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A key controls opening or closing this large Grille on Stuarts in the Seminole Mall, Seminole, Florida.

Also manufacturers of Automatic Steel Rolling Fire Doors and Counter Shutters.

After-hour security is always of prime concern to the building designer and store owner. With Kinnear Rolling Grilles, you get positive protection, attractive design, carefree and easy operation, and no restrictions on dimensions. Store fronts both large and small with one or more openings can be easily fitted with Kinnear Grilles that will more than "measure up" to every security challenge.

A perfect example of Kinnear adaptability is Stuarts store in the new Seminole, Florida Mall. The wide, open entrance is protected by rugged but graceful motor operated Kinnear Grilles. With a "turn of a key," these Grilles can be silently and quickly raised or lowered. The opened Grilles disappear completely out of sight — and out of the way — above the store opening where the operating mechanism is also concealed. The compact rolling curtain principle developed by Kinnear has never been excelled, and the people of Stuarts echo their acceptance when they say, "Our Kinnear Grilles are convenient, as well as decorative ... they suit our needs perfectly."

The Seminole Mall is one of the newest of many attractive shopping malls whose stores have found Kinnear Grilles to be the best "see-through protection" available. Window shoppers can still admire the store's displays through the closed Grilles. And for the centralized climate control, the Grilles allow uninterrupted circulation of air.

Kinnear's "Registered" Life-Extension policy, backed by a nationwide service organization, assures maximum Grille efficiency and minimum maintenance.

Let Kinnear consult with you on your newest project or present building for proven entryway protection with Kinnear Rolling Grilles. Write or call. No obligation.

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FEATURES

Eighteenth Annual P/A Design Awards Program

58 For the first time in its history, two separate juries — one for architecture and one for planning and urban design — were invited to judge submissions of the program. The eight judges selected seventeen winners from the 739 projects submitted.

60 First Design Award
The Bennett Residence, Sun Valley, Idaho

Awards

62 Eastwick High School and George Pepper Middle School, Philadelphia, Pennsylvania

64 Schools on a Shoestring: East Harlem Pre-school and The Block School, New York City

66 Madera Community Hospital, Madera, California

68 Santa Ana Phase II Apartments, Santa Ana, California

70 The Jury Discusses:
Hospitals, Schools and Religious Buildings: The jury noted a significant improvement in the design of hospitals and schools, but a marked decline of vitality in the design of religious buildings.

Industrialized Buildings: Many industrialized systems the jury found more anxious to parade the versatility of their engineering than to show how they could be assembled into desperately needed living units.

Presentation Techniques and the State of the Art: The straightforward presentation technique becomes increasingly important as design problems grow more complicated in their solutions and reflect, as did this year’s projects, a wider variety of interests than ever before.
Citations

74 Tennis Courts and Handball Facility, University of Oregon, Eugene, Oregon
76 Catalog House, Pleasant Valley, New York
78 Community Map, Hill District, Pittsburgh, Pennsylvania
80 State of Oregon Office Building, Salem, Oregon
82 Art Center for a Small City, Mansfield, Ohio
84 “Take Me to the Mountain,” 35 miles S.E. of Austin, Texas
86 Modular Housing System, State of New York
88 IBM-MIS Computer Center, Sterling Forest, New York
90 Sacred Heart General Hospital, Eugene, Oregon
92 Trailwood Path System, Houston, Texas

The Second Jury
An increased number of submissions in the planning and urban design categories called for a specialized jury to debate their merits.

The Jury Discusses:
Planning and Urban Design: Ranging in size from a few city blocks to entirely new megacities, the best solutions to these projects were found in humanitarian approaches that could be sensibly implemented.

Award
Kit of Parts and Orchestra Place, Detroit, Michigan

Citation
Site Development Plan for Hollins’ Properties, East Islip, New York
Golden Vari-Tran® reflective glass makes its debut in Dallas.

This is Lemmon Park Central, the office building designed by Dallas Architects Woodward, Cape & Partners, Inc. Vari-Tran/Golden gave them a beautiful new way to achieve aesthetic effects, while effectively controlling solar radiation and significantly reducing cost of cooling equipment and annual operating expense for owners Southwestern Dynamics, Inc.

Window walls are Thermopane® insulating glass with a golden Vari-Tran coating. Spandrels are Tuf-flex® tempered glass, also Vari-Tran coated. So the building's facades read as one material. Reflections on its glass surfaces change and shift with light conditions. And the surrounding environment becomes a part of its architectural expression.

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On Reader Service Card, Circle No. 354
What Is An Architect?

Dear Editor: I have read with interest your editorial in the October 1970 issue of Progressive Architecture and also your quote from Pier Luigi Nervi that "an architect is a man capable of conceiving and building a structure." Your article has brought to mind an additional quotation by the same celebrated architect (below) which pinpoints the maximum difference between the architect as an architect and the specialists who have been created in the architectural field. In today's standards, much emphasis has been placed upon their equal importance and capability.

Regardless of the opinions of educators, politicians and editors, who have had much to say about the scope of the architectural profession, the architect still holds the unique position of being the one whose professional qualifications and knowledge cover that of all the so-called specialists as well as the many other trades and professions. A thorough survey to determine the reason for the tremendous mortality of architectural students and graduates to final licensing and practice as architects would reveal some startling facts. From my own experience it appears that many recognize their inability to function in the full scope of the architect's work, and specialization becomes a much easier path to follow. Others find specialization more lucrative with less hours. And some find working as a designer, job captain, etc. in an architect's office satisfying with less responsibility.

If the particular work that a specialist does, under the direction of an architect, is a matter of public health and safety, there can be no objection to protecting the public by licensing this specialist. However, it still remains the overall responsibility of the architect who should be, and in most instances, is registered, and, as in Nervi's definition, "... must have a wide-ranging knowledge of the entire field of building in order to be better equipped than the specialists in each field."

J. P. Boulanger, FARA
Westfield, N.J.

Systems Standards

Dear Editor: Reader Don Rezab, in a letter to the Editor which appeared in the November issue of P/A (p. 6) questioned the definitions of systems, subsystems, assemblies, components, and parts which appeared in my paper in the September issue of P/A (p. 100).

This order, or hierarchy, as Mr. Rezab calls it, originated in a U.S. National Bureau of Standards Report (N.B.S. Project 4002410) dated October 1965. This report covers a study conducted by the Institute of Applied Technology.

I agree with Mr. Rezab that there is a lot of confusion in systems building terminology. However, if Canadian and U.S. government agencies disagree on definition, we will add further confusion in the U.S. if we ignore our own standards and follow those of Canada. Therefore, at least where the U.S. is concerned, I recommend we stick to the U.S. standards as outlined in my paper.

Guy G. Rothenstein
Building Systems International, Inc.
Atlanta, Georgia

Re Cyberarchitecture

Dear Editor: I want to thank you for publishing my article, "Toward Cyberarchitecture," (P/A, May, 1970, p. 98).

The response has been overwhelming; I am still busy answering letters.

Wolf H. Hilbertz
Visiting Associate Professor
The University of Texas at Austin

JANUARY 1971 P/A
We are proud to announce a door industry milestone. Weyerhaeuser standard solid core doors now have a 1/2-hour fire rating, which can save you money and maybe some headaches.

It means you don’t have to buy or specify a fire door to get a 1/2-hour rating.

It means Weyerhaeuser thinks fire safety is important and is doing something about it now.

We tested our DPC-1 Solid Wood Flake Core Door and our Solid Staved Core Door. Both passed the standard ASTM E-152 fire endurance and hose stream tests for a 30-minute rating.

The fire test side of the doors stood up to 1,500 degrees, while the temperature rose only 122°F on the other side. They resisted burn-through and warp. And afterwards held firm under 30 pounds of hose stream pressure.

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HARTFORD, Connecticut—the nation’s insurance capital—houses more insurance company head offices than any other city. Knowledge of the varied destructive forces that cost their insurance company clients substantial damage claims leads architects for many of Hartford’s structures to specify Permalite Sealskin Rigid Roof Insulation. Permalite is nationally approved for FM Engineering Division Insulated Steel Deck Class 1 construction (fire and wind uplift); Underwriters’ Laboratories, Inc., Metal Deck Assemblies Nos. 1 and 2 and others. Permalite is also lightweight (approx. 12 oz. per bd. ft.)...easy to cut, fit, lay and adapt to rooftop mechanical services. An ideal core for weight-saving wall elements, too. GREFCO, Inc., Chicago • Los Angeles. A subsidiary of General Refractories Company.

Reprints of this original rendering of Hartford by Forrest Wilson, A.I.A., suitable for framing, are available at no cost. Write GREFCO, Inc., Building Products Division, Dept. B-7, 333 N. Michigan Ave., Chicago, Ill. 60601, for no. 7 in this series of illustrations of American cities.
the beautiful world of reinforced concrete is a wide-open design

Sloping facade and majestic stair columns of Dallas' new Municipal Administration Center give a Texas-size greeting to residents and tourists alike. Dramatic three-block-long structure is planned to house municipal agencies and city officials with maximal convenience and appearance. The building's 10 levels contain 900,000 sq. ft. The effect of a totally planned environment is completed by the spacious seven-acre park-plaza.

The Center's free and open design, employing bold, clean lines and textures, is achieved through the imaginative use of reinforced concrete. The medium that keeps design possibilities wide-open. And cost down. Grade 60 reinforcing steel gives concrete all the support it needs to take any shape you have in mind. Quickly, economically. With minimal maintenance costs. And it's available. Ready to go whenever you are.
Go 60 and Save. 9,000 tons of Grade 60 reinforcing steel support 90,000 cu. yds. of concrete bringing Dallas an exciting new three-block-long Municipal Administration Center.

Architects: Associated Architects
I.M. Pei & Partners, New York City / Harper and Kemp, Dallas
Structural Engineers: Terry-Rosenlund & Co., Dallas
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JANUARY 1971 P/A
Designers can specify Carlstadt Railing for its wide selection of moulding shapes and fittings that allow custom designs for all building types and traffic exposures.

Carlstadt's rugged, engineered system is well-suited for floor, fascia or wall-mounted installations that emphasize function and durability. Its crisp styling makes it ideal for a variety of ornamental applications.

Components are available in stainless steel, bronze and aluminum from local fabricators everywhere. For a complete listing write for catalog, special bulletins, or see Sweet's Architectural File, Industrial File or Interior Design File.
First, Wade wrote the book on DWV system Carriers.

Then, we added some new chapters.

The book is our Wade Specification Manual and it was good as far as it went.

But then we expanded the carrier-fitting line to include all kinds of new ones for all kinds of materials and applications.

So we added new chapters to include the specs, the types, everything you need to know about the expanded line. Now you can specify Wade carriers for cast iron, plastic, copper and lead. Wade has eight new carriers for No-Hub systems plus new ones for hub and spigot SV pipe.

Next time, specify from our "new book," the Carrier Catalog section of the Wade Specification Manual. For your free, registered copy, simply write us on your letterhead. P. O. Box 2027, Tyler, Texas 75701.

If it goes into a DWV system, Tyler makes it.
Choice of two furniture series for contemporary office concepts

Seating to supplement every design arrangement

Complete complement of credenzas—in two depths

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Yet very individual. Select from incomparable furniture lines, finishes and fabrics in an inspired spectrum of colors and textures to impart infinite expression to your design. All-Steel Equipment Inc., Aurora, Illinois 60507. Showrooms in New York, Chicago, Los Angeles, Aurora. Canada: B. K. Johl Inc. Montreal, Toronto, Vancouver.
New hinge benefits from Beneke

With the new elevated hinge, former hard-to-reach bowl surfaces conducive to moisture and bacteria accumulation are eliminated when seat and lid are in the "UP" position. With the seat down and lid up, the streamline design of the hinge shield facilitates comfort and cleanliness. Wetness can't seep through into the actual hinge assembly.

The seat itself is molded from high impact polystyrene plastic with carefully contoured depth for maximum comfort.

The bowl and seat are cleaner because the hinge is higher. The Beneke HI-RISE® heavy duty plastic toilet seat is the first to feature this important sanitary breakthrough: the rotating mechanism is elevated well above the bowl, so thorough cleaning is accomplished quickly and easily without removing the seat. The best seat is the cleanest seat. The HI-RISE is the cleanest because it's the easiest to clean.

The Beneke HI-RISE is available in open front and closed ring models for both regular and elongated bowls.

You're better off with Beneke on.

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LENNOX PRESENTS

a season for shoppers

...the modular concept in year-round comfort

In Beachwood, Ohio—a Cleveland suburb—LaPlace shopping center blends New Orleans elegance with modern convenience and year-round comfort in some forty businesses such as (clockwise from lower left): the Inner Circle restaurant, Le Potpourri gourmet shop's wine cellar, the mall, and Park View Federal Savings & Loan Association. (See next page for credits.)

The modern merchant recognizes the sales value of shopper comfort. Storewide or through an entire mall, it's good business to keep the temperature even, the air fresh, the comfort continuous. And the economics are especially sound where the comfort comes from Lennox modular heating and air conditioning systems. With comfort designed in from the start.

...continued overleaf
The 83,000-sq. ft. LaPlace shopping center utilizes the modular comfort concept of heating/cooling/ventilating each shop or office with its own unit or units. Among the 180 tons cooling installed, Lennox equipment serves comfort needs from the rooftop—single-zone, single-package air conditioning with electric heat elements in the cabinets. Architect: Andonian & Ruzsa. Owner: Park View Federal Savings & Loan Association (James W. Male, president). General contractor: The Bolton-Pratt Co. Heating & air conditioning contractor: The Brewer-Garrett Co.

continued...

shoppers'season: a modular comfort concept

In shopping center planning, Lennox modular heating and air conditioning systems offer everything that's needed: comfort, economy, flexibility, design freedom. For initial cost savings, there are Lennox rooftop flash-in-place mounting frames, shortened duct runs. Plus time-and-labor savings from factory assembly, wiring and testing— including electric or pneumatic controls. For predictable long-range savings: quality-built systems with long life, little maintenance. And extended guarantees on critical components.

The modular nature of Lennox equipment prevents a total system breakdown. If failure occurs, only one area is out of service. And, because repairs usually are simpler, recovery is faster. Then, there's Lennox single-source responsibility for equipment and controls; if anything does go wrong, it's on our back.

Compact, low-silhouette Lennox units protect your design freedom. Modular concept simplifies future growth. Scores of systems to choose from. All capacities. Single-zone or multizone. Rooftop or ground level. Compatible combinations. Any fuel. Before planning your next development, consider the esthetics, the comfort, the economics, when the comfort's from Lennox.

See Sweet's 29a/Le, or write Lennox Industries Inc., 982 S. 12th Avenue, Marshalltown, Iowa 50158.
Glamorous Centre Laval in Montreal is 400,000 sq. ft. of patron convenience and comfort—in fifty stores, six restaurants and the mall itself. The major portion of its shoppers' season—all-year heating/cooling/ventilating—comes from Lennox single-zone modular equipment: 53 combination rooftop gas/electric units and 17 remote cooling units. Lennox supplied the units for all the allied stores for a total capacity of 433 tons cooling, 15,970,000 Btuh heating. And some 90% are equipped with Power Saver™ which cools free when the outside air temperature is below 57°F. Architects: Mayers and Girvan. Mechanical Engineer: Levine & Jonas. Owners: Centre Laval, Inc. Owner/Developer: Frego Construction, Inc.

Phase II of The Mall was a major expansion, almost doubling the original 332,000 sq. ft. of the giant Louisville, Kentucky, shopping center. Shoppers' comfort in eighteen of the twenty stores, plus the mall, is assured by Lennox single-zone combination gas heating/electric cooling units. The twenty rooftop units, rated 3 to 22 tons, provide more than 200 tons cooling capacity. Architects: Katzman & Associates, New York City. Owner/developer: The Rouse Company, Columbia, Md. Heating/air conditioning contractor: Hussung Mechanical Contractor, Inc.
This revolutionary can change the way next building.
At last there's a framing system that's going to help you beat today's "cost squeeze"—the increasing cost of labor, money, and the wildly fluctuating cost of lumber.

It's Wheeling's new Steel Framing System. It's the most complete light weight structural system ever introduced. And pound for pound it carries more load than any other framing material.

Our system's made up of a full line of load-bearing steel studs, track, bridging, and joists. And all the joists and studs are pre-punched to speed installation of mechanical service lines.

In addition, it gives you complete design freedom. Because it accommodates any exterior or interior surface material—masonry, steel, wood, gypsum, etc.

There are numerous other advantages our system has over conventional methods.

For example, it's quick to install. It can be prefabricated off site as well as on—which saves on labor and financing.

It's half the weight of wood—which saves on materials and foundation.

The studs form a hollow wall which conceals mechanical and electrical equipment.

And because it's made from high tensile steel, it's incombustible. It won't shrink, swell, rot, or warp and is termite and vermin proof.

It comes in two finishes (red oxide zinc chromate and weldable galvanized). Both take 100% weld.

All of which means our new Steel Framing System is ideal for the construction of schools, nursing homes, garden apartments, specialty stores, and other similar structures.

So now that you know a little about our system, we'd like you to learn a lot more. The best way is to send for our complete brochure WC 455, which has all the physical and structural properties and load tables that'll interest you. Write now. And start designing your own revolution.
This is the Knights of Columbus building in New Haven, Connecticut. A signpost. A gateway. A truly magnificent landmark. Its massive towers are sheathed in fired-clay. These structural masonry building units were produced by Glen-Gery Corporation, a design-oriented/technical/capable leader in the manufacture of exceptional brick & tile. For more — write to our headquarters, Reading, Pennsylvania, 19607.

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Interior Designers Eye Building Systems

“In this country, the wealth of interior design talent could be put to use to help both the builders and tenants of systems housing projects,” said Alex Cvijanovic, moderator of a panel discussion titled “The Design Factor: Its Place in Systems Housing.” He went on to recommend that the profession “consider ways to build the interior design consultant’s fee into the overall cost of a project, as is the architect’s fee.”

The discussion, sponsored by the New England Chapter of the American Institute of Interior Designers, drew some 200 designers and guests to Boston recently. Panel members and audience seemed to agree that interior designers could indeed contribute to the design of systems housing, but no one came up with a way to bring the interior designers into the team.

But while the panel may not have come to grips with its subject, it did make some telling points. Moderator Cvijanovic, housing design specialist with The Architects Collaborative, felt that interior designers could play a role in research as well as design for production. Social scientists and designers work together on large scale European projects to create housing that meets the needs and desires of occupants. “Systems building has become a discipline of its own,” he said, adding that there was no reason why the interior designer couldn’t be part of the team.

P/A’s editor Forrest Wilson suggested that the time is ripe for “architects and interior designers to learn each other’s skills” so as to produce housing that respects human values. Intangibles such as enterprise and pride of ownership should be built into a housing system, he said; not only should the eventual tenants have a say in the design of low cost housing, they should have a hand in its construction.


Copper, Copper Everywhere Except the Kitchen Sink

Copper, brass and bronze abound in a house design sponsored by the Copper Development Association. Designed by M. Arthur Kotch of Houston, the house will be on display for the National Association of Home Builders’ convention there this month.

The five bedroom house includes a predictably wide variety of copper based building products for floors, walls, roofs and ceilings. There are bronze and plywood floor tiles in the foyer and dining room and a copper and plywood laminated roofing and sidewall system; ceilings and walls are covered with lightweight copper sheet; and the sliding glass doors and windows have bronze frames.

A central air cleaning, cooling, heating and dehumidifying system keeps out airborne pollen and dirt, and a security system warns of dangers like fires and burglars. It also warns of air conditioning failures and frozen water pipes.

Parked in the driveway is the CDA copper electric car. Copper-trimmed and electric powered, the pollution free car will have its batteries recharged each night in the garage.

And, yes, there’s Revere Ware in the kitchen.

Sculpture Garden for New York City

New York City isn’t losing part of a park, it’s gaining a sculpture garden in an agreement with the developers of a midtown Manhattan office building. About two-thirds of Dag Hammarskjold Park, on the south side of 47th Street near the U.N. area, will be turned into a public sculpture garden as part of the street level plaza and arcade for a 16-story office building.

Architects for the glass and aluminum sheathed building and the garden are Raymond & Rado and Partners. The project is the first public sculpture garden with changing exhibits, they say, and it is also the first building built under the new building code, which doesn’t require a 4-ft fire wall at the edge of the slab (section). Under the agreement, developer Harry Macklowe will not only build the $150,000, 10,000 sq ft garden, but he will maintain it for 125 years.
NEWS REPORT/BUILDINGS ON THE WAY UP
1 Old estate near Washington’s Embassy Row will become a $58 million shopping and residential complex. Planned are enclosed shopping mall, office space, three nine story apartment towers and 15 townhouses. Fischer and Elmore are architects; Harry F. Green, consulting architect.

2 A century old in 1972, Montgomery Ward will mark its birthday with 27-story administrative building in Chicago, designed by Minoru Yamasaki. Cores at ends of building will have marble exterior; glazing will be bronze glass and aluminum.

3 Narrow site forced Wedemeyer Cernik Corrubia, Inc. to cantilever upper floors of City Bank Building in St. Louis, reducing deflections and amount of reinforcing steel in interior spans. Exterior is textured concrete.

4 New sanctuary for Old York Road Temple Beth Am, Abington, Pa. is marked by sloping fan-shaped roof. Main entrance to temple is between sanctuary and other fan-shaped element housing library, chapel and offices. Architect is Vincent G. Kling and Associates.

5 Service station in Aspen, Colo. was designed by Walls and Sterling, contains 5872 sq ft of space, including sales area, service area, automatic car wash, carpeted TV lounge and office. Exterior is dark brown brick, bronze aluminum and amber tinted glass.

6 Car wash in Newport Beach, Calif. designed by Riley/Bissel/Associates sits below street level. Precast concrete structure has brick walls, heavy timber roof frames; large overhangs, horizontal wooden screens hide gas pumps.

7 High strength steel, field welded moment design connections keep weight of structural frame down to 10.8 psf in 21-story office tower for Detroit’s Executive Plaza. Architect is Jickling and Lyman.

8 Three towers and service core make up 35-story Valley National Bank Building to be built in downtown Phoenix. Towers, 31-, 33- and 35-stories high, are sheathed in lightly reflective glass; service core is concrete. Tower corners will be mitered at 45 degree angle; building will rise from sunken plaza. Welton Becket & Associates, architects.

9 Art and sculpture exhibits will be held on open ground floor of Los Angeles office building. Steel framed and sheathed in white concrete and bronze glass, building will provide 246,000 sq ft of office space in 12 stories. Charles Luckman Associates are architects and prime tenants; Ogden Development Corp. is developer.

10 Circular garage, shopping mall and semicircular towers give shape to $23 million Hampton Plaza in Towson, Md. Taller tower (19 floors above plaza, 6 below) will house 204 apartments; shorter one (11 floors above, 6 below), offices. David Wilson is architect.
PPG introduces Solarcool Bronze Glass
Now you can have a warm-toned, light- and heat-reflective glass that doesn't cost a lot.

**Solarcool Bronze** Glass is a new light- and heat-reflective glass from PPG. It can bring a unique beauty and warm-toned reflectivity to any building facade.

**Solarcool Bronze** Glass is coated on the outdoor surface with a permanent, durable, metallic oxide which transmits approximately 39% of daylight incident light and reflects approximately 35%. It helps increase occupant comfort, because solar brightness is reduced.

**Solarcool Bronze** Glass is moderately priced, yet its performance can reduce mechanical equipment requirements. Operating costs may also be significantly reduced.

**Solarcool Bronze** Glass is the only single-glazed, annealed, light- and heat-reflective product available today. It can also be heat strengthened and tempered. Only PPG has it.

**Solarcool Bronze** Glass is the newest addition to PPG's family of Environmental Glasses. Look into it. Or see us about one of the others, early in the design stages. There's a PPG Environmental Glass that can meet any esthetic consideration, solve any environmental problem, and provide a solid return on investment in your next building. Write PPG INDUSTRIES, Inc., One Gateway Center, Pittsburgh, Pennsylvania 15222.

PPG is Chemicals, Minerals, Fiber Glass, Paints and Glass. So far.

Below: The Southern Yacht Club on Lake Pontchartrain, in New Orleans. Curtis & Davis, Architects, specified Solarcool Bronze Glass on a test basis two years ago. The results: an open view of the lake; greater occupant comfort; a beautiful, reflective facade.

On Reader Service Card, Circle No. 365
SFPA’S ENVIRONMENTAL GOAL: TREES FOREVER FOR MAN AND WILDLIFE

The quality in evidence today in Southern Pine lumber is the result of a half-century crusade in reforestation and forest management. Southern Pine forests, once on the verge of extinction, have been restored to scenic splendor. And, according to State Game and Fish Commissions, there are more deer and other wildlife in Southern forests today than when Columbus discovered America. In these man-made forests, air and water are pure and broad and new vistas of recreation have evolved.

Through its new “Trees Forever” Program, the Southern Forest Products Association is seeking a major extension of conservation policies long practiced by its members. The objective is to double timber growth in the South and thereby fulfill a broad range of environmental and economic needs in the years to come. If you’d like more information on how man and wildlife will benefit from our “Trees Forever” program, write to: Southern Forest Products Association, P. O. Box 52468, New Orleans, Louisiana 70150.

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ANCHORAGE REPORT

Anchorage Gets City Hall by Barge

When the town fathers of Anchorage, Alaska, needed a new city hall, they went to Oakland, California for 70 steel framed modules from Designed Facilities Corp. The modules were loaded on a 400 ft barge and shipped 2000 miles up the Pacific Coast to Anchorage, where they were put together.

The modules are completely finished, with redwood exterior siding and floor to ceiling tinted thermal glass panels. The units measure 10' x 60' x 12' (three of them are interconnecting units that are only 20 ft long), and when assembled provide 40,800 sq ft of office space.

The approach of Alaska’s bitter winter weather put the project on a tight schedule, with the end of November as a deadline for assembly of the building. During the 30 days it took to manufacture the modules, workers at the Anchorage site prepared the site, pouring foundations and running utility lines. Final completion and occupancy are set for April 30, but Designed Facilities says it is shooting for February 15.

Architect for the project is Richard Perkins of Spokane, Washington.

P/A Names Two Associate Editors

James A. Murphy and Clinton A. Page have joined the staff of P/A as associate editors.

Murphy, a registered architect, had been with the Stanford-based SMS Partnership for five years, where he was responsible for design and production work on schools, libraries, office buildings and dormitories. After graduating from the University of Nebraska he was in the design department of Clark & Enersen, Olsson, Burroughs & Thomsen, Architects & Engineers, Lincoln. Murphy is also a sculptor, working primarily with welded metals, and a sports car enthusiast.

Page comes to P/A from Vincent G. Kling & Associates where he was manager of public information. Prior to that he spent five years as news editor of Architectural & Engineering News. He is a journalism graduate of Principia College.

A folk-country-western guitarist and sports car buff, Page has written freelance articles on both subjects. He is an avid bridge and tennis player, married and the father of an eight-month-old daughter.

FAA Approves Standard Control Tower Design

The Federal Aviation Administration has given the nod to a concept design that will be the national standard for control towers at intercontinental and other major airports for the next ten years. The design, by Welton, Becker and Associates, is a modular pre-cast concrete structure; the first one will be built at the Dallas/Fort Worth Regional Airport.

The tower consists of four pre-cast concrete service shafts. Three types of control cabs and other components make up the completed towers. The shafts will house power and communications cables, elevators and stairs. The pre-cast, post-tensioned units are to be 10' x 10' x 7'-6" high; they will weigh 22 tons.

FAA criteria for the prototype tower called for heights of 180 ft, 150 ft, and 120 ft, measured from the base of the tower to the cab floor. Any one of three cab shapes must be accommodated; cabs come in the currently used 5-sided design, an 8-sided model that is the standard for new airports, and an 11-sided model designed specifically for Dallas/Fort Worth. The tower must also allow for the addition of other operations, such as weather bureau facilities.

Women in Construction

Open National Office

The more than 5,000 members of the National Association of Women in Construction now have a Washington headquarters, an executive director and a public relations director. The office is at 1000 Vermont Avenue NW; the executive director is Charles E. Perry, and the public relations director, Raymond J. Lloyd.

Quiet Year for Construction Industry

BY E. E. HALMOS

Next year could be a quiet one for the construction industry, with federal spending holding at the present $14 billion level, and little in the way of new legislation. Emphasis will shift, thus, to the construction economy itself, and to changes in the character of the work.

The usual spate of new-year predictions of construction activity seem agreed on only two points: (1) An increase probably in dollar-volume of work put in place (a small one over the roughly $90 billion for 1970) — but every bit of any increase in available dollars will be eaten up by inflation, so there won’t be more individual jobs; (2) a rapid shift in contract emphasis from public buildings and educational work to housing and stream pollution control work, with other categories (highways, airports, mall, ferry, construction, etc.) remaining about the same.

Cost of money will remain high (the reason that housing has been running counter to general downward trends is that high interest rates have attracted more money to the mortgage market); all sides will continue to press for management methods that might reduce construction costs.

On this last point, it was revealed last month that some government agencies — Army, Navy, Public Buildings Service, HUD — are already looking closely and carefully at the idea of “design/construct” contracts, under which a single entity takes on establishment of criteria, specifications, design, construction and inspection on a basis very similar to “turnkey.” Federal agencies are very conscious of professional objections to this type of contract. They lean toward a “team” approach as an answer in which architect, engineer and contractor are equal partners. But the prospect of cost savings is attractive.

The big imponderable is whether wage-price controls may have to be imposed. If they are, they will unquestionably hit construction first (since wage increases in this industry have far outrun all others). Any such controls are of questionable value and politically distasteful. But, with elections two years away, the lawmakers may be willing to risk the consequences to show their concern for controlling inflationary trends.

JANUARY 1971 P/A

On Reader Service Card, Circle No. 339
CELOTEX: contributing to the progress of Man the Builder.

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Tura, Egypt—ca. 2650 B.C.

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The painting: A scene at the stone quarries which produced the building blocks for the first of the Pyramids, the Step Pyramid of Zoser. The architect Imhotep gained such fame through this achievement that he was later immortalized as a god by the Egyptians, and even by the Greeks, a thousand and more years later.

This painting is one of three works in Set C of the Celotex Collection of paintings depicting major events in the history of Man the Builder. For full color reproductions 20"x16" suitable for framing, send $1.00 for each set of 3 to: Historical Construction Paintings, Box 368A, Miami, Florida 33145. Important: please specify Set A, Set B, or Set C.

Set A consists of: The Ise Shrine, Japan; The Erechtheum, Athens, Greece; Ollantaytambo, Peru. Set B: City of Uxmal, Mexico; The Bayon, Cambodia; Neolithic Shrine, Turkey. Set C: The Palace of Minos, Crete; The Step Pyramid, Egypt; Pueblo Bonito, Arizona.

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Good light for customers to come into, of course.
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On Reader Service Card,
Circle No. 316

CROUSE-HINDS
Wool Upholstery Fabrics

Herewith, three new upholstery fabrics: "Tiber," a handwoven cloth that juxtaposes thin and bulky yarns; "Dynamic," a design by Marga Hielle-Vatter, an all wool Jacquard weave, and "Executive Tweed II," now fortified with nylon, and in 10 new colors. Knoll International.

Add-A-Drawer

Now a drawer can be added under any flat surface with the 344 drawer slide. It needs no sidewalls for installation, will support loads up to 50 lbs.; has an extended position stop and instant removal capacity. Grant Pulley and Hardware Corp.

Dial Drafter

A drafting machine for technical designing, the dial drafter is portable, performs without drafting table or board, works on loose sheet. Double dial reads linear measurements, computes distances and by using blank dials, the process is reversible. Dial Drafter Manufacturing Co.

Butcherboard Tops

Butcherboard table tops in cherry, oak, walnut, maple or birch or in combinations of these woods come in any size, shape, and 11 finishes. A moisture equalization process permits the joining of two or more woods for tone against tone contrast. CHF Co.

Plastic Backs Fabrics

A special plastic backing makes it possible to apply vinyl wall paste directly to the fabric itself, without any seepage. The fabric is then applied directly to either wall or board. A variety of direct wall applications on view and information from Jens Risom Design, Inc.

Music to See By

Musical patterns are viewed in three dimensions with the color organ—an audio-visual entertainment system that relates each individual Jac- tune's frequency range and intensity change in a correlated color scale. Choice of cabinet finishes, screen sizes. APM Enterprises.

Clocking It in Plexiglas

Quarter hour indicators instead of numerals mark time on the see-through bronze dial of a Plexiglas wall clock. Seven-jeweled battery-powered movement. Other styles shown in brochure from Washington Clock Works Inc.

Stacking It

Stacking chairs with tubular steel frames are available in epoxy or chrome-plated finishes. Storage dollies are engineered to safely transport and store up to 40 add-ons in two stacks of 20 each. Thonet Industries, Inc.

Water Tower Controller

A fully automatic water conditioning cycle is the feature of a water tower controller for new and existing water cooling towers in air conditioning systems of 100 tons capacity or more. The controller consists of two reset timers, one for bleed-off, one for chemical feed—once the system is set both functions become automatic with water and chemical usage determined from the control panel. Barclay Chemical Co.

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Lumber Use Data


Designs On the Telephone

The recently created Telephone Design Center will offer: (1) "One-of-a-kind telephones," to include telephone sculptures viewed as possible works of art; (2) a "Limited Edition" series, to produce only 300 of a unit, only one of which will be sold in any region with a population of 300,000; (3) "Contemporary Replica" a mass-produced series of the most popular designs. The United States Telephone Co.

Heather Plush Carpet

Saxony plush carpet is made of Antron nylon which takes on a heather tone in medium and deep shades, has a frosted look in pastels. In 22 colors. Rivers Edge is a new, two-level lightly sheared carpet, available in 14 colors. Congoleum Industries, Inc.

Music to See By

Musical patterns are viewed in three dimensions with the color organ—an audio-visual entertainment system that relates each individual Jac- tune's frequency range and intensity change in a correlated color scale. Choice of cabinet finishes, screen sizes. APM Enterprises.
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Circle 114 on Reader Service Card

Visual Control Systems
Forty-six sizes of standard boards and 118 accessories are featured in a catalog of magnetic and electronic visual control systems. Introduced are three new concepts — Action-Lite, Wingmaster and white write-on boards. Custom designs available. Methods Research Corp.
Circle 115 on Reader Service Card

Engineering in Wood
This 24-page brochure illustrates applications of glued laminated arches, beams, domes, trusses and decking and such technical material as load tables, connecting details and suggested specifications. Timber Structures Inc.
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Window Art
Acrylic and fiberglass combine to produce a hand-made custom window art. Designs, background patterns and a color chart from which an original window or accent can be composed are featured in "Design-A-Glas Portfolios" available for $1.00 from The House of Stainglas, 3917 Oakton St., Skokie, Ill. 60076.
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Span Data
Maximum spans for joints and rafters is a catalog offering an index to lumber spans based on new sizes set by the American Softwood Lumber Standard (PS 20-70) and allowable stresses for grades incorporated in 1970 grading rules of the Southern Pine Inspection Bureau. SFPA.
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Burlap Wall Paneling
Tackable, noise-deadening burlap paneling is made by laminating imported jute to 1/8" thick insulation board. Standard size, 4' x 8'; lengths 10', 12', 14'. Natural burlap color can be changed with oil or water base paint, stain or dye. Color brochure from Homasote Co.
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Fire and Smoke Damper
A product engineering bulletin describes a fire and smoke damper, and an automatic actuator device which allows remote operation of both fire and smoke protection in commercial air handling systems. Airstream Products Co., Inc.
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JANUARY 1971 P/A
On Reader Service Card, Circle No. 347
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PRODUCTS & LITERATURE

(Continued from page 49)

Master Keying for Security

This is a key system set up to place the security control of a building or group of buildings under the jurisdiction of designated individuals. The system descends from a single grand master key to a number of change keys — an instructor, for example, may enter a specific classroom, the university president any room on campus. P. & F. Corbin. Circle 121 on Reader Service Card

Expansion Joint Compound Data

Flexible expansion joint sealing compounds compatible with corrosion resistant epoxy and polyester floor toppings are described in a technical bulletin. It also defines two newly formulated compounds, one for use in horizontal joints, the other for vertical and overhead surfaces. The Ceilcote Co. Circle 122 on Reader Service Card

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Taming the Sunfighters

This technical booklet is a guide to specifying and glazing gray and bronze tinted plate glass. It deals with methods for controlling thermal breakage from absorbed solar energy, explaining the problem, offering design considerations and glazing recommendations. ASG Industries. Circle 124 on Reader Service Card

Foam Board Insulation

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à la mod

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There's an evolution in the kitchen

BALLY PREFAB PANELS...FIRST TO PASS UNDERWRITERS' LABORATORIES (UL) FIRE TEST!

On Reader Service Card, Circle No. 327
EDITORIAL

It has been apparent for the past 10 years that the base of architecture was broadening. This year's jury selections emphasized the fact that all problems are not solved by buildings and that the processes that generate architecture, whether they be art, advocacy or terrain, are the concern of the architect.

This year's Design Awards capsulated the range of possibilities for the architects of the 1970s. Although the top award went to a finely designed monument, the work itself was modest in scale. For the first time in 11 years a house received the top award. And for the first time ever, a second jury was called in to evaluate large-scale urban schemes.

Honors were also given for advocacy planning, modular systems, planning and the non-architecture of 55 acres of undisturbed Texas bush. At the very beginning of the judging there was no question that Muchow's work would receive recognition, however, the judges also expressed preference for the non-design Texas land at an early stage. No really large buildings were singled out for recognition. The Oregon and IBM office buildings were the largest structures selected; but both were modest in size in relation to urban scale, and minute compared to the megastructuremania of five years past.

"The revolution today seems in the consciousness we have of things," observed this year's design awards editor, David Morton. "We cannot think any more of buildings in traditional ways. This was reflected in the selection of awards. None was given to excessively articulated or contrived structures. The process of design and the systems of how solutions were derived was often given as much consideration as the design product itself," he concluded.

Throughout the two sessions, the judges displayed an unwillingness to make decisions unless they thoroughly understood the process by which the design had been derived. Rejection of projects that did not clearly display the design process, and a refusal by the first jury to consider the planning submissions because time did not permit a thorough evaluation of the planning process, underlined this attitude.

Architects who have worked with building types all of their lives are capable of quick evaluations. They are familiar with building types and acutely aware of the program and problems such generic structures must satisfy. This is the basis of the jury system that makes it possible for a few men to evaluate a great number of submissions in a comparatively short period of time.

Such judgments are admittedly prejudiced by the judging professionals' experience. This is why juries are changed every year. Each juror's own work is the basis of his selection as a juror. Those who submit work to be judged do so to have it evaluated by these particular professionals. Within this framework we have agreed for a long time that judgments are accurate, and the history of the Design Awards program has substantiated this contention. This year the system evidenced the emergence of a changing consciousness. The broadening of architects' involvement and the consciousness of the importance of the process of design make quick judgments in all cases no longer possible outside the framework of building types. Other means of judging may well have to be evolved.

Universal solutions were suspect, and one juror pointed out that systems designed to do all things for all building situations apparently do nothing for the particular application. Those who submitted systems were often more concerned to show what could be done with the system rather than the architecture that could be constructed with it. The jury judged the validity of a system by its capability of generating architecture. Ingenious combinations of components is not enough, they said. These were judged structural gymnastics and as related to the whole of architecture as physical work-outs are to daily life.

In the selection of schools and hospital designs, the jury's first consideration was for the orientation of patient and student requirements. The Detroit city plan, chosen by the second jury, is a living thing with the architect directing user expression of preferences, not controlling it.

Recognition was given to the universal nature of today's architecture and the recognition and willingness on the part of the architect to share with others the responsibility for the quality of environment. However, the selection of the house, an exquisite work of art, symbolized architecture, for it is from the understanding of the combination of art, living space and its ambience that the architect derives his strength.

Forest Wilson
The Eighteenth Annual P/A Design Awards

On a particularly hot, muggy September morning, when the air conditioning finally tired of one of the most unpleasant summers in recent memory, five distinguished men gathered in P/A's Connecticut offices to judge the 739 submissions that made up the eighteenth annual Progressive Architecture Design Awards Program.

The submissions, piled many layers high on a huge conference table, separated into building-type categories, numbered and cataloged, presented a formidable front to the jurors, who had only two days to seek the jewels that might be secreted within. But with great interest and excitement, and perhaps not a little dread, they got quickly under way after voting Ed Barnes chairman of the committee.

Not long into their chore, the jury realized that some submissions in the planning and urban design categories were so complicated and vast that just decisions could not be made about them in the short time that was allotted to the examination of each project. The jury decided to put aside the more complicated schemes; they would judge only those projects that could be treated in terms of architecture. Consequently, a second jury was invited to judge the planning and urban design submissions. Coverage of the second program begins on page 94.

The First Jury

Jury Chairman Edward Larrabee Barnes has been design critic and lecturer at both Pratt Institute and Yale University. In 1959 he received the Brunner Prize from the National Institute of Arts and Letters, and in the same year, the P/A First Design Award for the Capitol Towers project in Sacramento, California. He has been a Trustee of the American Academy in Rome and Director of the Municipal Art Society of New York. His completed projects include the Ford Foundation Theatre Project, the Neiman-Marcus Shopping Center in Fort Worth, the United States Consulate in Tabriz, Iran, and most recently the New England Merchants National Bank in Boston. His firm is currently working on the campus plan and buildings for the State University of New York College at Potsdam, the College of Performing Arts of New York State University in Purchase, and the University of Chicago.

John A. Kouwenhoven is a professor of English who also teaches in the Art History Department at Barnard College in New York. Widely known as an historian of architecture, he is the author of Made In America, The Arts in
Modern Civilization, The Beer Can by the Highway, The Columbia Historical Portrait of New York, and he is advisory editor of the international journal Technology and Culture. Mr. Kouwenhoven is the vice president of Vermont Council on the Arts, a Benjamin Franklin Fellow of the Royal Society of Arts (Great Britain), and he has been decorated with the Officer's Cross of the Order of Orange-Nassau (Netherlands).

Ulrich Franzen is the head of the New York firm that bears his name. Recent projects include a master plan and new facilities for the national historic enclave at Harpers Ferry, West Virginia; major buildings at Cornell University; the recently completed Alley Theatre in Houston, Texas, and a self-contained community for the Urban Development Corporation of New York. He has received the Brunner Memorial Prize in Architecture awarded by the National Institute of Arts and Letters, and in 1970, an Honor Award from the American Institute of Architects. He has been visiting professor at both Harvard and Yale Universities and most recently, as President of the Architectural League of New York, Mr. Franzen has launched a series of new programs of experiments in the arts. He is a Fellow of the American Institute of Architects and a member of the Advisory Council on Design for HUD, the Public Advisory Panel for Architectural Services of the GSA, and the Committee on Design of the American Institute of Architects.

Ezra Ehrenkrantz, who founded Building Systems Development after establishing SCSD (School Construction Systems Development), among the first and most publicized building systems in the United States, is currently active in residential and academic building systems projects for the University of California and Indiana University. He maintains a continuing involvement in Operation Breakthrough, and was project architect for the HUD In-Cities Experimental Housing Project. Mr. Ehrenkrantz served on the White House Task Force on the Cities in 1966 and on the National Commission on Urban Problems in 1967 and 1968. He is associate professor of architecture at the University of California, Berkeley.

Myron Goldsmith, licensed both as an architect and as a structural engineer, is a partner in charge of design in the Chicago office of Skidmore, Owings & Merrill. He studied under Mies van der Rohe at Illinois Institute of Technology, and later worked in his office for seven years. In 1953 Mr. Goldsmith received a Fulbright Grant to study under Pier Luigi Nervi in Italy for two years, from which several independent projects resulted. His work in Chicago for Skidmore, Owings & Merrill includes high-rise structures for the Brunswick Office Building and the Chestnut-DeWitt Apartment Building, the United Air Lines Executive Office Building and Training Center Complex, the Inland Steel Research Laboratories, and the Dan Ryan and Kennedy rapid transit stations. Other works include the United Airlines Hangar and Industrial Complex in San Francisco and the AURA 60" Telescope in Kitt Peak, Arizona. Mr. Goldsmith is also a professor in the Department of Architecture at Illinois Institute of Technology.
First Design Award

Muchow Associates

Project: Bennett Residence, Sun Valley, Idaho. Spectacular architecture in a magnificent setting.

Project Architect: George S. Hoover.

Structural Engineers: Michael Barrett of Ketchum, Konkel, Barrett, Nickel & Austin.

Client: Mr. and Mrs. Marshall Bennett, Highland Park, Illinois.

Site: The eastern slope of a mountain overlooking the resort village of ...
Sun Valley, Idaho.  

**Program:** To provide a year-round vacation house in Sun Valley, Idaho, for an outdoors-oriented Chicago family. The house to be used for entertaining and as a base for winter and summer sports activities.  

**Design Solution:** The primary design objective was to meet the complex program requirements and to enhance the natural advantages of a spectacular site while causing minimal visual disturbance to the beauty of the mountainside. A series of stepped plateaus, shaped by cutting into and filling out from the natural slope, form indoor and outdoor living terraces overlooking Sun Valley. A central chair lift and stair provide access to the terraces and serve as a buffer between entertaining and sleeping areas. Orientation to the northwest affords a spectacular mountain view undisturbed by the afternoon sun. Southern sunlight is admitted into the living area through glass on the side of its raised roof.  

**Construction and Materials:** Sandblasted, reinforced concrete retaining walls on piers; sidewalls laterally supported by step walls; step walls laterally supported by floor diaphragms in tension. Roof factory finished; insulated metal deck over exposed bar joists. Floors plywood (carpeted) over bar joists. Decks, close mesh metal grating over bar joists. Colors, white and off-white outside; warm brilliant colors inside.  

**Jury Comments**  

Franzen: It's a piece of spectacular architecture.  

Kouwenhoven: The house is awfully good.  

Barnes: We all like the house.  

Goldsmith: It bothers me to give it a first award because of all the earth-shaking problems of modern times, of cities.  

Franzen: What's the point of feeling guilty? By not awarding this the First Award you're not going to help the city. The only way you can help the city is, when you have a city problem, try your darnest.  

Kouwenhoven: Aren't we, by picking the Sun Valley house and throwing out all the urban planning things, saying that architects aren't sociologists?  

Franzen: I think any architect that thinks he's a sociologist ought to be locked up.  

Kouwenhoven: That is why I don't have any compunctions about having that house as the First Award.  

Barnes: One of the intriguing things about this First Award is that it slants down the hill the way the hill does, but also that it does really involve itself very much with itself. In winter with drifting snow it would be quite marvelous. The way it would mate with the hill, the snow—you could ski right down it.  

Franzen: Right over it.  

Barnes: I would wonder why there weren't more people doing anonymous houses, houses camouflaged in some way so that we don’t mess up nature.  

Franzen: It is unique because it is a highly individualistic work of architecture that, at the same time, works extremely well in the context of its setting, and with the kind of life one can imagine would be appropriate in that setting. The context is very important. The house answered a need—great respect for its environment—that all the other artificially contrived forms ignored. It illustrates that within the context of a setting and the unique demands it makes, it is still possible to come up with extraordinary architecture for the single house.
Award

Caudill Rowlett Scott and Bower & Fradley

Project: Eastwick High School and George Pepper Middle School, Philadelphia, Pa. Two schools share one structure.

Richard R. Sawicki, G. Norman Hoover, Jack W. Smith, Frederick A. Preiss.

Partner in Charge of Design: G. Norman Hoover.
Partner in Charge of Project: Jack W. Smith.
Project Manager: Richard R. Sawicki.
Project Team: Frederick A. Preiss, Design; Thomas A. Hooker, Programmer; Dale J. Ruckstuhl, Production; Joe B. Thomas, Mechanical; James R. Cagley, Structural; Sid A. Seligmann, Civil; Jeffry L. Corbin, Graphics.

Site: Thirty-nine acres in South Philadelphia near the International Airport. The area is flat, subject to occasional flooding and largely undeveloped.

Program: Obvious economies of merging the common facilities of two schools led to combining them in one structure while maintaining the integrity, functional separation and autonomy of each. The project is intended to accelerate expansion of neighboring residential and industrial areas; thus enlarged common facilities provide a focus for community affairs. The program also called for flexibility and provision for expansion.

Design Solution: The Middle School is separated from the High School by a spine of common facilities. Each school can be expanded at one end by the addition of one house module.

Because the schools involve 5000 students and staff (the size of an average college) a "house plan" scheme was used to create social units of manageable size and identity to which individuals can relate.

Each school is separated from the common facilities by an enclosed four-story court and pedestrian street. All circulation, both horizontal and vertical, relates to the street.
to provide a sense of orientation. Shops, laboratories, auditorium, gymnasiums and pool occupy the first two levels; houses are on the upper two floors, with an instructional materials center (upgraded library) at the center of the third level. Each house occupies two floors, connected by a skylit opening on the upper floor that brings light into the deep interior spaces. Open planning provides flexibility; partitions are non-structural, and most areas are defined by cabinets, bookcases and movable furniture. Student lockers along rails of open balconies provide security.

Construction and materials: Basic construction module is a 24' x 34'-6" bay formed by 8-ft double tees which will be left exposed. The central bay of each house will have a suspended ceiling to conceal major duct runs. The 1500-seat auditorium, divisible into four lecture spaces, can be used for proscenium-type performances or as a central arena theater by relocating folding seating platforms. Earth berms protect against flooding and, combined with ramps, help separate people from cars.

Jury Comments

Franzen: With such an unbelievable scale the scheme manages, first of all, to introduce order, and second, orientation. Breaking down the elements into identifiable houses within the megastructure has been handled very skillfully. The houses are related to major orienting spaces along major streets and then there are minor side streets leading to each one of these houses. That's an extremely competent piece of work.

Barnes: That's quite a scheme. One thing I liked about it is the double exposed staircases.

Ehrenkrantz: There is a sense of community, sort of a way to take a big school and then break it down so that we have a home.
Hammel Green and Abrahamson

Project: East Harlem Pre-School and The Block School, New York, N.Y.
Schools on a shoestring make use of "found" space in dense neighborhoods.

Partner in Charge of Design: Ronald W. Haase.
Project Designer: Clark H. Neuringer.
Consulting Engineers: Hannaham & Johnston.
Client: New York City Board of Education.
Site: Abandoned supermarket in Spanish Harlem, and existing synagogue in changing residential neighborhood in Brooklyn.
Program: Both schools are experimental projects to serve as neighbor-

East Harlem Pre School
hood centers and enrich the preschoolers' educational, cultural and social experiences. Enrollment will be between 75 and 90 children at each location with the environment emphasizing "learning by discovery."

The designs were developed cooperatively with the staff of each center, and in the case of the East Harlem school, with a local advocate planning group. Design studies were made under a grant from EFL.

**Design Solution:** In renovating an abandoned supermarket and leasing space from an existing synagogue, the architects have developed an environment which takes into account a child's natural responsiveness to his surroundings. A variety of spatial changes are provided from group activity areas with high ceilings and tiled floors to quiet carpeted tucked-away alcoves. Areas are separated not by confining walls, but by variations in lighting, floor level and ceiling heights. Movement from one to another implies change in mood.

**Construction and Materials:** Carpeted wood platforms and low plaster board partitions are used to define areas. Basic construction is to be done by building owners in a "lease-back" arrangement. Much of the alteration work however will be carried out by parents and community volunteers. Simple furniture of reinforced cardboard, brightly painted found objects and bright graphics will enliven areas.

**Jury Comments**

**Franzen:** The shared space idea is not only a good one, but here it is very competently carried out.

**Ehrenkrantz:** I have a sense that one of these projects is really first rate and the other one too busy.

**Barnes:** What I really like about these is the idea of the loose, free space, furnished, really, more than architecturally defined, with a suggestion that more things could happen. Neither is rigidly programmed as in an ordinary school. And the fact that all this can happen within, for example, an abandoned store building in Harlem makes it more appealing than a brand new building. Both submissions have this quality. Part of the absolute simplicity and humility of the project is that it is done with just the minimum. Not to preserve the building but because it was there and could be reused.

**Franzen:** But there is something about this proposal that could be called "renewal" in the best sense of the word. An old container having lost its previous use is injected with a new life. We don't, therefore, have "removal" of the old, familiar grain within an existing neighborhood. The scale and texture of the environmental context is preserved while entirely new activities can be invented. It is an absolutely ingenious approach.

**Ehrenkrantz:** One of the critical things about it is the use of elements subdividing space which give the little nooks and crannies children would like to wander through. It provides ways of congregating, retreating and so on. One gets the sense that this is going to be a magnet for children.
Award

Rex Whitaker Allen and Associates

Project: Madera Community Hospital, Madera, Calif. Nucleus of a community health center, designed to reflect the most important concepts of health facilities planning today — flexibility and expandability.


President: Rex Whitaker Allen.

Director of Design: Mark A. Lechowski.

Designer: Dennis M. Brown.


Structural Engineer: Pregnoff, Matheu, Kellam, Beebe.

Mechanical Engineer: Kasin, Guttman & Associates.

Electrical Engineer: Mel Cammissa.

Client: California-Nevada Methodist Homes, Oakland, Calif.

Site: Forty-one acres adjacent to major freeway, five minutes from central Madera, provides ample space for future expansion, parking and related paramedical facilities and services.

Program: Initially to provide for 98 beds, 20 beds shelled-in area, with complete ancillary services. Parking for 330 cars. Maximum design capacity is 530 beds.

Design Solution: Ancillary services of the first floor are arranged along both sides of a linear central corridor, permitting independent departmental expansion as required. Flexible, cross-shaped nursing units on the second floor can function independently or collectively. Expansion may be incremental within each unit, or additional 24-42 bed units can be added. Individual patient care unit, with private toilet and lavatory, can also function as a double unit by opening the dividing partition between two adjoining patient rooms.

Construction and Materials: Structural frame is steel, Type I construction, with stucco exterior. All openings are framed in standard modular anodized aluminum. These materials permit expansion with a minimum of cost and disruption to existing operational facilities. Interior finishes are primarily plaster and vinyl fabric wall covering for ease of maintenance. Carpeting is contemplated in all areas permitted, and washable acoustical tile ceilings are provided. Mechanical services are concentrated in a "systems floor" between the first and second floors, permitting economies in construction, maintenance, and future changes. A second smaller "systems floor" is located above the second floor to accommodate the future third floor services in a similar fashion.

Jury Comments

Ehrenkrantz: If you are developing this kind of interstitial space with all that flexibility, the kind of repetitive modules here don't give way to any other potential organization.

Franzen: That hasn't anything to do with the patient.

Ehrenkrantz: It's the care of the patient. You don't use the same space for someone who is in intensive care as you would for acutes or ambulatories.

It appears to be a building that deals with complex functions, relationships, the possibility for future expansion and growth in such a way that while it makes this possible, it provides a pleasant environment for the activities that must take place within the hospital. It provides the capacity to relate to all of these complex activities and still keep a scale that appears as though it were one that an individual could respond to when spending a period of time in the hospital.

Kouwenhoven: Isn't there a fault in it, though, that it's too rigid in its plan, not sufficiently adaptable to changes in medical techniques?

Ehrenkrantz: I believe that it does have a lot of freedom in terms of services; the way in which it would grow over time.
Award

Backen, Arrigoni & Ross, Inc.

Project: Santa Ana Apartments, Phase II, Santa Ana, Calif. Garden type apartments for families in 25-35 age bracket with higher than average incomes.

Project Coordinating Architect: Stanley K. Ogden.
Landscape Architect: POD Landscape Architects.
Structural Engineer: Papp, Cawley & Associates.
Client: Macco Corporation, Newport Beach, Calif.

Site: Thirty-three acres of flat land, surrounded by apartments and single-family houses, 20 minutes from the Pacific Ocean.

Program: All buildings to be two-story eight-plexes, totaling 300 apartments developed as follows: 30 one-bedroom, one-bath units of 715 sq ft — 21,450 sq ft (10 percent); 60 two-bedroom, one-and-one-half-bath
units of 950 sq ft — 57,000 sq ft (20 percent); 90 two-bedroom, one-and-three-quarter-bath units of 1025 sq ft — 92,250 sq ft (30 percent); and 120 three-bedroom, one-and-three-quarter-bath units of 1150 sq ft — 138,000 sq ft (40 percent). Three hundred covered and 150 open spaces should be provided (1.5 to 1). Three community laundry rooms, bulk storage, trash collectors, and various recreational facilities should also be provided.

**Design Solution:** A low-rise, medium density arrangement of eight-plex apartments forming super-blocks of 12 apartments organized on the site to form peripheral pedestrian streets and recreational spaces. First floor apartments have patios off living rooms and bedrooms. Second floor apartments have bridge access over pedestrian streets to fenced private ground space that serves as entrance and patio space for outdoor family living. Major pedestrian streets running north/south lead to a project recreation center while minor pedestrian streets oriented east/west provide access from parking to individual apartments and link major pedestrian streets.

**Construction and Materials:** Conventional wood-frame construction with stucco exterior finish and gypsum board interior finish. Native materials of southern California.

**Jury Comments**

**Franzen:** The internal circulation, which is always complicated on a zero lot line, has much meaning here. Walking within the unit has a nice feeling.

**Kouwenhoven:** Perhaps the best thing about it is the street system — the way you walk through it and the way that it opens out at different points. We have free circulation without being regimented.

**Goldsmith:** This sort of court-housing poses an important problem and these architects have handled it well.

**Barnes:** The idea of court-housing living related to the ground in a dense living pattern has been tried and proven in other parts of the world but never well in this country. As things become more congested in the suburbs, this kind of solution becomes more relevant. We have found a scheme that has the most light and air, the best orientation and the best circulation.
The Jury Discusses

Six years ago, during the annual P/A design awards competitions, the jury seriously questioned the advisability of including the private house in the program. It concluded that the individual house was no longer a valid architectural problem, that housing of the future would be of a high density type, and that the isolated, "private place" would no longer have any real social significance. The following year, the jury concurred: the individual house was "embarrassing," and one of the judges, Vincent Scully, said, "Actually, who cares if the bathrooms are in the right place ... socially it's difficult to care about them."

This year, out of a total of 739 submissions, a private residence was given the first award — an honor that has gone to a house only once before; in 1955 it was given to Paul Rudolph's project on Siesta Key in the bay near Sarasota, Florida.

Although some jury members were reluctant to give a private house the first award during an era that is beset with grievous social ills and urban problems, Ulrich Franzen reminded them that "By not awarding this the first award you're not going to help the city .... The only way you can help the city is, when you have a city problem, to try your darndest."

Perhaps more important than the fact that the first award was given to a house it that was the first year an award has ever been given to a project that does not involve a building in any way. "Take me to the Mountain" is, rather, a design for the enhancement of a particular lifestyle; a style that not everyone could have or would want, but a valid style nonetheless.

Although the winning designs may not illuminate any startling new directions that architecture might be embarking on in the new decade, they show the wide areas of involvement that characterize the profession today. An artfully designed, controlled, exquisite house won the first award. A poetic idyll of the counter culture was singled out for recognition. And between those two, awards ranged from a community-designed plan for urban renewal to a crystalline computer center, from schools in found spaces to industrialized housing, and from a simple suburban path system to the new innovations in hospital design. That a jury of renowned professionals found some of these projects of sufficient interest to merit awards is, perhaps, more indicative of the emergence of some new interests within the architectural establishment than it is reflective of any new aesthetic or technological trends within the profession.

Hospitals and Schools

The jury noted a significant improvement in the design of hospitals and schools.

Ehrenkrantz: Yes, there are a lot of good hospitals here, the education and health buildings that appear to be the most competent ... as a group, the best thought out.

Barnes: The hospital competence is coming up from previous years. The hospital designers of the past were notoriously bad designers, plumbers. That is obviously changing. We are going to get a lot more good hospital architecture, but it's compared to a base that was awful.

Ehrenkrantz: Yes, there are a lot of good hospitals here, the aesthetic has really gone up. There is a significant change in terms of form and concept. In the same way, there was considerable development a number of years back in the field of education. So today, one has the attitude that we'll look at it, but unless it is extraordinary, there is no point mentioning it ... it's been done ... there's a competent background of experience of good design. You bypass good design in the educational field because it is not exceptional, whereas in the hospital field we are seeing it go on a rise right now and, for one reason or another, improvements are coming.

Religious Buildings

The jury, however, was not as kind to religious buildings as they were to schools and hospitals. If buildings can be seen as the material symbols of those institutions that a civilization holds in high esteem, then it may be justified to ask if religion is still a viable force within our society.

Ehrenkrantz: One might take a look at what we saw in terms of religion and say that it is on the downgrade. If anything, there appears to be some kind of turmoil taking place whereby the more detailed the program, the more "givens" there are in terms of specific functions, the better the response.

Barnes: On the one hand you have the church that is a kind of community center, which isn't doing a religious building, it's doing a community center. On the other hand you have the terribly pompous Howard Johnsons for churches. There is nothing spiritual about them. I think there is a real question about whether people ought to be building churches that look so materialistic and so much like motels. I was unimpressed.

Kouwenhoven: I, too, was unimpressed and depressed. It's symptomatic that one of the most interesting buildings I've seen is a synagogue in Cleveland which was designed by a non-Jewish architect. What then does that indicate about the spirit which informs the design? Here was a man who was able, quite cold bloodedly, to devise a house of worship for a faith he has no belief or interest in. The real problem is not the architects', but religion's. Churches don't know what they want from a building.

Franzen: You don't have to be Jewish to like Levy's bread. Corbusier built a pretty good chapel and monastery at La Tourette without being a monk or even a believer. A good architect works in a context and if a church looks like a Howard Johnson's or a Chinese beer garden, that is probably a pretty good indication of the state of religion.

Barnes: The trend toward making them social centers and places where people face each other could be questioned. There might be places where you could get off alone ... or you could have quieter places. What we saw today was not anything.

Industrialized Buildings

The growing concern with industrialized building was more evident in the projects submitted to this year's design awards program than it has ever been in the past. Some of the systems the jury saw were molded of plastic, some used various framing devices with different types of infill panels, others were designed to be built in increments over a period of time, and some were planned to be hung or stacked, or to be continually moved about for...
migrant farm workers. However, within a wide variety of proposals, the jury felt that the submissions, as a group, neither adequately addressed themselves to all of the problems concomitant to industrialized building, nor did they presage the wide range of possible options that one would hope might have emerged.

Ehrenkrantz: One of the things that struck me was that a lot of the prefabricated systems try to use the presentation to show that a system is designed to do anything, without addressing itself to a single problem and solving it. That would be more convincing to someone who would like to work with that system adapted to the problems that he sees fit. People are still working in terms of constructs, trying to show flexibility through a construct rather than through a piece of architecture that shows what you can really do with a system as architecture. Another thing of some concern in this regard is that the highway transportation module appears to be ruling industrialization in the same way the highway is carving up the city. It is attacking the urban environment both in planning and in terms of housing. We're trying to make things work in terms of the 12-ft module, rather than in the sense of designing something for living.

The city is being undermined by the automobile, and now it's coming in and undermining it in a completely different way by limiting our vocabulary. I believe the 12-ft module is a bad one. The different proposals we've seen for industrialized building schemes invariably were based on modules of 12-ft or, at a maximum, 14-ft dimensions, conceived in such a manner that they could be shipped as three-dimensional spaces over the highway. This concept ignores a whole range of things that are being worked on that do not face the same limitations, i.e., the major approaches to concrete panels, site fabrication, systems and a variety of things. We have actually seen in these submissions a relatively small proportion of entries representative of the various approaches to industrialization. One hopes that in the future there will be both encouragement and a greater range of submissions, so that one could begin to evaluate the tremendous variety of possibilities which actually exist.

Barnes: It seems to me that the unit here is the panel and the post — and I'm not sure that is the real unit. The unit for housing may be the whole apartment. I wonder about breaking it down into small components, and if that is the way things are going. Commercial mobile homes show that the economic way is to reproduce the whole apartment in the factory.

Franzen: The rationalized small component system has inherently greater opportunity for variety. It is, in the last analysis, an open-ended system. Obsolescence of one component does not invalidate the approach — change could occur. The search for one factory-produced box — delivered to your site with everything in place including a TV dinner in the refrigerator — is the search for a closed system. If successful, it would create environments where all the people would live in identical cells — piled high or low — like ants in an iron society.

The need for industrialized building, especially housing, is so compelling that we will certainly get it — whether architects participate or not. Whether this industrialized housing will finally imprison all of us in an iron and closed technological system, or whether it will achieve the dimension of open systems, miniaturized and flexible, providing not only shelter but also lifestyle options — is indeed a goal that can be brought about only through the most intense concern of architects and not through technocrats.

Ehrenkrantz: This is a very open thing, even more important than the marketing side, which involves how well and how much air you ship and how far you can afford to ship it. Perhaps the most important thing is the architect's ability to be responsive to individual client's requirements. The larger the units become, the more restricted you will be in terms of variation.

So we have a whole series of different options that can be considered, from dealing with very large to very small pieces, and also the possibility of dealing with very large pieces that are shells, along with a variety of infill pieces that can then be used to shape them to individual requirements. There are many ways to address the problems, and essentially what we have seen in terms of the submissions here, are variations on one theme.

Presentation Techniques

When five men are asked to perform the herculean task of looking at 739 design projects in the short span of two days, the packages in which those projects are presented are, obviously, of no small importance. This year, after the jury had seen all of the submissions, we were curious to learn how important the various presentation techniques were to them, whether they did in fact have any influence on the jury.

Kouwenhoven: It made a lot of difference to me, in a purely physical sense. If you have a bunch of cardboard boxes with elastic bands around them it is much harder to look at a project than it is if it lies flat and you can open it and move back and forth easily. Obviously, I am tremendously impressed with handsome presentations. Often you are thrown off by sloppy presentations, even when the idea may be good.

Ehrenkrantz: In terms of content, one of the things that eliminates a scheme is that its basic content or concept does not come through clearly. The ability to set a statement of the problem, and then show how you react to the problem so that it can be seen simply, is quite significant to the reaction.

Barnes: They ought to realize that in judging architecture all you need are plans, sections and elevations. Sometimes you get things that are not complete, such as some plot plans and elevations that are impossible to figure out. Some of them may have lost out on that. If they knew how hard we worked on some of these books ... it's crazy.

The State of the Art

Although the presentation technique is of great significance to the jury, whose imagination was sparked by some and infuriated by others, every project was studied as closely as possible within the time allotted. During the closing hours of their deliberations, after the jury had seen all of the submissions and discussed many of them in extensive detail, they were asked if what they had seen indicated anything about the state
of technology, the state of industrialization, aesthetics or even sociology. Did it, in fact, indicate anything about the state of the art or about the various interests of architects?

**Kouwenhoven:** I think among the first things you have to say is that the 45° angle is dominant at the moment, and rather tiresome.

**Franzen:** There is no reason why someone shouldn’t be totally committed to spectacular architecture as much as there is no reason why someone should not be committed to inventing devices that make it possible for ordinary people to understand how they can make a planning input, which is a very important area. If we have difficulty understanding large planning schemes, can you imagine how ordinary people can approach them? One of the most important devices in the world today would be something that would make it possible for people to say “Yes, I understand that.” That is just as important as spectacular architecture.

**Barnes:** The only office buildings I remember seeing are the ones that were really large scale, mechanistic patterns — maybe that has something to do with the state of the art.

**Franzen:** I think it has a lot to do with the superficiality that is going on, and a lot to do with the fact that if you live in the musclebound latter day Corbusier, if you eliminate the 45° plan or section, if you eliminate the shed roof, you have eliminated about 90 percent of the schemes, whether they are large or small. And when you have a small project at least you can do it honestly to the extent that you can examine it carefully. But when you see a master plan for an entirely new college using the 45° angle both in plan and on the skylines — God knows where — you just think people did not carry the thing far enough. Everybody is desperate to hop onto the latest-trend bandwagon, but the bandwagon is moving so fast no one knows quite where they are standing.

**Barnes:** As far as houses go, what bothered me a little was the posturing and posing. Whether, as more and more houses get built within sight of each other, that is the right attitude. All these designers are approaching a house almost always as if it were a work of art which is going to stand alone and not be next to anything, completely out of context, and that is not so. I wonder why there weren’t more anonymous houses, houses that were camouflaged in some way so that we don’t mess up nature. The first award, although it involves itself very much with the context. The context can be nature, people you work with, the environment, urban setting, what-have-you. We have all fully recognized by now, or it seems to me we should have, that there are new forces, new design generators, new parameters which have tremendous potential. In these submittals, the vast majority of the solutions mistreated the very programmatic possibilities that they themselves stated initially, and were then pulled off into another area which dishonored their first impression. The program, the context, the fact that it is now possible to see a building as a continuation of existing forces around you, has largely been ignored for the sake of architectural display.

**Ehrenkrantz:** There has been a tradition in architecture of divorcing the program from design. It may begin with students who spend a great deal of time in libraries doing research. They study to get the design, and then very quickly forget everything else and become involved with problems without a thorough opportunity to carry through, study the implication, and recycle and relate these things one to another. That same problem is found here, where people may have done a first-rate job in establishing a program in a context; but it is as though this was done with certain people within the office, and at some time the client signed off the program and said, “yes, that’s what I want,” so it was given to somebody else to then go out and design a building, and they stopped worrying about the program. There is a real discontinuity within the profession that is mirrored here.

**Kouwenhoven:** There are so few of the areas in which there is any call for energy. There have been some awfully good hospitals done, and there have been some awfully good houses done, but they have become pretty routine. The driving energies at this time, I think, are in areas in which people haven’t been ingenious before.

**Franzen:** The fatigue that we all began to experience after staggering through hundreds of blueprints was related probably to the lack of depth or seriousness with which a particular problem was developed. Maybe people have too much work. But once tackling a problem, a vast majority of them are completely content with superficial gimmicks that were signs and symbols of their being au courant. I think that’s just not enough. Competence also has something to do with your attitude toward limitations. Limitations are your best friends . . . the more you have, somehow the more energy is channeled in the right direction. Generally, I think, a whole series of new problems have been identified in the last decade. The horizons of our work have been enlarged. Everybody knows what these new dimensions are. So it seems that we have reached a point in time where one can see how good a whirl people gave these problems. The broad gamut of awards from first-rate architecture in a nature context to the making of a neighborhood map perhaps indicates the new range of design problems. The results of the jury’s work seem to say to me that we are voting against fashion fascism.

In the past you had the “45 degree” jurors and the “dumb and ordinary” jurors attempting to preach the latest gospel. Perhaps this jury is saying that there are no establishment rules, but only tasks to be tackled. Tasks of a greater variety than ever — all with legitimate claims — affording options for work to all kinds of design interests. The only questions one can then raise are those of commitment and sincerity.
Citation

Unthank Seder Poticha

Partner in Charge: Otto P. Poticha.
Structural Engineer: Frank Honey.
Mechanical and Electrical Engineer: Balzhiser & Colvin, Inc.
Site: Sloping narrow lot on campus between physical education building and outdoor playing field.
Program: To provide nine protected tennis courts usable year round, and nine handball courts, enclosed and heated. Adjoining dressing rooms already existing.
Design Solution: To retain the outdoor character of the tennis game yet give shelter from rain and wind (almost always from the south or southwest), a metal roof with slats like those of a venetian blind was designed to cover the courts. The slats open to the north to provide natural light and ventilation. The particular angle of slant, configurations of slats, and inclusion of a solid wall at the south end were arrived at by model-testing in a wind tunnel. (A quarter scale mock-up was also constructed to test rain seepage.) Handball courts were sited on the east end to take advantage of the sloping site, and allow observation and instruction to take place from the tennis court level.
Construction and Materials: Tennis court roof will be timber trusses and purlins supporting a deeply corrugated weathering steel roof spanning 10 ft between purlins. Concrete tilt-up walls and poured-in-place columns are used in handball courts and all solid tennis court walls. Handball court roofs are precast concrete planks with grouted joints and skim-coat ceiling finish.
Jury Comments
Ehrenkrantz: Light bounces off the back of one roof slat onto another. I wonder if they weren’t trying to shape the roof for light scatter. I have doubts about the wind though.
Goldsmith: They say they have tested it at small scale, but I wonder if it will work satisfactorily.
Kouwenhoven: They’ve done everything that a reasonable architect can do. And it is handsome.
Barnes: It’s probably like a slat-roof house inside, with a nice light.
Kouwenhoven: For the site in Oregon, it is a very sensible solution. You get good courts, protected so that you can play when it rains. The idea is solved with a minimum of fuss. And the form that emerges from the idea is interesting and pleasant.
Citation

John P. Grady

Project: Catalog House: An Expandable Dwelling, Pleasant Valley, New York. Assembled primarily from standard catalog parts, this aluminum house can be expanded easily.
Site: A level, heavily wooded plot 85 miles north of New York City.

Program: Provide a house for a family with growing and changing needs. Initially the structure will serve as a weekend house for a couple and guests. Eventually, it may become a permanent home for a family with several children. In order to experiment with interior design, public family functions required a simple loftlike space.

Design Solution: The building is divided into two zones connected to each other and to the roof deck by an external entrance stair. The lower floor, placed half-level below ground to take advantage of foundation excavation, is divided into small private spaces. The main level is constructed as a single large space. The structure grows in two ways: by expanding the structure and relocating the end walls, and by filling in the shell with independent structures and partitions.

Construction and Materials: Stressed-skin foam and aluminum panels are bolted to a structural framework of steel pipe columns and open-web steel joists. The framework is sized so that it can be erected using a small pickup truck crane. The panels are an integral wall with an exterior mill finish aluminum skin, insulating urethane core and a white baked enamel finish aluminum interior skin. Fixed and sliding glass panels bolt to the same frame. To avoid any footings in the path of the building's expansion, exterior decks are constructed as triangular braced outriggers bolted to the main structure.

Jury Comments

Franzen: Its real importance and excitement is that it doesn't go through the absurd presumption that for a single house you have to invent a totally new prefabrication system. It recognizes that for industrialized housing we have a component industry. It is a joyful piece of machine art or architecture.

Ehrenkrantz: We are all impressed that in taking things off the peg, so to speak, one could put them together without a great deal of fuss. Or in a sense, having a large market behind you, come up with this very creditable performance in terms of a design of a house which shows capacity to grow and evolve to meet the needs of a family.
Community Design Associates

Project: Community Map, Hill District, Pittsburgh, Pa.
Walk-on map involves people in planning their community.
Architect: Troy West.

Delineators: Damion Austin, Chuck Culbertson, Douglas Cooper, Jay Greenfield, Sharon Keeton, Joe Nagy, Robert Phipps, Emily Eckel, Sanders Woodall, Troy West, Sir John Banks.

Job Captain: Doug Cooper.


Information Coordinator: Chuck Culbertson.

Spiritual Guide: Chucky Dial.

Psychologist: Jay Greenfield.


Client: Pittsburgh Model Cities.

Program: Find a way to make a document that people of the community could understand and use in order to participate in planning.

Design Solution: For two summers West walked the streets of Pittsburgh's Hill District with Cooper, then a student at Carnegie Mellon University, to record each building and its use. Photographs taken by local residents, who were hired as consultants, contributed to accuracy. The 25' x 40' map was painted by 13 people over a long weekend, after which residents were invited in to walk all over it. The map is being used by CDA in a transportation study and also by the Model Cities program as a directory of services. It will be updated as projects are completed.

Jury Comments

Kouwenhoven: It's a technique of communication, an interesting achievement.

Barnes: It's the community coming in and standing on a map.

Franzen: The medium is the message. It seems to me that one doesn't have to give awards any more to something that is complete. Maybe the tools of the process, the means of talking with people, are really just as important as the finished product. This is much more than a map; it's the involvement of the community. It somehow has a vibrancy that our elegant graphic charts just don't seem to have. All you have to do is look at this map to know what's going on.
Citation

Wilmsen, Endicott, Greene, Bernhard & Associates


Project Design: Michael Marczuk, Gary Larsen.

Associated Architect: Charles E. Hawkes.

Landscape Architect: Michael Parker.

Structural Engineer: Frank Honey & Associates.

Consulting Engineer: Keith Kruchek, Inc.

Electrical Engineer: Klawa, Mehlig & Associates.


Food Service Consultants: Robert E. Whitney & Associates.

Client: State of Oregon, Department of General Services, Salem, Oregon.

Site: The urban block bounded by Marion, Winter, Union and Summer Streets.

Program: Provide 260,000 sq ft of net office space for 2000 state employees, with on-site parking for 140 automobiles. The maximum limit of expenditure was set at $11,764,961.

Design Solution: The building is split into one low-rise and one high-rise component. The five-story low-rise faces the capitol mall, holding the established cornice line and terminating the formal grouping of the Mall. The high-rise is behind and linked to the low wing. It is located to the rear and to one side of the site to avoid blocking the view of the Capitol Rotunda down Summer Street. The interiors are a repetitive system of floors that stack utilities and services. This represents a method of economy used nationally by private developers and builders.

Construction and Materials: The structure will be of reinforced concrete walls and columns, sandblasted to expose the aggregate, and precast concrete floors. Windows and doorframes will be anodized aluminum with dark insulating glass; heating and ventilating equipment will be all-electric.

Jury Comments

Goldsmith: As a straightforward office building this is a reasonable scheme that is well proportioned. There is enough variation in the floor height to give it a certain richness.

Barnes: I'd go along with the simple, anonymous, straightforward office building. But some young architect looking at the two together would think that's the point somehow. I don't think the high and low rise go together as an urban space.
Don M. Hisaka and Associates

**Project:** Mansfield Fine Arts Center, Mansfield, Ohio.
Modest building on modest budget offers sculptural design for display and teaching of art.
Project Designer: Don M. Hisaka, Principal.

Project Architect: E. Dean Cox, Associate.

Structural Engineer: R.M. Gensert Associates.

Mechanical Engineer: George Evans & Associates.

Electrical Engineer: Wm. B. Ferguson.

Client: The Mansfield Fine Arts Guild, Inc.

Site: Eight-acre triangular lot that forms a prominent corner in a semi-residential area of a small city.

Program: To provide about 10,000 sq ft of classroom, gallery and exhibition space on a modest budget. Building also will include offices, library, storage, sales and rental spaces, and to allow for expansion.

Design Solution: Building is placed in a central open space with parking provided to the southwest. To the east the sculpture will be exhibited in a meadow intentionally left open to enhance the view of the museum from the main intersection. A sculpture court will also be created in the space defined by the perpendicular relationship of the building's two wings. One wing, one story high, contains teaching studios; the other has exhibit gallery areas and supporting facilities. A prominent space in the exhibit wing is a two-story-high gallery space facing onto the open meadow. Clerestory windows provide natural lighting for both second story exhibit area and the classroom studios.

Construction and Materials: Wood frame structure with flush wood exterior siding painted white. The exhibit wing will be air-conditioned and the studio wing heated by roof-mounted unit heaters.

Jury Comments

Ehrenkrantz: This is competent . . . somehow the competent ones stand out in a way that most others don't.

Barnes: I vote for it, despite the fact that it's made of wood.

Kouwenhoven: Yes, that is the weakness . . . It could just as well be cinder blocks. But otherwise it's charming.
Charles Tapley and Associate

Project: “Take Me to the Mountain.” A wooded retreat results in a way of life.

Head Designer/Project Coordinator: Joseph L. Mashburn, Mashburn’s Prodigious Drive In Plan Service.

Client/Designer/Needlework Expert/Head Cook/Diddler Friend: Camille Waters, Houston/Delhi, Texas.


Carpenter Whole Earth Aesthetic Realist/Friend: Jerry M. Lunow.

Consultant Cat: Moon.

Site: Fifty-five acres of land 35 miles southeast of Austin, Texas. Rolling, steep, it stops at a high point, with views from three different sites.

Program: The client wished to develop the land as a retreat for herself, her friends and for:


Three sites are planned: Site one is a morning place, especially suited to autumn. Site two provides more cool shade and an evening view. Site three is special. A tent doesn’t belong here — just a fire. From site three the whole horizon is under you — Devil’s Creek, Devil’s Hollow and 30 miles beyond.

Drive ‘em in — pick a spot according to time and mood. Pop out the stuff and take me to the mountain. It’s all you need.

Materials: Selected to provide ultimate efficiency with maximum flexibility. Unlike “packaged” aesthetics, the client is left with a near infinite number of arrangements of equipment that is intended to be a process. Life Support. Thermos; four-body pop tent; Sierra design down sleeping bags; L.L. Bean back packer mattress; Svea pocket stove; candles and glass enclosure; matches in waterproof container; dependable waterproof battery-operated light (waterproof sportsman’s lantern: L.L. Bean); folding U.S. Army issue shovels; collapsible five gallon water container; Kelty back pack and bag for lengthy hiking; one pair pliers, two screwdrivers; Swiss Army knife; fork, spoon, cup and plate; seating — front seats slide out of VW (or rocks and logs); Thermos ice box — food and drink to suit; personal items.

Alt: two-burner Coleman stove, two-mantel Coleman lanterns, two-gallon gas can.

Ceremonial. Oriental rug: 9’ x 12’; “Crazy Quilt” VW tent; Sony portable cassette stereo tape player with preplanned sound track; Indian blanket; large pillow covers to be filled with pine needles; buckskin pants; pine branches and cones; chopped wood; freshly cut wild flowers.

Jury Comments

Barnes: The last sentence “leave everything with more than it had when you came,” could be an introductory statement.

Kouwenhoven: In one way it’s the most interesting thing we’ve seen.

Barnes: This is nonarchitecture — nature — but maybe this is what we really need.

Franzen: If there is a nonshape or gimmick issue that one can push, it’s really that nature is not part of all the gimmicks that in the past have been pawned off as architecture. This is a dimension that has been lost. We’ve talked so much about the city we’re divorced from all those things that really, in many ways, make us what we are. I just like the very broad, wide dimensions that this opens, and I’d rather associate myself with this dimension than with a 45° shed roof.

Ehrenkrantz: I really have a completely different feeling. The sense of leaving nature as it is, is not the driving in and the packing in. This is a different kind of imagery. Here is a concept of how one might ideally like to imagine something happening. It’s an essay, it’s a poem. I accept it on that merit.

Barnes: I feel a little as though we are jumping on something that is a fashionable bandwagon. But, this is something that you want to have people see. It is on the way to something — as a way of life. I think this is being cited for a process — we are not judging a finished design.

Kouwenhoven: This is not old fashioned sentiment — the components are a Volkswagen bus, a masonry fireplace. These things are reasonable. They don’t defile the landscape. Someday these 55 acres are going to be sub-divided, and when that time comes, OK. Meanwhile we still have places where you can take a Volkswagen bus and do this. That’s what it’s talking about.
L to R: Jerry M. Lunow, Camille Waters, Joseph L. Mashburn, Charles A. Keith.

SEE THE CYCLE AND DANCE NAKED IN THE R.
Citation

Wells/Koetter

Project: Modular Housing System.
A new scheme joins design flexibility to production efficiency.

Architects: Fred Koetter, Jerry A. Wells.
Job Captain: Klaus Dolder.
Structural Engineer: Ray DiPasquale/ Tectonics.
Site: A wide variety of site planning and foundation conditions may be accommodated, from pilings in water to spot footings with column extensions on a 20 percent grade.
Program: An investigation of manufacturing requirements and present housing and environmental needs under two basic design criteria: flexibility and production efficiency.
Design Solution: The basic system consists of a structural steel frame combined with dimensionally coordinated vertical and horizontal closure and space division panels. A standard arrangement of core facilities — kitchen, bathroom, stair and service components — is used. Other components include porches, decks, garages, outside storage units and fence assemblies. The system is designed primarily for row houses and garden apartments up to three stories. Detached and semi-detached houses are also possible.

Construction and Materials: Non-bearing infill-panels in a steel frame. The panels' exterior finish can be aluminum or steel, asbestos, plywood, or epoxy-finished exterior gypsum board. Twelve and fourteen gage cold-formed steel sections made up the structural frame. All connections are bolted.

Jury Comments

Ehrenkrantz: This scheme has gone through its prototype stage. The planning that has been done with it appears to be quite good, in fact, in this regard it is the best of the schemes submitted. It makes use of 12" x 24' modules as well as 12' x 12', which in many other schemes hamper planning. However, I wish it looked better.

Goldsmith: The award is given to the idea rather than to the way it is done.

Ehrenkrantz: This is a very open thing which deals very directly with the problem of how much air to ship and how far can you afford to ship air. Here we have a whole series of different options that can be considered from dealing with large pieces to small pieces which are infill, and can be used to shape the end product to individual requirements.
Prototype Unit

Waste Plumbing

Heating System

Electrical Distribution System

Cooling System

LOWER PLAN

UPPER PLAN
Citation

Gunnar Birkerts and Associates

Project: IBM-MIS Computer Center Facility, Sterling Forest, N.Y. Computer installation digs into a rocky hillside.

Project Designers: Algimantas Bublys and D. Bartley Guthrie.
Project Director: Anthony A. Foust.
Structural Engineers: Skilling-Helle-Christiansen-Robertson.
Mechanical and Electrical Engineers: Hoyem Associates, Inc.
Site Engineers: Staunton and Freeman.
Site: Sixty-five acres of densely forested hill rising from a lake to a county highway.
Program: 245,000 sq ft building to house large computer systems, support equipment and staff of 762.

Design Solution: The building is stepped to follow the terrain with a minimum of excavation. The building clearly separates the computer and equipment zone from the offices, which are located above and at both ends of the computer space. The exterior of the computer area is 20 percent reflective aluminum panels; offices are enclosed by 20 percent reflective glass. The two materials are separated by an orange metal stripe that initiates a theme that is carried inside by orange floors and by ceilings in the corridor between offices and the computer zone. Aluminum is also brought inside as painted aluminum “fields” on corridor walls and as skin on lobby walls. These walls are recessed and lined with molded fiberglass sheets to make a continuous bench.

Jury Comments
Barnes: The plot plan is nothing. It’s a huge open parking lot and they can perfectly well afford to bury it. The building is probably a perfectly good building.
Franzen: It is possibly quite an interesting piece of minimal sculpture. A very powerful piece of mechanistic architecture.

JANUARY 1971 P/A
Citation

Rex Whitaker Allen and Associates; Balzhiser Rhodes, Smith and Morgan, Associated Architects

Project: Ancillary Building, Phase I of the Master Plan, for the Sacred Heart General Hospital, Eugene, Oregon. Modular design and interstitial systems accommodate future changes.
President: Rex Whitaker Allen.

Director of Design: Mark A. Lechowski.

Designer: James M. Meek.
Project Coordinator: J. Philip Gaunt.

Structural Engineer: Herrick and Imper.

Mechanical and Electrical Engineers: Balzhiser and Colvin.

Client: The Sisters of St. Joseph of Newark, Eugene, Oregon.

Site: The Ancillary Building provides the link between existing buildings and ultimately will be located at the hospital’s center.

Program: To provide direct patient services, outpatient facilities, and supply departments replacing those that now exist and to reorganize traffic within the eight-building complex.

Design Solution: A six-story building with basement matches the levels of the existing main building and locates the new departments in the best relationship to existing ones. Each department is designed on a modular basis that simplifies reorganization possibilities. Fixed vertical elements are located at the perimeter of the building and will not impede future remodeling of the main space. Future increments call for the bridging of an arterial street to connect to a future nursing and administration building and multilevel parking structure.

Construction and Materials: Structural frame is steel, Type I construction, with lightweight exterior walls of tile. Interiors will have low-maintenance finishes such as plastics, ceramics, and synthetic fibers. The building has an interstitial-systems concept locating systems floors at the existing third and sixth levels. Within these stories mechanical, electrical and materials-handling systems may be maintained without disruption to the adjoining departments that they serve. Remote equipment such as fan-coil units and transformers will be located in these spaces.

Jury Comments

Barnes: Having operating rooms near the top makes this a logical solution.

Goldsmith: It obviously has a restricted site. I assume that functional reasons set this decreasing plan. As such, I believe that the architects handled this difficulty well.
Project: Trailwood Path System, Trailwood Subdivision, Houston, Texas. A greenbelt with a swimming pool and pavilion curves through a wooded suburb-to-be.

Project Architect: Charles Tapley.
Associated Architects: Charles Keith, Edward Hall, Bill Neuhaus.
Landscape Architect: Charles Tapley.
Structural Engineer: Karl Krause.
Planning Coordinator (for client): J. Stephen Crim.
Subdivision Land Plan: Williams and Crawford.
Client: Friendswood Development Company, Houston, Texas.
Site: A dense, linear woodland of 17 acres, about 30 miles outside of Houston. This acreage is part of over 14,000 acres on which the developers hope to build a small city, a satellite of Houston. The path system is part of the first phase of the development.
Program: Develop a subdivision greenway to allow pedestrian movement, visual retreat and interest. Also create children’s playgrounds, a swimming pool and poolside barbecue house with dressing rooms.
Solution: Remove dead trees. Snake a path through, in, and around the natural closed and open tree spaces, felled trees, yoyon and palm groves. Install sitting pads and minimum amenity devices. A raised roofless wooden pool pavilion with dressing rooms is dropped into the woods.

Jury Comments
Kouwenhoven: What interests us here is the pleasantness of the scheme, of having a belt of woods and greenery and paths stretching...
through the development, having all the streets in the development abut this open area and providing a focal point in the center of the area where there is a pavilion for swimming and changing clothes.

Barnes: I liked the pavilion itself.

Ehrenkrantz: I feel the trail is the important thing—I would have been against any citation for the pavilion by itself.
Jerzy Glowczewski, Urban Designer, was the chief designer for the new city of Aswan, UAR and, with the Perkins & Will Partnership, prepared the comprehensive campus plan for the State University of New York at Buffalo. Before coming to this country he was for seven years with the Warsaw Research and Design Office for Studies in Advanced Building Technology, and before that he spent four years on the designs for reconstruction of Warsaw historic monuments and districts. Mr. Glowczewski, who was twice the recipient of the First National Design Award of Poland, is Professor of Urban Design at Pratt Institute School of Architecture in New York.

Robert Schofield, Architect, is a principal in the firm Schofield/Clogan in New York, whose major works include the master plan and buildings for Rockland Community College and Pace College in New York. The firm received the New York State Association of Architects Honor Award for the Corporate Headquarters of Klopman Mills in 1965, and the Administrative Management "Office of the Year Award" for the Union Camp Corporation Corporate Headquarters in 1970. In association with Earl R. Flansburgh, their Wilton Senior High School in Wilton, Connecticut, received a P/A Design Award Citation in 1968, as well as an award from the American Association of School Administrators in 1970.

The Second Jury

The second jury was composed of the three principals of the recently established firm CODA — Community Design Associates — which was formed out of a belief in the need for an organization that could produce coordinated solutions for physical development projects that would combine the efforts of various planning and design professions. With a practice based on experience that ranges from rehabilitation of urban centers to the design of new towns and work on the preservation of natural landscapes, they made an ideal jury for projects in the planning and urban design categories that were not judged by the first jury.

The Jury Discusses

The second jury was faced with the task of examining over twenty complicated presentations dealing with solutions to projects that ranged in size from a few city blocks to entirely new cities almost as large as Boston. The three men spent the day reading and discussing the projects — many of them several hundreds of pages long — before citing two schemes. One of the projects is a plan for the revitalization of part of the city of Detroit; the other, in a remote part of Long Island, presents a commendable plan for new development while preserving the land in its natural state. The one, revitalization of the city core through corrective planning; the other, rural land development through preventative planning. Although quite dissimilar in scope, the jury viewed these projects not only as addressing themselves to appropriate questions but, in answering those questions, suggesting some important guidelines concerning the future vitality of man's environment, whether that environment be the heart of a large city or secluded woods on the seashore.

Early in their discussions, Jerzy Glowczewski proposed a set of criteria to consider for judging projects of this scope: What is the relevance of a project, what implication does it have for improvement and revitalization of the city? If a project deals with a new community, what is actually new in the form of ideas, apart from the fact of its being newly built? In a country where people move about so much, where transportation systems suddenly become obsolete, what are the new ideas in transportation? What might be the contribution of a given project to provide examples of desperately needed guidelines to others? To what extent does a project propose integration of various systems and land uses? What is the value of a project as advocacy planning? With these questions in mind as a
starting point, the jury was then asked to comment on the projects they had spent the day studying.

Schofield: We've been talking for years now in an increasingly sophisticated manner about the need to consider all the human factors involved in a relationship among many buildings — the total urban or suburban residential/commercial environment. Many of these submissions are based on preconceptions about the way people want to live; they are tract housing done a little better than it has been done before. I don't see that many of them address themselves seriously to the complexities of urban life, to multiple-dwelling living, to the richness of the environment and the variety that ought to be incorporated in a person's life. In the cities, what do we do about existing buildings, how do these projects relate to the existing infrastructure of the city? Some of them are just romantic expressions of the traditional Everyman's-house-is-his-castle thinking.

Bye: When we look at these solutions, we wonder if the architects, planners and landscape architects have actually thought about all of the phenomena of nature; the way wind blows between buildings, the air currents that are generated, the microclimate that is generated by the hot pavement in contrast to the green areas.

Schofield: The problem of core cities very closely relates to what happens outside of the cities, which implies the whole question of new towns. Many of the proposals are just more suburbia, suburbia cut a little bit differently. Maybe the real question is whether suburbia is valid. What are the real user needs of the people who choose to live outside of the city? Some of these schemes almost institutionalize all sorts of segregation; they say that people from the same socio-economic group should live on the same road, that mixing people creates frictions, which is a suburban idea we have been living with altogether too long. Many of these new towns are taking up the spaces between the cities and the existing space outside the city cores. The overall regional planning effect is to cut off one more option people have to get to nature, into the real, unspoiled, natural environment. There should be national policy with standards and guidelines for developers when they are thinking about the size and location of new towns.

Glowczewski: Ecology and preserving the balance of the environment are very important. But looking at these plans, I've seen too much abstract thinking.

Bye: In planning an environment for human beings we must understand some of the details of human nature. I think we have to get into how people turn a corner and how they park an automobile, how they like to sit in the shade and feel the breeze. In looking at these plans, I've seen too much abstract thinking.

Schofield: Some of the projects pay lip service to humanistic objectives, but when you look closely at them you see that it hasn't been implemented. They essentially say that they are for God and Motherhood and Urban Vitality, but on close examination they don't explain how the particular project functions in terms of circulation, what the objectives were in designing the spaces, or why the spaces met the objectives. Some of the projects were superblock Piazza San Marcos writ large again, which we have been kicking around for the last ten years or so. Many of them did not give much thought to the actual life that was supposed to occur in those great urban spaces, to what was going to make them vital. They didn't concern themselves with the real problems. On the other hand, the planners for the Detroit scheme that won show how that plan would be implemented. There were very tight spaces, there was a sequence of spatial experiences as you moved through.

No matter how you move, there are surprises, you could get a little lost, and there was quite a variety along the way in terms of the buildings that formed the walls of the spaces. I sensed that the people who designed it were aware of the problems and that they would see it was carried out in a rich way. They weren't saying that people have to use it in any particular way, or that accidents would not occur in the implementation, but that things would happen over a period of time, with a lot of different impulses plugged in.

Glowczewski: It is one thing to propose a certain structure to which you can plug in various accidents, but if everything is happy, then probably everything would become very bad. It is the contrast that makes things good or bad, if you compare one against another. It is very difficult to say "I am going to give you a right solution and you will be so happy that you won't want to do anything."

Bye: Yes, there can be happy accidents or bad accidents.

Schofield: And one person's happy accident is another person's bad accident.

JANUARY 1971 P/A

1971 Design Awards
Award

Detroit City Plan Commission

Projects: Kit of Parts and Orchestra Place.
With two projects, a large-scale plan and one of its sections, Detroit sets examples to follow.

Client: City of Detroit, Michigan.
Program: Provide a comprehensive, flexible system of approaching problems related to inner-city redevelopment, with emphasis on the ability of the plan to work with and within the existing framework. Increase individual's sense of knowing, and being involved in, his environment.

Design Solution: Through a system of carefully developed priorities, the factors which expand the accessibility, diversity and legibility of the individual's environment are analyzed. A system of paths and open spaces interconnecting centers, districts and new and existing landmarks is developed for pedestrians. Emphasis is placed on recognizing existing structures which are to be saved, and on the importance of offering the individual a choice of experience in the perception of his place in the environment. "Kit of Parts" demonstrates the general principles as applied to a large portion of the inner city, then looks at some of the effects on individual districts. "Orchestra Place" proposes a solution for one segment of the total city, again with interconnecting pedestrian paths to other districts. The proposal includes a staged schedule for accomplishing the total design and suggests architectural prototypes for new structures.

Jury Comments

Glaczewskii: Let's talk about Detroit, because that's really interesting. City planning commissions are considered to be the dullest places. But in this case, it isn't so. Planning commissions are the only agencies in power of proposing something. Usually they don't propose. They just state problems of cities. Here is an example where they are trying to do something. As an ex-

JANUARY 1971 P/A
them. This is a very humane solution.

**Schofield:** These people took a section of the city that apparently was run down but contains a few buildings worth saving. They came up with a proposal that revitalizes the area and saves these old buildings so that there is a rich, written record of the history of the city. Then they've done a very fine design in terms of the spaces between the buildings. At the same time, the way the project relates at both ends to the rest of the city is very carefully thought out.

**Design policies:** Design policies provide the framework within which community architecture can be accomplished. They insure that each individual building, park, shop, or street will recognize its contribution to the whole environment as well as gain from adjacent development. It is in this way that we can build an environment that will make city life easier, more satisfying, and more meaningful.
Major building form should occur in a linear pattern, creating an edge to the development on the east and west.

An emphasis should be placed upon rooftop open space for active use.

A variety of open space in size, configuration, and activity should occur.

Explicit path connections should exist between Orchestra Place and the Medical Center, Wayne State University, Cass Park, and Jeffries Housing.

Public structures and architectural resources should be visually accessible and occur at focal points in the various path systems.

High density publicly accessible uses are encouraged.

Vistas should be maintained to landmarks both inside and outside site.

Vehicular circulation should occur externally.

Pedestrian paths should be continuous to allow choice of direction and activity from any point.

Existing sound structures and architectural resources should be integrated into redeveloped areas.

Each dwelling unit should be within walking distance of essential services.

Diversity in housing types is encouraged in size, height, open space relation, access, etc.
Citation

Rafael Villamil


Architect-Planner: Rafael Villamil.
Clients: H.B. Hollins and L.L. Hollins.
Site: Forty-five acres of wetlands, creeks and higher wooded areas on the south shore of Long Island, New York.
Program: Preserve the land in its natural state while developing it for residential use. Within the 45-acre site, only a small portion of the land, as found in its natural state, is suitable for building. The remaining portion is composed of lowlands. An extensive salt water tidal marsh, essential to the ecological balance of the area, is bordered by creeks that flow into the bay. Zoning density requirements allow 37 single-family dwellings.

Design Solution: Although it would have been simple to fill the land and scatter the houses in typical one-acre plots that would have destroyed the natural properties of the land, the houses have been clustered on the two high points of the site, leaving about 78 percent of the land in its natural state. One cluster of houses is situated to overlook the marshlands, and the other is oriented inward toward the dense woods.

The entrance driveway curves through the woods to continuously provide elements of surprise as well as to discourage speeding. Where it comes close to the houses it is buffered by trees, and no house is less than 235 feet from the nearest public road. Walking and bicycle paths, swimming pool and marina have been carefully sited to avoid vehicular traffic wherever possible. The marsh and some wooded area will be donated to a conservation agency and the remaining land will be held under joint ownership of the residents of the community for their private use.

Jury Comments

Bye: I'm very happy about the way they recognized the ecological situation and have saved as much as possible. That is a great achievement in itself. We have to talk about this constantly from now on... the saving of our environment... these people have made an attempt to do so. They have done this in a very unusual way. The alignment of the road as it snakes through the woods brings you to an arrival point. You can orient yourself easily and there's always visual excitement. The parking in back of the houses is imaginative. The outlook from each house is refreshingly pure — pure in nature. It's deceptively simple. Sometimes because a thing is so well done, you don't find the problems there any more, they've all been solved.

Schofield: The sequence of spaces and the way it turns its back on the automobile and opens onto the marshes is very exciting. There will be a tremendous impact walking from these tight urban spaces, through the residences, and bang — out in virgin land. With that program on that site it couldn't be done any better.
Plastic Resins

New products out of the chemist’s laboratory and now being used in the construction industry are defined by the Chief Specifications Writer of Skidmore, Owings & Merrill, New York City.

A major array of new construction materials stems from the chemist’s laboratory which has produced assorted plastic resins and polymers. Since World War II, chemistry and science have developed resin formulations that provide the basis for products used in the construction industry. The chemistry is quite involved and the number of formulations is countless. As a matter of fact, the extent of utilization of these products of chemistry is still unknown and the possibilities are enormous. However, word of caution regarding plastics and resins is still in order. The toxicity, flame spread, fuel contribution and smoke development are on the high side. The end use of any plastic resin in construction must be tempered by its location, exposure and extent.

A major resin that has been converted into many construction uses is epoxy resin. Initially it was so glamorous that the label epoxy was utilized as a selling point. With time, the market has shaken out the marginal epoxy products and the more sophisticated specification writer has found some very useful and decidedly superior materials that are the products of epoxy resins.

Epoxy resins are the result of the polymerization of diphenyl propane and epichlorohydrin and were first produced commercially in 1947. Properly formulated epoxy resins can be used for surface coatings, adhesives, flooring, decorative panels and road toppings. Surface coatings have excellent adhesion and resistance to acids and solvents. Adhesives formulated from epoxy resins produce the tightest, strongest bonds available today for dissimilar materials. Flooring materials of epoxy resins are tough, abrasion resistant and chemical resistant. A combination of epoxy matrix and granite or marble aggregates can produce decorative wall panels and finishes.

Epoxy formulations are used to fill cracks and seams in concrete to plug leaks because of their tenacious bond and excellent weathering characteristics. A major use for epoxy compounds is found in highway, bridge and industrial floor surfacing and patching. Normal repair and maintenance of these surfaces with concrete admixtures was never satisfactory because of shrinkage, poor adhesion and normal wear and tear. Epoxy patching compounds cure quickly to provide early use of restored areas and the bonded areas are generally stronger than the surface to which it was applied.

Polymers

Polymers comprise a very wide group of polymers. The formulations initially introduced on the market were limited and the end products suffered as a result. Many misconceptions and negative attitudes concerning polymers are based on these earlier formulations. The first coatings and flooring materials had serious drawbacks. Coatings yellowed and were not weather resistant. Flooring products shrank. Formulations available today are very different indeed from the earlier formulations and hold much more promise for end products.

Polyester resins are used in fiber glass reinforced plastics, surface coatings for tile-like paint systems, shower and tub enclosures, wall paneling and floor tiles. Special polyester formulations have been developed to provide higher heat resistance and resistance to burning. Others have been developed for surface coatings.

Since polyesters encompass a wide variety of polymers, there are literally thousands of different resins possible, each with unique properties. A polyester may be manufactured to fit the criteria for almost any end product. Because of this versatility, many applications in the architectural products field are yet to be researched and realized.

Urethanes

Urethanes and polyurethanes are produced by the reaction of polyhydroxyl materials, such as polyessters and polyethers with isocyanates. The urethanes account for surface coatings, sealants, insulation, flooring and molded products such as gears, sprockets and rolls. Urethane coatings possess excellent physical properties, they are chemical and solvent resistant and durable for exterior exposure. They are tough, hard and mar resistant and have excellent abrasion and chemical resistance.

While solvent-based urethanes have irritating vapors, new water-based types have been developed to reduce the hazards of flammability and toxicity. Elastomeric sealants based upon one and two part urethanes have excellent abrasion, cut, tear and puncture resistance. They also resist attack by ozone, oil and grease and have very good resilience and flexibility at low temperatures.

The urethanes can be foamed in place to provide insulation for roofs, sidewalls and floors. Since they have a very low thermal conductance factor, urethane insulation is used extensively in low temperature applications such as freezers and refrigerators.

While all of these polymer resins are rather exotic and their chemistry beyond the ken of architects, it is essential that the end products be carefully studied and analyzed before making a judgment as to their use. They can be used successfully after careful investigation and research.
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TROPHY® Gym Seal and Finish has again contributed to the beauty and utility of one of the newest and finest athletic plants in the nation. Built at a cost of $10 million, this complex at the University of Utah consists of five individual buildings connected by hallways at the lower underground level. The Special Events Center, a circular facility with 15,000 permanent chair seats, will serve for athletic events, lectures, entertainment, conferences and commencements.

Other facilities include two exhibition areas, offices, classrooms, a three-pool natorium, and men's and women's physical education departments. In addition to the basketball floor in the Special Events Center, the complex has five other multiple-use gym floors and six handball courts. All are finished with Trophy Seal and Trophy Gym Finish.

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Faced with a construction season only 3 months long, the architects for the James C. Ryan Junior High School, in Fairbanks, Alaska, wanted an exterior wall system that would be quick to install in any weather, and easy to maintain through the years.

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CONTENTS

Background
The Administrative Revolution

Management Decisions
The Marriage of Man and Efficiency

Scientific Factors
Science, the Marriage Broker

Economic Factors
Landscaping—a Complex Factor

Practical Details
A Magnified Look

Interior Design Factors
The Finishing Touch

Heuga Landscaped Offices
A Bird’s Eye View

Commentary
Experience from Actual Practice
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.

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NOTICES
Appointments, Partners, Associates

JAMES STEWART POLSHEK and ASSOCIATES, ARCHITECTS, has appointed DIMITRI LINARD, Senior Associate, Architectural Management; W. TODD SPRINGER, Senior Associate, Design; JOSEPH L. FLEISCHER, Associate; HOWARD M. KAPLAN, Associate.

ALFRED EASTON POOR, Architects/Engineers, New York City announce the appointments of EDWARD S. CONNELL, AIA and JOSEPH LEE COLT, AIA as associates.

ROBERT W. KITE, AIA, has been named a director of the board of BENHAM CONSULTANTS, INC., Los Angeles.

DANIEL, MANN, JOHNSON, & MENDEHALL, Los Angeles, planners, architects, engineers, systems analysts and economists, announce PAUL J. LOVEWELL as vice president.

ROGER M. LANG has been made an associate of HOBART D. BETTS, ARCHITECT, New York City.

NORMAN DE HAAN ASSOCIATES, INC., Chicago, announces the appointments of CARL E. KAUFMAN and FRANCIS C. MORIGI to the office of vice-president.

ALAN R. GERARD, ISP, has been appointed principal in the Seattle office of JOHN GRAHAM and CO.

GIBBS & HILL, INC., New York City, consulting engineers, has announced that ROBERT W. YOKOM, AIA, has joined its staff as Vice President for Urban Development.

FRANKFURT-SHORT-EMERY-McKINLEY, Architects-Engineers-Planners, Oklahoma City, and New York City has appointed RALPH G. KIRKHUFF, JAMES W. Seward, and RICHARD L. TREADWAY as associates.

RICHARD LEWIS GOULD has been appointed principal and secretary of KING & LEWIS ARCHITECTS, INC., Southfield, Mich.

New appointments at DAVID A. CRANE and ASSOCIATES, ARCHITECTS include: JAMES NELSON KISE, Senior Associate; SCOTT W. MILLIKEN, Associate; I. H. MARSHALL, Associate.

JOHN A. Dziuba, AIA has been appointed president of C. F. MURPHY ASSOCIATES, Chicago.

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Concrete with POZZOLITH — expressive medium for housing the performing arts

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The complex is a succession of concrete terraces overlooking the Rideau Canal. A triangular grid repeated in the building design reflects the shape of the site and accents the geometry.

Throughout the structure, intricate angles, clean cubes, and bold textures testify to the versatility and character of fine concrete. The structural system is cast in place; precast concrete panels are utilized functionally and decoratively.

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126

On Reader Service Card, Circle No. 335
A distinguished jury named nine structures as winners of equivalent top awards in the 1970 Prestressed Concrete Institute Awards Program. Three of the winners were produced by Mo-Sai manufacturers.

1. Battelle-Northwest Technical Center  
Richland, Washington  
Architects: Naramore, Bain, Brady & Johanson  
Structural Engineers: Skilling, Helle, Christiansen & Robertson  
A wide range of precast concrete with exposed aggregate elements was used in this complex, including structural bearing walls, window walls, spandrels, fascia elements, facing for cooling tower, and large precast pylons that serve as exhaust shafts. Jury comment: "Handling of the various complex shapes and their finishes is commendable. Reflects the highest order of contemporary design."

2. Stephen Leacock Collegiate Institute  
Borough of Scarborough / Ontario, Canada  
Architect: A. M. Ingleton  
Structural Engineers: Robert Halsall & Associates, Ltd.

3. Physical Sciences Complex  
University of Guelph, Guelph, Ontario, Canada  
Architects: Craig, Zeidler & Strong  
Structural Engineers: J. Maryon & Partners  
The exterior is precast concrete panels with an exposed warm local aggregate. Featured is a random sculptured rib face. Jury comment: "Textures expressed in precast concrete lend warmth and interest."

Jury comment: "This building demonstrates a masterful handling of precast and prestressed concrete. It makes a clear and powerful statement without violation of the human scale."

Mo-Sai PRECAST, PRESTRESSED CONCRETE WITH EXPOSED AGGREGATE
The electric climate is for architects who want unlimited design flexibility.
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Harwood K. Smith & Partners
design an 18-story building
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The Zale Corporation wanted a unique and striking building for their headquarters in Dallas, Texas. Yet it had to be efficient, functional and built within a strict budget. Architects Harwood K. Smith & Partners found the answer. They had the Zale Building constructed with an all-electric environmental system for year-round comfort—which adds up to the electric climate.

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For complete details see the current Sweets, Section 7.1 Gat or write for the UWM-28 Bulletin.

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On Reader Service Card, Circle No. 359

JANUARY 1971 P/A
Lead solves unusual construction problem in a brand new way.

Hoffmann-La Roche, major manufacturers of pharmaceuticals and fine chemicals, turned to traditional sheet lead — to solve a new and unusual construction problem.

Design of the firm's new Research and Quality Control Building in Nutley, New Jersey, included the necessary provision for continually changing conditioned air in each laboratory. The problem: how to seal most effectively and economically, the air conditioning distribution system from potential leakage when the plenum space above each ceiling in the nine story building contained myriad pipes, conduits and ducts required for laboratories.

The dual problem of controlling air flow in the plenum and preventing sound transmission from laboratory to laboratory was solved architecturally by the selection of sheet lead — after consideration of various possible alternatives.

One-pound sheet lead (1/64-in. thick), offered its notable workability and ease of installation to solve the seal problem — its superior sound attenuation capability to solve the noise problem. And the choice of lead provided still another bonus: the low in-place cost.

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JANUARY 1971 P/A
Why Steel Joists Were the Right Answer to This Building Need

THE HUSSMANN PLANT

22 ACRES UNDER ONE ROOF—AND FAST!

"What we needed," says Gordon R. Garrey, president of Hussmann Refrigeration, Inc., "was a plant that covered a large area with minimum internal supports, in the fastest time at the lowest cost. And," he added, "that's exactly what we got."

Hussmann, a Division of Pet Incorporated, is the world's largest manufacturer of food store equipment—coolers, shelving, check-outs and refrigeration machinery.

Open web steel joists were the logical answer, the obvious answer to this building challenge. The new Hussmann plant and office building in suburban St. Louis is a quarter mile on each side and covers more than 800,000 square feet—almost 22 acres. That's a lot of space to cover! From groundbreaking to full operation of the new facility required 16 months. Austin Company engineered the project.

High-strength, lightweight open web steel joists are versatile structural members that span space with speed and ease. They can be set in place quickly, saving days and weeks of building time.

And they're available in a wide selection of lengths, depths and load-carrying capacities.

For complete technical information, send coupon today for your free copy of our 1971 Edition, Specifications and Load Tables for Open Web Steel Joists and Longspan Steel Joists.

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Arlington, Va. 22202

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On Reader Service Card, Circle No. 370
ARCHITECT—Major midwest architectural, planning and engineering firm with a nation-wide practice concentrating on institutional, commercial and industrial projects. If you have 5-10 years experience in all phases of architectural work, have NCARB rating, and are interested in working in a regionally, nationally and internationally advertised line of luminous ceiling systems, report your qualifications and salary requirements. Box #1361-177, PROGRESSIVE ARCHITECTURE.

PROJECT ARCHITECT—Expanding architectural/engineering firm has openings for project designers and draftsmen. Located in Western New York and maintaining a regional practice through the states of New York, New Hampshire and Connecticut. This firm can provide exciting challenges to architects oriented to the design of medical, educational, 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, 2637 Main Street, Niagara Falls, New York 14305.

PROJECT ARCHITECT—Design and production manager for building products manufacturer. Must have architectural degree, registration, and 5-10 years experience in all phases of high rise office buildings, commercial and industrial buildings, schools, hospitals, and laboratories. Excellent compensation, fringe benefits, and growth potential are available. Send confidential resume to: Construction Manager, Daverman Associates, Architects & Engineers, 200 Monroe, N.W., Grand Rapids, Michigan 49502.


PROJECT ARCHITECT—Design and production manager for building products manufacturer. Must have architectural degree, registration, and 5-10 years experience in all phases of high rise office buildings, commercial and industrial buildings, schools, hospitals, and laboratories. Excellent compensation, fringe benefits, and growth potential are available. Send confidential resume to: Construction Manager, Daverman Associates, Architects & Engineers, 200 Monroe, N.W., Grand Rapids, Michigan 49502.
Prior to the installation of LUNDIA FULLSPACE, bank personnel had to remove a heavy, cumbersome box to gain access to the desired item of information. Photo taken during installation of FULLSPACE system showing original storage system using open steel shelves and boxes.

How did one of the world's largest banks cut information retrieval time by 50% and gain other benefits in the process?

One of the largest commercial banks in the U.S. handles, among other things, over two million checks a day. Today it has records of over 500 million checks in what may be the world's largest rolling library—LUNDIA FULLSPACE movable storage units. The FULLSPACE system comprising 30 bays each having five movable shelf units and one stationary end unit, was installed four years ago to replace an inefficient steel shelf system. Besides a 50% savings in time to check information retrieval with FULLSPACE, the bank gained 2700 sq. ft. more floor space for storage than was available with its old shelving. Previously, information was retrieved by removing a cumbersome box, propping it on a knee or setting it on the floor so the lid could be opened to remove the envelope containing the information, and the reverse process when the box was returned to the shelf. The versatility of FULLSPACE now makes it possible to store the envelopes on the shelves loosely where access to them is quick and easy.

Domestic Adjustment Department, Chase Manhattan Bank, where up to 400 accesses per day are made to the LUNDIA FULLSPACE file system holding records of over 500 million checks.
<table>
<thead>
<tr>
<th>Company Name</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>All-Steel Equipment, Inc.</td>
<td>21</td>
</tr>
<tr>
<td>Frank G. Naheuer, Inc.</td>
<td></td>
</tr>
<tr>
<td>Amsterdam Corporation</td>
<td>16</td>
</tr>
<tr>
<td>Alden Advertising, Inc.</td>
<td></td>
</tr>
<tr>
<td>Andersen Corporation</td>
<td>114, 115</td>
</tr>
<tr>
<td>Campbell-Mithun, Inc.</td>
<td></td>
</tr>
<tr>
<td>Art Vivant, Inc.</td>
<td>124</td>
</tr>
<tr>
<td>Sherman, Sackheim &amp; Co., Inc.</td>
<td></td>
</tr>
<tr>
<td>ASG Industries, Inc.</td>
<td>112</td>
</tr>
<tr>
<td>Liller, Neal, Battle &amp; Lindsey, Inc.</td>
<td></td>
</tr>
<tr>
<td>Azrock Floor Products Div.</td>
<td>2nd Cover</td>
</tr>
<tr>
<td>Glenn Advertising, Inc.</td>
<td></td>
</tr>
<tr>
<td>Bally Case &amp; Cooler Co., Inc.</td>
<td>56</td>
</tr>
<tr>
<td>Beaumont, Heller &amp; Sperling, Inc.</td>
<td></td>
</tr>
<tr>
<td>Beneke Corporation</td>
<td>22</td>
</tr>
<tr>
<td>Kelly Noen Co., Inc.</td>
<td></td>
</tr>
<tr>
<td>Bethlehem Steel Corporation</td>
<td>111</td>
</tr>
<tr>
<td>Van Brunt &amp; Co.</td>
<td></td>
</tr>
<tr>
<td>Blum, Julius &amp; Company, Inc.</td>
<td>17</td>
</tr>
<tr>
<td>Seery &amp; Co. Marketing</td>
<td></td>
</tr>
<tr>
<td>Blu-Ray, Inc.</td>
<td>124</td>
</tr>
<tr>
<td>William Schaller Co., Inc.</td>
<td></td>
</tr>
<tr>
<td>Bradley Washtafountain Company</td>
<td>14, 15</td>
</tr>
<tr>
<td>Hofman-York, Inc.</td>
<td></td>
</tr>
<tr>
<td>Brevister Corporation</td>
<td>130</td>
</tr>
<tr>
<td>Solvang/Conway Advertising, Inc.</td>
<td></td>
</tr>
<tr>
<td>Burke Rubber Company</td>
<td>20Wa</td>
</tr>
<tr>
<td>Hal Lawrence, Inc.</td>
<td></td>
</tr>
<tr>
<td>Cabot, Samuel, Inc.</td>
<td>50</td>
</tr>
<tr>
<td>Donald W. Gardner Advertising, Inc.</td>
<td></td>
</tr>
<tr>
<td>Carpenter, L.E. &amp; Co., Inc.</td>
<td>126</td>
</tr>
<tr>
<td>Harold Marshall Advertising Co., Inc.</td>
<td></td>
</tr>
<tr>
<td>Celotex Corporation</td>
<td>37 thru 40</td>
</tr>
<tr>
<td>Bishopric/Lieberman/Harrison/Fielden, Inc.</td>
<td></td>
</tr>
<tr>
<td>Checkmate, Div. of Rixon, Inc.</td>
<td>35</td>
</tr>
<tr>
<td>Motivation Dynamics</td>
<td></td>
</tr>
<tr>
<td>Concrete Reinforcing Steel Institute</td>
<td>10, 11</td>
</tr>
<tr>
<td>Fenaholt Advertising, Inc.</td>
<td></td>
</tr>
<tr>
<td>Crouse-Hinds Company</td>
<td>42, 43</td>
</tr>
<tr>
<td>Rumwill-Hoigt, Inc.</td>
<td></td>
</tr>
<tr>
<td>Customwood Filigree Mfg. Co.</td>
<td>132</td>
</tr>
<tr>
<td>Ojo Graphica</td>
<td></td>
</tr>
<tr>
<td>Edison Electric Institute</td>
<td>128, 129</td>
</tr>
<tr>
<td>Compton Advertising, Inc.</td>
<td></td>
</tr>
<tr>
<td>Emhart Corp., Russwin Div.</td>
<td>55</td>
</tr>
<tr>
<td>Horton, Church &amp; Golf, Inc.</td>
<td></td>
</tr>
<tr>
<td>Fallansbee Steel Corporation</td>
<td>107</td>
</tr>
<tr>
<td>George Hill Company</td>
<td></td>
</tr>
<tr>
<td>Formica Corporation</td>
<td>13</td>
</tr>
<tr>
<td>Clinton E. Frank, Inc.</td>
<td></td>
</tr>
<tr>
<td>Gates Engineering, Div. of SCM Corporation</td>
<td>130</td>
</tr>
<tr>
<td>John T. Hall &amp; Co., Inc.</td>
<td></td>
</tr>
<tr>
<td>Glen-Gery Corporation</td>
<td>28</td>
</tr>
<tr>
<td>Roberts &amp; Company</td>
<td></td>
</tr>
<tr>
<td>Glidden Durkee Division of SCM Corporation</td>
<td>108</td>
</tr>
<tr>
<td>Meldrum &amp; Feamson, Inc.</td>
<td></td>
</tr>
<tr>
<td>Grefo Building Products</td>
<td>8, 9</td>
</tr>
<tr>
<td>Baghert, Lovett &amp; Dean</td>
<td></td>
</tr>
<tr>
<td>Fuller &amp; Smith &amp; Ross, Inc.</td>
<td></td>
</tr>
<tr>
<td>Gustin-Bacon Div., Certain-Teed Prod. Corp.</td>
<td>19, 20</td>
</tr>
<tr>
<td>Valentine-Radford, Inc.</td>
<td></td>
</tr>
<tr>
<td>Hartor Corporation</td>
<td>49</td>
</tr>
<tr>
<td>J.G. Sullivan Advertising, Inc.</td>
<td></td>
</tr>
<tr>
<td>Heugatitle Corporation</td>
<td>113</td>
</tr>
<tr>
<td>Wyman Associates, Inc.</td>
<td></td>
</tr>
<tr>
<td>Hickman, W.P. Company, Inc.</td>
<td>124</td>
</tr>
<tr>
<td>John H. Rosen Advertising</td>
<td></td>
</tr>
<tr>
<td>Hill-Rom Company, Inc.</td>
<td>54</td>
</tr>
<tr>
<td>Caldwell-Van Riper, Inc.</td>
<td></td>
</tr>
<tr>
<td>Hillyard Chemical Company</td>
<td>110</td>
</tr>
<tr>
<td>Ayres &amp; Associates, Inc.</td>
<td></td>
</tr>
<tr>
<td>Jewett Refrigerator Company</td>
<td>50</td>
</tr>
<tr>
<td>Bowman, Block, Patin &amp; Cook, Inc.</td>
<td></td>
</tr>
<tr>
<td>Kentile, Inc.</td>
<td>4th Cover</td>
</tr>
<tr>
<td>Benton &amp; Bowles, Inc.</td>
<td></td>
</tr>
<tr>
<td>Kinmeir Corporation</td>
<td>1</td>
</tr>
<tr>
<td>Wheeler, Kight &amp; Guinney, Inc.</td>
<td></td>
</tr>
<tr>
<td>Knoll International</td>
<td>118, 119</td>
</tr>
<tr>
<td>Wm. C. McDade, Inc.</td>
<td></td>
</tr>
<tr>
<td>Latco Products</td>
<td>132</td>
</tr>
<tr>
<td>Albert Frank-Guenther Law, Inc.</td>
<td></td>
</tr>
<tr>
<td>Lead Industries, Inc.</td>
<td>131</td>
</tr>
<tr>
<td>Bishopric/Lieberman/Harrison/Fielden, Inc.</td>
<td></td>
</tr>
<tr>
<td>LCM Closers</td>
<td>46, 47</td>
</tr>
<tr>
<td>Aloe T. Pruca, Inc.</td>
<td></td>
</tr>
<tr>
<td>Libby-Ford Company</td>
<td>4, 5</td>
</tr>
<tr>
<td>Fuller &amp; Smith &amp; Ross, Inc.</td>
<td></td>
</tr>
<tr>
<td>Lord &amp; Burnham</td>
<td>120</td>
</tr>
<tr>
<td>Westmarketing Group, Ltd.</td>
<td></td>
</tr>
<tr>
<td>Lundia Myers Industry, Inc.</td>
<td>135</td>
</tr>
<tr>
<td>Hall, Haer, Peterson &amp; Harney, Inc.</td>
<td></td>
</tr>
<tr>
<td>Master Builders</td>
<td>122, 123</td>
</tr>
<tr>
<td>Jayme Organization, Inc.</td>
<td></td>
</tr>
<tr>
<td>Mo-Sai Institute</td>
<td>126, 127</td>
</tr>
<tr>
<td>David W. Evans &amp; Associates</td>
<td></td>
</tr>
<tr>
<td>Norton Plastics &amp; Synthetics Div.</td>
<td>130</td>
</tr>
<tr>
<td>Northlich, Stolley, Inc.</td>
<td></td>
</tr>
<tr>
<td>Olympic Stain Company</td>
<td>121</td>
</tr>
<tr>
<td>Kraft, Smith &amp; Love, Inc.</td>
<td></td>
</tr>
<tr>
<td>Pella Rolscreeen Company</td>
<td>105, 106</td>
</tr>
<tr>
<td>L.W. Ramsey Advertising Agency</td>
<td></td>
</tr>
<tr>
<td>PPG Industries, Inc.</td>
<td>32, 33</td>
</tr>
<tr>
<td>Ketchup, MacLeod &amp; Grove, Inc.</td>
<td></td>
</tr>
<tr>
<td>Polacoat, Inc.</td>
<td>137</td>
</tr>
<tr>
<td>L.F. McCarthy &amp; Co., Inc.</td>
<td></td>
</tr>
<tr>
<td>Potlatch Forests, Inc.</td>
<td>109</td>
</tr>
<tr>
<td>Evans, William &amp; Associates, Inc.</td>
<td></td>
</tr>
<tr>
<td>Professional &amp; Technical Programs, Inc.</td>
<td>125</td>
</tr>
<tr>
<td>Henderson &amp; Roll, Inc.</td>
<td></td>
</tr>
<tr>
<td>Red Cedar Shingle &amp; Handsplit</td>
<td>116</td>
</tr>
<tr>
<td>Shake Bureau</td>
<td></td>
</tr>
<tr>
<td>N.W. Ayer/F.E. Baker, Inc.</td>
<td></td>
</tr>
<tr>
<td>Russwin, Div. of Emhart Corporation</td>
<td>55</td>
</tr>
<tr>
<td>Horton, Church &amp; Golf, Inc.</td>
<td></td>
</tr>
<tr>
<td>Silb rico Corporation</td>
<td>51</td>
</tr>
<tr>
<td>Elwing Johnson Advertising, Inc.</td>
<td></td>
</tr>
<tr>
<td>Sloan Valve Company</td>
<td>103</td>
</tr>
<tr>
<td>Reinecke, Meyer &amp; Finn, Inc.</td>
<td></td>
</tr>
<tr>
<td>Smith, Elwin G. &amp; Company, Inc.</td>
<td>45</td>
</tr>
<tr>
<td>Market Communicators, Inc.</td>
<td></td>
</tr>
<tr>
<td>Southern Forest Products Association</td>
<td>34</td>
</tr>
<tr>
<td>Fitzgerald Advertising, Inc.</td>
<td></td>
</tr>
<tr>
<td>Stanley Works — Hardware Division</td>
<td>117</td>
</tr>
<tr>
<td>Wilson, Haight &amp; Welch, Inc.</td>
<td></td>
</tr>
<tr>
<td>Steel Joist Institute</td>
<td>133</td>
</tr>
<tr>
<td>Bats, Hodgson, Neuselacker, Inc.</td>
<td></td>
</tr>
<tr>
<td>Sunroc Corporation</td>
<td>16</td>
</tr>
<tr>
<td>Ernest William Greenfield, Inc.</td>
<td></td>
</tr>
<tr>
<td>Thonet Industries</td>
<td>41</td>
</tr>
<tr>
<td>Arndt, Preston, Chapin, Lamb &amp; Keen, Inc.</td>
<td></td>
</tr>
<tr>
<td>Tyler Pipe, Wade Division</td>
<td>18</td>
</tr>
<tr>
<td>Walter Clark Advertising, Inc.</td>
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</tbody>
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**Note:** The page number likely represents the page where the company's listing appears in the directory.
Recently Harvey Goldstein moved his Minneapolis Century Camera Store to a new location. Ten years prior, he had installed the 4' x 4' LENSCREEN rear projection panel, shown, for passerby displays. Because of the unusually severe exposure, Polacoat requested that the acrylic substrate LENSSCREEN coated "window" be returned for exhaustive quality tests.

Careful inspection proved that the optical characteristics of Century Camera's LENSSCREEN display panel had not changed. What more conclusive proof of LENSSCREEN's quality and long service life?

LENSCREEN In-Wall panels are available on glass or acrylic substrates in a wide range of sizes and thicknesses.

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Zonolite® fireproofing experts would have known exactly what to recommend for any fireproofing job. Too bad they weren't around in those days.

But today there's a local Zonolite Mono-Kote® fireproofing expert to serve every major city. He'll help you sort out local building codes. Advise you on current fire ratings. Provide answers on anti-pollution and in-place density requirements.

Mono-Kote is the cementitious direct-to-steel fireproofing material that so many specifiers are turning to. So check with Zonolite first, on any fireproofing job. It'll only take a minute now—and can save you time and headaches later. In fact, it just might be a matter of life and death.


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