who are now raising $500,000 to restore the original chapel and rebuild the pier that led to the river.

Under the chairman of the sponsoring committee, actress Helen Hayes, the committee will restore the chapel as a place for services of all faiths and for solemn civic occasions; and eventually a proposed museum addition behind the chapel will house an exhibit of religious arts.

**Elsah, Ill.: social and architectural history that lives**

Nestled in a hollow beside the Mississippi River, Elsah, Ill. never had room to grow. And although it was a bustling river port during the end of the 19th Century, its low level of economic activity since then has kept change to a minimum. It is possible to look down a street today and see little that is different from a photo taken in 1900—little different except utility poles, pavement and larger trees.

The natural sort of preservation that has kept Elsah as it [continued on page 40]
As a plumbing contractor, I know gaskets of DuPont Neoprene are dependable.

On-the-job experience has proven to me that cast iron soil pipe and gaskets of DuPont Neoprene are a winning combination for reliable DWV systems. I have found that Neoprene gaskets install quickly, seal quietly and dependably. They resist all types of sewage and are tough and tear resistant. We use them on all of our jobs.

Cast iron and Du Pont Neoprene... time-proven materials teamed up for long-lasting performance. Ask your wholesaler for more information.

Neoprene
was years ago can't go on forever; the expanding suburbs of Alton, Ill. and St. Louis could eventually engulf the village. Preserving it for the future is the aim of the Elsah Historic Foundation.

There are a variety of reasons for saving the village, says Dr. Charles Hosmer, a history professor at Principia College, which owns property in Elsah and has its campus on the bluffs to one side of the village. Elsah is, in effect, the front door to the college; it is an unusual example of a 19th Century river town that has not changed dramatically in its 120 years; and it is an interesting combination of social and architectural history that is still a living and breathing community, not a museum.

The Foundation by itself, has "only limited hopes of saving much of Elsah," Hosmer says. One immediate goal is to put the Village Hall, a frame structure built in 1887, into working order. "I hesitate to use the term 'restore,' because we intend to rip off the clapboards, and we hope to insulate the building and strengthen it," says Hosmer. For the long run, the Foundation does have plans to buy and restore one or two key buildings, he says, ones for which there probably would be no immediate use without a good bit of alteration. And the College has been asked to include in its sales contracts a clause that would prevent significant changes in façades or exteriors of properties it may sell.

What the Foundation has done so far has been to influence others to buy and restore properties in the village. The College has recently purchased an antique shop and house that includes a log cabin built in 1847, six years before the village was founded. Five other houses are currently being restored by college faculty members or other individuals, and there are plans for others. One structure that no one can figure out what to do with is a gas station—probably the only one ever designed by Bernard Maybeck, who was the architect for the Principia College campus.

Awards

Eight Chicago buildings were named Distinguished Buildings in the 18th annual awards program sponsored by the Chicago Chapter AIA and the Chicago Association of Commerce and Industry.

The awards are given to the owner and contractor as well as the architect. Honored were: Booth & Nagle (Award Gas Station, Mount Prospect); Graham, Anderson, Probst & White (United Air Lines Chicago Regional Reservation Center, Elk Grove Township and St. Joseph Mercy Hospital, Aurora); David Haid (Dyett Middle School, Chicago); Holabird & Root (Oakbrook Fire Station No. 2, Oak Brook); Metz, Train, Olson & Youngren, Inc. (Lake Forest High School West Campus, Lake Forest); Shipporeit, Inc. (880 Wells Building, Miller Village, Gary, Ind.) and Skidmore, Owings & Merrill (O'Hare Plaza, Chicago). Two service awards were given for contributions to Chicago architecture through work in related fields. One was given to John D. Entenza, formerly editor and publisher of Arts and Architecture and director of the Graham Foundation for Advanced Studies in the Fine Arts; the other was given posthumously to architectural photographer Richard Nickel. He was also a prominent activist in architectural preservation.

Personalities

Frank W. Orleans of The Grad Partnership, Newark, N.J., has been appointed a member of the Planning Board of New Providence, N.J.

Hermann H. Field, FAIA, AIP, has been named professor of environmental planning and design in the Department of Political Science, Tufts University, Medford, Mass.

Robert T. Dorsey has been elected president of the Illuminating Engineering Society, New York City.

Richard Dormian, FAIA, has been reappointed consulting architect for California State College at San Bernardino.

The following have been appointed adjunct professors in the Department of Architecture and Architectural Engineering in the University of Miami School of Engineering and Environmental Design: Edward D. Stone, Jr.; H. Samuel Kruse; James A. Garland, AIA; David L. Peterson; Dean K. Newberry, IBD; and H. Richard Schuster.

The University of Texas at Arlington has named six adjunct professors in the Department of Architecture: Martin C. Growald; Khan Husain; R. Jerrald Vincent; Sarah Moore; Kenneth M. DeHaas; Hélaine Frost.

Nomer Gray has been elected president of the New York Association of Consulting Engineers, Inc.

Edward J. Quinlin has been named vice president for university affairs at Polytechnic Institute of Brooklyn, New York.

Ulrich Franzen was awarded the Medal of Honor of the New York Chapter AIA at the chapter's 105th Annual Meeting. Honorary membership in the chapter was conferred upon Donald G. Elliott, chairman of the New York City Planning Commission; Dr. Anthony G. Adinolfi was honored posthumously for his work as head of the New York State University Construction Fund.

Calendar


Nov. 9-12. Board of Governors meeting and mid-Atlantic regional conference, American Institute of Interior Designers, Washington, D.C.


Jan. 21-Feb. 18. Exhibit of the Italian Art & Landscape Foundation Inc., Toledo Museum of Art, Toledo, Ohio.


1/32" pecan veneer glued to plywood.
About 40¢ a foot.
Why pay more?

3/4" solid pecan wall plank.
About $1.40 a foot.
Life is short.

Bruce Wall Plank
Division of Cook Industries, Inc., Memphis, Tenn. 38101

Send free color booklet showing 6 species of Wall Plank. $3.00 enclosed for design kit.

Name ___________________________
Firm Name ___________________________
Street Address ___________________________ City ______ State ______ Zip ______

Circle No. 341, on Reader Service Card
Concrete brings harmony to contrasting designs of new cultural/convention center.

If, as Schopenhauer said, architecture is truly frozen music, then SCOPE, Norfolk, Virginia’s new cultural/convention center, is an upbeat in contemporary counterpoint. The straight, clean lines, stark concrete pillars and simple dignity of Chrysler Hall, the center’s civic theater, serves to accent the flowing curves and graceful concrete ribbons of the Convention Hall with its dramatic domed arena and ground-to-apex visual sweep.

Taken from the Greek word “kaleidoscope,” the center’s name, SCOPE, reflects the variety the center will offer in professional sports, theater, conventions, exhibits, and local civic affairs.

At the surface level, the two halls are connected by a paved brick plaza with reflecting pool and lighted fountain for focal points. However, the bulk of the center—including exhibit hall, offices, meeting rooms, restaurant, rehearsal studio and a 640-car garage—is located beneath the plaza adjoining Convention Hall.

Essentially the center is a large “boat” with a three-foot concrete slab floor that extends as much as fifteen feet below the area’s water table. It takes 4,000 concrete piles to stabilize it—some keep it from sinking and others from floating upward.

It required 100,000 cubic yards of concrete to complete the center—and every yard contained POZZOLITH admixture. POZZOLITH helped to enhance the beauty of the concrete and to provide it with outstanding performance in workability, placeability, and finishability.

One of the center’s designers said, “The quality of the concrete used in building SCOPE was outstanding, and beyond a doubt the POZZOLITH admixture contributed greatly to the fine workmanship of the concrete contractor.”

You’ll find POZZOLITH the preferred admixture whenever concrete performance is vital. That’s because POZZOLITH delivers its many performance benefits where performance counts—on the job and in the finished structure. That’s why, over the years, POZZOLITH has earned the name “The Performance Admixture.”

For more information on the concrete performance on this and other jobs, contact your local Master Builders field man or write Master Builders, Cleveland, Ohio 44118.
The Gamble house in Pasadena, the famous 1908 work by Greene & Greene, is unique in the annals of preservation. James Gamble, grandson of the original owners, spent months learning how to give away a historic monument, one in perfect condition containing furniture, rugs, etc., designed for it by the Greenes and accompanied by a handsome endowment. In 1966 he turned it over to the city of Pasadena and USC, which marked the first time a city and university joined in preservation.

USC was an obvious choice because on the architecture faculty was Randell Makinson, who published, in 1960, a fine monograph on the Greenes. The university provides funds for restoration, maintenance of structure and daily operating costs. The city maintains the gardens and is now restoring them to the original plan, redrawn by Emmet Wemple, a landscape architect teaching at USC.

Even with a full-time curator (Makinson) and part-time secretary and housekeeper, the house could not have assumed its place among the major cultural attractions open to the public without the docent council. There are now 80 docents and among them they contribute services equal to that of 15 full-time employees. All receive the equivalent of a semester's study in architecture, from the Industrial Revolution to World War II; the crafts from William Morris through the 1910s; daily operating procedure of the Gamble house and library practices. A docent can then conduct tours of children or adults, staff the Greene & Greene research library (expanded lately to include the whole craftsmen's movement) work on a public school pilot program that provides slides and background material on architecture, run the bookshop, plan the Wednesday luncheon, make the frequent distinguished visitors comfortable—or simply restore library furniture.

Ten of the docents are of the original 12 selected in 1966. Each year 20 new ones are screened by old members. Makinson is proud of the fact that the council is composed of "the rich, the poor, the old, the young." They are not used as fund raisers but the proceeds from their two annual open houses go to enrich the house—new curtains, oriental runners, a Tiffany vase, etc.

The council began when board member Sam T. Hurst, dean of the USC School of Architecture and Fine Arts, requested Janann Strand to set it up; she and Dorothy Byles, wife of a Pasadena architect, tested various docent systems until they found a workable scheme for the Gamble house. Mrs. Strand is dedicated enough to return to college for a degree in art history, even visiting Japan to research oriental influences on the Greenes.

Administrator of the house is USC, and an advisory board determines policy. Three advisory board members are appointed by James Gamble; Pasadena is represented by the city manager and city director; the vice president of business affairs and Dean Hurst act for USC.

The budget of $10,000 for the first years has climbed to $20,000, due mainly to expanded activities. But with the income at present around $16,000 new ways are being sought to meet the deficit; one of them is to establish Friends of the Gamble House who will contribute $50 a year each.

The concentration of cultural interests near the house, which includes a dozen Greene & Greenes, has increased the number of local visitors, and the exhibition of the Greenes' furniture at the Metropolitan accounts for more eastern visitors. The total is about 10,000 this year—a great incentive for making up the deficit. [Esther McCoy]
Where ZINC guards the Coast Guard

The Coast Guard's own designers took the "drab" out and zinc will keep the rust out of this beautiful new concept in military quarters. This handsome building is the new U. S. Coast Guard Barracks at the Elizabeth City, N. C. Air Station. The zinc is on the galvanized steel reinforcing rods below the surface of the 237 precast concrete panels used for both interior and exterior walls. Galvanized steel was specified because of its proven ability to prevent subsurface rust which could cause staining, cracking and spalling of the concrete surface. While the use of galvanized re-bar is especially important in marine environments, it is also specified in inland locations to protect against general moisture and other corrosive atmospheres. Used in concrete or as a separate material, galvanized steel provides the most practical combination of strength, corrosion-resistance and economy.
ZONOLITE® MONO-KOTE® is being used to fire-protect the interior portions of the new 82-story international headquarters for Standard Oil Company (Indiana) in Chicago.

Sprayed directly to the building's structural steel members, it's meeting the critical needs of the owner, architects, contractor and subcontractor—thanks to its outstanding performance. **The owner** is getting a product that meets his most critical requirement: protecting the structure in the event of fire.

**The architects** needed a material that could meet building code requirements—and state and city standards prohibiting asbestos in the formula. (W. R. Grace & Co. helped them both ways with ZONOLITE MONO-KOTE.)

**The general contractor** required the assurance that the fire protection application would not slow down his construction schedule.

**The subcontractor** needed to keep ahead of schedule—and did by pumping MONO-KOTE at the rate of 1,000 bags a day. Pumping to heights of more than 700 feet (without having to move equipment), he often completed two floors every three days.

So—for this "showcase" job—everyone is getting what he needs most in a fire protection material. Plus the service and reputation of W. R. Grace & Co. ZONOLITE MONO-KOTE delivers a full range of fire ratings. It is available from plants throughout the United States and Canada, to meet tough schedules. For complete information, contact your ZONOLITE sales office or ZONOLITE, W. R. Grace & Co., Construction Products Division, 62 Whittemore Ave., Cambridge, Mass. 02140.

---

Stan Carlson  
Standard Oil Company  
(Indiana) Chicago

Hans Neumann  
Perkins & Will  
(Architects) Chicago

J. Munroe McNulty  
McNulty Brothers Co.  
(Fire protection subcontracts) Chicago

Larry Smith  
Edward Durell Stone & Associates  
(Architects) New York and Chicago

Bernie Newton  
Turner Construction Company  
(General contractors) Chicago
Wade makes any carrier you can specify.

That's a fact. Wade stocks residential and commercial carriers for all cast iron DWV systems. And for plastic, copper, and lead as well.

You can specify from Wade's exclusive new line of No-Hub carrier fittings.

You can specify Wade carriers in singles, doubles, lefts, rights, longs, or shorts.

And Wade maintains complete, computer-controlled inventories. That means your carriers are ready to be delivered in our own controlled truck fleet.

So put 'em in the specs. We'll have them, and we'll get them there.

Next time, get out the Wade manual and specify from the industry's most complete line.

For your Wade Specification Manual on carriers and carrier-fittings, write Box 2027, Tyler, Texas 75701.

Circle No. 393, on Reader Service Card
Our stone facing goes up as easy as

1. Stone wall cladding that installs with ordinary carpenter's tools? That's Sanspray, the great stone facing from U.S. Plywood. On top, a handsome natural stone aggregate. Bonded beneath, a sturdy panel of exterior plywood.

The result: a distinctive cladding that does great things for residential and light commercial exteriors.

At a far lower cost than conventional stone and masonry treatments.

Sanspray panels cut with a power saw. They can be nailed or glued to wood, masonry or steel frame constructions. They are relatively light and easy to handle. So installation costs are cut way down. Once in place, Sanspray is virtually maintenance-free, in all climates.

Sanspray comes in two aggregates - large and regular, both of which are shown below. And a wide selection of natural stone colors - like Tangerine, Gaelic Green, Northern White,

Pearl Gray and Monterey Sand, to name a few. But to really appreciate Sanspray, you ought to see and feel the real thing. We'll be happy to supply you with hand-sized samples, as pictured, if you'll call your local U.S. Plywood Branch Office. Or, if you prefer, write directly to our New York office.

U.S. Plywood
A Division of Champion International
777 Third Avenue, New York, N.Y. 10017

Circle No. 394, on Reader Service Card
380 tons of cooling for the humans, 20 tons for the computer.

All of it supplied by General Electric.

When a computer gets overheated, it has a nervous breakdown. So when we found out that 35 GE rooftop units were cooling one computer and 325 humans in a Morristown, New Jersey building, we had to ask some questions.

We found that despite high temperatures and low line voltages, there had been only one compressor burnout in the last three years.

We found that maintenance is a matter of cleaning the filters and checking the operating pressures.

The men responsible for the equipment are pleased. We weren't surprised. We expected it. It's the result of designing the equipment the way we do, building it the way we do and testing it the way we do.

We start by building our equipment from the base pan up. That way every part can be designed to match (and work) with every other part.

We use our exclusive Spine Fin condenser coil design, because it eliminates 90% of the brazed joints (which are potential leaks) of a conventional plate fin design.

We test to make sure that every 230 volt compressor can start at 170 volts (about 75% of normal).

This voltage test is only one of more than 500 quality checks we make on every central air conditioner we ship.

These reliable air conditioners come in 3, 4, 5, 7½, 10, 15 and 20 ton capacities. With them you can design zone-by-zone cooling into areas as small as a reception room or as large as an auditorium.

And since we're a major integrated manufacturer of air conditioning, we can deliver. For people, or computers.
Earthstone is so different you can do different things with it.

Natural redburning shale from mother earth, hand-moulded into rustic, glazed semi-vitreous tile. That's what Earthstone is. What it can become is up to you. The authentic richness of Earthstone, enhanced by its variegated texture, cries out for creative applications. Earthstone's glaze needs no waxing, no buffing, no stripping. Immediately available in six shapes and five rich earth tone colors. Custom shapes available upon request. If you have an idea that's different, we have the Earthstone! Write us for a sample.

Earthstone is a trademark of Sikes Corporation.
Wash your hands of expensive water bills.

A seven-month test recently concluded in New York showed that water consumption, both hot and cold, was cut by 90% when Unatap spray mixing faucets were used instead of conventional faucets on ordinary wash basins.

While maintaining a hygienic spray of water, the flow-governing mechanism that's the heart of every Unatap faucet cuts wasteful water consumption.

That also means a saving on water heating, a major factor in operational costs. And even installation costs because the entire water distribution system is scaled down to meet the drastically reduced hot and cold water demand.

Specify Unatap for the next job. With Unatap, you can wash up without pouring money down the drain.

Richard Fife Inc.
1140 Broadway, New York, N.Y. 10001 Phone: (212) 683-0745
Reflecting the classic beauty, the perfection you associate with Nature itself:

In developing a completely superior hinge... optimum performance and the ultimate in beauty do not just happen but, as in the world of Nature, evolve step by step.

Ten years ago, McKinney introduced MODERNE, the industry's first two-knuckle hinge. With its integrated non-removable pin, MODERNE ended troublesome intermeshing of knuckles and provided maximum security. Its self-lubricating door leaf bushing and oil-impregnated stainless steel bearing insured years of smooth, quiet, self-maintaining service.

Now, McKinney carries the evolution a final step. By recessing the bearing we have concealed it, and achieved the ultimate in hinge design... a slim, trim barrel crossed by only a single horizontal line.

MODERNE II is available in all types, finishes and materials for specification in commercial buildings, schools, hospitals... all your especially important jobs. For bulletin "MODERNE II by McKinney" write DEPT. 236.

MCKINNEY, SCRANTON, PA. 18505.

MODERNE II
by McKinney
means business

Circle No. 369, on Reader Service Card
To be successful, housing for the elderly must feel like a real home to the residents, and avoid the aura of an "institution."

The architect who designed this unique project in Minneapolis began with this premise.

He gave it residential character and European flavor, and designed the whole project to function as a community within itself.

At the center of the complex there are comfortable recreation and visiting areas with a courtyard and fountain.

To help the residents feel even more at home, the architect specified Andersen Perma-Shield® Windows.

He wanted Perma-Shield for its tough, durable exterior vinyl sheath that doesn't need painting. And for the natural beauty and warmth of wood on the inside.

The natural insulating factor of wood and the extra-weather tight quality of Perma-Shield Windows are important in the bitter Minnesota winters. The welded-insulating glass option eliminated the need for storm windows.

In warm weather the Casements open wide, letting in lots of fresh air with top to bottom ventilation.

With 5 styles and hundreds of combinations to choose from, Andersen Perma-Shield Windows can add a touch of home to your next project without sacrificing low maintenance. And without straining the budget either, when total installed costs (including cost of painting) are figured.

For more information, check your Sweet's File. (Sections 8.16/An. and 8.6/An.) Or see your nearest Andersen distributor or dealer.

Circle No. 414, on Reader Service Card
the GREENFIELD collection

R-WAY
fine furniture since 1881

R-WAY FURNITURE COMPANY SHEBOYGAN WI 53081 PHONE AREA 414 457 4833 SHOWROOMS NEW YORK SAN FRANCISCO
American Olean's ceramic tile System 100.

Redi-Set pregrouted ceramic tile sheets are uniformly grouted, perfectly aligned—for beautiful jobs every time. Only joints between sheets are grouted on the job, with the same grout we use in the system.


Flexible grout. Will bend and stretch with building movement.

Waterproof system for waterproof installations. Redi-Set goes up over almost any interior wall—concrete masonry, gypsum wallboard, even existing ceramic tile.

Crystalline, Bright and Matte glazes. There are up to 16 Standard Grade tiles to a Redi-Set® sheet. With 4⅛" x 4⅛", 6" x 4⅛" or 8½" x 4½" tiles.


Redi-Set pregrouted tile. It's the natural thing to use.
We can do anything you can doodle!

Flash in any configuration with Gacoflex Contourflash. It conforms to any shape. Easily cut and applied on the job with simple hand tools. Contourflash remains flexible from $-40^\circ F$ to $+220^\circ F$.

Write for complete details and specifications or see the current Sweets, Section 7.10/Ga.
Architecturally coordinated 150-ft. single-piece lighting structures were selected to light up and blend into the 100-acre Town East Mall shopping center in Dallas, Texas. Just 14 Meyer structures did the job, replacing a forest of conventional poles that saved parking space in the 7500 car parking area.

Meyer sky-high lighting is a welcome customer invitation to a well-lighted shopping facility. This helps eliminate vandalism, theft, muggings and provides customers with a sense of security. Which all adds up to safe shopping and establishes your business as the place to patronize after dark.

If your plans call for an efficient high-level lighting system, come to Meyer and get single source unit responsibility. Building reliable high-level tubular steel structures is Meyer's exclusive business.

POLY-12 TAPERED STEEL POLES
Meyer INDUSTRIES, INC., RED WING, MINNESOTA 55066
There are four excellent reasons that architects specify the Shure Vocal Master sound system. The first is sound quality: the Vocal Master is the first sound system especially tailored to project the voice with authority and clarity. Reason two is adaptability to environment: the system is completely portable; therefore it can do the work of several systems—in any size area from a small conference room to the outdoor Greek Theater in Los Angeles. Three is economy: it costs only a fraction of the built-in systems it easily outperforms. Four is its utter reliability.

Write Shure Brothers Inc.,
222 Hartrey Ave., Evanston, Ill. 60204.
The subdued approach to Reflective Glass

With the increasing use of reflective glass for outstanding solar control and lower operating costs, more and more buildings are sticking out in harsh, metallic glare.

Now, Shatterproof Glass Corporation has developed a refined, subdued Reflective Glass that still offers the benefits of the harsh reflective glasses.

... Manufactured in three configurations—Insulating, Laminated and Monolithic—for complete versatility.

Depending on the type specified, it can also provide thermal control, sound control, security and safety benefits. Available in subdued tones of bronze, gold, gray and chrome ... in the largest quality sizes in the industry.

To learn more, write for our Reflective Brochure, Shatterproof Glass Corporation, Dept. 101A, 4815 Cabot Avenue, Detroit, Michigan 48210. Phone: 313/582-6200.
Exit devices. Outwardly, their design reflects an inner strength and reliability. Now look beneath the cover for the real Sargent quality. Built for service through simple design; a smooth, positive interaction of all moving parts. And look at the completeness of the line... all functions in all finishes, including a full line of Fire Exit Hardware. Sargent exit devices... well worth another look.

The strength
The style
The range

SARGENT

A complete line of advanced architectural hardware, including the Sargent Maximum Security System
New Haven, Connecticut  Ontario, Canada

One of the serious blind spots in many preservation efforts seems to be the belief that if enough people of good will stand up and say a building must be saved, it will be saved; as though there were some omnipotent czar, some god, from whom we could gain an audience (if we sent enough letters), and once persuaded by our logic on irreplaceable quality, etc., at the 11th hour, his magical hand would come down and catch the wrecker’s ball in midswing before it strikes. But all this image does is point out the dreamlike quality of some preservation efforts.

Buildings are destroyed on ledger books, years before the proverbial ball. Despite all their derived benefits so loudly apparent to some of us, buildings, all buildings, are economic vessels. No buildings—not churches, post offices, mints, galleries, houses—are without functional purposes with some sort of economic justification.

All this is to say that a building cannot be out of economic gear too long or it will surely expire. Long before the door fences go up and the collectors (often left-handed cousins to preservationists) perch about ready for the dismemberment, a rewarding replacement for the obsolete use of the building must have been found or else the goal is lost. Few municipalities today can justify the holding of a building, unlike a painting or an archaeological artifact, for museum purposes only, i.e., purely to see how we housed a now-defunct economic purpose at a former time. I would suggest that if preservationists want to save as much as possible and do not want to be labeled as merely anti-new, anti-development or anti-everything, we should be finding new economic uses for buildings.

In all of our projects, we have derived significant aesthetic fallout from the frank juxtaposition of old and new. The building is old and shows its age, even its dirt—or better, its patina—and highlighting that quality is a clear show of new systems added—air conditioning, lighting, electricity, telephone, partitioning and so on. This is not to say that the juxtaposition is not a tricky problem and demands considerable skill, but done well it is the crux of successful preservation through renovation. Badly done, transmography is the result—the Victorian façade with the violently updated shiny tile facial.

Any approach has its excesses, but these are not likely to occur in the hands of preservationists whose ultimate motivation and concern remains not highest economic use but conservation of resources.
Preservation in context

On May 30th at the Metropolitan Museum of Art in New York, P/A co-sponsored a symposium on preservation with The Italian Art and Landscape Foundation. The discussions were held in conjunction with the Foundation's photomural exhibition in the Blumenthal Patio entitled 'Art and Landscape of Italy, Too Late to be Saved?'

By using Italy as a tragic case in point, the primary goal of the exhibition, which is now traveling throughout the U.S. and Europe, is to focus attention on preservation problems within the context of the causes and effects of the environmental crisis. Video tapes of the symposium were later shown at the U.N. Conference on the Human Environment at Stockholm. The excerpts presented here are accompanied by illustrations drawn from the exhibition.

Participants

Kenneth Frampton, moderator, architect and Fellow of the Institute for Architecture and Urban Studies.
Luigi Barzini, former Deputy of Italian Parliament, author of The Italians.
Giorgio Bassani, president of Italia Nostra, author of The Garden of the Finzi-Contini.
Roberto Brambilla, architect, director of Italian Art and Landscape Foundation.
Barry Commoner, chairman of the Department of Botany and director of the Center for the Biology of Natural Systems at Washington University, author of Closing Circle and Science and Survival.
James Marston Fitch, founder and director of the graduate program of Restoration and Preservation of Historic Architecture at Columbia University, author of American Building.
Herbert Gans, professor of sociology at Columbia University, author of The Levittowners.
Richard N. Gardner, professor of law at Columbia University and senior advisor to the Secretary General of the U.N. Conference on Human Environment.
Bernardo Rossi Doria, architect and Secretary General of Italia Nostra.
Niccolo Tucci, author of Before My Time and Unfinished Funeral.

Frampton: Preservation is obviously a larger issue than that of preserving art works in merely an archeological or curatorial sense, of the redemption of artifacts as the stuff of tourism, of the isolation of monuments as though they were fossilized specimens. The issue, too, clearly extends well beyond Italy, which is merely a highly dramatized version of a process that seems to be happening everywhere. America, for instance, is well into the wholesale destruction of its 19th Century heritage. Hannah Arendt once wrote, "In a need for more and more rapid replacement of the worldly things around us, we must devour, as it were, our houses and furniture and cars as though they were the good things of life, which would spoil uselessly if they were not drawn into the never-ending cycle of man's metabolism with nature." She saw the issue of preservation not merely as a matter of culture but also as a matter of survival. So what appears to be at stake, if one accepts her thesis, is a present tendency to consume, despite museums, every human artifact, and with it the natural world. What is the motive force that drives us in this direction? One response being given with ever increasing frequency today is that it is an issue of ideology, not political ideology in the usual sense, but the ideology of the gross national product, the cult of ever increasing industrial growth. The feasible limits to growth, and how they are to be established, are two questions which in the last analysis may well be political. Clearly we cannot dream like William Morris of a pre-Raphaelite life returned to a pre-industrial past, nor can we expect the younger inhabitants of 13th Century villages in Italy to remain at their posts, as it were, for the benefit of tourists when clearly a viable economic support for life has long since been depleted. Yet by the same token, why do we have to passively accept legislative and fiscal provisions which seem to favor exploitation of both men and resources? One answer always given is that these things are done in the name of accelerated consumption and finally in the name of profit, however uncomfortable that may be to accept. These are uncomfortable issues, yet I don't see how we can discuss the question of preservation and action without confronting them. What can we do? The idea of an overnight redemption is obviously a daydream, by the same token the idea of zero GNP can hardly be seriously countenanced, and yet surely it is possible to distinguish between restricted and optimized growth. It seems to me that we
Venice: Palazzo Ducale, marble statue of "Temperance." Photo, G. Lotti.


Ferrara: Church of S. Michele. Photo, R. Bazzoni.
ultimately stand before a threshold where public opinion will or will not come to exert some pressure on the power system whose sole raison d'etre appears to be an abstraction, i.e., infinite growth. However, public opinion cannot do this unless it is informed, which brings me back to this panel discussion which surely should have as one of its more modest aims to inform and perhaps as its more ambitious long-term aim, the intent of reform.

**Brambilla:** In this exhibition, our thesis is that increasing misuse of world cultural and environmental resources is depriving mankind of an essential aspect of civilization. This impoverishes the quality of life and ultimately affects man's physiological and psychological behavior. Our objective is to increase public awareness and concern for the complexity of the problems facing environmental and cultural change in order to anticipate the process of change or transformation, and to present a program for a worldwide strategy of preservation. Our message is directed to the highly industrialized nations of Europe and America, which have greater responsibility in the world development process. Our purpose is to try to collaborate with other conservationist groups to try to start as soon as possible a comprehensive effort on an international scale.

**Fitch:** It's perfectly obvious that preservationists all over the world today see very clearly that this is a problem of environmental protection. It becomes increasingly clear that, except in isolated country churches or a castle here or there, any monument worthy of preservation can only be preserved in its context and that the issue is fundamentally an environmental one. This, of course, explains the new kind of unity that exists between conservationists, as we call them in this country—the people who are dedicated to the protection of the natural or God-made environment—and architects and historians who are interested in protection of the man-made environment. It is now understood that these are two sides to the same coin. It's really impossible to intervene at any smaller level. It's also become increasingly clear that these artifacts which we inherit from the past, with very few exceptions, cannot be handled as museum items. Wherever possible, in the field of architecture, they have to be returned to a viable role in the tissue of which they are part. The environment produced by the human settlement is the result of living processes. When we intervene we're not dealing with dead tissue but, to the contrary, when you decide either to maintain or to remove a given section of this urban tissue, you're intervening in the very life processes of the city itself. There is an analogy between the preservation and restoration to active use of old buildings and districts, and the work of the doctor. The more serious the pathology, the more discreet the intervener has to be. This, in turn, I think, exposes the fallacy of a great deal of current work in this country that goes under the heading of urban renewal, which doesn't very often renew at all, but acts to terminate the life of the patient more quickly than otherwise would be possible. Some of the younger men in this field have coined two very nice concepts which I think are much more attractive. One is "environmental retrieval" and the other is "environmental recycling." Both these terms remove the field from the opprobrium of thinking that it is done only by old ladies interested in preserving grandfather's birthplace.

**Gans:** Every society tries to eradicate its shameful aspects and leave and preserve only those things of which it can be proud, which means that we get largely aristocratic leftovers, buildings, artifacts, what have you. We don't really get a bill which indicates how many people were enslaved, in one form or another, to build these aristocratic monuments, how many people were killed in the war to finance this church or that...
temple or that monument. Preservation is a sanitizing act and in some ways one that lets us forget that the past is evil, which allows us to think the past was great and therefore justifies all kinds of worship of the past. About the idea of stopping growth for cultural reasons, because we or some of us don’t like modernization, I think we ought to remember that when we talk about stopping growth, we’re really saying that for the last 500, 1000, 2000 years the rich have been able to consume, to make profit, to speculate in land, among other things, and now things are getting critical so we’ve got to stop. It now also happens to be a time when the rest of society is beginning to get its share of the action, and the share of the action doesn’t look very historic or aristocratic. It often looks like American or English or international suburbia, but it’s a damn sight more comfortable to live in than a drafty medieval apartment six stories up. I can understand why no one wants to live in them. I think that we do have to look at those people who have not yet had a chance to get the advantage from growth that the affluent have had. Unless we come up with solutions which not only preserve the patrimony of the rich from the past, unless we have a growth and a preservation policy which gives something to 90 percent of the population which so far has been left out of history, they’re not going to stand for it and the environment is going to change as it has changed in America, as it’s changing everywhere else, and nobody is going to be able to stop it. 

Commoner: I find it enormously encouraging that those of you who are concerned with preserving our cultural heritage have begun to discover its links to a broader issue; namely, the environment as a whole. As I interpret the presentations here, and the content of the exhibit, it is now recognized that the preservation of our culture is not something which can be pursued simply for its own sake in isolation from the rest of the world, but that it represents, in effect, a kind of symptom of a larger disorder in the environment as a whole. We have to join forces to preserve the environment to conserve our resources for the sake of our culture as well as for the sake of our own well-being. Now I want to take it one step further. In my view the same relationship that exists between conservation of the culture and preservation of the environment exists between preservation of the environment and a much larger and dominant issue; namely, the way in which our economic system allows us to use our resources. What I want to tell you is a very simple thing. If you start on this path, and I applaud it, of saving the statues and the paintings and the buildings, of saving the environment, you will have to end up considering the basic unsolved issues of poverty, of racial discrimination, of war. There is no way out. You’re on that path. That’s a flat assertion but let me give you some data to go with it. I find it incomprehensible that the President of the United States should go to Moscow and sign an international agreement to conserve the environment; meanwhile, under his own personal orders, without the support of the U.S. people or the U.S. Congress, rains bombs on Vietnam, destroying the environment in the first ecological war we’ve conducted since the Indian wars. There is no way of solving environmental issues without dealing with the issues of the rich and the poor that Professor Gans mentioned to you, and I think there is no way of dealing with environmental issues without asking why we have done this insane thing of building an industry which destroys its own foundation. I want to remind you that our steel foundries use oxygen which is only produced on the earth’s surface by green plants, and these same steel foundries are destroying the green plants. This is suicide and the question is why has it happened. I think the answer is really quite simple. It pays to destroy resources for your own business operation if in the course of that destruction you gain enough profit to go somewhere else in the environment and set up a new business. It pays for the business but in the end there will be no earth left for the rest of us. The point I want to make then is very simple. I applaud and I think it is a remarkable step forward that the cultural questions of the preservation of our heritage have been linked to the environment and I think it’s time now for all of us to link that to the issues of social justice. 

Barzini: Think of Rome. It’s a baroque city. Where is the medieval Rome, where is the Gothic Rome, where is the Romanesque Rome? It has disappeared because every generation in Italy destroys everything around them and builds again in whatever the contemporary taste dictates. In Italy we have always had this problem but it has become monstrous today. One of the reasons, of course, is that Italy in two generations has become an industrialized country. We have been revolutionized by a complete transformation in Italian society, people have been lifted rapidly from one class to another. People who have not eaten for centuries are now eating for the first time twice a day. Italy of the grandpapa—they don’t want it anymore, they want Italy to be like Beirut or some South American capital. It is very difficult to be an Italian; there are a lot of foreigners who are better Italians, especially among art lovers, than many Italians of birth. I was a member of Parliament until three days ago and I know how worried many people were about the problem of preserving the inheritance of Italy. We all know that you can’t preserve Venice without preserving the Venetian mainland, but to preserve terra firma you must give meaning to all these things. They must live in the contemporary world. How can you make these things live in the contemporary world? It’s a very difficult problem. We do not even tackle it in Italy. You talk to ministers, they say we do not have the money. But you point out that in order to run Italian railways, we spend 3 billion lire a day. Couldn’t we spend a little less for the railroads and spend a little more for preserving our inheritance? 

Gardner: Dr. Commoner made a great point about denouncing racism and war. I guess everyone here is against racism and war, but I think we ought not get into the state of mind that we can’t do something about the environment unless we also immediately solve the problems of racism and war. For example, there are many environmental problems that are not the result of racism. There are black African countries with no racism that are rapidly despoiling their wildlife and soil. I think we ought to recognize that there are some things we can do about environment even though we may not solve the problem of racism. He also made a great effort to link our environmental problems to the economic system. I would point out that the environmental problems are not unique to any one social or economic system. The Soviet Union, a system of central socialism, has very severe environmental problems even though they don’t have a profit system as we do. I think an argument could be made that a market economy has within it a very effective means of doing something about environment. For example, if we established the proposition that the cost of environmental cleanup had to be paid by the producer of a product and that cost had to be incorporated into
Preservation in context

product price, we would go very far towards solving some of our environmental problems. We also have some built-in defenses that the state controlled societies don't: active citizens in environmental groups of a kind that don't exist in eastern Europe, which can bring pressures on governments. If a bureaucrat in the Soviet Union wants to put a pulp mill on a lake, he can get away with it and there is no citizen's group to do anything about it. One final point. Dr. Commoner asked us to do something about racism and war but there is one subject he didn't mention—population. Now let's face it, people pollute, and the greatest hazard to this world with respect to environmental degradation is the existing rate of population growth around the world. The population of this world is growing by one million people per week, and at this rate, you can forget all your attempts at environmental cleanup unless you deal with the population problem.

Commoner: I am rather astonished that Professor Gardner feels that I was unwilling to attack other economic systems. I don't know of any economic system operating today which has from its base taken into account the simple fact that our economy depends on the environment and not vice versa. I think every economic system will have to make fundamental adjustments. If the Soviet Union has difficulty doing it, that does not excuse us from facing the issues. Let me get right down to a couple of examples. I don't think that it makes sense to invent a solution which is superficial when the problem is radical, in the sense of the root. I've maintained that environmental degradation is an intrinsically radical issue. It has to do with the way in which we use our resources, and this is the beginning of all civilization. Let me take an example. Professor Gardner suggested that in our economic system we could easily adjust to environmental degradation by internalizing the cost. What do you suppose would happen to the poor people? Given the economic disparity in the United States, any effort to add the environmental costs (which the producers have been saving) to the cost of fundamental goods would enormously intensify the gap between the rich and the poor. It is a problem of our economic system which must be faced.

If there is planning, as there has to be, someone will have to be in control. The famous Ecologist report in England describes a totally new Britain; over a 100-year period, year by year, they say when this will be done and that will be done, how many people will live in what cities and so on. What they do not tell us is who is in charge of all of these controls. I want to remind you that not only does your concern with preservation of art, and therefore your concern with the environment, lead to questions of poverty, of war, it also leads to the question, if we are going to reorganize our society, of whether it will be in terms of popular control or fascist control.

I'll say something about population. It is a political, not an ecological problem. There is no evidence whatsoever scientifically that the United States is overpopulated. The big changes in our environment come about because we have changed the way in which we produce our goods. For example, since World War II, the air pollution has gone up by a factor of 10. Are there 10 times more people? No. Are there 10 times more cars? No. What has happened is that the cars have been turned into smog generators because they operate at high compression, they have lead put in the gasoline, and so on. Now the world's problem is something different. Human societies go through a population explosion as a result of improving their standard of living. But people are not terribly stupid. When they see that their children are living longer and going to school rather than working, which converts the child from an economic asset to an economic liability, they understand that they do not need as many children as they
thought they did. The result is that fertility drops and the population levels off. This is what’s happened in every Western country, and it is now happening in the rest of the world. Have you ever noticed that all of the countries with a high rate of population growth happen to have been former colonies? They were exploited by having technological changes introduced into their culture that allowed their population to go up. Now we say these countries should reduce their populations before they have reached the standard of living which makes it sensible. If you want to save the world by turning to the people on whom we imposed the population explosion and say now you ought to do what we tell you about contraception, that’s a political decision.

Fitch: I’d like to change the scale of the discussion, but I hope not its importance. Professor Gans said quite correctly that the tendency in the past has been to save upper class, aristocratic artifacts, and that this has largely been the work of upper class people. This is true. It’s also true that a qualitative change is taking place all over the world. The younger people in the field understand very clearly that the whole culture merits scrutiny, not just the ruling class culture. Fortunately, history has left us all kinds of remnants of vernacular, folkloristic and primitive architecture all over the world. A great deal of attention is now being placed upon this. There is a great hunger among people for some knowledge of where they came from. I think that in this area, the field we used to call preservation offers unparalleled opportunities for teaching history. Not the way Williamsburg teaches it, where all the sub-structure is expunged from the record. The whole of Williamsburg could be on display, including its foundation in slavery. We shouldn’t ignore for a moment the fundamental importance that there is a utilitarian aspect of preservation. It is not just a museological operation by any means; it involves the whole continuity of human culture, and God knows we’ve got enough trained archeologists, anthropologists and sociologists in the world today whose talents can be brought to bear upon this subject.

Commoner: It seems to me that the enemies are those who would duck the issue, and by that I mean the question of asking the basic question—what are the resources of the earth to be used for? Are they to be used to improve human welfare? Are they to be used as raw material for a productive process which is governed by the immediate and often private gain? In other words, are we producing for the sake of a productive process, or are we producing for people? What has happened is that we have designed our buildings, our factories and the way we run our farms for the sake of extracting maximum immediate profits. It so happens that this does not coincide with what’s best for the environment or for human welfare, and I think that’s what has to be changed.
Large scale preservation

Saving places for people

In Louisville, Seattle, Lockport and Lowell, preservation isn't only a matter of saving buildings one by one, but of preserving neighborhoods and communities for people.

It's one thing to save a single building, but it's something else again to preserve a place. To begin with, it's more complicated. Everything that has to be done to save an individual building gets multiplied in saving an area: the spaces as well as buildings that give an area its character must be identified; interdependent uses must be worked out for them; the political strategies are more intricate because there are more parties involved. And while one building may conceivably be out of use while it is being restored, an entire area can't be taken out of service.

It is a knotty problem, partly because a place, as opposed to a single building, is apt to loom large in the public mind. Saving one takes clairvoyance (to read the public mind), political acumen (because the decisions often end up in the political arena), a grasp of guerilla tactics (for the in-fighting that comes with preservation projects) and a touch of paranoia (because the threats to a place can be far more subtle than the threats to a building).

In the pages that follow, P/A has knowingly overlooked some well-known large-scale preservation efforts—historic districts in Charleston, or Savannah, or New York City, for instance—simply because they are so well known. The ones we show differ widely in size, historical background and in the kinds of assets to be saved. They differ in techniques and strategies being applied; the outcome, in all four instances, is by no means certain. What links them is simple: while buildings of architectural or historical significance may be involved, greater emphasis has been given to preserving places where people can live and enjoy life.
"We pride ourselves on our past"

One morning shortly before the 98th running of the Kentucky Derby, Jefferson County Judge Todd Hollenbach was telling a group of visitors about the bonds that hold Louisville together as a community. Louisvillians, he said, "have a love of the present and pride in the future." And then he added: "We pride ourselves on our past."

Proof of all three statements is easy to come by. To many Louisvillians, there is no better—no other—place to live: business is booming, downtown and waterfront areas are being renewed, the county government includes a court to deal with polluters, there are parks, there is the river, there is talk of a new airport. Yet with all this love of the present and rosy view of the future, the past has not been forgotten: true, part of this pride in the past centers on traditions, but part of it is based on the real importance of the city's history. This has, in recent years, prompted a real and growing effort to save worthwhile older parts of the city. Entire neighborhoods are being restored and rehabilitated; it's not so much buildings that are being saved, but environments for people.

Some of it has been preventive preservation; other efforts, rescue work. And sometimes, as in the case of the Belgravia Court-St. James Court area, the difference can be as little as a short city block. The two courts form a T-shaped showplace of turn-of-the-century houses in the middle of what is known as Old Louisville. Since the sale of the first lots in 1889, St. James Court, wider and lined with larger grandeur houses than Belgravia, has had its own residents' association which maintained the street and worked to preserve the neighborhood. The Belgravia Court Association was formed in 1964. Belgravia Court and much of the surrounding Old Louisville area had been declining for several years. In 1961, to rebuild the old rather than clear away everything for large scale renewal, the Old Louisville Association was formed; a spin-off, Restoration Inc., bought nine houses on Belgravia Court, beginning its restoration. Private owners have since bought most of the 30 or so houses and restored them.

Other preservation efforts are being made in Old Louisville, and still others could be made. A small residential court, Floral Court, is showing signs of wear but could still be saved. The main streets running through Old Louisville are linked with magnificent turn-of-the-century houses, some restored for private owners, some turned into offices or rooming houses; others have been threatened by demolition to make way for apartment projects. But no one gives up; so far, according to the city's Urban Renewal and Community Development Agency, some $1.7 million has been spent on improving houses in Old Louisville. Completely rehabilitated houses contain 334 dwelling units, while another 186 are in buildings being renovated.

The same combination of neighborhood pride and initiative is doing the job in Butchertown, a few blocks east of the central business district. It was once the center of the meat packing industry in Louisville and five plants are still operating. Some of the earliest buildings in Butchertown were built during the 1830s, and the area was at one time a well-kept "just right" neighborhood of solid German immigrants. Now after years of decline, Butchertown is pulling itself up. The key to the effort is Butchertown, Inc., a neighborhood development corporation that got its start as a neighborhood club which took up a complaint about zoning. Says Jim Segrest, president of the corporation, "Back in the 1930s, all of the downtown was rezoned for industrial zoning, which allowed people to put up anything, anywhere, from houses to factories. Our neighborhood club went to the mayor a few years ago to complain and got the zoning commission to study zoning in the neighborhood. The club decided not to stop there, so we kept going and formed a corporation and sold stock to local people, the local churches and others to raise capital." Thus, Butchertown, Inc. is a profit-making venture, although it hasn't yet shown a profit.

The money goes to rehabilitate old houses and, recently, to build new ones. The corporation is working on three row

Parts of Main Street are returning to 1874 appearance, starting with block (above) being filled in with shops, night spots and offices. The Board of Trade (top) facade will be preserved in new development.
houses designed by architect Roger Hughes to meet a $17,600 cost, and there are plans for rehabilitating three old houses as a commercial development. Since the formation of the corporation, a number of outside people have moved into the area, buying and restoring houses, opening shops and becoming an integral part of the community.

In downtown Louisville, pride in the local past is becoming visible in a different sort of preservation effort. Along with the construction of new office towers, hotels and shopping malls, the renewal includes plans to make good use of a wealth of 19th Century buildings. One new development, Shipping Port Square, will front on Main Street and preserve the façade, at least, of the city's venerable Board of Trade Building. Across the street, a national landmark, the Greek Revival Bank of Louisville is being preserved as part of a new theater for Actor's Theatre of Louisville.

With the growing realization that preserving and reusing a declining neighborhood is as important as preserving one old house as a museum, has come the need to coordinate the efforts of all the preservation groups that have sprung up in Louisville in recent years. The vehicle for the coordination is a newly formed group called the Preservation Alliance. "Every conceivable body—city, county and neighborhood groups, preservation groups—will be represented," says Jefferson County Archivist Sam Thomas. The aim is to get the individual groups to pull together and prevent overlapping activities.

John Cullinane, a young architect previously with Design Environment Groups Architects, is the group's first executive director, and he fills what Thomas says is a real need. Federal, state and local programs and laws dealing with preservation are complicated, and Thomas says the Alliance "really needed someone looking at these problems full time, someone with knowledge of adaptive uses, zoning ordinances and the like, and someone who could use this knowledge and the power of the group behind him."

Cullinane sees the Alliance as "the salvation" of Louisville's preservation efforts. It will be a major force for attracting federal preservation funds to Louisville, from HUD and other agencies, and pulling in money from the state, too. The Alliance will actively seek contracts for surveys, studies and consulting work (it is a nonprofit group): "If it's economically feasible," says Thomas, "we'll do it."

Another aim of the Alliance is to put some teeth into preservation efforts in Louisville, and Thomas hopes to draw up an ordinance imposing a specified period of time for opponents of demolition to come forward with reasons and proposals for saving a given building or neighborhood; during that period demolition could not start.

Cullinane and Thomas are both involved in other efforts to heighten the public's awareness of historic preservation and neighborhood renovation. This fall Cullinane has been giving a series of workshops at the University of Louisville; previous forums, Thomas says, have "really just taken the cream off the top, talking about museums and the like. We need to talk about financing and other problems." Thomas is teaching a course at the Urban Studies Center at the University. "People sometimes want to save something not worth saving," he says. "They need to know how to evaluate what they have."

Thomas describes himself as "a chemist who went astray," and he has been active in preservation in Louisville for sometime; before becoming the county archivist (a part-time job; he is also a book editor for the publishing arm of the Louisville Courier) he ran Locust Grove, a restored house that was the last home of George Rogers Clark. "I've been fooling around this game for 10 years in a house museum," he says. "That's the deadest thing in the world. It's one thing to help a bunch of little old ladies restore one house; it's another to take on a whole district."

Renovation is something of a habit with Actors Theatre of Louisville (ATL). The theater has always been in reused spaces, and its third home, into which it has recently moved, preserved as its lobby a Greek Revival bank that is a national landmark. Built in 1837 and designed by Gideon Shryock ("The father of Greek Revival architecture in Kentucky" according to the plaque out front), the bank was acquired in a curious transaction in which the theater traded the only new building it ever built for the bank.

Cost has been a major consideration in all the theater's renovation projects, but their concerns have gone further than that. Its last home preserved, at least for a while, an old railroad station in the heart of downtown Louisville, and the new theater, which is seen as a permanent home, saves a real treasure from the wrecker's ball. "One of the things we felt," says Alexander Speer, ATL's managing director, "was that we were preserving and opening to the public one of the finest..."
St. James Court (top, far right) has had a neighborhood association since lots were first sold in 1889, so houses were maintained through the years. Belgravia Court (right) went through years of decline before preservation efforts got underway in the early 1960s. Today both streets are among Louisville's showplaces. All photos by Day Johnston.

examples of Greek Revival architecture in this part of the country. Very few people in the city have ever been in it." Those that have, have fallen in love with it, impressed, as Harry Weese was, by the elegance of the two-story skylit main banking room. Weese had been engaged by the theater when ATL decided that a renovation project was the only way they could afford a new permanent theater.

To use the building, ATL had to buy an adjoining office building, and then build the actual theater from scratch at the back of both buildings to gain the needed width. Buying the next door office building was no problem—all it took was money—but the bank was something else. Years before, it had passed into the hands of the Louisville Credit Men's Association, a tax-paying nonprofit group. The Credit Men felt that the capital gains on the sale of the fully depreciated building would prohibit any new construction. ATL bought a building a few blocks away, tore it down and built a new one to the specifications of the Credit Men's Association. When the new building was done, ATL traded it for the old bank.

Except for the main banking room which has been returned to its original condition, the project created a "very contemporary" theater, says Tom Hickey of Weese's office. The basement of the bank was turned into a lounge and bar; offices for ATL, a large workshop for building sets, small experimental theater and the 600-seat main theater round out the project. Total cost is about $1.6 million.

For their money, says Speer, "we're probably getting more space by acquiring and renovating two buildings than we could have by building from scratch. It also lets us concentrate our efforts on the theater. We could never have afforded to build a lobby of equal grandeur."

From the outside, the bank will look as it did when completed in 1837; the building next door, a typical late 19th Century office structure, has stone columns on the front, which when cleaned, will blend nicely with the bank's façade. And, adds Owsley Brown, an ATL board member and chairman of the building committee, "In the long run it may be a finer thing to have preserved than the bank. The bank would have been preserved anyway, by someone, sometime; but the old office building . . ." [CP]
Saving places for people

Seattle: two humanity preserves

The core of Seattle is remarkable for its lack of public open spaces or focal structures; it is as if the views of surrounding waters and mountains are supposed to compensate for an almost total absence of man-made assets. The downtown area may yet be saved from suicide by dullness through two preservation efforts—Seattle's only two—one, the rehabilitation of a ragtag market complex dating from 1907; the other, re-use of commercial buildings from the 1890s clustered around the world's original Skid Road.

It may be the very lack of conventional landmarks—of fine civic buildings, churches and houses—that makes the current, broader meaning of preservation so clear in Seattle, so clear that voters supported a popular initiative to save the Pike Place Market. This complex of loft buildings, is one of the few historic districts in the country to win its designation at the ballot box; it is also one of the most unprepossessing landmarks—in traditional terms—ever recognized.

Pike Place Market is being preserved for reasons that have nothing to do with style, craftsmanship or historic associations, but as a setting for a lively mix of functions—food-sellers, flea markets, crafts shops, cafes, rooms to let. "With its emphasis on face-to-face, producer-to-consumer transactions," says a Department of Community Development fact sheet, "Pike Place offers urban dwellers an alternative to standardized living."

A typical market customer, met by chance at one of the shared tables of Lowell's Cafeteria (while watching ferries come and go over breakfast coffee) tells why he makes the trip to Pike Place from West Seattle: "I don't even have to cross the street to get to a supermarket, but a supermarket is just a commercial thing; this is a social thing. I come down here often, sometimes join the talk around the big table over there (gesturing to the center of Lowell's upstairs dining room). Everybody gets a chance to say his thing, you know, and it's like an education. The people who own this place just keep bleeding it for rent, waiting to sell out so that it can be torn down for high rises and more supermarkets. A place like this ought to belong to the people." This from no political radical, just a retired man who has lived in enough cities from coast to coast to know how rare Pike Place Market is.

The voters did not act to save Pike Place from total demolition, but from a more subtle threat: a plan to embalm a 1.7-acre portion as a sanitized centerpiece for a 22-acre urban renewal development. The market buildings had been allowed to deteriorate during the 1960s, and owners were not encouraging tenants to renew leases. In 1969 the city—armed with earlier studies by a powerful downtown business association—came up with a plan to redeem this "blighted" tract of "prime real estate" with a 4000-car garage, a 600-room convention hotel, a row of high rise apartment towers, plus 300 units of low-income housing, which would have sheltered about half of the single men then in old hotels on the site. The preserved fragment of market at the center would soon have been preempted by souvenir shops and cafes for the convention and tourist trade. Actual market activity would have had to leave the highly accessible site that was critical to its success—and the market was drawing more and more customers, despite neglect by both owners and city.

Back in 1963, a group called Friends of the Market had been formed to keep Pike Place whole and functioning. Among its organizers were architects Victor Steinbrueck, Fred Bassetti, and Ibsen Nelson, along with other architects, attorneys and market merchants. As soon as the official urban renewal plan was published, the Friends mounted a campaign which culminated in the popular initiative measure of November 1971, calling for a seven-acre historic district subject to control by a 12-man Market Historical Commission. Opposing the initiative were the downtown business leaders, newspapers and radio stations closely allied with them, the project's would-be developers and the city government; there was even an opposition group deceptively styled the "Committee to Save the Market." The initiative carried by 20,000 votes.

Now that the earlier Pike Place renewal plan has been rejected, the city has turned over replanning to a special team of the Department of Community Development, working out of an office on the site. The office is staffed with five architects—including Project Manager James E. Mason—an urban planner, an economic analyst, specialists in relocation, community services, historical documentation, real estate and public information, backed by outside consultants on engineering, financial planning, etc. Among current studies is a critical one on housing or relocating single people who now live on the site and another on the projected future of farmer participation in the market. Allocation of $14.6 million in federal funds for the project has recently been approved by HUD.

Planning for the historic district centers around two vital objectives: maintaining the continuity of its activities and bringing its structures up to minimum structural, health and housing standards. Mason estimates that up to 40 percent of structures in the district will have to be replaced to meet safety standards, with new structures that maintain the existing pattern of space and use. Continuity in the market will demand very sensitive phasing of rehabilitation and rebuilding—a game of "musical market stalls"—and it will also require economic arrangements that allow present tenants to rent space in the refurbished buildings.

Current rents in Pike Place Market are not especially low for comparable uses in Seattle, nor is much of the merchandise low-priced. Market merchants are now prospering, but even a slight increase in rents could tip the balance toward high-markup businesses. "We don't want the market to be Ghirardelliized," says Mason, referring to San Francisco's stylish bazaar. "It has to remain meaningful for the average citizen."

Fragmented ownership of the market buildings obviously complicates the process of rehabilitation—and subsequent management. But official policy is to allow present owners to become "owner-participants" in the market rehabilitation if they are willing to accept the city's plans and policies for it.

Although the remainder of the 22-acre Pike Place renewal site is not covered by the historical district ordinance, the planners recognize the need to make it a transition zone between the markets and high density downtown development.
Location of the main market buildings along a bluff (above) allows for several levels of commercial use. A continuous market arcade (below) runs along the uphill access street (below, right). Harbor side of building offers seclusion and broad views (bottom, right). Ingenious lighting and graphics dominate exterior and interior.
After a decade of private, building-by-building rehabilitation, the Pioneer Square district is now benefiting from public open space development (long-range plan, above, by landscape architects Jones & Jones). Occidental Square (A) has just been completed on the site of a parking lot; adjoining Occidental Avenue has median plantings, may eventually be closed to traffic. Jones & Jones' glass-roofed shelter/bandstand in this new park (top left) is an updated version of the 1909 iron pergola (left) in Pioneer Square (B). This relic of the Alaska-Yukon Exposition is now being restored to its original, glass-roofed splendor. The triangular plaza will be extended by incorporating the street along one side and planting median trees on the bordering avenue.
Saving places for people

Mason hopes to include some rehabilitation in this connective zone, and wants to avoid "overwhelming the market with skyscrapers." These would not hurt the market aesthetically, but economically—in terms of prevailing rents, Pike Place parking spaces, etc.

The public might not have realized the potential of in-town preservation if it were not for the privately sponsored example of Pioneer Square. Preservation in that area began in the early 1960s, when architect Ralph Anderson rehabilitated an old office building near the square for his own use. Up to then the square had been known only as the center of Seattle’s Skid Road community of vagrants and alcoholics. Yesler Street, which runs along one side of the square, is the original Skid Road (down which logs were skidded to the sawmill)—a street so long established as a center for the down-and-out that it has contributed the phrase Skid Row to the American language.

Back in the 1890s, however, Pioneer Square was the commercial heart of Seattle, and its buildings reflect the exuberance of a city that was cashing in on the Alaskan Gold Rush. Later, as business migrated north, the solid office buildings and hotels around the square sheltered flophouses, saloons, hiring halls and missions. The flamboyant iron-and-glass pergola in the square became a refuge for vagrants, and the tall totem pole near it became a sardonic symbol of the many American Indians on Skid Road.

After Anderson showed the way, one building after another in the area just south of the square was reconditioned for use as art galleries, furniture showrooms, design offices, even a law firm, all attracted by high-ceilinged, broad-windowed space at relatively low rents. Along with them came a few sophisticated bars and restaurants, including Seattle’s first sidewalk cafe. City recognition of the area did not begin until 1970, when a 38-acre portion was designated a historic district (over the violent objections of organized downtown businessmen). The city’s first financial commitment has been for rehabilitation of Pioneer Square itself, the development of a nearby vacant tract as Occidental Park and the planting of street trees—at a total investment of about $300,000.

The completion of these open space improvements will only add momentum to an ongoing preservation movement. (Even the sudden collapse of half a building while rehabilitation was under way promises to be only a temporary setback.) The major drawback of Pioneer Square’s prosperity is that the old Skid Road residents are gradually being dispersed along with the services they need. Already the number of panhandlers and winos in Pike Place Market, nine blocks north, is increasing noticeably. So far, the indigents and the new clientele seem to coexist comfortably around Pioneer Square; the new Occidental Park is reported to attract a broad mix of people, none apparently repelled by the sight of drunks. But if you stop to take a photograph in the area, you may hear a short message from one of the old residents about how “they’re forcing out the little people.”

A threat to the future character of Pioneer Square is a domed sports stadium planned for a site just one block south of the historic district boundary. The demand it will generate for parking and crowd-oriented cafes is bound to exert strong economic pressures on uses within the district.

Successful preservation of these two enclaves is essential for the survival of downtown Seattle. Despite overall drabness, the core of Seattle has remained a concentrated focus of regional commerce. This may be due in part to the fact that many workers can arrive by ferry and walk to work from there (an opportunity that has all but disappeared from other U.S. cities). A proposed transit system that could have strengthened the centralized pattern has been defeated by voters. Until some other way is found to reduce Seattle’s dependence on cars, the city core needs all the help it can get to stave off dispersal. Pioneer Square and Pike Place Market—successfully executed—can do much to make downtown Seattle an attractive objective for visitors, shoppers and workers. [JD]
Saving places for people

Advocacy planning on a town scale

If group dynamics, advocacy planning and increased awareness are viable tools for helping underprivileged communities, what about applying those techniques to town questions concerning preservation versus development?

Lockport, N.Y. is not a poor town, in terms either financial or physical. When Malcolm Holzman of Hardy Holzman Pfeiffer Associates (of downstate New York) was working on a theater in Lockport (upstate), he was impressed by some much-overlooked potential in the town. Together with James Burns of Lawrence Halprin Associates, Holzman and members of Burns' class at Cooper Union sought ways to help Lockport, without imposing their own architectural/planning values.

Lockport takes its name from the Erie Canal locks around which the town grew. Its most prominent physical features—the canal, locks and rock escarpment—form dramatic views adjacent to the central business district. That area also includes some fine old brick and stone buildings such as the present City Hall (1864) and the Ruhlman Building (1825). Both were built as mills, and occupy key sites near the locks and CBD. Another section of Lockport, Lowertown, is what remains of Niagara County's high finance district of the 1820s, now occupied by a largely black population. The canal there is (or was) edged by a delightful array of low buildings, both brick and stone, used for various purposes. There are also many handsome old residential sections of the town, which derives most of its financial stability from General Motors' Harrison Division plant.

Still, as in many communities, business is a tough business. Commercial developments on Transit Avenue (toward Buffalo) began to usurp CBD profits. Urban renewal proposals

Workshop score for boat trip on the canal

Go to Site A on your walking tour map, the Duckboat landing, and board the duckboat.

1 During the voyage downstream and back, record your impressions of: uses of the canal; uses of the canal’s borders; what occurs where land and sky meet; how many people you can see and what they are doing.

2 On arriving at landing B in Lowertown, disembark and walk across to the north (grassy) side of the canal to the next bridge. Observe natural and manmade forms, and potentials of the environment.

3 At Adams St. bridge, climb one of the towers and record your feelings about the overview by using the TV videotape camera that will be there with someone to help you film.

4 Descend and walk back to the Duckboat dock along Market St., stopping twice to record your impressions, including: relationships to canal; relationships to history; relationships to people; relationships to the future.

5 Board Duckboat and return to dock at the foot of the locks. Proceed to next activity. Bon voyage!
Through walking tours (top) and duckboat trips on the canal (above), residents took a fresh look at Lockport. Old five-stage locks (right) are still of scenic interest, with replacement two-level locks adjoining them on the left, out of the picture. Park proposals for this area along the canal may preserve at least that part of Lockport’s fast-disappearing visual legacy.
were formed on paper, wiping out Lowertown's charm and favoring development over people in downtown areas. An apathetic Lockport had lost interest in the canal and was allowing aging assets, both physical and financial, to slip through its collective fingers. A very familiar pattern developed—the momentum of developers, shopping malls outside city limits and urban renewal plans, had become formidable. Any attempted new proposal must now play catch-up ball against overwhelming odds.

Holzman, Burns and the Cooper Union students organized an exploratory Community Workshop for Lockport in 1971, to try to allow residents a chance to affect those odds. This led to CWII in 1972. This time, reinforced by experience and students from the State University of New York at Buffalo, the group had high hopes. With funds appropriated by the Lockport Common Council and New York City donors, a matching $5000 grant was obtained from the New York State Council on the Arts. Avoiding the obvious path of informing townspeople what they ought to do, the organizers planned sessions to help residents set their own course. Despite all hopes, only about 140 of the 27,000 residents elected to take part. Although people of all ages and political-economic levels attended, there were no representatives of the black community (nor, some contend, enough of Lockport's leading citizens). Four open one-day workshops were held, with participants discussing observations gathered on scheduled walking, driving and boating tours. Following a printed score, tours suggested ways to observe town sights that residents, through familiarity, had ceased to notice. On a one-hour walking tour, for instance, participants were asked to follow routes without talking to each other, so that individual observations would result. As the boat trip score shown indicates, suggestions were used to increase awareness without forming predetermined results. "What is your objective?" was CWII's predominant question.

But business is still business, and plans are still plans. If the town doesn't get on with its urban renewal, it will lose promised funds. Lowertown must go, as must a number of CBD structures. Plans for a new building skirting the canal show the escarpment lined with yet another parking lot. A public hearing held the fifth day of CWII produced presentations and suggestions of workshop groups, and lively discussions with officials. There, again, were those inevitable conflicts between new awareness and vested interests. Referring to the new building and parking lot, an urban renewal official scolded the group for thinking that last minute changes might yet be made. "Don't keep talking about this development as a plan," he warned, "it is definitely going ahead." The only apparent effect by CWII was a walk along the canal edge of the parking lot (designed by the town engineer) to let people "use" that side.

Results of the sessions, therefore, seem to be mixed. A list of CWII suggestions, compiled for review by city officials, probably gives the most optimistic viewpoint. In matters concerning town policy, the group asked for strict code enforcement, an architectural review board and regular town meetings for open discussion of city problems. For the canal and locks, residents want park areas on both sides, better lighting and maintenance and a listing on the National Register. Although bulldozers are almost ready to level many buildings, the list includes recommendations for City Hall and the Ruhman Building and asks that a survey be made of all existing historic places. Another plea is that future development will emphasize the canal, allowing people, not parking, to use the brow of the escarpment.

New life apparently has come to one town organization, Historic Lockport, which had all but died just as CWII was being set up. Its new head, David Zimmerman, spoke out for citizen action at the workshop presentation session. He was charged by a "native" with being a newcomer who had not made any contribution in his seven years in Lockport. Acknowledging his—and everyone else's—apathy in the past, Zimmerman hopes that Historic Lockport can be effective by staking out realistic goals. By not dissipating its energies on doomed projects, the group will accomplish more and sustain member interest. The scheduled October demise of Lower-
town buildings, for instance, allowed too little time for action.

In the words of a representative of the New York State Historic Trust, "The town will wake up when its heritage is all gone." Although applauding CWII efforts, he thought that workshop organizers would do well to work harder at aligning more powerful allies within the town, and at subordinating the "outsider" role when trying to help a community. Those who participated, of course, held less resentment for the "outsiders and college kids."

Some of the students agreed with Lockport's David Haley that there was a breakdown. Haley, a former council member and present member of the Lockport Environmental Improvement Committee, felt that the workshops suffered by not having specific objectives or a final result. There was some feeling that the frustrations of recognized problems might be better served with careful doses of expert advice.

Other reactions to CWII range from optimism to pessimistic resignation. Most participants agree that the canal-side park is a definite possibility. Some feel that a few old buildings have a fighting chance. Everyone is aware that the workshops would have been more valuable in halting Lockport's disintegration 10 years ago. Town problems, however, seldom produce a determined effort until consequences actually threaten residents in some clear way. The workshop's full impact, or lack of effect, on Lockport will take time to assess. One of the most promising products of the workshop is the edited videotape of CWII proceedings. All sessions were taped, and this technique was a highlight for participants, who enjoyed seeing themselves "on the tube." The final version of the tapes will be used to help other communities apply the Lockport experience to their problems. If Lockport succumbs to the bulldozer, that record may be the contribution of CWII. [JM]
Lowell, Massachusetts, is the product of industrial growth and decline—a city that in the last 50 years has had an unemployment rate hovering around 15 percent. Yet Lowell is an extraordinary example of a town planned around the resources of an earlier industrialization which could not adapt to changing technologies and a shifting economy. "Lowell exemplifies an environment," say the planners, "about which little is known and even less is understood by those whose lives it shapes. Economic, physical and social decline characterize the life of the city. Stimulating educational, recreational, cultural or artistic resources are almost nonexistent. Many Lowell youths want nothing more than to leave."

The Lowell Discovery Network by planners Michael and Susan Southworth is a broadly based plan to use those remaining elements of Lowell's past that are unique to its industrial history; the plan emphasizes processes and consequences of industrialization by integrating education with the life of the city. As defined by the planners, an educative environment is "a place where one cannot help but learn, not because one has to or even wants to, but because the place itself communicates something of its form, function, people and past."

Part of the apathy toward the city, the Southworths feel, is due to a lack of ability to understand the forces that shape the environment and, consequently, the inability to deal with changing it. By drawing on the resources of the city for learning about it, the planners want to involve the community in a process of change. "Community development efforts," they feel, "should be aimed at making the physical, social, and institutional environments of the city into resources for learning. Carried out with the active participation of Lowell residents, this creative process as well as its products would help individuals discover new interests, develop new work skills, articulate needs, values and ideas, deal more effectively with environmental change and more fully comprehend the forces...
Saving places for people

which affect their lives.'"

The by-product of this effort is the reuse of many urban elements that have been lost through disuse and neglect. After initial historical and contemporary studies of the city, the planners proposed eight major areas of resources for development: Indians, river, forest, canals, mills, contemporary people, visual environment, contemporary industries.

The proposal for dealing with the economic, social and physical decline of this city goes far beyond the usual remedial efforts of both urban renewal and preservation. Initially funded under the Model Cities Educational Component, the plan was limited in scope by the definition of the environments as educational. Even though the education takes place in a nontraditional setting or, in the case of proposed museums, traditional ones, the participants are still being taught. The Southworths’ proposal would make Lowell a self-evident learning setting through a central communications facility, providing information not only about educational opportunities, but new physical development, social and public services as well. Perhaps more to the present and future benefit of Lowell as far as its residents are concerned, is the conversion of one mill into a social center set up and managed by students for themselves. Also proposed are maps and models that will help residents understand new projects or developments and supply information about citywide and neighborhood oriented events. This is the city telling about itself and telling people what they want to know. Since the original proposal was drawn up, the program has been transferred from the Model Cities Educational Component to the Human Services Corporation, which has allowed the planners to expand their ideas beyond those of an educational nature. The first proposed development—with a matching fund grant from the National Endowment for the Arts—is the conversion of one mill into a cultural center to include space for drama, concerts, artist studios, ethnic restaurants, an art gallery and community art facilities.

While many of the specific ideas in the plan are only suggestions of possible ways to reuse the Lowell resources, many of the ideas are historically based and their proposed reconstruction is meant to attract outside visitors, develop a tourist industry and provide an economic stimulus both with new jobs for residents and supportive services to tourists. While this is an acknowledgment of the economic problems and an effort to provide new economic inputs, the planners’ suggestions for dealing with the historical context of the city have some serious consequences beyond those of the potential economic benefits.

Historical reconstructions—an Indian village, an 1850 mill yard and old manufacturing processes—can offer some form of recreational pursuit for the residents, but it cannot offer the long-range commitment or involvement needed by the community for change. In view of the planners’ aims to recover and revitalize the resources of the city, the reconstruction of historical sites seems a static clog in what should be a dynamic and changing process of growth and adaptation.

How does all this make life better for the individual residents, especially the unemployed or underemployed? How much of this plan makes a connection with the day-to-day lives of all the people of Lowell? Rather thoughtfully, the planners recognize this open-ended question: "The need for improved housing, health care and social services is certainly of higher priority than development of the educational environment. Might not people resent [money] being spent [on education] while the more important shortages remain unrelied? These questions can only be answered by involving the community at the investigative stages. Some of the answers may change entirely the purpose and direction of development for the city of Lowell."

Perhaps the most valuable role the planners can play is to help the people of Lowell see the potential of future uses rather than dwell on a past filled with memories of a struggle to survive in a declining social and economic city. [SLR]
In this report, the author reviews the conservation acts of the UK, public participation, economic viability, individual listed buildings, new structures and the great need for public awareness of environmental quality.

In contrast to landscape, where change is only accepted to meet the needs of society and the natural order of things is paramount, it is change that is the life blood of the built environment. The city, town or village is a living museum and the pressure exerted for change is to be welcomed as evidence of the vitality of the population. Many people believe that preservation is the only means by which order can be maintained, but as a universal policy it would result in stagnation of the very places we love. Whereas change is an essential ingredient in maintaining the life of urban areas, the quality of the resultant environment depends on the skill with which the change is implemented.

Great Britain has a fine heritage of buildings and landscape, and over the past 10 years public concern about the future of this environment has increased. The first signs, which gave no indication of the flood to follow, were simple protests such as letters to the local or national press. Then volunteer groups, known as amenity societies, were formed at both the local and national levels. They wield considerable power and influence over environmental matters—so that sometimes even a proposal to demolish an indifferent building or cut down a spindly group of trees is met with howls of protest. Together with the environmental heritage, and perhaps because of it, Great Britain has a sophisticated system of planning control administered by means of various Town and Country Planning Acts commencing with the 1945 Act. Onward through the years subsequent Acts have introduced more definitive and complex legislation controlling land use, density and transportation, but in respect of aesthetics a negative form of control was exercised under which good design often foundered but indifferent and sometimes downright bad designs were permitted.

In 1967 the Civic Trust, a nationally orientated amenity society, managed to get a private Members’ Bill before Parliament which led a major breakthrough in planning legislation. The 1967 Civic Amenities Act came about as an amalgam of public concern and government awareness of the need to cushion society against change. The 1968 Town and Country Planning Act gave teeth to the means of aesthetic control in certain areas and in relation to certain buildings. It has also given increased protection to buildings of architectural and/or historic interest and provided an effective section dealing with disposal of abandoned vehicles and other refuse which have long been a severe environmental problem.

The major change is summed up in a paragraph in the beginning of the Act: "Every local planning authority shall from time to time determine which parts of its area are areas of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance, and shall designate such areas (hereafter referred to as 'Conservation Areas')." For the first time, therefore, the importance of areas was recognized and in an accompanying circular the government stresses that particular importance is attached to the designation of conservation areas; this represents a shift of emphasis from negative control to creative planning for preservation.

A system of protection covering individual buildings of merit which graded buildings into groups, had been in existence for a long time. Those qualifying for inclusion in Grades I, II or III required notice to the local authority before demolition or alteration could take place. If within two months the local authority did not issue a Building Preservation Order preventing such work from being carried out without consent, the building in question could be demolished almost overnight, or butchered beyond recognition. The new legislation changed all this. The graded buildings (commonly known as "listed buildings") are now protected as if they had been the subject of a Building Preservation Order and therefore alteration or demolition cannot take place without local authority consent. The penalty for unauthorized action can be as much as 12 months' imprisonment.

The grading or listing of buildings is a continuous process and the nomination of a building for inclusion is open to any member of the public as well as being the responsibility of the local authority. The nominations are submitted to the Department of the Environment (the central government department...
responsible) and those buildings considered worthy are added to the list and thereby afforded protection.

**Public participation**

Under this new legislation wider public participation became essential, and local authorities are required to advertise any application for development which would affect the character of a conservation area and pay attention to any representations made. Furthermore, applications for consent to alter or demolish a statutorily listed building must be advertised on the site and in a local newspaper.

The effect of this legislation is only just beginning to be felt by the average man in the street, but the enormous ramifications are increasingly evident to architects. The need for design skill benefits the profession by permitting the architect to fully demonstrate his ability to solve visual and technical problems within strict environmental constraints. In a designated conservation area, any proposal to build must be submitted to the planning authority in the form of a detailed design. The submission must fully illustrate how the proposals relate to the environment so that an assessment of the visual effect can be made as part of the overall consideration.
Conservation and the built environment

The local planning authority also has an important role to play; it not only has the responsibility to designate the conservation area in the first place, but also to back up action by producing a plan of the designated area together with substantial environmental survey information and a policy document indicating the planning strategy for the future. Unfortunately the quality of environmental information prepared by the local authority is not always high, but when it is as good as the townscape analysis prepared by the City Architect and Planning Officer of Cambridge, there can be no complaints. It is also the responsibility of the local authority to control the rate and scale of change and to understand the complex functioning of the area so as to be aware of future needs.

Economic viability

Whatever the requirements for each area may be and notwithstanding the points made above, any conservation policy that does not include economic viability in addition to good intentions is doomed to failure. There are many kinds of obsolescence in buildings, but they all show themselves eventually as economic problems. One of the real dangers is that obsolescence breeds a sort of environmental fear. Seeing buildings fall into disrepair and become dilapidated encourages inhabitants of an area to leave or to neglect the environment and the rate of obsolescence quickens. Unless the right economic action is taken, a neighborhood suffering from this problem can become a depressed area with all the sociological problems that breed within a few short years. Obviously there are many occasions when large-scale redevelopment on a comprehensive basis is necessary, but there is enough evidence now to show that this can create more sociological problems than it solves. The planning authority should keep a careful watch of an area—a sort of taking the environmental pulse—and when any signs of neglect appear must ensure that there is an incentive to avoid obsolescence and the subsequent downhill slide. Private investment, with the exception of community action, only happens with sufficient financial inducement. In many cases the conversion, extension or rehabilitation of an existing building will offer an adequate financial return. This process, together with selective redevelopment on an infilling basis will ensure environmental maintenance and the gradual change necessary to the retention of the character of a place.

The out-of-town shopping center is an example of the pressure that produces the fast rate of change that can cripple an existing environment. It is in these and similar situations that planning control must be exercised so that the right decisions are taken on a comprehensive basis and not just to obtain the benefit of immediate financial return. It is frequently possible to provide the facilities of the out-of-town shopping center within the infrastructure of an existing area to keep the town viable. With design skill, the changed environment will be

Protected from demolition as a listed building, Tring Vicarage in Hertfordshire was too dilapidated for use as a residence. Preserved and converted to church offices, it will become the focal point of a complex that will include a new office wing, parish hall and vicarage. Melvin, Lansley & Mark are architects; photo by Simon Dell.
graced by the old and enhanced by the new. This kind of environmental surgery is being performed skilfully at Stratford-on-Avon by Frederick Gibberd & Partners in the central shopping development. The proposals are based on the need to maintain the existing medieval character; to preserve the existing contrast between the closely built-up inner core of the town and the openness of the river frontage; to maintain the existing street character derived from the considerable number of remaining half-timbered buildings; to confine the redevelopment to the outworn and nondescript heart of the area; and finally to plan the servicing in a form which would permit the existing perimeter shops to be included. Apart from the successful visual integration and the obvious financial success, the scheme provides all the amenities such as convenient parking, safe undercover pedestrian shopping and proximity of various types of shops, that an out-of-town center can provide.

Reusing old buildings

In safeguarding the character of an area, the re-use of individual listed buildings requires perhaps the highest degree of ingenuity. Protected from demolition, perhaps in a poor state of repair and rarely needed for their original functions, they demand new uses to ensure continued life in a well-maintained state. Here is a great architectural challenge, for coupled with the need for ingenuity is the whole problem of designing in a historical context. The new use frequently requires an extension, or at least a major rehabilitation, and in these circumstances the designer's skill is fully tapped. As opposed to preservation, where painstaking restoration is the order of the day, adaptive use conservation requires good modern design which does not devalue the existing buildings by copying. The example illustrated here suffered a long history of dereliction before a suitable use could finally be found.

Tring Vicarage, in Hertfordshire, is a Grade II listed building in Jacobean revival style erected in the 1820s. It was no longer suitable for use as a vicarage, as it cost too much to maintain and was in an advanced state of dilapidation. Since conversion to ordinary residential would not attract sufficient rental return it was decided to convert the building to church office use. An extension was added to provide additional office space together with a new parish hall to serve both Anglicans and Methodists. The injection of these new mixed uses, as well as providing the important ingredients for the opportunity of visual success, enables the vicarage, trimmed down to its original size, to be restored. It is now the focal point of the complex and the new buildings have been linked to it to form a collegiate type of development involving the church, gatehouse and the new vicarage.

New buildings

New buildings should be built within the discipline of the local identity. Sometimes a whole area is focused on some simple feature such as a hill, river, crossroads, church or quite small-scale elements such as balconies, railings or a particular form of detailing. At Tewin, a small village in Hertfordshire, architects Adams, Huntley Associates decided that a small housing project should close the end of the green. It would have two-story terraced units reminiscent of the pattern of the village as a whole. This respect for the identity of the place manifest in the handling of scale, form and detail permits the totally modern vernacular of the new houses to completely harmonize with those existing.

In the High Street of Berkhamsted, solutions to the problems of scale posed by a new headquarters office building have been attempted in various ways. Adjoining the development on one side is a two-story nondescript Georgian revival building of 1930 vintage and on the other, across a side
street, is a delightful single-story terraced group of 17th Century almshouses. Architects Melvin, Lansley & Mark chose to maintain the height diversity by building a four-story block linked to the adjacent building with a single-story pitched roof shop unit. From the other side the return elevation of the four-story block acts as a backdrop to the almshouses. The shops at ground level are expressed as individual units, further identified by a lead-clad oriel window over each which echoes the small scale nature of the remainder of the town. The oriel window, a typical feature of the town, occurs in various forms on several existing buildings.

In conclusion, it is clear that the heritage we admire evolved largely through natural pressures. In addition to having a full understanding of the environmental quality of a place, it is necessary to understand these pressures so as to direct and coordinate the energy generated by them into buildings that maintain and enhance the environment. Of paramount importance to the success of this process are two further factors that should always be borne in mind. First is the need to create a public awareness of environmental quality that, in turn, will produce an enlightened legislative framework in which the designer can work advantageously. Second, no matter how good the rules, there is no substitute for skill.
The facets of renovation

Portfolio

Reuse, rescue, refurbish, restore, redecorate, preserve, polish and protect; a portfolio of projects that succeed in accomplishing one or more of these goals

Salvaging a site

When the Burroughs Corporation was faced with the need for a new administrative headquarters, it could have, like so many other companies, fled to the suburbs. Instead, for political and economic reasons, it chose to stay in Detroit and rebuild its 20-acre factory site. After demolition of 18 outbuildings, three large factory buildings were stripped to their skeletons to house corporate administrative offices, computer rooms and product display areas. Reinforced concrete foundations, columns, floors and roof framing were all that remained of the five-story structures that had been built between 1914 and 1918. A few steel beams and columns were added during the renovation.

Precast concrete panels with exposed limestone were attached to the existing concrete frames to form the new façades. The panels weigh about 7 tons each and incorporate two lights of bronze heat absorbing glass, separated by a solid aluminum mullion. Other additions included concrete floor fill over the existing floors to accommodate underfloor trench duct systems, 5-ply built-up roofs, gypsum board partitions, new stairs and elevators as well as all plumbing, mechanical and electrical systems. The precast walls and structural members were fire-proofed with sprayed asbestos. At the first floor, computer and display areas are enclosed with 1 in. insulating clear glass with a few porcelain steel panels installed for privacy.

Architects Smith & Gardner describe the project, at 675,000 sq ft, as the largest rehabilitation ever undertaken for reuse of such buildings.

Data

Project: Burroughs Corporation World Headquarters.
Architects: Smith & Gardner.
Site: 20 acres of company-owned factory buildings.
Structural system: existing concrete frame sheathed in new precast concrete window units.
Mechanical system: dual duct, high velocity air conditioning with hot or chilled water; separate air supply to computer room.
Major materials: precast concrete, bronze glass, exposed aggregate paving, aluminum and glass doors, gypsum board partitions.
Costs: approximately $26 million, including demolition.
Yesterday's grace, today's usable space

This year the doors to Cooper Union's old art and architecture Foundation Building did not open to the students and public who have used its facilities for almost 120 years. Classes, however, continue in nearby rented spaces. Under the direction of John Hejduk, chairman of the school's architecture department, in association with Peter Bruder of the Engineering Department, the building will be completely renovated inside and impeccably restored on the outside. "This will not be a glossy restoration," says John Hejduk, "we want a building we can use, that can respond to any curricular changes in the future." Part of the trouble with the old building was the amount of valuable space wasted in grand hallways, foyers and stairwells; over the years the need for more space prompted piecemeal alterations that gradually cluttered and disorganized the interior. The purpose of the renovation is to enlarge the spaces, clarify them, and bring the building up to modern fire-code regulations.

The famous Great Hall in the basement will be air conditioned, relit and refurbished to bring back its 19th Century architectural dignity. The library, the first public one in New York and once the city's largest, will be consolidated on the first floor where it will be more accessible to the public as well as students; a new mezzanine will provide quiet reading rooms and an audiovisual center. There will be offices and seminar rooms on the second floor, while the industrial-loft spaces of the four floors above will be given over to large art and architecture studios. The smaller seventh floor will house more offices, and on the even smaller eighth floor clock room, where the works of the huge tower clock will be encased in glass, there will be a new trustees' room with a roof terrace at one side. Anticipating the invention of the elevator, but not its shape, Peter Cooper's original design included a round core for the device. Now, the square elevator that has been used for years finally will be replaced by a round one.
Correcting post-Victorian mistakes

When William P. Clements bought Cumberland Hill, the oldest public school building in Dallas, his only plans were not to tear it down. He liked it, even if it had been "modernized" so many times since 1889 that it wasn't even a good example of Victorian architecture.

But when architects Burson & Hendricks located an old picture of the original building that showed a steep roof and cupola instead of a 1920s flat roof and crenellated parapet, Clements decided to remodel his prize once more. This time previous architectural blunders would be corrected and the building used as headquarters for Sedco, his oil drilling firm.

Off came the flat roof and parapet, along with a corner "castle" entry tower and its pointed arches. Additions made in 1901, 1905, 1913 and 1919 were kept, but their windows and decorative details were modified to blend with the oldest part of the building. A coat of ochre paint helps hide the fact that different brick was used for different additions. The new roof, of standing seam metal, has a lead pewter finish that is similar to 19th Century roofs common in the area. The cupola has a slate roof and bronze glazing; below it is a well open to the first floor lobby and grand staircase. Interiors were furnished in Victorian style and the landscaping further emphasizes the contrast between the building and its curtain wall neighbors in downtown Dallas.

Data

Project: renovation of Cumberland Hill School, Dallas, as corporate headquarters for Sedco, Inc.
Consultants: Chester R. Reed, structural engineer; D.W. Torry & Associates, mechanical and electrical engineers; Lambert Landscape Co.
Opulence revisited

When the Eastman Theater was reopened at the University of Rochester last winter after a $2.3 million refurbishing, concert patrons found everything just about as it had been before. There were two exceptions: embellishments and decorations long hidden under dust and grime suddenly were visible; and a new steel acoustical shell projected sounds from the stage so well that the audience could hear the conductor quietly wish the orchestra “good luck” as it began playing.

Mechanical efficiency, rather than returning the luster of the 1920s opulence, was the prime object of the restoration. In addition to the acoustical shell, which can be lifted out of the way when not required, improvements included an air conditioning system, water coolers in the formerly dry lobby, a new stage floor and orchestra pit that can be raised to stage level for dance performances, new rigging and lighting and new seats (wider than the originals) upholstered in a warm Etruscan red.

Carpets and the stage curtain were replaced, as were 12 “Psyche and Cupid” scenic wallpaper murals in the lobby and mezzanine. The scenics had been printed from woodcuts commissioned by Napoleon in 1814, and could not be cleaned. John Wiste, interior designer for Ellerbe Architects, located another set, printed in 1923 and the last available from the same blocks. A plastic finish will preserve them.

Much of the refurbishing was a cleaning and polishing job, from walls and ceiling to paintings and wall sconces. Original furniture was reupholstered, and the final touch was replacing the original teardrop, lost for years, in the main chandelier. Two items not replaced are gilded washtubs which had been installed 50 years ago as “temporary” substitutes for balcony chandeliers that never arrived.

The theater, designed by McKim, Mead & White and first opened in 1922, was a gift from George Eastman to the Eastman School, forerunner of the University. The renovation was paid for by the Eastman Kodak Company.

Data

Project: Eastman Theater renovation, Rochester, N.Y.
Architects: Ellerbe Architects.
Consultants: George C. Izennour Associates, theater; Paul S. Veneklasen & Association with Anderson-Angervine, acoustical; Mather, Zimmerman & Shwabe, design; Carl K. Hersey, historical.
When Purcell, Elmslie and Feick's Merchants Bank of Winona, Minn., opened in 1912, it was far ahead of its time and not generally appreciated by the public. It was essentially a simple cube of brick, glass and terracotta, with a symmetrical plan and elevation. Unlike the prevailing neoclassical rural banks of the time, it typified the architects' conception that such a structure need not be rigid, formal and lifeless, but could be dignified, functional and economical. Purcell and Elmslie, now recognized as important figures in the prairie school movement, had earlier worked with Adler & Sullivan.

Scheduled for demolition in 1968, the bank had by that time become widely known as one of the last surviving examples of prairie school commercial architecture. Although it had been expanded and remodeled several times, public interest soon made it apparent that the building should be retained and restored. Dykins-Hanford, Inc., the Minneapolis architects who had been commissioned to design a new building, were retained as restoration architects and directed to follow the original design as closely as possible. Fortunately, the original architectural records had been preserved in the University of Minnesota archives.

Today the impressive main entrance leads to a restored central banking room where the glass skylights, destroyed by an earlier remodeling, are now back in place. In the 24-ft-high room the murals of local scenes have been cleaned, the oak trim has been restored to its original finish, and the six 10-ft columns topped by large globe lights have been restored. The exterior has been cleaned and repaired where necessary, and Dykins-Hanford's new addition has been sensitively subjugated in ornamentation and fenestration to allow the original building to remain the focal point.
The best of both worlds

America's newest opera house is 94 years old. Not only is it the second largest, it is also one of the very best. For 77 years the 3642-seat Victorian Music Hall in Cincinnati has been home to the Cincinnati Symphony Orchestra, but without air conditioning, it could not be used during the summer. For over 50 years the city's Summer Opera has been performing in the park of the Cincinnati Zoo, never having a real home of its own. Now it has, for in June the Opera took up permanent residence, along with the symphony orchestra, in the exquisitely renovated Music Hall.

Over the past three years Schatz Associates, with Alan Schatz and Bruce Schweninger in charge, have painstakingly renovated and refurbished the old hall without marring any of its 19th Century grandeur. And, almost miraculously, the acoustical quality for which the hall is renowned has remained unchanged.

To change a concert hall into an opera theater, while retaining its original function, a pit must be created for the opera orchestra. Yet the concert orchestra must continue to play on stage, not separated from the audience by a large pit. The major task of integrating the two functions was done by extending the forestage farther into the orchestra and installing a hydraulic lift under most of it, and there is now the choice of either orchestra pit or concert stage. But opera also requires extensive dressing room facilities, rehearsal rooms, workshops and storage space for costumes and sets. And fortunately, in the large hall, there was room for all of these, plus space to store sets for more than 40 operas.

At the time of renovation a new, completely electronic system of stage lighting was installed, the building was air conditioned and escalators to the balconies were discreetly installed in a foyer adjacent to the main lobby. The auditorium and public spaces have been redecorated in red, white and gold, and the exterior has been sandblasted to bring out the original, warm colors of the old, pink brick.

The total cost of the renovation was $6 million, about half of which was contributed by the Corbett Foundation. But even if the city had paid the whole bill it would have been a bargain—now with its two functions, the Music Hall truly gives Cincinnati the best of two worlds for the price of one.
Missouri mix

In keeping with the fact that Missouri's first state capitol was in use only from 1821 to 1826, its restoration as a museum of the period includes two rooms from its subsequent use. After the legislature moved from St. Charles to the more centrally located Jefferson, the first floor became a hardware and dry goods store while the upper story was divided into apartments. A reproduction of the store is stocked with typical 19th Century items and the room where the storekeepers lived has been redone as a bachelor residence of the period. The Governor's office, Senate Chamber and the House of Representatives, however, are once again intact.

The restoration was a 15-year project of the Missouri State Park Board, which started by tearing out brick walls that had been put up in front of the originals, replacing "modern" copper gutters and spouts with wood ones, opening up sealed fireplaces and replacing gas heaters and oil stoves with potbelly stoves.

Not wanting to cope with 1821 inconveniences such as ashes and soot, and being unable to conceal radiators or hot air ducts, the architect, Kenneth E. Coombs, used electric radiant heating panels for both ceilings and walls. Because the heating cables are concealed within %/8-in.-thick gypsum board panels, a code variance was required for the wall panels (the cables could be severed if pictures or fixtures were to be hung without care). As a final "authentic" touch, the drywalls were plastered and whitewashed to match original walls, and thermostats were hidden behind pictures or furniture.

RR reuse

Old railroad stations are prime candidates for refurbishing and reuse. They are romantic, roomy and available. Even before the last passenger train left the Rock Island depot in Lincoln, Neb. in 1966, the station was the subject of sketch problems by architectural students at the University of Nebraska. The building, constructed in 1892, has now been listed in the National Register of Historic Buildings, and has begun a new life. Under the direction of Lawrence Enersen, of the architectural firm of Clark & Enersen, Hamersky, Schlaebitz, Burroughs & Thomsen, the station has been spared both the wrecker's ball and excessive modification.

Purchased by the City National Bank of Lincoln, the building is now a satellite drive-in bank. Restoration of the main space has substituted tellers for ticket agents, with old cages serving new uses. An extensive effort was launched by bank officials to refurbish the depot with authentic items of the appropriate era. With cooperation by various railroads, banks and the architects, the interior authenticity and condition was restored, living harmoniously with the new electronic and pneumatic systems for drive-in banking.
The Robert Lewis Showroom in New York City occupies a 4000-sq-ft loft space with a 15-ft-high ornamental plaster ceiling. The first and most important decision made by the client and architect Kenneth Walker was to retain as much of the architectural detail as possible. This led to the obvious problems of fitting in a new mechanical system and overall illumination, and breaking up the space into small offices, clerical space and a showroom. The first two problems were easily solved: the mechanical system was hung from the ceiling and painted a bright magenta while overall illumination was installed in the partitions and reflects off the ceiling.

But to have white partitions stopping short of the ceiling would have provided no contrast with the white shell. Both as a necessary visual ending to the partitions and as a humorous gesture to the 19th Century detailing, the architect designed his own two-dimensional version of the classical egg and dart motif as a cornice for the partitions. The addition of the graphic motif creates a tension between the new and old symbols, allowing each to be appreciated for its own qualities.
The old post office museum

New life for a dead letter office

Walter Kidney

In 1968 it was scheduled to be demolished in the name of urban renewal, but today Pittsburgh's old North Side Post Office has been restored to new use and new life as The Pittsburgh History and Landmarks Museum.

Until 1907, the North Side of Pittsburgh was an independent community with all the appointments of an old-fashioned small town. As Allegheny City, its post office had to be a representative building, that is, one that "showed" the flag and absorbed and disgorged mail. Begun in 1894 to designs by William Martin Aiken, the architect of the U.S. Treasury, it showed, along with the determination to impress, a certain indecision as to how. For it is a naive building, the product of a time of violent change in fashion. Had it been done five years before, it would probably have been Romanesque, with rock-faced sandstone walls and a pyramidal roof in red tile. But the World's Columbian Exposition and Stanford White's Quattrocento experiments had begun to set new fashions by 1894, and the post office was thus tentatively modish. Of a slightly somber granite, it was a little unsure of itself in proportion, but airily classical, with plenty of big round-arched windows, pilasters and balustrades, and a truly Federal dome above it all.

Inside was an impressive public ambulatory, but a wood-and-glass screen separated it from a much more impressive space that lay behind, under the great coffered inner dome. Postal workers labored in what was virtually a mosque interior, while officials looked on from rooms above. Ornamentation was not spared here; the plaster ceilings were most elaborately modeled, and the second-floor gallery had a cast-iron balustrade whose detailing was perhaps the most spec-

Completed in 1964, Allegheny Square was designed by William N. Breger to relate formally to Pittsburgh's old North Side post office, which is flanked by new apartments on the left and the Buhl Planetarium on the right. The building's exterior, in perfect condition, only needed cleaning.
In the great central space (above), the new mezzanine provides additional display area and privacy for offices. On mezzanine (below) stained glass from old houses screens offices, partitions are topped with unframed glass.

On mezzanine, elaborate ornamentation is complemented by gate made from roof cresting of old houses (above). Members' lounge (below) was formerly post master's office; old fireproof vault at rear now leads to new pantry.

New life for a dead letter office

tacular and successful in the whole building.

As the years went by, the North Side became a neighborhood of the poor. Mansions became rooming houses or business offices; cornices, mansards and verandas were stripped away, paint peeled, grass was neither mown nor sown.

In the early sixties the area around the major crossroads of Ohio and Federal Streets became the site of Allegheny Center, one of the last Zeckendorf projects. Despite protests, the handsome old city market was razed, along with many decrepit houses. In their place rose a covered shopping center, a somber office building, and some apartment slabs with very peculiar face brick, as well as a huddle of townhouses off to one side that look as if they had wandered into the wrong part of town.

It was intended that the post office, which the government was to vacate in 1968, should be the site of yet another slab. But the Pittsburgh History & Landmarks Foundation was anxious to salvage it as a museum of city and county history that
would fit into a chain of cultural institutions in the area. Arti­
fact and photograph collections did exist in Pittsburgh, but no
real facilities for displaying them frequently or permanently.
The architectural fragments the Foundation was diligently ac­
fact and photograph collections did exist in Pittsburgh, but no
would fit into a chain of cultural institutions in the area. Arti­
real facilities for displaying them frequent ly or permanently.

The urban redevelopment authority, which had final say in
the matter, yielded in 1969 to petitions from the Foundation
and the community, provided the Foundation would purchase
the building for $116,000 and restore it suit ably, spending an
estimated $750,000. Williams/Trebilcock/Whitehead were re­
tained as restoration architects. Late last year the first stage
of restoration and remodeling was finished, and the Founda­
tion moved into its offices on the new mezzanine floor. The
first show opened early this year.

One of the most conspicuous alterations was the removal
of the old screen, which opened out the central space on one
side into two minor galleries. A new wall enlarged the lobby
space at very little expense to the central space. The resulting
central exhibit area is irregular, but the central space beneath
the dome, very nearly square, dominates and unifies the
whole. In this it is helped by the low new mezzanine (first floor
ceiling height is 10 ft). To create this mezzanine, lower por­
tions of the structural columns were stripped to their thick
cast-iron cores and new concrete, ending in mushroom capi­
tals, was poured around them. Pairs of needle beams, sup­
ported at the other ends by the outer masonry, passed across
these capitals, and the intervening areas were filled in with or­
dinary bar-joist construction. The upper portions of the col­
umns were carefully preserved. The remainder of the build­
ing, aside from repainting, repairs and mechanical work, has
been, and will be, left substantially as originally built.

One enters the building through massive, highly carved old
doors. Off a large lobby, to the right, are the stairs and the
elevator; to the left is a ticket window (cannibalized from part
of the old ambulatory screen) and space for sale of antig ues,
souvenirs and books. Beyond, the postmaster's old office is
now furnished with Victoriana as a members' lounge. Out of
this open two smaller spaces: the postmaster's former lavo­
tory, now (appropriately, perhaps) a study alcove, and what
used to be a fireproof vault is now a small pantry, its door re­
stored to its original fancy paint job. Two great windows on ei­
ther side of the entrance are partly filled with stained glass
rescued from the stairways of demolished Pittsburgh man­
sions, while the elevator signs on the main floors are art glass
work from a famous downtown grocery.

The basement will be the starting place for large shows that
observe some sort of sequence. Here are the cloakroom, the
lavatories and the mechanical room, with a large exhibition
space leading to small, irregular spaces. The floor is fully car­
peted, but otherwise the bare bones of the structure are the
decor: piers of rich red brick, supporting a floor of girders and
plastered brick segmental vaults, strong, rigid and at one time
deeded to be fireproof.

The mezzanine contains a lecture space and the offices
and library of the Pittsburgh History & Landmarks Founda­
tion. Here, the ornamental plasterwork of the cornices and
ceiling, carefully restored, dominates the rooms. Calculated
for a 22'6" ceiling height, and rather ornate at that, the ceiling
is only 9'6" above the new floor; the high-pressure effect is
augmented by the proximity of the old Corinthian capitals,
richly carved doors of 1891 from the old Oliver mansion and
an abundance of leaded and stained glass from other demoli­
ished houses. Furthermore, only the lunettes of the original
windows, a bit under 5 ft high at the most, give a view of the
out-of-doors. On the other hand, there is quite a bit of glazing
(rescued from the screen) toward the great central space of
the Museum. One refinement of the partitioning is the use of
glass panels to butt against the columns so that they can be
seen, both from inside and outside the offices, in the round.
The third floor will be finished later; it has five offices as well
as "clerestory" windows for the central space. Above this, be­
tween the pendentives of the inner dome, is another tier of
clerestory windows on all four sides; this has its own gallery,
making three in all with the new mezzanine.

Some second thoughts

Official and commercial architecture in the 1890s often had
the air of aspiring, from sincerity, to urbanity. It was moving
out of a matter-of-fact, hard-edged mid-Victorian way of get­
ting the job done toward something more gracious—it was
feeling its way from Mullett to McKim. That the Corinthian
columns of the central space, seen in their uninterrupted height,
contain great cast-iron tubes is no surprise: a lot of Victorian
design is conventionally debrutalized fact, and here the
tube shows up more than the Corinthian column.

To this architectural frame have been added certain new
elements of gentility. Ornamental work cannibalized from de­
stroyed and decrepit Pittsburgh mansions has been hand­
somely cleaned and refinished; if the doors show signs of
being trimmed down to fit new openings, their solidity, their
taste and their overall lavishness still make them welcome.
This skillful reuse of such treasure may serve as an example
to homeowners undertaking their own rehabilitation projects.

Another kind of gentility comes from the architects respon­
sible for the remodeling who, like Giorgio Cava glieri at the
Jefferson Market Courthouse ("The Return of Old Jeff," P/A,
Oct. 1967), decided to make a clean but neutral break with
the old architecture. It could be said that, as far as the con­
spicuously new work went, they designed a railing. A handrail
of varnished wood, separated from plain, light tan plasterwork
by a narrow quirk, runs up the new main stair and goes
around the central space at the new mezzanine level. It begs
you to discount it, as tiptoeing interloper—yet so broad an ex­
panse of light tan plasterwork cannot be discounted in the
central space. The quirk, however, holds a channel for mold­
ing hooks, and from these any amount of Victorian wood­
carpets or paintings can be hung, and the blank balustrade
(at built to spare the blouses of passing secretaries and
to give the officers of the Foundation, who have many ac­
quaintances, a chance to go about their business uninter­
rupted) thus becomes a neutral background, an annex to the
display space.

If the spaces remain filled, so far so good. But pale tan is
not too far from that very pale green favored by welfare
agencies and other dismal places. It reflects an age which is
guilty about a lack of color without really understanding what
color is all about. The carpeting of the first floor is dark
brown, a slightly less grudging admission that there is such a
thing as color, but in this context it still reflects a kind of

11:72 Progressive Architecture 103
New life for a dead letter office

prudery. It is to be hoped that the whole question of color will eventually be rethought.

The building, as a museum space, is arbitrarily layered, thanks to the original plan. In bad weather the visitor enters, sees large, inviting doors ahead of him, and must ignore them in order to check his coat in the basement.

Given the plan of the building, this is inevitable, since the main-floor space is very rightly given over to the major displays. But the basement stairs could be made more conspicuous and inviting, with a wallpaper, or a gorgeous object hung on the first landing, or some other sumptuous decoration to legitimize it as a major traffic route. It is inevitable, too, that the columns around the inner space are halved and lose their original, gaunt dignity. Inevitable, but a pity.

In sum, there is a truly princely quality about the building itself and about the ornamental work that has been added to it; the building, as restored, will always be the Museum’s prize display, and one that museum directors will envy. But the purely new work is too bland, and something should be done about it. Pittsburgh, as it has evolved through the decades, is sometimes grand, but never bland. It is not a smooth, pastel-colored city. And its Museum should reflect its very real, not-too-easily-defined character.

---

Data

Project: The Old Post Office Museum, Pittsburgh, Pa.
Architects: (original building) William Martin Aiken; (remodeling) Williams/Trebitcock/Whitehead, Pittsburgh.
Program: to convert the former main post office of Allegheny City into: a historical museum; the headquarters of a foundation for the recording and preservation of historic monuments; rentable office space.
Site: an old civic center with adjacent parkland; much new apartment and commercial construction in the adjoining areas.
Structural system: (old building) load-bearing masonry walls; cast-iron interior columns; steel beams; steel-framed dome; (new work) concrete slab floor on open-web steel joists, supported on reinforced concrete capitals attached to existing columns.
Mechanical system: hot/chilled-water heating/cooling system; fan coil units.
Major materials: (original work) pale gray granite ashlar on brick; steel; (new work) reinforced concrete; steel; plasterboard; ornamental work from demolished structures.
Costs: acquisition of building, $116,000; restoration and new construction (with architect’s fee), $600,000 to date; estimated final cost of work, $750,000.
Consultants: Deeter-Ritchey-Sippel, Inc., Pittsburgh, engineering; Griswold, Winters & Swain, Pittsburgh and Williamsburg, Va., landscaping; Chester LeMaistre, Pittsburgh, interior design.
Client: The Pittsburgh History & Landmarks Foundation.
Photography: Erol Akyavas.
A national health organization is needed to begin a responsible move in assisting health departments to formulate standard hospital waste disposal methods

The need for standardized state health codes is not unlike the need for standardized automobile driving rules throughout the nation. A nationally coordinated driving program has successfully produced standard regulations for common conditions and now the driver can recognize his legal controls almost anywhere in the country.

The hospital field needs double yellow lines and standardized directional signs in the handling of solid wastes. Local conditions can be handled in the same manner as local speed limits. Some standards have been legislated by the Federal government, such as those for handling radioactive wastes, which are stringently controlled. Guidelines have been issued in the areas of air and water pollution and most states have established, or are in the process of developing standards.

But other areas of solid waste handling for hospitals generally have been untouched, principally because the amounts of such wastes are small in comparison with the overall problem of waste handling and because little attention has been given to the effects such waste might have on a community.

A review of state health codes reveals some overall interest in the disposal of pathological wastes; that is, the disposal of human tissues. Many states require incineration; some permit disposal in landfill; some do not distinguish pathological wastes from other types of hospital waste.

Some states require the incineration of experimental animals and their bedding, most say nothing about this kind of waste. Some states mandate that laboratory wastes must be autoclaved and burned; others do not mention such wastes in their health codes. Some states consider all hospital wastes contaminated, requiring incineration. Others consider all hospital waste identical to that coming from any home and therefore not requiring any special handling.

Many states have no instructions at all regarding hospital wastes but simply rule that disposal shall be as approved by the appropriate state or municipal authority. More important than the political implications of the problem is evaluation of the effects of hospital wastes upon a community. Specifically, are these wastes dangerous to the community if they are not processed before the community is exposed to them? Although opinions differ widely, from "no harmful effects" to "definitely dangerous," studies indicate that a potential danger does exist and a national trend toward incineration of all hospital wastes seems to be developing. State health authorities should now reevaluate their health codes, in concert if possible.

The Federal government is aware of these problems. A list of definitions of various types of hospital wastes is to be released soon, and other parameters are being developed. Most of this material will be in the form of guidelines and it becomes the responsibility of the states to incorporate this information in the form of health codes. It is recognized that state conditions vary, for example, in geography, topography, demography and economy, and that codes must also vary.

The use of landfill, for example, can be affected by climate. Very cold winters create cover problems and therefore specific code considerations may have to include provisions for emergency handling. The same provisions would be unnecessary in southern states. Landfill usage will be different for the high water table states in the south and the mountain states in the west. Population concentrations, with accompanying industrial complexes, generate different types and larger quantities of waste than farmland areas.

Although health codes must necessarily vary, there are many areas directly relating to hospitals where waste is identical and health codes should be in agreement: definition of terms; requirements for handling pathological wastes; the effect of all hospital wastes on a community; the use of incineration for hospital wastes, both hazardous and general; control of special wastes such as radioactive, laboratory, and all sharps; the use of decontamination procedures prior to disposal. All of these are of common interest, and should be treated in a scientific manner.

Within Federal standards states could have different options in addition to mutual problems. State codes can be more restrictive than the Federal guides, but should have engineering and scientific data to justify the stronger stand. Of no less importance is a clear line of responsibility within state operational organizations so as to avoid direct conflicts in regulations. In at least one area of the country all of the various possible methods of hospital waste disposal are in violation of codes, which are issued independently by legally established authorities.

Many studies covering all phases of hospital solid waste handling are available. They have been performed by universities under Federal grants, by engineering and consulting firms in the course of their everyday business, and by systems manufacturers in the promotion of their products. There are differences in conclusions but there is an equal amount of agreement. Most of the data obtained and the recommendations developed are valid.

Just as a national automotive association has taken the initiative in generating national driving regulations, so should a national health organization begin a responsible move in assisting health departments to formulate standard hospital waste disposal methods.

Author: William E. Herdman is a member of the Elevator and Materials Handling Department, Syska & Hennessy, Inc., Consulting Engineers, New York City.
The unmatched Nevamar collection of dimensional finishes.

It finishes all the talk about plastic laminate leadership.

Nevamar originated three-dimensional laminate finishes in 1965 to give you greater design latitude. Then we developed other new dimensions. All of these are Nevamar originals. Yes, some have been copied, but most are still Nevamar exclusives.

What's more, dimensional finishes are only the beginning. Look at the entire Nevamar collection of patterns, colors and standard finishes. Check our close-to-you laminate availability.

You see, Nevamar means total leadership in high-pressure plastic laminates. Send for a sample chain and all the details. They say it better than all the talk.

Nevamar

newest look in Laminates

Enjay Fibers And Laminates Company
Odenton, Maryland 21113
A Division of Enjay Chemical Company

Circle No. 409, on Reader Service Card
There's a lot to see at Kennedy International. And the architects who designed the National Airlines terminal make sure visitors see it all—through suspended clear plate glass.

To support this hanging glass curtain—more glass. Vertical glass mullions that keep the facade of the building light and transparent. Which is in keeping with architects I. M. Pei & Partners concept of the terminal: one of classic simplicity, an antidote to the visual hodge-podge of unrelated structures at the airport.

Suspended glass braced by more glass is a new idea for an airline terminal, where jet blasts and high winds can raise havoc with a design concept.

The architects proved the terminal's "airworthiness" to the New York Port Authority by testing a full-scale mock-up against 140-mph winds. It passed with flying colors.
enjoy maximum visibility.

We supplied the heavy-duty plate glass for this “glass pavilion,” in 1/4", 5/8", 3/4" and 7/8" thicknesses. As well as Tuf-flex® tempered glass for doorways and high traffic areas. The next time you’re at this airport, give National’s Sundrome Terminal a longer look. We think it represents an exciting new design concept for architects—and shows how glass walls work under somewhat adverse environmental conditions. Libbey-Owens-Ford Company, Toledo, Ohio 43695.
Spaulding’s Creative Designer Group

An imaginative ensemble of light that distinctively combines function and form.
Created to complement and enhance the spirit of your design.

- Choose from Group Sculptura — changing dimensions;
- from Group Contempra — tomorrow's past;
- from Group Moderna — the present look of the future;
- from Group Lanterna — ageless shapes;
- from Group Miniatura — new dimensions and from Avenue Decor — the environmental era.

Designer Group . . . exclusively Spaulding.

3731 Dirr St., Cincinnati, Ohio 45223

Circle No. 421, on Reader Service Card
New prefinished Carlstadt® acrylic/wood handrail mouldings retain the beauty of natural hardwoods but have twice the abrasion resistance and several times the indentation resistance of the same hardwoods finished conventionally. Mouldings are made from selected walnut, ash and oak, impregnated with acrylic plastic and hardened by irradiation.

Because the hard, lustrous, plastic penetrates the wood completely, the moulding can be cut, shaped to the desired contour and buffed to match the luster of the prefinished surfaces without further finishing. Thus, fabrication and maintenance are greatly simplified.

This durable wood handrail is available from stock in five distinctive profiles through local fabricators everywhere. Request Sweet’s Architectural or Industrial File.
The glass box. Not a true box, these are open frame glazing panels to be used in open-planning office arrangements. The perimeter is a steel frame with extrusions for glass installations, plexiglass or other materials. (The maker does not provide the glass and recommends the use of safety glass.) Panels come in two heights: 62 and 80 in., two widths: 24 and 48 in. The glazing panels offer sound privacy while permitting visual surveillance of an adjacent area. Herman Miller, Inc. 
Circle 101 on reader service card

Plastic bubbles. Pedestal bases molded of weather-resistant rigid urethane foam support globes of translucent white polyethylene. Bubbles come in 36-in. and 54-in. heights, suitable for indoor or outdoor use. Egg cup chair also available. Foam by Uniroyal; lamps by Vaungarde, Inc.
Circle 102 on reader service card

Rocking chairs. Designed by Paris architect and sculptor Marc Held, these chairs in fiberglass reinforced plastic rock and pivot without counterbalance or mechanical devices. Reportedly, the chair is comfortable as well as functional. Knoll International.
Circle 103 on reader service card

Fan-case lighting. Recessed luminaire for commercial applications combines an Alzak reflector with phospher-coated HID light sources. Described as a low maintenance lighting system, the plug-in ballasts cuts installation time; specular reflector controls brightness by putting light where it is needed. Adjustable socket allows beam spread variations to tailor lighting to fit needs. General Electric Co.
Circle 104 on reader service card

Transit shelters. This company built the 50-ft-long prefab train station at Transpo '72, and their literature offers its description as well as other bus and train shelters. The structures are fabricated with special aluminum extrusions and Plexiglass or Lexan glazing and Plexiglass skylight dome roofs. All are described as vandal-resistant, largely maintenance-free, weatherproof. 27 models available. Columbia Equipment Co.
Circle 105 on reader service card

Logged for play. Constructed of logs, pipes and collars in abstract forms, this equipment is described as a wholly integrated structure for play. Cargo nets, firemen's poles, tire swings, swinging bridges and aerial tramways are also used, with design based on the kinds of play experiences wanted, budget, site and safety considerations. Each Big Toy is individually designed; a scale model is submitted with each proposal. Big Toys.
Circle 106 on reader service card

Plastic planters. Made of high density polyethylene these planters are suitable indoors or out, come in a range of shapes, sizes and colors. Lightweight, they are also described as resistant to temperature extremes, suitable for natural or artificial plantings and chipproof, crackproof, rustproof and dentproof. Custom shapes for special design requirements. Hub Floral Corp.
Circle 107 on reader service card

[continued on page 122]
The Silvery Spectacular

Silver Slate is a striking new dimensional laminate that can turn any surface into a shimmering swirl of color and motion. Its chrome-like brilliance and bold, deeply embossed texture bring it alive with highlights and shadows.

And the real beauty is that when you specify Silver Slate, you’re selecting an exclusive FORMICA® brand laminate that stays bright and new looking for years. Designed for any vertical or light horizontal application, the durable surface resists scuffs, dents and scratches.

Silver Slate is one of eleven exciting new colors and patterns that make this a vintage year. Deeply textured dimensionals, fabulous Quatramatic woodgrains and subtle patterns. They’re all part of the biggest laminate line available. See them all in Sweet’s Architectural File 6.14/Fo. Contact your Formica representative or write Dept. PA-11
Door pulls. Designed in geometric forms, there are 40 door-pulls available. Metals include bronze, nickel, silver and aluminum in varied finishes; wood pulls come in oiled Brazilian rosewood, walnut or teak. Sizes range from 2½-in. diameter to 11" x 34". Forms & Surfaces. Circle 108 on reader service card

Patterned and tinted glass. Suggested for use as partitions, door panels and windows, this patterned glass is now available in a variety of tints. Fade-resistant, the new tints allow special light and color effects. Pilkington Brothers Ltd. Circle 109 on reader service card

Street furniture. Designed in concrete, but light enough to be repositioned as requirements change, the concrete bases of this furniture integrate with contemporary concrete architecture. Can be used in extreme climates, both tropical and arctic, since rain, cold or heat are said to have little effect. Suggested for outdoor and indoor street use and in malls, gardens, parks, airports, terminals. Muller & Stewart Limited. Circle 110 on reader service card

Wood burning. Prefabricated wood-burning fireplace is designed for installation without masonry foundation, framing, finishing or remodeling. Triple wall construction insulates the unit, allowing it to be placed directly against existing walls and on any floor material. Included is a large decorative metal hood to ceiling height of 7 to 8 ft, a raised hearth and firebox. Venting is by standard 9 in. all metal prefabricated chimney components through a minimum opening in ceiling and roof. The Majestic Co. Circle 111 on reader service card

Vinyl wallcovering. Koroseal vinyl wallcoverings include such patterns as Planks, designed to offer the rustic look of cedar panels; Adobe, with a sculptured stucco effect; Atwood, a corklike design in a montage of squares; and Galaxy, a swirling design of color on color. All are fire-rated, and are resistant to stains and abrasions. B.F. Goodrich Co. Circle 112 on reader service card

Mirror light. PyraMirror features inverted mirror-bright stainless steel pyramids in 18 or 24 in. modules—highlighted by exposed incandescent lamp filaments which reflect against the pyramids' surfaces. Integrated Ceilings, Inc. Circle 113 on reader service card

Free-floating desk. From a collection designed by Stan Hutchinson of Selje, Bond & Partners, desk comes in walnut or oak with vinyl or plastic laminate tops. Credenzas, seating, lounge chairs and sofas also available. Benedetti Corp. Circle 114 on reader service card

Man-made stone panels. A mosaic texture of stone blocks in sheet form, these panels are suitable for exterior and interior walls. A mixture of synthetic calcium aluminum silica binder and finely dispersed mineral fibers, pigments and fillers, its makers report that it cannot burn, is weather-resistant, and has the lasting qualities of natural stone without its imperfections. Panels are 4'x8' and weigh two-thirds as much as natural stone. In brown, white and gray. Johns-Manville. Circle 115 on reader service card
Polymarble passed the school board's exam.

The requirements were very demanding. "Give us durability, lightweight, attractive design, and accent color at a cost comparable to ordinary cast iron fountains."

Haws had the answer with polymarble. Offering color at no extra cost. Color that won't chalk, fade or yellow. Color that runs through the entire material thickness.

The enduring quality of polymarble helped win final approval. Today many polymarble models are excelling in practical application.

For further details on highly rated Model 1070, in a choice of five colors or white, write Haws Drinking Faucet Co., 1441 Fourth St., Berkeley, California 94710.
Free booklet shows how architects are changing the face of low-rise buildings, successfully.

The cold, sterile look in non-residential buildings is out! The new look—the successful look—is Western Wood. Architects across the country are achieving new, aesthetically pleasing effects with Western Wood. Because Western Wood allows unique design and structural flexibility. It ages beautifully. And Western Wood buildings are compatible with any environment and commercial situation.

Our 8-page, 4-color booklet illustrates some of the best examples of the new look. Find out how other architects are successfully changing the face of low-rise non-residential buildings. Send the coupon for your free copy today!

Name
Title
Firm
Address
City	State	Zip

Western Wood Products Association
Dept. PA11-72, Yeon Building, Portland, Oregon 97204
One of a series presented by members of the American Wood Council.
Hungry Tiger Restaurant, designed by Robert L. Barnett, A.I.A.; South Coast Village, designed by Bodrell Joerdan Smith, A.I.A., & Associates, Santa Ana, Calif.
Products continued from page 122

Carpet convention. "Convention" is the name given this carpet made of 100 percent Antron Du Pont nylon fiber. With a tight tufted loop pile construction, it is said to have improved soil-hiding characteristics, can be used for conventional installation or direct glue-down. Antistatic control by Brunson is available on foam or jute back. Comes in 11 colors; 12 in. width. Patcraft Mills. Circle 116 on reader service card

Lettering kit. A pressure-sensitive lettering kit that is designed so that letters can be quickly applied and removed, permitting experimental layouts to be changed and shifted until a final design is selected. The sharp, precision die-cut edges and solid opacity of the characters make them useful for photography, and they can be reused after being photographed. Transfertite Font System. Circle 117 on reader service card

Insulating glass. The extra insulation of inert gas is available in Thermopane insulating units. The use of inert gas instead of dry air in a 3/16-in. air space is described as increasing the efficiency of the unit to that of a 3/8-in. air space. The glass is said to create more comfortable temperatures and increased humidities without increasing fogging or condensation on the room side surface of the glass; also helps to reduce heat loss. Libbey-Owens-Ford Co. Circle 118 on reader service card

Literature

Ideas for swimming pools. Color brochure illustrates design applications of ceramic materials for institutional pools. Photographs of more than 20 pool designs include open air, indoor recreational and therapeutic types with a wide variety of ceramic facings, edgings and gratings. Mechanical drawings of alternative pool edging and overflow systems are given. Buchtal Ceramic Works, Amsterdam Corp. Circle 119 on reader service card

Planning school space. Brochure details use of Hufcor partitions to help in efficient use of space in school. Sketches illustrate the portable partition, which locks into place between floor and ceiling; the semi-portable, which uses a ceiling channel; Tackwall, a low-cost paneling to be applied to permanent walls as a display surface; sight divider panels, used to create individual work centers. All panels offer full tack display surfaces, wide color choice, interchangeable clip-on accessories such as chalkboards, shelves, desks. Hough Manufacturing Corp. Circle 120 on reader service card

Noise control. Noise and noise control are examined scientifically in this 26-page booklet, which also describes the qualities of Antiphon, a sound-damped sheet metal. Sound levels are defined and analyzed; charts and graphs present varied aspects of noise identification, measurement and control. Scason, Inc. Circle 121 on reader service card

Windows. Booklet describes rolling windows for application in high or low rise apartment buildings, commercial and institutional buildings. Pre-engineered, they are designed to satisfy varied installation conditions without incurring excessive window engineering costs. Can be used as window wall units incorporating fixed glass and/or panels. Sash operates on inside track which has nylon rollers; latch is adjustable vertically to any desired position. Booklet on aluminum industrial windows that need no painting also available. Lupton Manufacturing Co. Circle 122 on reader service card

Electrical distribution system. Feed-way is a high capacity system that supplies multi-services from a single access hatch. Made up basically of headers and distribution cells, the single hatch reduces visible floor openings. Designed for high performance electrification in slabs on steel or concrete frame, large capacity headers bring service from cabinets and closets to modern in-floor electrification systems. Distribution cells are available to carry power and telephone service throughout the floor area. Granco Steel Products Co. Circle 123 on reader service card

Abrasive vinyl flooring. For commercial and industrial installations, Altro flooring combines hard aluminum oxide abrasive and resilient chemical-proof vinyl. Defined as tough, hard and resistant to abrasion, abrasive particles carry the floor load as the vinyl recedes under load. Thruway Building Service, Inc. Circle 124 on reader service card

Mill and products directory. Compiled by the 12-state western lumber industry, this 44-page directory lists member plants with their lumber products, capacities and specifications, species processed, shipping services and addresses. (Listed mills account for about 1/3 of the U.S. softwood lumber output.) The manual also lists WWPA's wholesaler associates and firms belonging to Western Red Cedar Lumber and Fir and Hemlock Door Associations. Western Wood Products Association. Circle 125 on reader service card

Office planning kit. Basic components in the kit include desks, swivel arm, posture and straight back chairs, legal and letter size files, stationery cabinets, telephones, coat trees and even the office drinking fountain—all accurately scaled 1/4 in. to 1 ft. Office machines and other equipment may be ordered to augment the kit. Brochure describes computer planning models too. Visual Industrial Products, Inc. Circle 126 on reader service card

Food for thought. Brochure describes advantages of porcelain-on-steel panels for walls of food-processing plants and other areas where food is used or prepared. Panels are vermin- and rodent-proof, impervious to odor and disease-bearing bacteria and are approved by the Department of Agriculture. The crevices and cracks that allow invasion routes for insects are eliminated; paint flaking and plaster chipping cannot occur. Available in 101 standard colors with fadeproof, marproof and scratchproof finish, panels are guaranteed for 50 years or the life of the building. AllianceWall Corp. Circle 127 on reader service card
At first glance, wood blocks don’t look sophisticated. It would be easy to assume that their installation requires a minimum of preplanning, but this is not so in most cases. Your flooring should be engineered to your requirements just as your factory was. Jennison-Wright Kreolite® End Grain Wood Block Floors have many advantages (see panel at left), but to take full advantage of their features, preplanning is most desirable. Our Design Engineers will gladly perform this service at no charge.

The Jennison-Wright Corp., P. O. Box 691, Toledo, Ohio 43694

...you'll find us in Sweet's Catalog and in the Yellow Pages
The Celotex line.
It's an almost never-ending line. Constantly moving. Constantly growing. No wonder. With over 4500 different building products more people are using more building products, from the Celotex line. The one company which can supply most all your needs. And see that you're put on the right track.

THE CELOTEX LINE

- Acoustical Ceiling Systems
- Built-Up Roofing Systems
- Residential Roofing Products
- Hardboard Sidings
- Ceiling Luminaire Systems
- Urethane Foam
- Insulating Board
- Insulating Sheathing
- Gypsum Drywall Products
- Ceiling Tile & Lay-In Panels
- Vinyl Sidings & Shutters
- Asbestos Cement Panels
- Protective Coatings
- & Emulsions
- Waterproofing
- & Dampproofing
- Interior Moldings
- Roof Insulation Boards
- Blanket Insulation
- Residential Carpeting

Celotex understands the man who builds
Dynamic approaches to environmental change


Reviewed by Ray Pierotti, administrative assistant to the executive vice-president of the American Crafts Council; former assistant director of the Museum of Contemporary Crafts.

It is apparent when first reading Arthropods that Jim Burns, author/coordinator, uses a lot of big words. Upon closer examination of the text of this very important book about Art, one is fully aware that Jim Burns not only uses a lot of big words but he also knows what they mean—certainly a rare quality to be found among the current Art critics.

There will certainly be many groups who will denounce the book simply because they are not included in it. Granted, all of the arthropodic groups of the current art scene are not listed; however, Mr. Burns does justice to those he mentions and certainly allows that there are others doing similar things, some better some worse. He presents to the reader a comprehensive view of various facets of an extensive movement. Most museums, art historians and critics continue to ignore the movement's activities. A major reason for not dealing with them is that they cross interdisciplinary lines and have a tendency to frighten and confound reviewers of the "art exhibition," the "ballet critic," the "musical notes by . . ." and "the reviewer of serious theatre." One can only be impressed by Jim Burns's writing. His ability to synthesize all of these disciplines into a very coherent exposé is another rare quality—today's critics often tend to be irrational and incomprehensible.

Mr. Burns, along with the arthropods, takes a swing at the establishment architecture which continues to try to force the visions and fantasies of the masses into its own narrow "Master Builder" syndrome . . . and connects squarely. The book is a bound set of portfolios with a Foreward and a Summary. It is pregnant with information. Here is a group of people beyond all classification; their actual as well as implied effect on our civilization is staggering. In opposition to the master builder, who first must destroy in order to fulfill his own vision, these arthropodical societies would rather build onto or around present structures. This is not to say that they are not willing nor capable of proposing new structures, events and environments to be developed on sites presently void of any man-made structure. Their main theme, or at least this becomes apparent in seeing so [continued on page 134]
was the natural choice in roofing material to top things off in the restoration of the old Cumberland School in downtown Dallas. The building now serves as corporate headquarters for Sedco, Inc., an offshore oil drilling company. Sedco's president, Dallas native William P. Clements Jr., felt that restoration of this venerable landmark would be an outstanding addition to the Dallas skyline. The building has already won two architectural awards; one from the Dallas AIA chapter, the other from the Texas Society of Architects.

The standing seam roof of Titanaloy "A" was selected because it closely simulates the color and ribbed effect of roofs that were common in the Texas Hill Country in the late 19th century.

The dove grey patina color is achieved through an exclusive pre-aging process which assures designers roofing material that will age uniformly without bleeding, streaking or staining adjacent materials.

Titanaloy "A" offers important cost and application economies too, when compared with other less functional roofing materials. Available now in continuous coils up to 36" wide.

Get the full story on maintenance free TITANALOY "A" in SWEET'S Architectural file under 7.2/Mat or let us supply samples and the name of the Matthiessen & Hegeler distributor nearest you. Matthiessen & Hegeler Zinc Company, La Salle, Illinois, 61301; New York Office, 233 Broadway, Rm 4015, Phone 815/223-8600, or 212/267-6542.

Circle No. 368, on Reader Service Card
Briefly, there are four important points to remember about our new 2-part Silicone Sealant 1600.

First. Low cost. 1600 is based on a technological breakthrough that puts it in the 2-part polysulfide price range without sacrificing silicone's traditional advantages in weather, temperature and aging resistance.

Second. High extensibility. 1600 can expand 8 to 10 times its contracted size. Which is at least twice as good as competitive sealants.

Third. Joints won't fail. Even when cut, 1600's knotty tear characteristic turns the tear in the direction of exerted force, which relieves stress at the point of puncture.

Fourth. All-weather application. 1600 flows easily at any temperature. Without sagging. Needs no primer on concrete and several other materials.

For more information and your distributor's name, write Section Q11334, Silicone Products Dept., General Electric Co., Waterford, New York 12188.

New GE Silicone Sealant 1600 outholds and outstretches polysulfide. Yet it's priced almost as low.
THE SUMPTUOUS CLASSIC YOU SETTLE INTO, SWIVEL WITH, COMMAND FROM THE 976 CHAIR. THE UPHOLSTERY IS AVAILABLE IN LEATHER, FABRIC OR VINYL. THE BASE IS FIBERGLASS. CHOOSE FROM A WIDE RANGE OF COLORS. REQUEST FREE CATALOG. TURNER LTD., 305 EAST 63RD STREET, NEW YORK, NEW YORK 10021. TELEPHONE (212) 758-4744. DESIGNED BY GEOFFREY HARCOURT FOR ARTIFORT OF HOLLAND.
many groups pulled together in one setting, is that of helping man perceive his present environment... once he has perceived, he then is capable of effecting meaningful change.

The publication deals with changing man in a changing world. Unlike the current craze for self-flagellating ecological publishing, it is a positive document. The collection of ideas and portfolios represents activities and proposals by one segment of the current artistic community. It is their version or vision of how to cope with those changes and how to influence them.

Arthropods is one of those rare illustrated books on Art and Design that merits being read as well as seen. Even if the reader is familiar with this segment of the artistic world, the Forward deserves reading. It is the clearest statement about a trend that had its beginnings prior to World War II and only emerged from underground in New York City at the Museum of Contemporary Crafts when Haus Rucker Company (one of the groups mentioned) in 1969 had policemen jumping on a giant inflatable sculpture that blocked traffic on 53rd Street.

The book is a presentation of groups (or individuals who are somehow related to a group) who prefer to be known by their "company" name. Their penchant for adopting a fanciful name rivals that of the rock musical groups. If one is compelled to categorize them, they prefer being called artists rather than architects, designers, educators, social psychologists, engineers, biologists, physicists, etc., which they are by formal training. The product resulting from their combined efforts spills outside the traditional boundaries of their academic disciplines.

Like an element in the overall arthropod concept, Jim Burns's observations bring to the group-community activity the role of the literati. Acting as an individual, within a collective effort, he effects change in the perception of the reader and offers his own contribution, thus effecting environmental change.

Documents

[The documents listed below are available from the associations and agencies cited. Request for such documents should be directed accordingly.]


This is a special issue of the Swedish magazine Plan, a periodical for planning rural and urban areas. It is published in conjunction with the United Nations Conference on the Environment which recently took place in Stockholm. Although a number of the articles deal with environmental and planning research in Sweden, several are concerned with the broad fields of urban and energy planning.


Counter-culture enthusiasts and others interested in some interesting dialogue will find this publication, the product of last year's convention of the AASA, worth securing. Professor Serge Chermayeff and Sim Van der Ryn, both of whom attended the congress, are represented; a 16-page supplement entitled "Groundworks" describes the design and performance of an "experiment in minimal shelter."
AURATONE® 5/8" x 24" x 48" Acoustical Ceiling Panels in suspended exposed grid system continuous over partition. Double layer 1½" THERMAFIBER Sound Attenuation Blankets above ceiling extending 4' on both sides of partition.

USG® Metal Stud Partition employs ½" SHEETROCK® FIRECODE® "C" Gypsum Panels; 2½" studs 24" o.c.; single layer panels each side, applied vertically and screw-attached; ½" THERMAFIBER Sound Attenuation Blankets one side; joints finished, perimeter caulked.


THERMAFIBER® Insulation: the 3-in-1 blanket that has no "or equal" for systems performance

These photographs illustrate results of a recent 1-hour furnace fire test witnessed and certified by Wiss, Janney and Elstner, independent consulting engineers. Temperatures were controlled to follow the ASTM E-119 standard time-temperature curve. THERMAFIBER (left) and a glass fiber insulation (right) were tested in two identical partition panels for one hour. The result proved that THERMAFIBER adds an extra margin of fire safety to an assembly.

Before you specify, evaluate THERMAFIBER Products for all types of construction on 3 important counts:

1. SOUND ATTENUATION. THERMAFIBER used as shown here achieved 45 to 48 STC ratings in single layer wall partitions, 45 to 49 STC ratings in ceilings.

2. THERMAL EFFICIENCY. THERMAFIBER Insulation is used by leading curtain wall manufacturers in such buildings as the 109-story Sears Tower in Chicago, Diamond Shamrock in Cleveland, Detroit Edison, and 154 Wisconsin Center, Milwaukee.

3. FIRE RESISTANCE. THERMAFIBER offers a 50% greater safety factor than glass fiber insulation which melts and loses flame resistance at about two-thirds the temperature required for THERMAFIBER. (See recent fire test results at left.) THERMAFIBER Insulation won't burn, disintegrate or support combustion under fire conditions as defined in ASTM E-119. Now THERMAFIBER can be used as safing (fire-stop) in all urban high rise construction markets where fire resistance is critical.

Specify THERMAFIBER Products with all the features you need in commercial as well as residential assemblies. See your U.S.G. representative. Or write to us at 101 S. Wacker Dr., Chicago, Ill. 60606, Dept. PK-112.
What goes on here?

Anchor Clips make bolts obsolete.
Here's why:

Anchor Clips:
1. Eliminate drilling anchor bolt holes.
2. Wrap around any size plate up to 2" x 8".
3. Bend out of the way to make construction easier.
4. Can be used on brick, concrete or masonry walls.

For literature and samples, write:
The Panel-Clip Co.
BOX 423, FARMINGTON, MICHIGAN 48024

"ROLL-SHELF"
has ONE Aisle HERE

That's the nice thing about "ROLL-SHELF". It doesn't eat up space by loading you down with lots of aisles. "ROLL-SHELF" comes with only one very versatile aisle. And you can put it where you want it... with just a slight push. "ROLL-SHELF" is generous, too. Gives you over 40% more storage capacity in the same floor space than fixed, multi-aisle shelving gives you.

Or look at it another way. "ROLL-SHELF" reduces your storage floor space by more than 40%, turning storage area into productive area.

Either way, "ROLL-SHELF" puts dollars in your pocket. And that's another nice thing about "ROLL-SHELF".

Send for Descriptive Literature

Circle No. 374, on Reader Service Card
the first really new Quarry Tile in MMCVII years.

Strata Tile is a brand new look, a new range of inherent color that goes all the way through the tile, not a surface treatment — an enhancement to all the well-known advantages found only in genuine extruded quarry tile ... quarry tile that resists impact, abrasion ... that is virtually unaffected by moisture, acids, oils, chemicals and traffic ... that is fireproof, fadeproof, dentproof and provides for minimum maintenance. New Strata Tile is a random blending of natural earth colors available in 6"x6"x1/2", 4"x8"x1/2" and nominal 3"x9" "hex" as illustrated. For the full story, ask your ceramic tile contractor or write direct.

MEMBER: TILE COUNCIL OF AMERICA, INC./PRODUCERS COUNCIL
Samples of POLYURETHANE INSULATION

HUNDREDS OF USES

Locks out...
Air Flow • Heat or Cold
Dirt or Dust • Light • Noise
Shock or Vibration

For examination: five representative samples of easy-to-install Foamedge® insulation. Tough, wear-resistant vinyl covering. Soft, resilient polyurethane foam core that conforms to any shape to insure a positive seal. Wide range of sizes, foam densities, and colors.

Send today for your free samples and complete information about Foamedge vinyl covered polyurethane insulation.

Structures Unlimited, Inc.
37 Union St., Manchester, New Hampshire 03103 Tel. 603-627-7889

The hinge that hides

NOW YOU SEE IT
NOW YOU DON'T

The Soss Invisibles—for a custom look for any room! These amazing hinges hide when closed, eliminating unsightly gaps, hinges, and door jambs. They're the perfect hidden touch for doors, doorwalls, storage cabinets, built-in bars, stereos, and TV's. Specify the Soss Invisibles wherever looks matter. See listing in Sweet's or write for catalog: Soss Manufacturing Co., Division of SOS Consolidated, Inc., P.O. Box 8200, Detroit, Mich. 48213.

When the project calls for a year-round pool enclosure...

Here's one that is bright, light, cheerful — and easy to heat.
Design your permanent Pool Enclosure with this exclusive modular system.

Construction is the patented Kaiwall sandwich panels which consist of two translucent fiberglass faces, overall thickness of 2½", structural supports are aluminum box beams.

Advantages:
- insulated panels equal 16" thick concrete
- lower initial construction costs
- strong; yet lightweight
- glare-free, diffused light
- wide range of design possibilities
- optional motorized roof
- self-cleaning, virtually no maintenance

Individually engineered, factory prefabricated and installed ... based on 30 years engineering experience.

Write or phone Robert Keller, Jr., General Manager for full color brochure.

Circle No. 384, on Reader Service Card

Circle No. 388, on Reader Service Card
Bally belongs.

In mass feeding for patients on health care fare
Bally Prefabs set the standard for Walk-In Refrigeration

Bally Walk-In Coolers and Freezers belong everywhere mass feeding takes place. They can be assembled in any size for indoor or outdoor use from standard panels insulated with four inches of foamed-in-place urethane, UL 25 low flame spread rated. Choice of stainless steel, aluminum or galvanized. Easy to enlarge ... easy to relocate. Refrigeration system from 35°F. cooling to minus 40°F. freezing. Subject to fast depreciation and investment tax credit. (Ask your accountant.) Write for 28-page book and urethane sample. Bally Case and Cooler, Inc., Bally, Pennsylvania 19503.

© 1972, ALL RIGHTS RESERVED.

Circle No. 337, on Reader Service Card
Superior metal trim

Now in stainless steel!
Superior ventilation expansion screed in all shapes is now available in stainless steel as well as the standard galvanized steel. Special trim available.
Now you can have the lasting qualities of stainless steel at an economical cost. For information, write Electrical Division, H. K. Porter Company, Inc., Porter Building, Pittsburgh, Pa.

BETTER PRODUCTS BY DESIGN

EXCLUSIVE: Lock-Deck consists of 3 or more kiln-dried boards, offset to form tongue on one side and end, groove on the other, laminated with weatherproof glue. We invented it.

STRENGTH: Lock-Deck offers a range of E factors giving superior load-carrying values in spans to 20' or more in 5" thicknesses.

STABILITY: Each board in Lock-Deck is kiln-dried to 10-12% m.c. before lamination. This assures greater stability under all conditions.

BEAUTY: One or both faces of Lock-Deck can be any desired grade, in a wide choice of species. Solid decking is limited in both grades and species.

ECONOMY: In-place, finished cost of Lock-Deck is often less than solid decking due to speed of erection, factory-finishing, absence of waste, better coverage.

MORE COVERAGE: Offset tongue and groove on Lock-Deck gives more coverage per bd. ft. than machined solid decking.

LESS LABOR: Lock-Deck installs quicker, using ordinary nails, spikes, special fasteners or splices.

LESS WASTE: Offset end match, absence of twisting and few unusable shorts keeps waste well below that of solid decking.

VERSATILITY: Lock-Deck forms excellent load bearing or curtain walls as well as floors and roofs.

DURABILITY: Unlike solid decking, knots or checks can go through only one ply in Lock-Deck. Weather-proof glue and exclusive process make bond stronger than the wood itself.

Progressive Architecture

Notices

Appointments
George Erdstein has been appointed to the board of directors of Leonard G. Siegal Associates, Inc., AIA, Detroit.
R. Kring Herbert and William F. Shinnick have joined Ostergaard Associates, New Jersey.
Richard S. Heitz has been appointed an associate of H. A. Williams & Associates, Inc., Columbus, Ohio.
Ross Olding has been appointed product research and applications engineer for Albert Kahn Associates, Inc., Detroit.
Gerald A. Crawford and Dennis F. Walsh have been elected vice presidents of Eilerbe, Minneapolis and St. Paul, Minn.
Stone, Marraccini & Patterson, San Francisco, has announced the following appointments: Wilbur H. Tusler, Jr., AIA, director; Robert J. Barney, PE, and Spencer Jue, AIA, associate directors; W. Richard Armor, AIA, James A. S. Borthwick, ARIBA, and William F. Wedemeyer, associates.
F. William Heilman, Jr. has been elected to the board of directors of STV, Inc., Pittsburg, Pa.
Leonard Harding has been named general manager of Associated Space Design, Inc., affiliate of Atlanta architects Finch Alexander Barnes Rothschild & Paschal, Inc.
Roger Keating has been named associate planner for Bernard Soep Associates, Inc., Boston. Denis F. Curran has joined the firm.
Alan Cooper has joined the staff of Graham & Smith, Nashville, Tenn.
John Gaccione has been named director of graphics for the Rex Allen Partnership, San Francisco.
John L. Schmidt, AIA, has been appointed vice president of Environmental Systems International, Inc., Los Angeles.
B. Robert Swartburg has joined Grove-
We invented Lock-Deck®
the unique laminated building material

Lock-Deck is wood made better than nature could. Laminated of three or more kiln-dried boards under great heat and pressure, Potlatch Lock-Deck is available in four thicknesses from 3" to 5", nominal 6" and 8" width (10" and 12" in some species on inquiry) and lengths from 6' to 16', with 40' and longer available on special inquiry. Faces, in a choice of grades and species, can be smooth-surfaced, saw-textured or wire-brushed and factory-finished in Colorific acrylic penetrating stains.

This opens a whole new world of architecture and construction. Lock-Deck forms both structural and finished wall and roof surfaces in one imaginative application. It forms superior wood walls, finished on both sides. It forms both structural roof or floor and finished ceiling. It combines the unique warmth and beauty of wood with the superior strength and span capabilities of modern laminated members, and makes possible structural and aesthetic concepts not previously possible. Write for more information. Potlatch Forests, Inc., P.O. Box 3591, San Francisco 94119.
"The headquarters of the New York State Bar Association," as a most distinguished critic recently wrote, "is an object lesson in how to build intelligently, sensitively and well... In a happy alliance, the lawyers and the architects, James Stewart Polshek and Associates, have preserved a row of handsome 19th-century town houses and incorporated them, not as a false front, but as a working part of a completely and strikingly handsome contemporary complex built behind them. The words that come to mind are skill, imagination and taste, qualities not encountered too often on the urban scene."

We at Follansbee Steel are particularly gratified that Mr. Polshek specified TCS (Terne-Coated Stainless Steel) for all pitched-roof areas on this outstanding building in which originality of design and integrity of site are so felicitously coupled.

FOLLANSBEE STEEL CORPORATION
Follansbee, West Virginia
BSN likes glass, architecture and architects who have imagination.

This is why we have been making glass for centuries at our factory the "Hall à Pots", all kinds of glass. Just ask us, and we can make a glass as thick as you want, the exact colour you need, the ideal form you have in mind.

It doesn't make a difference where you are either: for example we came to Sydney with our technicians and engineers to help realize the enormous project of the famous Sydney Opera House. BSN can match the wildest architectural dream. Tell us yours.

BSN Export, 17 bis, bd Haussmann, 75-Paris 9e.
Phone: 770-93-79.
Let the Hall Mack name on your specs speak for your judgment and good taste. The fractionally higher cost is reflected in finer workmanship and design - and in a comfortable lack of customer complaints. Hall Mack, the quality-word in bathroom fixtures, offers a broad line that includes a unique group of specialty items: recessed bath scales, storage and service units in a rich variety of metals and finishes. See them all! Send for our new full-color catalog. Write Hall Mack, P.O. Box 328, Harrodsburg, Kentucky 40330.

Haack Associates, Fort Lauderdale, Fla., as consulting architect.

The firm of James D. Lothrop, White Plains, N.Y., is now Lothrop Associates with the appointment of Frank Raimondi as partner.

Ann Brandt and James A. Ferguson II have joined Schweizer Associates Architects, Inc. of the Environmental Design Group, Winter Park, Fla.

Gary A. Bowden and Thomas R. Witt have been appointed associates of RTKL, Baltimore, Md. The following have been named associate vice presidents: Sandor Csojobaj; Edward Haladay; Robert Kolker; Vernon Moorer; Joseph Scalabrin.

R. Lawrence Dunlap, RA, has been made an associate partner, and Harry W. Wright an associate of The Cannon Partnership, Niagara Falls and Buffalo, N.Y.

James E. Sulewsky has been named manager, architectural acoustics, and Frederick M. Kessler, manager, engineering acoustics of Lewis S. Goodfriend & Associates, Morristown, N.J.

D. L. Stafford has been appointed vice president of Arnold Thompson Associates, Inc., White Plains, N.Y.

Derr, Stueber & Cornachione, Kent and Akron, Ohio, is now Derr, Stueber, Cornachione & Brown with the appointment of W. Prentiss Brown as partner.

Vincent Sena has been appointed project manager, and Robert Zaccone assistant chief designer of the J.R. Stevenson Corp., Hempstead, N.Y.

Richard P. Browne Associates has opened a major regional office in Peachtree City, Ga.

Perkins & Will has acquired SPA/REDCO, Inc., Chicago.

Fraioli-Blum-Yesselman of New England, Hartford, Conn., has been formed to continue the former practice of Fraioli-Blum-Yesselman of Connecticut.


Richard P. Browne Associates has opened a major regional office in Peachtree City, Ga.

Perkins & Will has acquired SPA/REDCO, Inc., Chicago.

Fraioli-Blum-Yesselman of New England, Hartford, Conn., has been formed to continue the former practice of Fraioli-Blum-Yesselman of Connecticut.


New addresses
Llewelyn-Davies Associates, 410 E. 62 St., New York City.


Everybody takes copper plumbing for granted. Clog-free, corrosion resistant and non-contaminating, copper quietly does its job for the life of the building, needing less maintenance than other materials. It's the dependable one.

Contributing to the long range economy of copper is its fast, easy installation. Copper requires no flammable joining compounds, needs no extra supporting hardware. Copper doesn't sag with heat or get brittle with cold. What's more, it can be altered easily and economically if a system change is ever needed.

Most important, copper does not create a potential fire hazard. Copper will not burn and decompose to toxic gases or conduct fire through floors, walls and ceilings.

So, keep taking copper plumbing for granted. Copper is a quality product, backed by years of proven service and code acceptance everywhere. It may cost a little more to begin with, but first cost is the least cost when it's the last cost.

For a booklet listing 44 solid reasons why copper is your best buy, write: Copper Development Association Inc. 405 Lexington Avenue, New York, N.Y. 10017.
New Facad is so sculptured, it's almost sculpture.

There's a new way to incorporate sculpture and textural relief in building design. It can be done with Facad.

This sculptured facing of easy-to-install, thin, molded, reinforced cement panels can be used as a total wall element; as spandrel panels, fascias, balcony panels or soffits.

Sturdy, but lightweight (2 pounds/square foot), Facad is easy to handle. It comes in sizes up to 4' x 10'. No special skills or extra structures are required. Installation is within the competence of carpenters or glazers.

Facad is also very durable. And because it is all mineral, it is completely incombustible. Facad comes in a series of standard panel surfaces, one of which is shown below. It can also be custom-molded to afford architectural designers a broad choice of texture, color and pattern.

For complete information, call your local U.S. Plywood Branch Office.

U.S. Plywood
A Division of Champion International
777 Third Avenue, New York, N.Y. 10017
Efficient building idea: Recent report tells how to solve the acoustical problems of open offices.

Good news for architects who like the design freedom of open offices—but don’t like the acoustics. Tests by Geiger & Hamme, an independent acoustical testing agency, show you can get excellent open office acoustics by using these three things (with the help of an acoustical consultant):

1) An acoustically non-reflective ceiling—so the sound won’t bounce off to other areas. (Of all the ceilings tested—including expensive coffered and baffled systems—the best, they say, is Owens-Corning’s Nubby Fiberglas Ceiling Board in a standard grid suspension system.)

2) Sound-controlling screens—to stop the sound from going directly from one work area to another. (Either directly or by reflection.)

3) A masking sound system—technically designed to fill the sound voids without increasing the overall ambient noise level. This makes it possible to hold personal conversations in a normal voice—without being overheard.

If you’d like the whole story, send for our free design guide, “Achieving Acoustical Privacy in the Open Office.” Write to Mr. P. A. Meeks, Owens-Corning Fiberglas Corporation, Fiberglas Tower, Toledo, Ohio 43659.

Owens-Corning is Fiberglas

* T.M. Reg. O.-C.F.

Circle No. 395, on Reader Service Card

Circle No. 372, on Reader Service Card
New information on plywood building systems and design.

For free books, use Reader Service Card.

Circle Reader Service No. 320

Textured Plywood Portfolio. We've added to the APA textured plywood idea collection. Full-color photos show varieties, patterns, species. Paneling and siding suggestions for office buildings, apartments and restaurants. Application and finishing suggestions, brand names, list of manufacturers.
Circle Reader Service No. 321

Plywood Coatings Package. All about plywood coatings: durability—weatherlight coatings; uses—exteriors, interiors, roofs, decks; appearances—textured, colorfast surfaces; application—chemically coated and overlaid plywood; and testing.
Circle Reader Service No. 322

Circle Reader Service No. 323

Plywood Construction Package. Plywood Construction Systems for commercial and industrial buildings, including roofs, walls, floors and load span data. New Plywood For Concrete Forming book, including: application examples, special textures, and engineering data.
Circle Reader Service No. 324

Circle Reader Service No. 325

For free books, use Reader Service Card. For more information about plywood and other plywood publications, write American Plywood Association, Dept. PA-112, 1119 A Street, Tacoma, Washington 98401. Or get in touch with one of the APA field service representatives. Offices: Atlanta, Chicago, Dallas, Los Angeles, San Francisco, Tacoma, Washington, D.C.
Beautiful Washfountains that hold up beautifully. Bradglas® Washfountains...colorful like nature. Brick red. Salmon. Surf green. And eight others. With clean, contemporary lines to fit today's commercial, industrial and school buildings. Durable like steel. Smooth, non-porous. Resistant to abrasion, acid and corrosion. Won't swell, shrink or warp. Won't chip, peel or flake. Vandal-proof and fire-safe, too. Reinforced polyester is tough...yet light for easy installation...80% lighter than precast stone. Bradglas Washfountains cut installation costs because they serve up to 8 people with one set of connections. Save on wall and floor space. Can be installed anywhere...washrooms, halls, alcoves. More sanitary than lavatories because they're foot-operated. In 54" and 36" circular and semi-circular models...11 decorator colors. See your Bradley washroom systems specialist. And write for latest literature. Or call (414) 251-6000. Telex 2-6751. Bradley Washfountain Co., 9141 Fountain Boulevard, Menomonee Falls, Wis. 53051.
Situations open

Architect: Architect for establishment of architectural design services and partnership in existing land planning/landscape architectural office in rapidly growing resort area. Great opportunity, right person. Applicant must have Maryland registration or equal. Send inquiries and confidential resume to: Repsher Associates—P.O. Box 388—Ocean City, Maryland 21842.

Architects: Opportunities for architectural draftsmen and project architects interested in careers in an established, design conscious architectural firm. Send resume and salary requirements to: The Williams and Tazewell Partnership, 710 West 21st Street, Norfolk, Virginia 23517.

Architects: Outstanding opportunity for the project architects who have 5 years plus experience with medical projects. This experience should include all phases of project programming, design development, construction document preparation and substantial client contact. You will be exposed to a variety of projects in an established firm with a team of highly capable professionals. Your benefit program will include: life, hospitalization and disability insurances, profit sharing, retirement program, regular salary reviews, merit bonuses and a four day work week. Please send a resume of your professional experience to: Cliff Schroeder, Ellerbe, Architects/Engineers/Planners, 333 Sibley Street, St. Paul, Minn. 55101, An Equal Opportunity Employer.

Architectural designer: Immediate opening for an aggressive young registered architect with leadership capability. You will be responsible for scheduling projects, setting design standards and supervision of staff. We are a young design group with responsibility for the total environment of two large county health facilities. Send resume and salary requirements to: Mrs. Brown, Personnel Department, 1900 West Polk Street, Chicago, Illinois 60612.

Architectural designer/planner: Position in an interdisciplinary firm (A.E.P.) architect owned condominium developments. Continuing growth in commercial, retail, health facility, educational, governmental and housing projects. Minimum of 3 years experience in design, design development and working drawing coordination. Planning or interior design background also desirable. Must be capable of working as an individual with client contact as well as a team member. Submit resume and include major projects, responsibilities, awards and photographs to: Leo Lauterbach, 2600 Winters Bank Bldg., Dayton, Ohio 45402.

Architectural designers, job captains, architects: Growing Charleston, South Carolina, A-E-P firm seeks experienced architectural designers, job captains and architects. General practice includes wide variety of commissions. Good working conditions in America's most historic and liveable small city. Send complete resume in confidence to: General Manager, Lucas, Stubbs and Long Associates Ltd., 255 East Bay Street, 29401.

Manufacturers reps: Manufacturers reps wanted by long established aluminum metal pan acoustical ceiling tile manufacturer with new and proven items to merchandise. Looking for agents who call on architects for our “Spec” items; and general contractors, acoustical contractors, lumber yards, building supply houses, etc. for our “Direct Sale” items. Many territories open. Commission basis. Flexible agency policy. No stock to carry. Write to Simplex Ceiling Corp., 663 Fifth Avenue, New York, N.Y. 10022.

Project architect: Expanding architectural/engineering firm has opening for talented [continued on page 152]
Some materials stand up to fire better than they stand up to water.

In a fire, flame isn't always your worst enemy. Often the water used to put out the blaze damages the building worse than the fire itself.

Many builders overlook this. They choose their materials only on the basis of fire codes. But fire codes have no requirements for water damage. So there's no guarantee that the building will still be usable after being ravaged by fire and then flooded with water.

Under conditions like this, only one building material truly survives. Masonry.

First, it has the greatest dollar for dollar resistance to fire. No matter how hot it gets, concrete or clay masonry won't melt or burn. (That means it's safer for stairwells and elevator shafts.) And in the case of a real blaze, fire doesn't spread as easily with masonry. It can be contained in a small area.

But masonry is also resistant to water. A popular building material like gypsum dry wall can warp when exposed to water. Masonry will not. Dry wall can disintegrate when exposed to water. Masonry will not. Dry wall can peel from water. Masonry will not.

There's no simpler way to put it. If you want to pass fire codes, use what you want. But if you want to protect your investment, use concrete or clay masonry. It protects your building from going up in flames. Or down the drain.

The International Masonry Institute
Suite 1001, 823 15th Street, N.W.
Washington, D.C. 20005. 202-783-3908
architects as project architects and project designers. Located in Western New York and maintaining a regional practice through the states of New York, Pennsylvania, Vermont, New Hampshire and Connecticut, this firm can provide exciting challenges to Architects oriented to the design of medical, education, commercial and industrial facilities. License and/or degree helpful, but not mandatory. Please send confidential resume, including salary requirements, to: Mr. Franklin D. Guidone, AIA, Director of Design, The Cannon Partnership, 2170 Whitehaven Road, Grand Island, New York 14072.

Project architect, job captain, architectural draftsman, specification writer: The Law Company, a nationally known design build organization specializing in shopping centers, office buildings, distribution centers, and other commercial projects, is seeking highly qualified, dynamic individuals for the following: Project Architect—Four years of architectural experience. Job Captain—2 to 3 years of architectural experience. Architectural Draftsman—1 year of architectural experience preferred. Specification Writer—Experienced spec writer preferred but will consider applicant with 5 years of architectural experience. Preference will be given to degreed candidates. The Law Company is a fast growing organization with projects in all parts of the country. Send resume and salary requirements to: Ron Hilfinger, The Law Company, P.O. Box 1139, Wichita, Kansas 67201.

Project architects/architectural draftsmen: J. R. Nelson and Associates Inc. (Consulting Engineers) We need project architects, Jr. and Sr. architectural draftsmen and individuals with commercial building design experience. Top salary, paid vacations and holidays plus the beautiful rockies and 255 sunny days a year. Rush resume to 7625 W. 5th Ave., Suite 204 E., Lakewood, Colorado 80226.

Situations wanted

Architect: Malaysian-Chinese, single, graduate of Sydney University of Australia, Associate of Royal Australian Institute of Architects, 4 years experience with leading architect's offices. Seeks employment with architectural firm and in any state of America, to obtain immigrant visa. Resume on request. Reply to: Kim P. Lee, C-/Joseland & Gilling, Architects, 367 Kent Street, Sydney 2000, New South Wales, Australia.

Architect: U. S. citizen, NCARB, AIA, 18 years experience, all phases of architectural practice. Graduate several South American universities. Interested in working with architectural projects, within Spanish speaking countries; emphasis - bi-lingual, design, production, management, family willing to travel. Reply to Box #1361-440, Progressive Architecture.

Contract interior designer: Lady, age 36, 12 years experience interior design services to architects, designers, dealers and institutions. B.S. Design, the University of Cincinnati. Graduate study, the Sorbonne. 5 years own design studio; 3 years staff employment architects. $12,000-$15,000. Reply to Box #1361-442, Progressive Architecture.

Mechanical engineer: P.E., HVAC and plumbing specialty. Will accept short term or long term contract. Geographical area no barrier. Reply to Box #8246, Detroit, Michigan 48213.

Architectural services

Associateship: Associateship available with design-oriented, publicly-involved 9 man office in Washington, D. C. Send resume and expectations and we will reciprocate. Reply to Box #1361-443, Progressive Architecture.


(continued on page 158)
In Oronoque Village, a condominium community in Stratford, Connecticut that will stretch for over 300 acres, GAF Timberline® Asphalt Roof Shingles is the only roofing being used.

It's not hard to see why. Timberline combines the rugged good looks of wood shake shingles with the safety and maintenance-free convenience of modern asphalt shingles. That's a tall order for one roofing.

Moreover it won't rot, crack, warp or split. It's fire resistant. And it has a special self-sealing adhesive to keep it down in high winds.

Timberline's woodlike texture comes in 6 authentic shades. All with that rich, varied shadowing that really makes a home appealing to a potential buyer.

There was one final reason why Timberline was chosen for Oronoque Village. GAF. The company that warrants this great roofing for 25 years against manufacturing defects.

GAF Timberline. The reliable roofing. Oronoque Village wouldn't put 1200 families under it if it weren't. For further details, call your GAF Building Products distributor, or write:

GAF Corporation
Building Products Division Dept. PA-112
140 West 51 Street
New York, New York 10020

Circle No. 353, on Reader Service Card
Some sash designs need to put the pressure on glazing tape.

Stick curtainwall systems and pocket-glazed windows provide structural economies in many applications. But they also present you with some formidable glazing problems.

For one thing, the pocket channel allows the glazer very limited working space. This means he must either, 1) position the glass first and then apply a gunnable sealant from the outside — necessitating costly swing stages or, 2) do the glazing from the inside by using a tape sealant and then insert the glass, applying a positive pressure by means of wedges or gaskets.

This tape sealant must be 25%-50% compressible, yet must not squeeze out of the channel despite the pressure.

Another problem — illustrated on the opposite page — is the offset condition of channels in stick system glazing. As you can see, there is a \( \frac{3}{8} \)-inch differential between the vertical and horizontal members in the illustration. When glass is put in under pressure, the two tapes are compressed to provide a uniform plane, in order to prevent leaks and distribute stress evenly.
Besides the design problems just mentioned, you and your glazing contractor are faced with increasingly critical glazing conditions as buildings go higher and higher. For example, larger lights of glass, greater pressure differentials and higher windloads all put a bigger burden on glazing techniques. Omitted, misplaced or incorrectly chosen shims compound these problems and raise the possibility of leaks and glass breakage.

All these conditions call for something special in the way of glazing tape. And Tremco has it. It’s called POLYshim. And it’s designed for use wherever design conditions call for 25% to 50% compression. It contains a continuous, integral reinforced shim that transfers windload from glass to sash evenly around the entire perimeter. This eliminates pressure points or any danger that the sealant will pump out of the sash.

POLYshim can be installed from the inside quickly, easily and accurately. It comes on a specially-treated instant release paper backing that helps avoid mess, waste and tape distortion. POLYshim is self-adhering and forms a tight seal that effectively prevents water infiltration, resists ultraviolet and withstands temperatures as low as -65°F and as high as 220°F. In addition to practical applications in major buildings around North America, POLYshim has passed independent laboratory tests for dynamic and static water infiltration, buffeting by wind and water, thermal and pressure loading and accelerated aging.

So when the pressure's on glazing tapes, specify POLYshim. And if you have any other caulking, glazing or weatherproofing problems, remember your Tremco man can help.

For over 40 years, our business has been solving these problems and providing top-quality leakproof systems and products, such as our job-proven sealants MONO; DYmeric® and Lasto-Meric®, liquid polymer Tremproof® waterproofing and our new roof edging system, Tremline™.

The Tremco Manufacturing Company, Cleveland, Ohio 44104. Toronto 17, Ontario
Treasure Island, Florida: another builder cuts costs in today's competitive market with Staggered Steel Truss.

Staggered Steel Truss is a new structural design concept for multi-story structures. It's been proven across the country to compete with and often beat other framing systems. And it can compete on a number of counts.

For instance, Green Feathers, Inc., owner and builder of St. James Apartments, Treasure Island, Florida, chose Staggered Truss for construction speed. They wanted faster occupancy for a quicker return on their investment. The main body of the building, which utilizes the Staggered Truss design is a rectangle, 207 ft. x 40 ft. and 7 stories high. It was erected in just 5 working days. (A 68 ft. x 46 ft. wing in the rear of the structure was erected with the conventional braced steel frame method.)

The Staggered Truss design also provided an ideal solution to off-street parking requirements by making possible a column-free 207 ft. x 40 ft. ground level parking area under the building. Additional benefits were realized in a relatively light weight steel frame and less costly foundations.

Essentially, the Staggered Steel Truss system is made up of one-story high trusses that span transversely between exterior steel columns and occur in a staggered pattern from floor to floor. Trusses at a given floor are placed midway between those of the floors below and above. Each floor rests on the top chord of the trusses below and is supported, alternately, from the bottom chord of the adjacent trusses.
Staggered Truss concept was developed for U. S. Steel by the Massachusetts Institute of Technology. The St. James Apartments is just the latest of many buildings around the country to use it effectively—and profitably.

We'll gladly send you a complete structural report (ADUSS 27-5588-01), which describes how Staggered Truss was used on this building. Also a free 26-page booklet on Staggered Truss, that shows a design for a typical 20-story apartment building in full detail. Write U. S. Steel, P. O. Box 86, Pittsburgh, Pa. 15230.

Construction Details
Description: A 7-story apartment building with penthouse atop. The main unit is a rectangle 207 ft. x 40 ft., to which a short wing 68 ft. x 46 ft. is appended. The latter is conventionally steel framed and cross-braced. 53 apartments, of which 8 are one-bedroom, 40 two-bedroom, and 5 three-bedroom. The entire main unit is set on pedestals, providing a 207 ft. x 40 ft. column-free parking space on the ground floor. Design live loads: 40# psf in apartments/100# psf in corridors/20# psf on roof/Wind loading as per code.

Applicable Code: Southern Standard Building Code, Coastal Region.

Structural Steel: Total steel frame weight, 206 tons. Weight of other structural steel, 121 tons. Field connections are high-strength bolts.

Floor System: 16" joists on 2'6" centers. 7/8" formed metal deck with 2½" poured concrete.

Roof Construction: 28 gage galvanized steel formed decking; 3" lightweight concrete slab; built-up roofing with tars and gravel.

Foundations: augered caissons.


Exterior Walls: 8" concrete block, sprayed with stucco.

Elevators: 1 bank, 2 elevators.

Fire Resistance: 1 hour for floor/ceiling. 2 hours for columns, spandrels & trusses (dry-wall).

Steel Erection Time: For the main unit of the building, 5 working days. Total steel erection time: 12 working days.

Gross Area: 90,098

Floor-to-Floor Height: 9'8"

Floor-to-Ceiling Height: 8' (7' in bathrooms and corridors).

Owner: Green Feathers, Inc., Treasure Island, Florida

Architects: Edward W. Hanson, Architect, Inc., Clearwater, Florida

Structural Engineers: O. E. Olsen & Associates, St. Petersburg, Florida

General Contractor: Green Feathers, Inc., Treasure Island, Florida

Structural Fabricator: Musselman Steel Fabricators, Inc., Tampa, Florida

Structural Erector: West Coast Steel Erectors, Inc., Tampa, Florida

United States Steel
ComTex Industries: Distributors, representatives wanted. Woodsticks—Dramatic new three dimensional wooden wall paneling consists of strips of exotic Brazilian Pau Ferro of varying lengths and thicknesses glued to hardboard backing. Two foot sections interlock forming perfect surface ready for nailing. Free brochure: ComTex Industries, P.O. Box 355, Miami, Florida 33138 Tel: (305) 751-5563.

Edwards & Shepard Agency: We are a design and architectural placement service uniquely equipped to locate and appraise the qualifications, experience and effectiveness of architectural and interior designers, urban planners, systems and space planners, construction specialists, exhibit, lighting and environmental designers. We know (1) what positions are available (2) who the best prospects are (3) the right approach (4) how to break negotiating gaps (5) how to save money, time and effort (6) how to simplify procedures and appointments (7) the day to day state of the market. Contact Bill Shepard at (212) 725-1280. Interviews by appointment in our "dome on the roof" at 1170 Broadway, N.Y.C., N.Y. 10001.


Nationwide Architectural Arts: Renderings—realistic full color renderings. $149.00 to $299.00. 8 day service, delivered by air express. Service B provides immediate choice of price and type of rendering view. Type 1—$149.00—Eye Level—Vignette. Type 2—$189.00—Eye Level—Full Bleed. Type 3—$239.00—Aerial—Vignette. Type 4—$299.00—Aerial—Full Bleed. Service B requires one main structure to be rendered. People and automobiles included. Board size from 20x30 to 30x40 inches. Price includes cost of packaging and shipping. 25% off price with furnished perspective. For an exceptionally detailed structure use our cost quotation Service A. Order today. Procedure: Send drawings, viewing angle and color information. Drawings acknowledged. Brochure available. Nationwide Architectural Arts, Inc. P.O. Box 217, Belleville, Mich. 48111.


David S. Wachsmann Associates, Inc.: Public relations/marketing: Is your architectural practice growing? Are you well known and highly regarded in your market? Is the best of your work published on a continuing basis? Excluding staff and clients, are at least 200 people currently familiar with your office and its work? Does your brochure represent you as well as your most successful project? If you answer "no" to any of these questions, professional public relations/marketing service may be of immense value to you. We would be pleased to discuss your growth plans. 51 East 42nd. St., New York, N.Y. 10017 (212) 687-1196.

RITA SUE SIEGEL AGENCY

Discover a priceless treasure in...

LATCO® ANTIQUE
1" x 1" Decorator Tile

Earthy colors that seem burnished by time, splashed in contrast, flecked and sumptuously shaded in a special process that gives them an authentic patina of age. A beautiful way to dramatize your most creative concepts, available in eight dramatic colors with full trims.

Write for complete color brochure.

LATCO PRODUCTS
3371 GLENDALE BOULEVARD • LOS ANGELES, CALIF. 90039

TIMEPLACE

What Time Is This Place?

by Kevin Lynch

In 1960, The MIT Press published Kevin Lynch's The Image of the City, a widely influential book that explored the differences between one's personal sense of place and "official," "objective" maps. In his new book, What Time Is This Place?, he takes a complementary view of the human sense of time, a biological rhythm that follows a different beat from most "official," "objective" timepieces. The center of his interest is on how this innate sense affects the ways we view and change—or conserve, or destroy—our physical environment, especially in the cities. Beyond this, the book reveals that the sense of time and the sense of place are inextricably meshed: Time-place is a continuum of the mind, as fundamental as the space-time that may be the ultimate reality of the material world.

$10.00

Yellow Pages of Learning Resources
edited by Richard Saul Wurman
$5.95 hardcover; $1.95 paperback

Man-Made Philadelphia:
A Guide to Its Physical and Cultural Environment
by Richard Saul Wurman and John Galfery
$10.00 hardcover; $3.95 paperback

Making the City Observable
by Richard Saul Wurman
$7.50 hardcover; $3.95 paperback

The MIT Press
Massachusetts Institute of Technology
Cambridge, Massachusetts 02142

Circle No. 412, on Reader Service Card

Progressive Architecture 11:72
158

Circle No. 370, on Reader Service Card
the secret

of complete security in a revolutionary new ultra narrow stile door is an exclusive vertical muntin housing a top and bottom rod lock.

The new Amarlite Ultra II Aluminum Entrance stops thieves cold. You cannot unlatch it by bending the stile in at top or bottom of the door. The A-R 2-point top and bottom rod lock is not in the stile but in a unique, vertical muntin.

Distinctively styled, the narrow sight lines are accented by the vertical muntin in an Amanodic color hardcoat finish. The door is mechanically joined at the corners for added strength. Center hung, double acting or single. Easy to install.

Guaranteed for one year following your approval. Write for specification file Section 8, or Sweets File 8.1 An. 4785 Fulton Industrial Boulevard, S.W. Atlanta, Georgia 30305 • Telephone: (404) 691-5750

Circle No. 326, on Reader Service Card

A Good Reason To Think

At first it was a historically significant house. Then a train station. Now whole sections of cities are disappearing without a second thought to the environment it creates. And, it won't stop until you help stop it. Support historic preservation in the United States. Join The National Trust.

James Biddle, President
The National Trust for Historic Preservation
740 Jackson Place, N.W.
Washington, D.C. 20004
Progressive Architecture

Advertisers

Advertising Sales Offices

Stamford, Connecticut 06904:
600 Summer Street  203-348-7531
William F. Bondlow, Jr.
Advertising Sales Manager

Michael J. Hanley, Donald C. Stanley
District Managers

Philadelphia, Pennsylvania 19107:
12 So. 12th Street  215-922-0346
John A. Teefy, District Manager

Pittsburgh, Pennsylvania 15222:
Three Gateway Center—Room 1827
412-281-9421
Charles W. Van Eman, District Manager

Chicago, Illinois 60603
10 So. LaSalle Street  312-726-1282
Dean E. Greener, James J. Hoverman

District Managers

Cleveland, Ohio 44114:
1717 E. 9th Street  216-771-4011-12-13
John F. Kelly, District Manager

San Francisco, California 94104:
Jobson, Jordan, Harrison & Schulz, Inc.
57 Post Street  415-392-6794
Charles S. Harrison, Cyril B. Jobson
Representatives

Los Angeles, California 90057:
Jobson, Jordan, Harrison & Schulz, Inc.
1901 W. 6th Street  213-483-8530
Kenneth E. Jordan, Peter Schulz
Representatives

Atlanta, Georgia 30308:
H. Proctor Co.
505-805 Peachtree Bldg.  404-874-6427
Harmon L. Proctor, Representative

Tokyo, Japan:
International Media Representatives, Ltd.
I, Shiba-Kotohiracho, Minatoku
Sumio Oka, Representative

Acme Plastics ........................................161
Acme Advertising Agency
Amarilite Architectural Products Div./
Anacconda Aluminum Co. ......................159
Peitscher, Janda Assoc., Inc.
American Chain & Cable Co./
Page Fence Div. ..................................32
Wilson, Haight & Welch, Inc.
American Olean Tile Co. .........................57
Lewis & Gilman, Inc.
American Plywood Assoc. ......................148
Cole & Weber, Inc.
Amsterdam Corp. ..............................30, 31
Alden Advertising Agency, Inc.
Andersen Corp. ..................................54, 55
Campbell-Mithun, Inc.
Armstrong Cork Co. .............................4, 5
Batten, Barton, Durstine & Osborn, Inc.
Atlas Minerals & Chemicals Div. .............10
Lieberman-Harrison, Inc.
A-T-O, Inc. .....................................IBC
D'Arcy-MacManus-Intermarco, Inc.
Azrock Floor Products .........................IFC
Glenn Advertising, Inc.
Bally Case & Cooler, Inc. ......................139
Beaumont, Heller & Sperling
Blum, Julius & Co., Inc. ......................115
Seery-Hill & Associates
Blu-Ray Co. ....................................150
William Schaller Co., Inc.
Bradley Washfountain Co. .....................149
Hoffman, York, Baker & Johnson, Inc.
Bruce Flooring Div. Cook Industries, Inc. 41
John Malmo Advertising, Inc.
B.S.N.—Prestige .................................143
Young & Rubicam
Cabot, Samuel, Inc. ............................29
Donald W. Gardner Advertising
Cardkey Systems, Inc. .........................152
Garry Advertising, Inc.
Cast Iron Soil Pipe Institute .................36, 37
David Olsen Advertising
Celotex Corp. ..................................128, 129
Bishopric & Fielden, Inc.
Clearprint Paper Co. ...........................21
Hoefler, Dieterich & Brown, Inc.
Cold Spring Granite Co. .......................8, 9
Kerker & Associates, Inc.
Connor Engineering Corp. .....................11
Marquardt & Roche, Inc.
Contech-Soneborn ..............................109
Fischbein Advertising, Inc.
Copper Development Association, Inc. ..145
Ross Roy of New York, Inc.
duPont de Nemours, E. I. & Co., Inc. ...39
N. W. Ayer & Son, Inc.
Eastman Kodak Co. .............................12
J. Walter Thompson Co.
Ebco Manufacturing Co. .....................2
Howard Swink Advertising, Inc.
Enjay Fibers & Laminates Co. ..............111
Lord, Sullivan & Yoder Advertising
Fife, Richard, Inc. ............................52
Bozell & Jacobs, Inc.
Florida Tile Industries, Inc. .............51
Fry/Hammond/Barr, Inc.
Follansbee Steel Corp. .......................142
George Hill Co.
Formica Corp. ...............................121
Clinton E. Frank, Inc.
GAF Corp. ......................................34, 153
Daniel & Charles, Inc.
Gaco Western, Inc. ............................16Wa
Kraft, Smith & Lowe
Gates Engineering Div. of SCM Corp. ...58
John T. Hall & Co.
General Electric ................................50
Young & Rubicam
General Electric—Silicone Products Dept. 132
Ross Roy of New York, Inc.
Glynn-Johnson Corp. .........................144
Stevens-Kirkland-Kreer, Inc.
Grace, W. R. & Co.,
Zonolite Construction Products ......46, 47
Fuller & Smith & Ross Inc.
Grefco, Inc.—Building Products Div. ...162
Motivation Dynamics
Hall Mack .......................................144
Horton, Church & Goff, Inc.
Haws Drinking Faucet Co. ..................123
Pacific Advertising Staff
Hickman, W. P., Co. ..........................33
John H. Rosen Advertising
Hubbell, Harvey, Inc., Lighting Div. ....107
Mills, Fife & MacDonald, Inc.
International Masonry Institute ........151
Henry J. Kaufman & Associates
Jennison Wright Corp. .........................127
Phillipps Associates, Inc.
Jute Carpet Backing Council, Inc. .......28
Shaw & Associates, Inc.
Kentile Floors, Inc. ..........................OBC
Benton & Bowles, Inc.
acme's precision molds eliminate the agony in creating masterpieces

... and we do it daily

Yes, the old master gained immortality with his singular works of art. But the form and grace of Acme's sculptured polyester letters is captured over and over again in 22 elegant styles. Architects and display specialists will find these solidly cast, weather resistant letters a must for their specifications...after all, doesn't your masterpiece deserve our masterpiece?

A free catalog which details our diverse line is yours for the asking...or contact your nearest Acme distributor.

*unretouched photo of style - 8/Matador

**Permalite**

Is the trade name for expanded perlite manufactured by a nationwide network of licensed franchisees from perlite ore mined by Grefco, Inc.

**Permalite® CONCRETE AGGREGATE**

Slope-to-drain roof decks renowned for performance and low maintenance. Excellent fire rating should reduce insurance costs. (Contact local rating bureau).

For details, contact your local Permalite® franchisee or:

**Grefco, Inc.**

Building Products Division
2111 Enco Drive, Oak Brook, IL 60521

A subsidiary of General Refractories Company

Circle No. 423, on Reader Service Card