AMSTERDAM, NEW YORK PUBLIC SAFETY BUILDING, BY FEIBES AND SCHMITT
NATHAN MARSH PUSEY LIBRARY AT HARVARD, BY HUGH STUBBINS AND ASSOCIATES
THREE INTERIORS BY GWATHMEY-SIEGEL
STANLEY TIGERMAN'S EXPLORATION OF NEW SHAPES FOR SPACES
BUILDING TYPES STUDY: PUBLIC ADMINISTRATION BUILDINGS
FULL CONTENTS ON PAGES 10 AND 11
More architects use Armstrong Luminaire Ceiling Systems because what they get is more than just a ceiling.
They get flexibility. Flexibility that translates into the kind of freedom they need to carry out their most innovative ideas. The kind of freedom that makes it relatively simple to design, specify, control, coordinate, and install a dramatic ceiling in any building. Like the four striking solutions shown on these pages.

What you get with Luminaire is truly a system. A system that combines lighting, air diffusion, fire protection, and acoustical control in one integrated assembly. But what you also get is versatility. Versatility that allows you to handle these functions in many different ways.

There are five Luminaire Ceiling Systems: C-60/30, C-60/60, AW 3600, Symmetry, and Pentaflex™. Each is basically scaled to a 5′-square module but is also available in custom variations to meet just about any requirement.

Each can offer you not only a choice of lighting patterns and a wide range of illumination but a flexibility of module, troff and panel arrangement that
results in almost unlimited design possibilities.

For instance, you can choose from three vaulted systems as well as two flat-type systems that provide either exposed or concealed grids. You can vault your entire ceiling or mix your vaults with flat types. You can light all the vaults or space your lighting to meet specific requirements of the job. Within a vaulted system like the C-60/60, you can even choose various light options—including square light fixtures 2' x 2', 2 1/2' x 2 1/2', 3' x 3', or rectangular fixtures 1' x 4' and 2' x 4'. All of which adds up to a freedom of choice you'd be hard put to match.

Also available from Armstrong, of course, is the Armstrong man—bringing you technical assistance that can help put your entire design into focus.

Add this kind of people support to the most advanced ceiling materials available, and you can see why Armstrong Luminaire provides you with the esthetic and performance characteristics you require in your building environment that bears your name and displays your talent.

To learn more, write: Armstrong, 4201 Rock St., Lancaster, Pa. 17604.

In Canada, write: Armstrong Cork Canada, Inc., Box 919, Montreal 101, Quebec.
Introducing the Regitron Series from Armstrong.
Three beautifully sculptured ceilings designed to make
the grid become part of the pattern.

The standard lay-in ceiling has two things
going for it...economy and accessibility in a sus-
pended grid system. However, because the grid is
exposed, the ceiling's design is interrupted and its
aesthetic appeal diminished. Now, with the new
Regitron Series, Armstrong has come up with
an ingenious solution.

Since there's no way to eliminate the grid,
we've found a way to eliminate its visual impact.
And the way we've done it is to purposely design
the grid as part of the ceiling's surface pattern. So
when Regitron's 2' x 4' mineral-fiber acoustical
panels are installed, what you end up with is a ce-
iling in which the grid blends with the design to pro-
vide a virtually monolithic look.

There are three designs available in the Re-
tron Series, all manufactured to carefully regis-
the embossed designs and to beautifully conce-
the acoustical perforations.

Textured Squares employs a 12" x 12"
tilelike module and features embossed radius...
Circles 'n Squares features eighteen circles within smooth-surfaced squares in each 2' x 4' ceiling panel. The one-inch-wide embossed border effectively blends in the grid and disguises sprinkler heads, lighting fixtures, and speakers.

If you're building or designing on a budget, we think you'll find that our new sculptured Registron Series offers you an uninterrupted low-cost lay-in ceiling without a low-cost look. Write Armstrong, 4206 Rock Street, Lancaster, Pennsylvania 17604.
Letters to the editor

I heartily applaud your editorial in the July 1976 issue of ARCHITECTURAL RECORD concerning "family architects." This is a concept which rates an advertising campaign by the AIA at least equal in scope to the one mounted to make the business community more architect-aware. With so many architects in strained circumstances and willing to earn money in ways they would not have considered a few years ago, now is an ideal time for the general public to be made aware that architects can be rented by the hour (usually at rates lower than those of lawyers and psychiatrists). A few hours of consultation with an imaginatively analytical architect can yield a variety of alternative avenues of approach to a problem, some of which can often lead to surprisingly non-architectural solutions. Architects should be geared to offering such consultation services for a fee instead of giving them free and utilizing the time to sell project services. If he is working on a consultation-fee basis, the profession-in-name is more likely to be a professional-in-fact so far as the quality and impartiality of his advice is concerned.

Andrew Alpern, AIA
New York, New York

Your editorial in the July issue is realistic, refreshing, and regenerative. While I don't feel the title is quite right, it points out a need for greater exposure of our profession—that architecture should become a household word, and that all people should be made aware of all potential contributions by architects.

We are a small firm interested in, and enthusiastic about, the small stuff. We strongly feel this kind of market can be reoriented to us through a commitment toward significant public relations and discretionary advertising by the profession. We hope you will continue this fine kind of editorial writing. Perhaps it would be timely for next year's AIA convention.

John J. Serke, AIA
J/D Serke Associates
Ha vernett, Pennsylvania

I enjoyed your editorial July "Family Architects." It is a fine reminder for young firms, as we have all gone through this stage. As a matter of fact, if a firm, no matter how large or well known, does not continue to offer this service, our profession is really not serving our clients as it should. I know our firm still does.

We just finished designing for an "A" frame children's playhouse and recently completed an organic Texas ranch house in, of all places, Big Hill, in Central Texas near Groesbeck. Fortunately we've recently been assigned sizable new commissions to augment our "family" practice. Which: Kari Kamrath, FAIA
MacKie and Kamrath Architects
Houston, Texas

I recently read your editorial on "Family Architects" and find that you have expressed several thoughts and ideas that I myself have felt.

Many architects ignore the type of service you speak about primarily because it does not pay enough and probably because it does not have enough glamour.

I have found that if the service performed is simplified into advice and sketches or drawings that fit the need of the client, then the fees (understandably low) that you can expect, will be closest to what the work effort will be.

Architects by ignoring this type of work also then feed the cycle of potential clients not knowing what architects do or why they could possibly have need of an architect's services. Architects' active participation in everyday community affairs and problems is essential to the community's well being in areas of planning, recreation, education, rehabilitation and new construction. In serving as a so-called "family architect" to the community, an architect becomes actively involved.

Thanks for your editorial. I hope more of us will heed the call.

John M. Scarpata, AIA
Glen Grove, New York

Louis Bauer once said, as my memory recalls, "...as long as there are small buildings there must be small architects,..." lest we "little uns" fear the "big uns" (SOM, CRS, TAC, etc.) we can all take notice of the fact that there are many garages in the world... If building costs continue to soar—the "garage remodel" must become a new wave of architecture. . .

Your "family architect" editorial is so good and common sense with more impact than you realize—once people begin to trust you with designs for their old garages and understand you can solve problems that will help the lives of their dogs, cats, children—once they trust you at their home, then they will trust you for larger work which will ultimately produce a far stranger profession. Let's hear it for the small architect.

Joe Stubbfield, AIA
San Antonio, Texas

Calendar

SEPTEMBER
20-24 9th Annual National Conference of States on Building Codes and Standards, Cranston Hilton, 1150 Narragansett Blvd., Providence, R.I. Contact: Sandra A. Berry, 301/291-3146
14-October 22 Exhibit, a gift from the Italian government, Palladio in America, hosted by the University of Pennsylvania; First National Bank of the U.S., Philadelphia. Contact: Jane Wilson, 215/243-8721.
OCTOBER
1 Last day of submissions for Record Intern Awards (For details, see page 198)
17-20 Prestressed Concrete Institute (PCI), annual convention, America Hotel, Miami Beach, Fla. Contact: Gale M. Spowers, Prestressed Concrete Institute, 20 N. Wacker Dr., Chicago, Ill. 60606
20, 21, 22 Workshop conference, "Philosophy & Issues in the Design of Play Environments," the University of Wisconsin-Milwaukee, Department of Architecture and Department of Physical Education. Contact: Thomas Spellman, University of Wisconsin-Milwaukee, School of Architecture and Urban Planning, P.O. Box 413, Milwaukee, Wis. 53201, 414/963-5239.
21-22 IAB International Board for Aquatic, Sports and Recreation Facilities Architectural Congress, Niagara Hilton Convention Center Hotel, and the International Convention Center, Niagara Falls, N.Y.
New Highspire Travertone* from Armstrong.

It's what "first class" was always meant to look like.

It's the newest addition to top-of-the-line architectural ceilings from the manufacturer with the top-of-the-line reputation, Highspire Travertone. The non-combustible mineral-fiber ceiling tile from Armstrong that provides a whole new dictionary of meanings for words like "quality" and "elegance.

Produced by an exclusive process that endows it with a deeper, richer textured surface, Highspire Travertone gives you the look of luxury any way you look at it. And it's available in 12" x 12" tiles as well as in 24" x 24" tegular-edged units that are installed in an exposed-grid system.

So when first class is the only way to go, Highspire Travertone could well be the only one you'll want to go with. To learn more, write Armstrong, 4207 Rock St., Lancaster, Pa. 17604.
There's a new way to look at steel pipe... (Structurally)
We were looking for a way to cut costs, and our studies indicated that steel pipe was the most efficient and economical construction material for the project. This space frame, designed by using the most recent Canadian specifications and standards, weighs 12.3 lbs. per sq. ft. compared to a conventional truss system weighing approximately 18 

— Regis Trudeau & Associates, Inc.

We were looking for a way to create a unique design and, by going to a steel pipe truss system, we developed a trademark for the center. Not only did steel pipe provide a utilitarian solution to a major structural requirement, but it created a dynamic sculpture, representing both the grace and power inherent in the use of steel.

— Architectonics, Inc.

One thing we were looking for was a versatile material for the roof structure. In this project, steel pipe could efficiently handle the highly axial loads on the members, and it also enabled us to very simply detail the intersection of numerous components. The result was an economical as well as handsome roof structure, which contributed significantly to the quality of the interior space and the power of the exterior design.

— Thompson, Ventulet & Stainback, Inc.

Now, we'd like you to take a more in-depth look at steel pipe in structures. Through our "Design Manual for Structural Tubing" (cost: $2.50), we offer technical information to assist designers in selecting the best structural components for a given design problem. And, through our companion piece "Tentative Criteria for Structural Applications of Steel Tubing and Pipe" (cost: $2.00), specific Criteria are given for the design of tubular sections used in tension, compression, bending or torsion members. For these important manuals, promptly enclose check and make payable to:

The Committee of Steel Pipe Producers
American Iron and Steel Institute
1000 16th Street, N.W.
Washington, D.C. 20036

For more data, circle 4 on inquiry card.
Ask company president Karl Schurr...

Our WATER BASE Pitt-Glaze® Acrylic-epoxy keeps his plant clean—at a practical cost

At Minco Products, Inc., Minneapolis, Minnesota, a clean plant is a necessity for the quality control so vital to the manufacture of Thermofoil heaters, temperature detectors and similar precious metal, fine-wire products. So when Minco completed construction on a recent plant expansion, WATER BASE Pitt-Glaze Acrylic-epoxy Coating got the nod for use on all inner wall surfaces.

According to Karl Schurr, "We were looking for something that would give us an easy to keep clean plant at a practical cost. WATER BASE Pitt-Glaze Coatings met that requirement. Pitt-Glaze Acrylic-epoxy also is impervious to water — another important feature since we use so much water around the plant."

The WATER BASE Pitt-Glaze Coating System has other advantages, too. Like low odor during application; stain, acid and alkali resistance; soap and water clean-up. It's tough, durable. Is available in hundreds of colors.

WATER BASE Pitt-Glaze Acrylic-epoxy might just be the coating you're looking for, too. For more information write PPG Industries, Inc., One Gateway Center, 3W, Pittsburgh, Pa. 15222.

PPG: a Concern for the Future

For more data, circle 5 on inquiry card
Imaginative building facades in hydroformed metal allow unlimited exploration of the functional and aesthetic potential of form. From small fascias to giant skyscrapers, from remodeling to innovative architectural concepts, the Warnel Metal Division of Forms & Surfaces offers standard panels or engineered systems to meet individual project requirements. Hydroformed shapes and textures increase strength, reduce weight and cost. A complete range of metals and finishes are available, including stainless steel, bronze, copper, weathering steel, aluminum and coated galvanized steel.

Forms & Surfaces/Metals 2112 North Chico  South El Monte, CA 91733  (213) 283-7234
THE RECORD REPORTS

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and Record Interiors for 1977

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ARCHITECTURAL BUSINESS

63 “How-to” books that belong in the A/E’s management library
Current Techniques in Architectural Practice and How to Prepare Professional Design Brochures are two of the latest—and best—books on the subjects, in the opinion of reviewer Bradford Perkins.

65 Some pertinent reminders on contracts
Attorney Charles D. Maurer, Jr., offers some good advice, including an often overlooked basic: always have a contract for design services, even on those small jobs.

67 Building costs
Dodge Building Costs Services’ figures for September.

69 Building activity
The South: cooling off
## BUILDING TYPES STUDY 493

127 Public administration buildings
How well are we designing for the public realm? The question of the quality and efficiency of our public architecture has become a subject of increasing concern to professional architects and to the governmental agencies who commission them and use them. Here is a portfolio of recent successes —focusing on medium-size buildings in medium-size towns, the kind the vast majority of architects are working on.

128 Belmont Regional Center
Charlotte, North Carolina
Gantt/Huberman Associates, architects

132 Amsterdam Public Safety Building
Amsterdam, New York
Feibes and Schmitt, architects

136 Malden Government Center
Malden, Massachusetts
Doxiadis Associates, architects

## NEXT MONTH IN RECORD

Building Types Study: Airports
With the recent passage of Federal law 94-353, there can be no doubt that the activity in airport construction will quicken. That law will allow a much higher amount of Federal participation in local efforts—up to $500 million this year alone. But what will the new construction be like?

Most will not be on the very large all-new projects. In RECORD for October, a few of the probable alternatives will be discussed, and these will range from small new airports to alterations of existing facilities to the construction of new satellites around still-functioning older buildings.

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## INTERIORS

Nathan Marsh Pusey Library, Harvard Cambridge, Massachusetts
By partially burying this three-level library underground and covering its roof with grass, architects Hugh Stubbins and Associates have added essential structure while preserving open space.

1 Interiors by Gwathmey-Siegel
2 Pearl's Restaurant, New York City
3 Vidal Sassoon, Costa Mesa, California
4 Unger Apartment, New York City

## Exploration of new shapes for spaces

A group of projects by Stanley Tigerman shows the ways in which he has been exploring rounded shapes to define new kinds of spaces:

1 Private residence in Illinois
2 Private residence in Indiana
3 St. John’s, University of Illinois
4 Illinois Regional Library for the Blind and Physically Handicapped
5 Ukrainian Institute of Modern Art
6 “Zipper” housing, Evanston, Illinois

## Even small banks can express a regional vernacular

1 The Redwood Bank, Vallejo, California
by architects Smith Barker, Hansen
2 The Bank of Suffolk County, New York
by architects Michael Harris Spector and Associates
3 Northpark National Bank, Dallas, Texas
by architects Omniplan
4 The branches of the First National Bank of Albuquerque, New Mexico
by architect Antoine Predock

## Functional simplicity in design for earthquakes

In accordance with the Field Act, which outlines the minimum design and construction of all California public schools for earthquake resistance, the Piedmont Junior High School by Chester Bowles replaces an older, outmoded complex.

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We’ve designed Tru-Therm® to save 2 of the scarcest things in today’s world. Energy and money.

We know the crunch affecting both is something you recognize all too well. We also want you to have a solution you can live with—aesthetically and economically—for years to come. That’s why ASG Tru-Therm insulating glass units are built to provide outstanding efficiency, trouble-free performance and genuine durability. And they can do it right from the beginning, facilitating a reduced initial investment in heating and air conditioning equipment, along with a long-term cut in the consumption of costly fuel.

Thanks to Tru-Therm, it’s feasible to increase the size of exterior openings to take maximum advantage of natural light, thereby minimizing the energy consumed by artificial lighting. Tru-Therm units are available in a wide variety of sizes with a choice of air spaces. What’s more, they’re adaptable to all the latest glazing techniques and all glass used in them can be tempered for extra strength and safety.

Tru-Therm shows its real beauty with an exterior lite of Bronze or Gray tinted twin-ground plate glass. Both are heat absorbing and glare reducing. Gray tinted glass blends with white, gray and black accented buildings. The Bronze harmonizes ideally with tinted glass spandrel and other earthtone materials, while giving a beautifully subdued reflective appearance. In fact, when you stop to think about it, we’re going easy on three things. Energy, money and who knows how many eyes. For complete information, write ASG Industries, Inc., Dept. A, P.O. Box 929, Kingsport, Tennessee 37662.

ASG Industries Inc
The Glass Company

For more data, circle 10 on inquiry card
Three cheers for the AIA for pushing so hard on the energy bill.

Now the real push starts...

The AIA’s strongest effort in years at “going public” was launched on June 23rd with a full-page ad in The Washington Post encouraging quick affirmative action on the energy conservation bill. The ad read, in part: “The current and seemingly abundant supply of foreign oil must not blind us to the urgent need for [an energy policy] . . . . To do this we will obviously need more than legislation. Successful execution of a national policy will require the cooperation of that broad segment of the economy responsible for the built environment—financial institutions, developers, the building trades unions, engineers, the designers and manufacturers of building materials, and, of course, architects. It will also require the enthusiastic support of the Federal establishment, beginning with the White House. (The present Administration has been far too obsessed with the supply side of the energy crisis.) The cooperation of state and local government is essential . . . .”

To extend the impact of the ad, reprints were mailed with covering letter to all Senators and Representatives, all 50 governors, 30,000 city and county officials and agencies, and all AIA chapters for local follow-up. Articles were prepared for distribution to suburban papers, radio and television stations. Lou de Moll, president-elect Jack McGinty, and Energy Committee Chairman Carl Bradley provided background briefings for many major newspaper editorial boards; and Bradley presented a proposed energy plank to the Democratic platform committee, which was adopted at least in part. (A similar effort is underway at the Republican convention as this is written.)

That is some kind of effort at explaining to a not-too-excited public what this business of energy conservation is all about. And, as the headline of this piece suggests, I think three cheers are due the AIA.

The bill as passed is a start—and gives a big push towards standards

The major thrust of the bill does seem primarily concerned (still!) with stimulating oil companies to increase domestic production by granting them higher prices. And I don’t pretend to know whether that carrot will work this time.

There are also incentives, via grants and loan guarantees, to try to encourage homeowners and owners of some commercial buildings to “insulate” and “weatherize” their properties—and I’d be willing to bet that carrot won’t work.

But most importantly, the bill does say: “Get on with the job of setting standards. . . .” The bill “directs” the Federal Energy Administration and HUD to establish energy conservation standards to be incorporated in state and municipal codes. And that does seem to me, at least, to be the only thing that will result in us getting on with the job of designing and building energy-efficient new buildings and retrofitting our old ones.

As RECORD pointed out in its first Round Table on energy conservation—back in January 1972—there is just no doubt that architects and engineers know how to conserve vast amounts of energy. The problem is persuading owners and clients and mortgagees to accept the additional first costs that will be required in some (but by no means all) cases.

Our second Round Table on energy—published in our Engineering for Architecture issue last year (mid-August, 1975)—indicated that almost no one was against meaningful standards that spread the concern and the costs even-handedly. Many owners at that Round Table agreed with a point of view I’ve held all along—standards are necessary because you can’t ask responsible and concerned architects and engineers to do the extra study and research needed to design energy-efficient buildings; and you can’t ask responsible and concerned owners to pay any extra first costs involved (even if your life-cycle costs look good) as long as there are “bad guys” down the street who will (by ignoring the desperate need for energy conservation) be able to “under-sell” you.

Good standards (and the right kind of standards are—as RECORD, AIA, the CSA, and most architects and engineers have been saying all along—performance standards) seem to me to be the only way to put everyone on the same footing and to get on with the job of conserving energy. The building industry can make a massive impact: for example, the AIA thinks we can reach savings on the order of 12.5 million barrels of petroleum equivalent per day by 1990. And that’s 12.5 million barrels not wasted; 12.5 million barrels that we won’t have to explore for, drill for, build refineries for . . . or pay for. —Walter F. Wagner Jr.
Attractive appearance and energy efficiency have now been combined to create a new era of low-glare lighting.

General Electric's new low-glare luminaires cut off unwanted light above 90 degrees and put light on the task — where you want it. These new lighting systems have been specially engineered for HID (high intensity discharge) light sources such as Lucalox®, so you don't lose good efficiency while you gain light control.

Choose between the Powr/Door® cut-off luminaire (upper left) or the Decashield® (lower left) for higher wattage applications. Both provide easy component accessibility for maintenance or upgrading. Or select from the Decaflood® luminaire (lower right) with its unique set of area or roadway optical systems...to the Spaceglow® with the attractive glow shield.

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You will conserve precious water, ease the demands on sewage systems and save on operating costs at no extra cost with the Emblem. Why would anyone buy any other water closet?

*As tested by Dynamics Testing Laboratory, Toledo, Ohio
**Based on a 91¢ average cost per thousand gallons in 5 major cities.

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Consider the type of traffic that will pass by. Korolite wallcoverings are heavy enough to take a lot of punishment - they run from 13 ounces minimum to a maximum of 25 ounces. Most other type 1 materials go up to only 12 ounces. And because they're vinyl, they're long lasting, durable, and easily cleaned.

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walls, cover all the angles.

Consider the size of wall you need to cover.
There is no wall too large or too small for B.F. Goodrich Korolite® wallcoverings. They come in 54 inch widths, and are ideal for quite improvement or renovation, hotel-motel applications, all lightweight commercial uses in residential.

After you've considered all the angles, you'll conclude that the right wallcovering for you can be selected right from this book.
Get a hold of one to see and feel our wallcoverings. Or consult your Koroseal® swatch book or Sweet's for your nearest BFG distributor.

Consider the costs carefully.
Compare the expected life and durability of Korolite wallcoverings with the shorter life of other wallcoverings, and you'll see that BFG vinyl wallcoverings are an extremely economical approach.

B.F. Goodrich General Products Company, 500 South Main Street, Akron, Ohio 44318.

For more data, circle 14 on inquiry card.
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Most heating systems require an entire crew and a whole array of tools to install the many components. All it takes to install ESWA is one man armed with a staple gun. Sometimes it doesn’t even require that. Just unroll the ESWA elements and put them into place. Your heating unit is up in a fraction of the time it takes to install other systems requiring extensive labor. That’s because ESWA lets you eliminate furnaces, radiators, intricate wiring, blowers, ducts and pipes — and therefore much of the expense of putting in a heating system. And ESWA gives you one of the most effective heating systems available today. It’s custom designed to eliminate heat waste. And for maximum comfort and efficiency, the temperature of each area can be controlled with its own thermostat.

Unlike other heating systems, ESWA is completely safe. Should a nail or screw penetrate an element, the material actually insulates itself from the intruding object, providing safe and continuous operation. The ESWA Heating System provides clean, economical heating in any kind of building. That’s the reason it’s been in use in Europe for over 15 years. Isn’t it time you started installing your heating systems with a staple gun?

For more information, call or write Mr. Thomas J. Hoffman, ESWA, Elixir Industries, 17925 S. Broadway, Gardena, CA 90248 (213) 321-1191.

and its installation tool.

U.S. Patent Nos. 3265307, 3336557

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For more data, circle 15 on inquiry card
TERNE ROOFING...
FORM, COLOR, FUNCTION

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Terne permits any visual roof area to become an integral part of the total design concept.

From the standpoint of color,
Terne provides the architect with a creative latitude as broad as the spectrum itself.

From the standpoint of function,
Terne's durability is measured in generations rather than years; it is easily installed, and when measured by the criteria of those to whom ultimate performance is no less significant than initial cost, it is relatively moderate in price.

FOLLANSBEE
FOLLANSBEE STEEL CORPORATION
FOLLANSBEE, WEST VIRGINIA

Boulder Recreation Center, Boulder, Colorado
Architect: Nixon-Brown-Brook-Bowen, Boulder, Colorado
Roofers: Reliable Roofing, Longmont, Colorado

For more data, circle 16 on inquiry card
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Whatever you make of it will withstand the worst punishment possible. LEXAN sheet is guaranteed against breakage, even under the blows of a sledgehammer or the onslaught of a steamroller. That means lower replacement costs, more economy. LEXAN sheet is UL listed Burglar Resistant, complies with the Safety Glazing A.N.S.I. (Z97.1) standard and OSHA requirements. And new F-2000 flame-retardant grade meets the highest standards for reduced flammability.

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For industrial glazing PROTECT-A-GLAZE™ sheet offers an attractive, clear and tinted, translucent glazing for durability with economy.

And architects are finding more and more applications. LEXAN sheet is being used for lighting panels and lenses which are light weight and provide high light transmission.

Tough skylights.
LEXAN sheet’s high impact resistance, clarity, and weather resistance make it ideal for durable, attractive skylights.

Photo: Nashville House
Nashville, TN
Architect: Robert Lamb/Hart/HK5

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• Share the precautions similar to those required for glass.
• Consider emergency access.
• Do not handle clear or tinted laminates after they have been exposed to heat.
Safe school windows.

In school systems throughout the USA, LEXAN sheet secures buildings against vandalism and theft, with LEXAN sheet providing up to 25% more insulation than comparable thicknesses in glass.

Photo: Walt Disney Magnet School
Chicago, IL
Architect: Perkins & Will

Long lasting enclosed walkways.

Domes and enclosed walkways of LEXAN sheet are weather resistant, color stable, and offer high light transmission.

Photo: Provincial Court & Remand Centre
Calgary, Alberta, CANADA
Architects: Long Mayell & Associates

Light weight solar collector panels.

LEXAN sheet .040 and .080 mils thick offers high light transmission, physical toughness, high heat stability, and environmental resistance.

Photo: Grover Cleveland Junior High School
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Photos of Saint Augustin School Centre near Bonn, Germany.

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Based on calculations from the ASHRAE (American Society of Heating, Refrigeration, and Air Conditioning Engineers, Inc.) Guide and Data Book.

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Current examples of redwood plywood applications are shown in the accompanying photographs. For data on specifying redwood plywood, see the Redwood Plywood Guide in Sweet’s or write us at Department P.
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GENERAL ELECTRIC

For more data, circle 24 on inquiry card
The jobs bill is still uncertain of a go-ahead from Congress and from the President. But if it succeeds, new public works projects could get rolling by early next month. Details on page 34.

President Ford has signed the housing authorization bill despite his apparent opposition to many of its programs. The bill revives the conventional public housing program and provides a Treasury loan for construction of housing for the elderly. Details on page 34.

New York City has plans to build a playground for handicapped children as well as for those who are able-bodied. Architects working in the state of New York, and wishing to participate in the design competition for this playground, should contact the New York City Department of City Planning, Playground Competition, Publication Sales Office—Room 1616, 2 Lafayette Street, New York, New York 10007.

Congress has finally appropriated funds for the Pennsylvania Avenue restoration project proposed more than 15 years ago. The plan calls for construction of both residential and commercial units along the historic route between the White House and the Capitol. Details on page 34.

Prescriptive standards are needed for buildings that will limit energy savings, the AIA told the Federal Energy Administration recently. Urging that the FEA revise its proposed State Energy Conservation Plan guidelines, AIA vice-president Carl L. Bradley argued for adoption of performance-based standards.

The Justice Department plans to re-open its antitrust case against the American Society of Civil Engineers. Ended four years ago in a consent decree, the case challenges prohibitions on price competitions as stated by the profession's code of ethics. Details on page 34.

Ten architectural and artistic design projects are part of a national touring exhibit sponsored by the General Services Administration. The display features winners of GSA's Second Biennial Design Awards program, including projects involving historic preservation, adaptive re-use, interior space planning and design, office building construction, fine arts, and barrier-free design. Now on display at Boston's Federal Center, the exhibit will open September 14 at the Massachusetts Institute of Technology; October 18 at the Federal Center in New York; November 17 at McCormick Place in Chicago; and December 28 at the Federal Building in Kansas City, Mo.

An exhibit exploring the impact of black artisans on the architecture and building crafts of the South will open September 30 at the Los Angeles County Museum of Art. "Two Centuries of Black American Art" will remain in Los Angeles until November 21 and then travel to the High Museum of Art, Atlanta (January 8-February 20, 1977), the Dallas Museum of Fine Arts (March 30-May 15, 1977), and the Brooklyn Museum (June 25-August 21, 1977).

New York City Club's Bard Awards for Excellence in Architecture and Urban Design were recently presented. The winners were: Bustop shelters, by Holden/Yang/Raemisch/Terjesen, Architects; Arts for Living Center, by Prentice & Chan, Ohlhausen, Architects; and 1199 Plaza Cooperative Housing, by The Hodne/Stageberg Partners, Inc., Architects. Alfred Devito, Philip Johnson, Peter Samton, and Joseph Wasserman served on the jury.

The Concrete Reinforcing Steel Institute's 1976 design awards program is now taking entries. Deadline is November 15, 1976. The awards recognize reinforced concrete structures that show "creative achievement in esthetics, economy, engineering and functional excellence" and are open to all registered architects and engineers (individuals or teams) with structure is located within the continental United States and has been completed since January 1, 1974 or essentially finished by November 15, 1976. For more information, contact: Victor Walther Jr., Concrete Reinforcing Steel Institute; 180 North LaSalle Street, Room 2110D; Chicago, Illinois 60601.

The projects of 11 American architects are currently being exhibited in the 1976 Venice Biennale. The display, dealing with suburban alternatives, contains works by: Raimund Abraham, Emilio Ambasz, Peter Eisenman, John Hejduk, Craig Hodgetts, Richard Meier, Charles Moore, Cesar Pelli, Robert Stern, Stanley Tigerman, and Denise Scott Brown with Robert Venturi. The exhibition was organized by the Institute for Architecture and Urban Studies in New York City.

ARCHITECTURAL RECORD invites submissions for RECORD INTERIORS of 1977 and RECORD HOUSES and Apartments of 1977. Deadlines for receipt of material are: October 1, 1976 for RECORD INTERIORS, to be featured in the January 1977 issue; and November 1, 1976 for RECORD HOUSES and Apartments, for the 1977 mid-May issue. For further details, contact Barclay Gordon, ARCHITECTURAL RECORD, 1221 Avenue of the Americas, New York City 10020. Telephone: (212) 997-2334. (Also see page 198.)
Ford signs housing bill after a long battle

The housing authorization bill President Ford signed just before the Republican Convention last month actually revives, continues, or expands a number of categorical-type housing programs the President does not want. For example, it revives the conventional public housing program, provides a $2.5 billion direct-from-the-Treasury loan program to build housing for the elderly, and continues for another year a program that subsidizes mortgage payments for private builders of housing for rent to low-income families.

President Ford, however, said he signed the bill because “good government requires” that a number of program extensions become law “as soon as possible.” He also noted that Congress was voting less actual spending—for the public housing program for example—that the maximum allowed under the authorization bill.

The final law was the product of a prolonged battle between Congressional Democrats and the Ford Administration forces led by Housing Secretary Carla Hills.

On public housing, the bill calls for $100 million of annual contract authority spending to be committed to the construction of new substantially rehabilitated conventional housing projects. The appropriation, however, is $85 million.

On housing for the elderly, the $2.5 million Congress authorized is “off-budget” lending by the Treasury to builders of new housing for the elderly—enough to start about 90,000 new units. It requires no appropriation.

The battle of trimming back planning grants ended with $100 million authorized, but only $62.5 million voted, as compared to last year’s $75 million.

Other actions include raising the mortgage limits and the maximum allowable income for a moderate-income family who want to buy a house under the revived home-ownership program. The government now subsidizes the mortgage rate down to 5 per cent. The program was also liberalized to make mobile homes eligible.

Other provisions authorize funds for the new National Institute of Building Sciences; boost the funding for the urban homesteading program; and make permanent an exemption from the mandatory flood insurance, thus making it possible for homeowners to finance the sale of houses in flood-prone areas not in compliance with the law.

The actual amount approved for all subsidies for lower-income families for fiscal year 1977 (beginning October 1) is $675 million, including an Administration program under which Secretary Hills is trying to house as many needy families as possible in existing apartments, rather than in new buildings constructed under government contracts.—Donald Loomis, World News, Washington.

Jobs bill still not guaranteed of a go-ahead

The fragile coalition who waded together enough Senate votes to override President Ford’s veto of the jobs bill feared their deal may yet come unstuck. The coalition has to hang together long enough to get the $3.95 billion appropriation bill through both houses. And the President will have to sign the bill before Washington bureaucrats can give the mayors and governors the green light on any spending.

Whether the President will is an open question: but if he does, Commerce Department approvals of public works projects might begin by October 1, as would spending by some states of new allocations for sewage treatment plants from the Environmental Protection Agency (EPA). Spending by cities and states of Treasury’s categorical revenue-sharing checks could start by November 1.

But by early this month, which is the earliest an appropriation bill is expected to reach the White House, new political strains could develop around the Congressional consideration of the $5 billion bill for EPA grants and a $5 billion categorical revenue-sharing bill—all of which have already passed the House. Adoption of these bills (and the appropriations bills for them that must be enacted by October 1) poses another danger for the smaller $3.95 billion jobs programs, particularly if Ford vetoes the appropriation bill.

The mayors and governors are being charged to recommence their lobbying efforts on the three senators who cemented the bill together: (1) Jennings Randolph (D-W.Va.), who is Chairman of the Public Works Committee. The $2 billion in his part of the bill allows the Commerce Department’s Economic Development Administration to parcel out funds project-by-project with most getting $5 million or less, and no state winning up with more than a $125 million slice of the pie. The money can go for almost any kind of building or public works or recreation project—except canals. (2) Edmund Muskie (D-Maine), who shoved through the $125 million for revenue-sharing grants; most getting parcelled out over five quarters retroactive to July, mostly to cities with high unemployment. The money would be used to maintain public service by keeping employees on public payrolls. (3) Herman Talmadge (D-Ga.), who led the block of 66 senators from Southern and Western states that would get a slice of the additional $700 million in water pollution control funds.—Donald Loomis, World News, Washington.

Justice attempts to re-open antitrust case against ASCE

The Justice Department is trying to re-open its antitrust case, ended in a consent decree four years ago, against the American Society of Civil Engineers. The case was the twin of the Justice prosecution of the American Institute of Architects, both challenging professional code of ethics restrictions on price competition.

Each societyrewrite its code to remove the bans on price bidding, although the National Society of Professional Engineers elected to fight the issue and is currently at the United States Court of Appeals in Washington with its case. What Justice is now arguing is that the ASCE code revision did not go far enough, and that more changes are needed to open the way for one member to bid against another.

Being questioned is what is now Article Three of the ASCE code, which holds it to be unprofessional, dishonorable, and undignified for any “professional engineer” to attempt to supplant work of another engineer in a particular engagement after definite steps have been taken towards his employment.” Justice claims that since the ban on competitive bidding was removed, the society has used the don’t-steal-client provision to bar price competition and has “aggressively investigated alleged violations of Article Three.”

The Government’s case rests primarily on Society disciplinary actions against two top officials of Mecklenburg & Eddy, the Boston-based design firm that is a subsidiary of Reed & Cullin. ASCE dropped Franklin B. Newlin, then president, from membership for three years, and vice president George K. Tozer for two. The charge was that M&E had won away—by holdingbidding—a design review contract.
Port of Kingston in the process of major restoration project

A few years ago, the United Nations sent industrial designer Sergio Dello Strologo to Kingston to help the Indonesian government improve its labor-intensive industries. After a realistic appraisal, Dello Strologo chose to concentrate on traditional ethnic crafts (crafts being the main potential for export in an area with some of the world's finest artisans); and he went about advising the Indonesians on how to market and thus capitalize on their indigenous arts.

Now, eight years later, the Jakarta government, headed by Gouvernor Ali Sadikin has discovered other ways to use Dello Strologo's expertise. With guidance from this Italian-born American (who also oversaw a restoration project for Kingston, Jamaica), Jakarta now has a major restoration project of its own — a project that is sure to spur economic development via both the international and national tourism engendered, and that, more importantly, is instilling civic pride in the city's past.

From its 750-year beginnings, Jakarta has been a wealthy, cosmopolitan port and a long-time headquarters of the spice trade. Its history was greatly influenced by the Portuguese, British, French, Chinese, and Dutch.

Initially, the restoration of Jakarta was limited to the old town square. Under the direction of Project Officer Ir. Tijong, the architects and designers closed the square to traffic and reproduced its original layout with lawns and a radial pattern of stone paths. A central cistern was restored over foundations uncovered during construction; and a cannon long thought to induce fertility by touch was re-installed. Stadhuis, the Dutch city hall was restored as the Museum of Jakarta, a monument celebrating the country's Indocentric history. And the original Jakarta Court House was turned into a performing arts center.

For the Jakartaans, however, all this restoration was not enough; and according to Dello Strologo, "the enthusiasm of the intelligentsia of the city forced us to enlarge the project to include the ancient port of Sunda Kelapa.

Work on Phase II has now begun: Plans have been laid and the zone has been declared historical. Eventually, houses along the canal leading to the old port Pasar Ikan (fish market) will be relaid in 17th and 18th century styles, enhanced by street signs reminiscent of the same era. A 240-year-old mosque will restored, and two old warehouses of the Dutch East India Company will become museums of maritime and of spice trade. Nearby, a group of 17th century Chinese houses has been earmarked for restoration as a museum detailing one of the earliest settlements of Chinese outside their own country. And out in the bay, four islands, for merely a naval base, will become a "maritime playground" for tourists to enjoy bathing, water skiing, and sailing.

Primarily funded by the governor's office of Jakarta, the restoration project has catalyzed enthusiasm throughout Indonesian "hill-country" itself. "Jakarta has always been a style-setter," Dello Strologo says, comparing its development to that of New York. And, already, a new city is emerging from the old fort. —Harrier Sugar.
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See Sweets General Building (Architectural File) 7.5/Cem
Use structure to go up in Taiwan's bustling capital city

Burgeoning with new ideas, will soon be getting under way, multi-use, multi-functional and residential uses, designed by Y. H. Associates. Served by main entrances (two end ones for apartments and the central one for commercial use), the L-shaped building will contain: 1) three basements, the two lower for parking and the top for a supermarket and bakeries; 2) four commercial floors, the lower two housing a department store and small shops and the upper two including an 800-seat cinema, a small music house and several restaurants and clubs; 3) an office floor for shop owners on the fifth level, and 4) ten upper floors of apartments. A four-story-high vertical lobby, with a glass elevator and a series of escalators, will interconnect the four activity floors. Due to the long span requirements of these lower levels, the structure changes at the fifth floor: supported by brackets at the exterior bay, the level is designed as a Vierendeel truss. The exterior is hand-chiseled exposed concrete.

Joint Venture III designs new Hyatt complex

A new 500-room Hyatt Regency Hotel and two 16-story office buildings make-up the Merchants Plaza Complex, to be built in Indianapolis. Designed by Joint Venture III (Coetter, Tharp & Crowell; Caudill Rowlett Scott; Neuhaus + Taylor), the three buildings are juxtaposed diagonally, their walls creating a natural atrium that, glazed and roofed, will serve as the major entrance, in Hyatt's typical grand style, to all the complex. The lower three levels of the hotel are approximately one-half retail space, with small shops and restaurants on the ground floor. The skating rink shown at left has been deleted for financial reasons but will be replaced by a raised lobby bar. An escalator zigzags up the atrium space, carrying passengers to the second floor where they cross the atrium via a bridge and continue the ride to the next level. Another lobby bar, landscaped with live trees and plants, is located here. The complex contains 1,325,000 square feet.
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For more data, circle 28 on inquiry card
Gettysburg campus to get new library by Jacobsen

Gettysburg College in Pennsylvania has plans for a new centrally located library that, though contemporary, will harmonize with its early-nineteenth-century environs. Using pitched slate roofs, burgundy-colored brick, and broad, gently-pitched entry steps, architect Hugh Newell Jacobsen designed the building to blend with the campus' traditional character and scale. The interior design is open-plan, and includes tinted glass bays that provide broad vistas to surrounding lawns and buildings as well as a rhythmic facade.

Dental center to be built in Rochester

A new Eastman Dental Center relocated on a site adjacent to the University of Rochester Medical Center was designed with an emphasis on a faceted exterior to reflect interior functions. Arata Isozaki, Richard Foster and Michael Hordt, in designing this building that houses clinics, dental facilities, and experimental laboratories, placed the intense use such as the X-ray's section and auditories nearest to the entrance. The walls, colors, and temporary furniture, innovative lighting and foliage such as that in the center of the circular clinics diminish the traditional "medical" atmosphere. Other major clinics are also on the ground floor, with adult and staff facilities on the second floor. For the economy of locating mechanical services vertically, laboratories were placed on four smaller floors that form a tower over the lobby area. The angling and height of this tower makes it the focal point of the surroundings.

Minneapolis bank gets an indoor "oasis"

This indoor tropical garden in Minneapolis, designed by Lawrence Halprin & Associates as a "year-round oasis," has replaced the 3½-story-high main banking floor of the old Federal Reserve Building. Located on what is now the second floor of the National Bank Building, the public Garden Court is accessible from outside via an elevated walkway. Replete with plants, waterfalls, and running brooks, the 5000-sq-ft garden is completely dependent on artificial light. Design of the garden required demolishing the existing interior of the Reserve's lower floors. In addition, the bank's vaults—3-ft-thick concrete reinforced with armor plates and steel bars—had to be cut through.
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Essex County Technical Careers Center, Newark, N.J. Robert Moran, Architect
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The tale of two cities

"Miralago," by George Fred Keck (1929)

Illinois Institute of Technology, by Mies van der Rohe (1940-72)

9 Years of Architecture in Chicago, by Oswald W. Abele, Peter C. Pran, and Franz Schulze; J. Philip Trana, Chicago, 1976, 191 pages, $17.50.


Reviewed by Richard B. Oliver

Two recently published exhibition catalogs each describe a rich architectural scene in a viable American city. In each catalog, the city in question is Chicago, although a reader might swear he was reading about two entirely different cities. In fact, the reader is receiving two entirely different views of the same city, and two entirely different notions about what constitutes an architectural scene, and what constitutes architectural history.

During the last few years what was once kind of guerrilla warfare against the impregnable bastions of modern architecture has expanded into a full-fledged civil war (though a rarity that often resembles a chic parlor game). A modern architecture dead? as a hotly debated issue, is the clear successor to that timeless question of the 1960s, What will survive? Nowhere, to my mind, have battle lines and issues of this altogether serious architectural debate been made more vivid and so compelling as in these two books that describe the same one hundred years of architectural development in the same American city.

9 Years of Architecture in Chicago, by Abele, Pran, and Schulze, is a thoroughly orthodox view of Chicago architecture. The book includes a review of all the great monuments of the First Chicago School (1871-World War I), the Reliance and Monadnock Buildings, Auditorium Theater, the Rookery, the Marshall Field Warehouse, and others—and pays the influence of Richardson, Jenney, Holabird and Wright. There is a four-page essay on Chicago architecture between the wars. The remaining bulk of the book is devoted to the work of the Second Chicago School (1938-present), which is completely dominated by the presence of Mies. There is a great emphasis on the high-rise building (both office and apartment), and the "great hall" or universal space. The "Great Hall of Lake Shore Apartments is included, along with the Sears Tower, the John Hancock, and the towers and plazas along Dearborn Avenue. The one unswerving criterion for inclusion in this book is that the form of a building must result from structural clarity, and a direct expression of function.

Chicago Architects, by contrast, is a revisionary view of the "young Turks." The primary bias of publisher Stuart Cohen is to include a number of notable and fascinating (and perhaps great) buildings not included in the orthodox histories of Chicago. Here, works not previously appreciated because they were built between the Columbian World Exposition in 1893, and the arrival of Mies in Chicago in 1938, a period of time in which Siegfried Gideon would have us believe that the only project of value was the Gropius and Meyer submission in the Chicago Tribune Competition. The book is amply illustrated with such examples as the eclectic architecture of Howard Van Doren Shaw; the avant-garde (and often International-Style) projects of George Fred Keck, such as his House of Tomorrow and Crystal House at the 1933 Century of Progress Exhibition; and the Art Deco and Streamline splendors created by Holabird and Root. There are even buildings which are Miesian, but, ironically, not a single Chicago building by Mies himself is included.

The former book is unabashedly orthodox, complete with the jargon of a party-line gone stale. The book rides a fine line between being a dull rehash and a suave recap of what almost everybody already knows (anyone, that is, whose architectural history courses featured heavy doses of Space, Time, and Architecture). The latter book is nothing if not au courant, brimming with an energetic David and Goliath air of having pulled off a coup, full of a Lewis and Clark sense of having discovered a whole new collection of objets trouvés. To say, however, that one book represents the "bad old guys," and the other the "good new guys" would be misleading and altogether inappropriate.

100 Years and Chicago Architects are, in fact, strongly complementary, and the chance to see one against the other is very provocative. 100 Years sees architectural history as a Gedonesque revelation of a single primary line of development with individual examples included or excluded as a function of how well each supports the theory. Chicago Architects subscribes, instead, to the E. M. Forster view of history as a series of messes, and seeks to include a diverse set of works without much urge to weave a consistent tale. The former book views the Chicago scene as one characterized by a brilliant singularity of direction. The latter book views the brilliance of the scene in terms of its resonant and often crazy diversity.

Each book is curiously incomplete. What is missing from each book is most easily found in the other—two books co-existing and interdependent, like yin and yang (or a horse and carriage). Even members of the two casts of characters appear in both books. Especially fascinating is Walter Netsch, who in 100 Years is solidly in the classicizing Second Chicago School, while in Chicago Architects, he appears as one of a band of eccentric romantics. Or Charles Atwood, who designed the Reliance Building in 1894, surely a seminal building in Gideon's theory, but who a year earlier designed the neoclassical Hall of Fine Arts for the Chicago Fair, a building regarded by Augustus Saint-Gaudens as the finest since the Parthenon.

Although the two books do not, in my opinion, represent "bad-guy/good-guy" positions, the books are not of equal quality. 100 Years suffers from just plain smugness—from the tone of the text, to the steel gray and black cover, to the price tag—and from the lack of a fresh approach to familiar material. By contrast, Chicago Architects is so full of wonderful new material that one can ignore, and even sympathize with, an underlying tone of indignation and impatience (and even despair that Gideon will ever be routed) that pervades Cohen's very scholarly and meticulously researched essay.
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How-to" books that belong in the A/E's management library

By Bradford Perkins, Llewelyn-Davies Associates

CURRENT TECHNIQUES IN ARCHITECTURAL PRACTICE, Robert Allan Class, AIA and Robert E. Sehler, Hon. AIA, editors; The American Institute of Architects and Architectural Record, New York, 1976, 275 pages, illustrations, $25.00.


No important books have recently been added to the rapidly growing library of management literature for design professionals, such attempts to fill a real gap in the current literature, and each partially succeeds.

My initial review of Current Techniques in Architectural Practice was made as one of the instructors responsible for the management course at City College of New York's College of Architecture. No satisfactory general text exists, and my colleagues and I all wondered how this book would meet our needs. Our view was qualified "yes."


Because it is a loosely edited anthology of ten authors' views on 20 related topics, the book suffers from the common problems of such books: inconsistent writing styles, skills, viewpoints and levels of detail; redundancy; and occasional detours from the central theme. These problems are mitigated somewhat because most of the authors are well-qualified to write on their assigned topics. But because it is a compendium it is necessary to review the characterizations of the parts as well as the whole:

1. It has a number of excellent chapters, which are major contributions to the available literature, such as Bernard Rothschild's chapter on "Insurance Management" and David Bowen's on "Personnel Management." Unfortunately many others, including the ones on the client and computing, are disappointing given the authors' recognized knowledge.

2. There is a great disparity in viewpoints and level of detail. Some chapters such as the ones on personnel insurance and financial matters would be of interest to the practicing professional while others such as the ones on codes, project delivery, and project management seemed to be written for laymen.

3. The traditional complaint about most management literature that it is big-firm oriented can probably be applied to this book as well. Parts of the book are relevant to any design professional, but many of the specific techniques are not. No real effort is made to deal with the specific issues facing the average-size (10 people) architectural firms.

4. The book also tends to proselytize for the AIA in a few areas. The chapter on construction cost control references the AIA's theories on cost information, and several other chapters refer to the AIA financial management system. The AIA has made some contribution in both areas, but far better references exist.

5. The book is missing some important material. As a whole, it barely deals with such topics as legal methods of compensation, managing consultants, managing growth and change, and starting a new office.

In spite of these flaws, however, this is a good book. It certainly does not justify the flyleaf's accolade that "This book will doubtless emerge as the critical tool for managing an architectural practice in the '70s." It is, however, a useful addition to the literature relevant to both students and the practicing professional.

And about those brochures

McGraw-Hill has recently published the second in Gerre Jones' series of marketing texts. As with his book How to Market Professional Design Services, How to Prepare Professional Design Brochures is clearly the effort of a person who knows his subject, has a point to make, and writes well. But, as was also the case with his first book, this book is not the final word on the subject.

Before noting some of the flaws, I should state three basic facts concerning this book:

1. The subject is important to any firm's marketing effort. The book includes the results of a survey that a large number of project interview lists are made up from brochures, and a good brochure will have an influence on whether one makes the list.

2. Most firms prepare mediocre brochures. In spite of the fact that most recipients look upon brochures as representative of a firm's best effort, according to the author, most brochures are badly done. A client survey gave the architect/engineer brochures reviewed an average score of 4.2 on a scale of 10.

3. This book is well worth buying and reading. Not only is it a small investment to make to help improve the result and reduce the effort to achieve better results, but it is also the only text on this subject directly relevant to the design professions.

The book deals in exhaustive detail with the mechanics of brochure preparation. What is curious, however, is that the depth of the discussion of mechanics is not matched with the similar depth in what makes a good or a bad brochure. For example, there is a whole chapter on writing styles, but the examples used are almost entirely drawn from entertaining but irrelevant publications. Throughout the book the actual subject—the design professional's brochure—is only infrequently used as the source of illustrations. Because of the shortage of brochure examples and discussion of specific design firms' brochure experience, I found less than I had hoped in the topics that mattered the most to me, such as:

1. "What can we do for $2000, for $3000, for $10,000?"
2. "How do I present my experience in such a way that it is relevant to the maximum number of clients?"
3. "How do I relate my brochure to my over-all marketing effort?"

Nevertheless, this book does give solid answers to such questions as:

1. "What are the tasks that must be accomplished in producing a brochure?"
2. "What major decisions must be made during each step?"
3. "What technical aids are available in achieving the desired result?"

These and many more questions are well handled. Hopefully, though, enough people will buy this book to permit Mr. Jones to expand it in future editions so that it reflects more of his extensive personal and consulting experience with the specifics of design professionals' brochures.
Construction costs. The Battle of the Bulge.

Time. Labor. Materials. The high cost diet that'll bulge a construction budget. Trimming that costly bulge in washroom construction is the beginning of Bradley Washfountain savings.

Bradley Washfountains save time with rapid delivery for remodeling and fast track schedules. Only 3 plumbing connections to provide washing capacity for 2 to 8 people. Uncomplicated, fast installation that cuts the high cost of labor. And a Bradley equipped washroom has lower component and material costs than a lav-equipped washroom with the same capacity. It all adds up to a total savings of 46% to 73% on construction costs. Plus reducing the amount of space needed for washing facilities by an average of 25%.

Increasing washroom efficiency and decreasing washroom construction costs. That's a Bradley Washfountain. And that's how you can trim your construction costs. By contacting your local Bradley representative. Or write for more information on the complete Bradley line. Bradley Corporation, 9107 Fountain Blvd., Menomonee Falls, Wisconsin 53051.

Bradley cuts down on costs.

For more data, circle 13 on inquiry card
Some pertinent reminders on contracts

Charles D. Maurer, Jr.

A common pitfall of design professionals is their failure to write the agreements they have reached with their clients, even on those smaller construction jobs (under $50,000).

Of course, a well-written contract provides a clear definition of the responsibilities and relationships of the parties. For instance, unless unequivocally defined in writing, the design professional and the client may have completely different opinions concerning whether the design professional is a guarantor or not. Clearly, the design professional is no such guarantor, as he recognizes the limits of his ability and the state of his art. Nevertheless, the client may assume such a guaranty, even to the extent of seeking to establish a court of law that such a guarantee exists.

Naturally, allocating responsibilities of both parties is also more clearly accomplished in a written contract than in an oral one. The parties can expressly delineate who will bear the responsibility for loss or destruction of material during construction; who will be responsible for job site safety and supervision. In the absence of a written contract, the law may allocate these responsibilities in a variety of ways, any of which could be detrimental to the design professional.

The law requires written contracts

Certain types of contracts are required to be in writing by statute. The law imposing this requirement, like that of its English counterpart, called a Statute of Frauds because its purpose is, obviously, to prevent fraud. The Statute of Frauds varies among states, however, local contracts required to be in writing by Statute in virtually all states are: 1) contracts which cannot be performed in one year for the sale of land, and 3) contracts for the sale of goods in excess of $500. Although the design professional does not generally contract for the sale of land or goods, his services might well be incapable of complete performance within one year, thereby necessitating a written contract. Reference should be made to applicable state laws to determine which contracts are required to be in writing. Contracts which do not comply with the Statute of Frauds are void and unenforceable, and a void unenforceable contract may leave the design professional without a remedy for collecting his fee.

Obtaining payment from an estate

A second type of statute which may prevent a design professional from collecting his fee, is called a Dead Man's Statute. This type of statute prevents parties in an action against a decedent's estate from testifying concerning transactions with the deceased person. Simply stated, the death of a client can prevent proof of the oral agreement with him, and thereby deny the design professional compensation for his services from the decedent's estate. A written contract will help eliminate this risk.

Another general rule of law pertinent to written contracts is the Parole Evidence Rule. The purpose of this law is to lend stability and finality to a written contract, which the parties intend to be the final, complete, integration of all their negotiations. Once a court is satisfied that the parties had such a final, complete, written contract, it will not consider any other evidence of prior or contemporaneous agreements or negotiations, which would alter or vary the terms of the written contract.

This rule alone should compel the design professional to seek a comprehensive written contract. It is important to recognize, however, that many jurisdictions will allow extrinsic evidence to prove a contract was not intended to be a complete integration of the parties' agreement. To protect against this circumvention of the Parole Evidence Rule, the parties should include a clause stating the written contract is the complete expression of the agreement.

Know who may legally sign

Since the legal status of a contracting party is important to the validity and enforceability of the contract, a written agreement is preferred to an oral agreement. Whether a contracting party is an individual, minor, corporation, public agency or married person affects the entire complexion of the contract, including its validity and enforceability.

Public agencies and corporations are limited by legislation and articles of incorporation to contract for certain purposes. Contracts beyond those purposes may be unenforceable. Additionally, the persons signing the contract on behalf of the agency or corporation must have the power to bind that entity if the contract is to be enforceable.

For instance, if a contract names Ajax Investors as owner and John Doe signs as owner, the design professional should ascertain the legal status of both before signing himself. Here, it is unclear whether Ajax is a sole proprietor, partnership or corporation. It is also not clear if Ajax has the power (if Ajax is a corporation) to enter into the contract. Lastly, it is not clear if John Doe has the authority and power to bind Ajax. An express provision in a written contract stating the legal status and authority of the parties to enter into the contract reduces the likelihood of a successful attack upon the enforceability of the contract.

A court faced with enforcement of a contract has much less difficulty interpreting a written, as opposed to an oral, contract because its terms are physically before the court, rather than lodged in testimony and bits of evidence through which the court will have to search for the elements of the agreement. Standard form contracts (e.g. AIA, NSPE, ACEC) increase the ease with which a written contract can be enforced because the language of such contracts has acquired special definition within the profession through widespread use. This aspect of standard form contracts is especially helpful in the event contract rights are assigned or duties delegated.

Written contracts reduce financial risk

One of the most often overlooked advantages of reducing a contract to writing is the opportunity afforded the design professional to advance his own interests by incorporating specific safeguards against his own financial exposure. Such safeguards might include liquidated damages provisions, provisions holding the design professional harmless from liability (e.g. provisions holding one design professional harmless from liability arising out of the professional acts, errors or omissions of a joint venturer) and provisions limiting the design professional's liability. Although such provisions may be subject to attack as offending public policy, their value does not depend solely on their enforceability. More importantly, the negotiations attendant to the inclusion of such provisions provide a clear understanding of the design professional's capabilities and erase unreasonable expectations which might otherwise have been the basis of a lawsuit.

Mr. Maurer is an attorney admitted to the practice in California, Washington and Arizona. He is associated with Risk Analysis & Research Corporation in San Francisco, which counsels architects and engineers on professional liability.
Scaled to today’s emerging office environment, the new 500 Series from All-Steel offers uncompromising comfort... unsurpassed All-Steel quality. 28 models; a full selection of fabrics, vinyls, shell colors and base options. Write for information. All-Steel Inc. Aurora, Ill. 60507.
**INDEXES: September 1976**

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Cost differentials compare current local costs, not indexes, on a scale of 10 based on New York

| Building cost | 35.9% | 44.5% |

**HISTORICAL BUILDING COST INDEXES—AVERAGE OF ALL NON-RESIDENTIAL BUILDING COSTS, 21 CITIES**

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1941 average for each city = 100.00
Only galvanizing protects around corners

to guard this cut edge against rust for over 4 years

Other coatings, such as paint or plastic, protect only the surface they cover—and only for as long as they cover it. When you cut, drill or scratch through the coating, you open the door to destructive corrosion which eats into the exposed surface and underneath the adjacent coated areas.

The magnified color photo above shows proof that the electro-chemical sacrificial action of the zinc coating can go around corners to protect cut and drilled edges. What you're looking at is the top surface and cut edge of a 22-gauge, regular G90 mill-galvanized steel sheet which has been outdoors in the industrial environment near Pittsburgh for four years. The sheet was exposed to the elements on September 20, 1971 and the photo was taken on September 20, 1975. As corrosion attacked, the galvanized coating on the top surface has given up some of its zinc to be deposited by electrochemical action as a tough crust of zinc oxide on the cut edge. After four years, the only hint of rust is the slight yellowish spot on the right side of the photo.

Another advantage of galvanizing versus any surface coating is that the protective layer of zinc is metallurgically bonded into the steel. It won't peel off the steel because it's actually a part of the underlying metal.

If you'd like to know more about the protective capabilities of galvanizing, write on your letterhead for our galvanizing booklets.

GALVANIZING GIVES YOU LONG-TERM PROTECTION FOR YOUR INVESTMENT IN FABRICATED STEEL.

ST. JOE MINERALS CORPORATION
250 Park Avenue, New York, New York 10017, Tel. (212) 953-5106

ZN-733
In the South: cooling off

Construction activity in the South has contributed to the exuberance and vitality of the Southern economy in recent years, and within the short decades, economic development has caught up with the industrialized North. Construction activity swelled also and between 1956 and 1975 the South increased its share of total square footage of new construction from 25 per cent to 36 per cent. (See chart)

When expansion accelerated, constant growth of the construction process was bound to produce overheating that occurred and the end of the sixties. Market share took upward turn between 1969 and 1973 before dropping sharply in 1974 and 1975—the same year for which an end to downturn is expected. The Southern economy has been the fastest-growing of the four regional economies since World War II. Aggressive overtures on the part of local chambers of commerce were vigorously successful in luring manufacturers to the South, offering the enticements of low labor costs, tax abatements, and a non-unionized labor force. Manufacturing employment increased at a faster rate than in the Northeast and the Midwest as a result. White-collar jobs increased as well, with large corporations establishing headquarter offices in major Southern cities.

Further stimulus came from Federal government outlays in the South. The manpower programs and many military installations were expanded. The post-war period resulted in the rapid expansion of Southern cities and the creation of many civilian jobs.

On top of everything else favoring the region, the South is the ideal place for the development of retirement communities as the proportion of the retirement age population in United States increases.

Now let us take a look at the future of construction in the South, and consider two possible paths for its aggregate market share to take through 1980:

1. Extrapolation of the trend of the last two decades results in a level of 41 per cent by 1980.

2. Below-trend growth during a cooling-off period puts market share at 37 per cent by 1980.

There are two reasons, at least, to believe that the industry will proceed along path number 2. One is that a readjustment to a lower level is already taking place following the overheating of the 1969-1973 period, which resulted in high vacancy rates in office and residential buildings. The second is that the Midwest and the West, and to a lesser extent, the Northeast, are expected to strengthen their market positions over the next few years. (Record, May, June, July, 1976)

Nonresidential construction

Manufacturing: Industry in the South is diversified and growing. Capital expenditures in Florida and Texas, for example, tripled and doubled correspondingly between 1958 and 1972. Between 1956 and 1975, market share of manufacturing construction increased from 21 per cent to 31 per cent along a saw-toothed upward sloping path. In recent years, market share growth has been above the long-term trend, but a readjustment to a lower level is forecast for the near future. A 29-30 per cent level is projected for the end of the decade.

Commercial building: The South's share of commercial building hovered around 30 per cent between 1956 and 1968, and then soared to 39 per cent in 1973 before falling back in 1974 and 1975. A 36 per cent increase in white-collar employment between 1966 and 1974 explains the surge in office building in the seventies. Market share of office building construction is expected to be at the 31 per cent level by the end of the decade, supported by anticipated higher levels of employment in the South.

Since 1966, the South has had an increasingly large share of the stores and shopping centers market, paralleling the growth in residential construction. Market share climbed from 31 per cent in 1966 to 39 per cent in 1973. The projected 36 per cent level by 1980 is in line with the long-term trend in residential construction.

Institutional building: The region's share of the institutional building market was growing very slowly through 1970, and then the South's share rose sharply from 27 per cent in 1970 to 34 per cent by 1975. Construction of educational facilities has not fallen off as sharply as in other regions in recent years, and as a result the South's share has risen almost 10 percentage points over the last five years. Hospital construction has also contributed to the increase in market share along with construction of public buildings. The region is expected to maintain its market position and be at the 33 per cent level in 1980.

Residential construction

Single-family housing: The sustained boom in single-family housing in the South was caused by population, income, and employment growth in the last two decades, as well as the comparative cost advantages enjoyed by the region because of climate and labor costs.

The region's share of single-family housing increased along a steep upward trend between 1956 and 1975. Market share rose from 26 per cent in 1956 to a peak of 44 per cent in 1972. The South is expected to retain its dominant role in the single-family housing market as population, income, and employment continue to grow beyond the present decade. Market share, however, will remain below the trend in the second half of the decade and is expected to reach an upward trend in 1978 reaching a level of over 40 per cent by the end of the decade.

Multi-family housing: During the multi-family housing boom of 1972-1973, the South had 44 per cent of the market compared with only 16 per cent in 1956. In 1961, the region's share began an uninterrupted climb to the 1973 peak before crashing to 25 per cent in 1975.

Both public and private construction drove up market share in the sixties and seventies. Over-expansion in the face of rising costs produced the highest vacancy rates in the nation. Market share is expected to remain relatively low but is expected to begin rising by the end of the decade and reach a level of 34 per cent by 1980.

In summary then, a cooling off period is expected to follow the overheating of recent years. During this period, the South's share of total square footage of new construction is expected to remain high, but will lie below the long-term trend line of earlier years. By the end of the decade market share will be rising again and a level of 37 per cent is forecast for 1980.

Jeanne A. Grilo, senior economist
McGraw-Hill Information Systems Company
ONLY ONE FOAM INSULATION IS FIRE RATED OVER STEEL DECKS.

THERMAX® ROOF INSULATION.
This is an industry breakthrough.

We have just developed a non-composite foam insulation which qualifies for Factory Mutual Class 1 fire rating when installed directly over unsprinklered steel decks.

It's a roof insulation board never before available. One with all the advantages of urethane: thin profile, lightweight, ease of handling, meeting all of today's more exacting requirements for insulating values. And with a Class 1 fire rating.

**Celotex Thermax® Roof Insulation.** It is a strong, lightweight roof insulation board with a foam core (reinforced with glass fibers) sandwiched between two asphalt-saturated asbestos facer felts.

It gives you the high insulation values of urethane, plus fire rating, without requiring a second product like perlite, foam glass or fibrous glass between it and a steel deck.

**Superior insulating efficiency.** 1.2 inches - thick Thermax Roof Insulation boards give approximately the same insulation value as 3 inches of cellular glass, 2½ inches of perlite or 1½ inches of fibrous glass. Because of this insulating efficiency, Celotex recommends Thermax Roof Insulation be applied in single thickness.

**Lightweight.** Compared with other FM-rated roof insulating materials providing the same insulation value, Thermax boards are 3 to 6 times lighter. That's up to 75% less deadload factor. The advantages are obvious: you can reduce the size and gauge of roof supports, have greater flexibility in choosing heating and air-conditioning equipment, reduce the size of metal or wood facia around roof perimeters. And still have that Class 1 fire rating.

**Are there any disadvantages?** No. It does not cost any more, it is easy to cut and handle, gives more footage per truckload, uses less warehouse space and requires less handling.

We started out by saying we had an industry breakthrough. We'd like to prove it to you. Contact your local Celotex sales representative, or call John Hasselbach direct: Commercial Roofing Department, The Celotex Corporation, Tampa, Florida 33622.
Antron® II nylon. The known for its lasting
Antron® II. The leading contract carpet fiber brand.

DuPont carpet fiber good looks. At A.T.&T.


carpet—all 150,000 square yards—is a special construction with pile of Antron® II nylon. Antron® II was selected for its outstanding long-term appearance-retention qualities.

—a nylon, it's the most abrasion-resistant of all carpet fibers. In addition, "Antron" II has a pleasant, subdued luster, unlike bright or sparkle-luster fibers that can dull rapidly in contained high-traffic areas. Cleanability and texture retention are excellent.

These are the properties most specifiers expect from "Antron" II, the fiber known for its lasting good looks. And they are among the reasons why it is the leading contract carpet fiber brand.

How "Antron" II masks soil. Here in this 250X electron micrograph, you can see the remarkable four-hole fibers of "Antron" II. The four microscopic voids scatter light to mask soil and help blend soil concentrations into the overall carpet look. The smooth exterior shape minimizes soil entrapments, making cleaning more effective than irregularly shaped fibers.

"Antron" III nylon for durable, effective static control is available in most styles in "Antron" II.

Specifier's Information Kit. For more information—a carpet manufacturers' resource list, a specification guide for commercial office buildings, and a maintenance manual—write: Du Pont Contract Carpet Fibers, Centre Road Building, Room AR, Wilmington, DE 19898.

*Du Pont registered trademark. Du Pont makes fibers, not carpets.

For more data, circle 30 on inquiry card
Now... for large fixed window applications

Pella’s new Clad Pivot Window

The high performance Pivot window with the beauty of wood inside

It's the newest addition to the Pella Clad System, and like the rest of the system, it's designed to be virtually maintenance-free. The exterior is protected by a skin of durable aluminum with an acrylic enamel finish that won't chip or peel. To help cut maintenance costs even further, it pivots to permit exterior glass to be washed from inside the building.

But what really makes this new Pivot Window unique is its wood construction. Wood not only contributes a rich, warm look inside, but its unsurpassed insulating value makes it a wise choice in today's energy-short economy.

Two different models are available — Pivot, with a single sash, and Pivot Contemporary which includes two sash within a single frame, the upper one pivoting and the lower one fixed. Keylocks, standard on all units, prevent unauthorized operation but allow opening for washing and emergency ventilation. All units can be equipped with Pella's Double Glass Insulation System and Pella Slimshades®.

For complete specifications fill in and mail the coupon today.

---

Please send me complete specifications on the new Pella Clad Pivot Window and other Pella products.

Name

Firm

Address

City

State ZIP

Telephone

Mail to: Pella Windows & Doors, Dept. 13116, 100 Main St., Pella, Iowa 50219.
Also available throughout Canada. This coupon answered within 24 hours.

© 1976 Rolscreen Co.
Integrated Ceiling Systems from Johns-Manville.

Now you can create ceilings that work as beautifully as they look.

Appearance and performance. That's what you'll have when you specify an integrated ceiling system from Johns-Manville.

Our wide choice of attractive ceiling configurations allows you the kind of design freedom you want. And we’ve combined these with lighting, sound control and air handling options—all from one manufacturer—for a truly integrated ceiling system.

Attractive modular grid intersection.

Until now, modular ceiling grids have rarely been the object of aesthetic praise. We’re introducing one that will be, with mitered flanges and a thru-regress at all intersections.

And, it’s versatile. Air boots go anywhere on any runner. Telephone and electrical wiring is easily dropped through the grid.

Besides outstanding appearance and versatility, the grid shape offers superior structural properties. It's roll-formed from 25-gauge steel and locks together in three planes to accommodate vertical, lateral and torsional loads.

Efficient distribution of light.

J-M Integrated Ceiling Systems feature Holophane luminaires, backed by 75 years of experience and technical leadership in providing energy-efficient lighting solutions. Our luminaires provide visually comfortable illumination, too. Even the new energy-saving HID lamps may be used without creating brightness problems.

We also offer computer-aided evaluations of lighting lay-outs for your project planning.

True sound control.

With J-M Integrated Ceiling Systems, you can select the acoustical material most appropriate for your requirements. Whatever the criteria—NRC, STC, durability, appearance or fire endurance—you have a choice of J-M acoustical products.

Quiet, dependable ventilation.

J-M air handling systems are known for reliability and flexibility. They maintain excellent distribution patterns even at low volume outputs and go virtually unnoticed in the ceiling. You don’t see them and you don’t hear them. And, if you want to move an air terminal, it’s as simple as lifting it from the current position and inserting it at the new. No tools are required.


For more data, circle 52 on inquiry card
This new STEEL-FRAMED CURTAIN WALL design manual is yours for the asking. U.S.G. covers everything for you in this handy reference guide, from bedrock basics to the latest information regarding Problems and Remedies, Physical Test Data and Applications for Stucco, Brick or Panel Facings. Mail the coupon now and update your knowledge of the many advantages of USG® Curtain Wall Systems... the low cost way to enclose concrete and steel frame structures.
An open-air opera house

STAGE LIFTS
BY DOVER

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Technical service and practical design aids ease design of this Weathering Steel parking structure.


The depth of the mountainside excavation, which greatly influenced the cost of the project, dictated the need for a long (240 ft), narrow (63 ft) structure.
depend on Bethlehem

state road-widening project through Grundy, Va., eliminated many of the town's Main Street parking spaces. And because of the area's steep terrain, alternative off-street parking sites were available.

In building a three-level, 144-car parking structure into the side of a hill to replace the spaces eliminated by the construction, the difficult nature of the site immediately suggested the use of structural steel. It could provide the required column-free long spans. And it could be erected rapidly.

Engineering service valuable. "Bethlehem Sales Engineering personnel are very helpful in furnishing us with technical publications and advice," reports Mr. Gerry E. Higgs, president, Higgs & Higgs, Inc., designers of the structure. "Two slide presentations, featuring steel-framed parking structures, the use of Weathering Steel in construction, were given to our engineering staff. It was also the advice of Bethlehem's Sales Engineer that we considered Weathering Steel for the interior, as well as the exterior framing of the structure."

Weathering Steel? The designers decided on ASTM A 588 Weathering Steel for both the exterior and interior framing for two reasons: (1) it provides an all-weather rust appearance which, when fully matured, will blend well with the surroundings of this rural coal mining community; and (2) its low maintenance will minimize future financial burdens on the town.

Several special design details are employed to minimize staining during the weathering process. Open slots are placed in the concrete slabs around all columns to avoid runoff from the columns onto the slabs. At grade level, gravel, set in concrete, surrounds all the column bases.

Architectural considerations. A low-profile parking structure was designed in order to avoid overpowering the neighboring one- and two-story buildings. The design features an open structure with exposed steel framing, partially clad with sand-blasted precast panels. A set of ramps at the south end provides entrance and exit to the parking lots. One of the ramps also serves as the entrance and exit right-of-way for property on the mountainside above the parking garage. The system of curi and straight ramps allows one-way traffic to be maintained on all parking levels. Stair towers, located at each end of the structure, control pedestrian flow.

Technical and advisory services available. Bethlehem's Sales Engineering section offers a wide variety of services to help make it easier for you to design in steel. Our Preliminary Framing Analysis can provide you with budget information for the total "systems package" of a structure under study. Our advanced engineering group can assist you with technical evaluations. For more information, just call the Bethlehem Sales Engineer at the Bethlehem office nearest you. His number is listed below.

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Slide presentations, as well as numerous Bethlehem publications and design aids, provided valuable assistance to Higgs & Higgs, the project's designer.
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In checking static generation, the AATCC Walk Test with Neolite Soles (134-1969) was conducted on carpet of Fortrel PCP polyester generated a mere kilovolt, well below the threshold of human sensitivity. (Even below the level necessary for such delicate applications as computer rooms and hospitals.) The carpet of Antron II, even with metallic protection, generated seven times as much static—3.5 kilovolts.

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In the AATCC Colorfastness to Light Test (Test Method 16E), the carpet of Fortrel PCP polyester showed no evidence of fading or color change after
For 600 hours of exposure to Xenon-Arc lamps. (That's nearly the industry standard.) The carpet of nylon faded substantially well before 1500 hours.

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These are only three of twelve testing standards that every carpet of Fortrel PCP polyester must meet before it is awarded our five-year guarantee. It's the only wear guarantee available on contract grade polyester carpeting. It guarantees that "if the surface pile of the carpet wears more than 10% within five years in the date of initial installation, Celanese will replace the affected area with equivalent carpeting absolutely no cost to you."

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For more data, circle 67 on inquiry card.
The beauty of Alcoa Coilzak in parabolic luminaires is the beautiful way it controls light.

Parabolic luminaires are esthetically pleasing, in the design of the fixture and in the type of light they disperse. This is particularly important where people work, read or shop, where low visual brightness contributes to a comfortable atmosphere. The secret is precise light control, made possible because the reflective material in quality parabolic systems is Alcoa® Coilzak lighting sheet. Note that we said lighting sheet. In a properly designed luminaire, reflectivity is only part of the story. Controlled image clarity and reflective diffusion are just as important. Alcoa Coilzak sheet is an Alzak®-finished reflector material that meets precise reflectivity and gloss standards.

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Change for the better with Alcoa Aluminum
IN DEERENCE TO ITS ENVIRONMENT, THE PUSEY LIBRARY WAS BUILT BENEATH HARVARD YARD

By partially burying this three-level library underground and covering its roof with grass, planting, and paths which reinforce the existing circulation patterns of Harvard Yard, architects Hugh Stubbins and Associates have added an essential structure while preserving open space. Glass windows, concealed by sloping berms along two sides of the exterior and a central light court introduce natural lighting to staff and reader areas. Shown above is the principal entrance. The mobile in black steel is Alexander Calder's "The Onion."
The most recent addition to Harvard Yard is a courteous and restrained new library. It is a background building constructed for the most part below grade on a site that was too constricted for a building above ground. Harvard Yard, of course, is a place of great historic interest, a museum of native American architecture of every period and an environment revered by generations of Harvard students, Cambridge citizens, and lovers of campus architecture.

Before being asked to design the Pusey Library, Hugh Stubbins Associates had been engaged to survey the entire twenty-two-acre Yard with the object of improving access and services.

After careful observation of the patterns of activity and circulation within the Yard, the architects proposed that it be completely closed to automobiles and parking except for service and emergency access. This was implemented by the university.

Originally it had been thought that the proposed library should be completely subterranean, but new concepts of landscaping led to the idea that the building could emerge at least slightly above ground. The architects foresaw an opportunity they have since effectively capitalized upon—that of designing the library in a way that would open up new vistas within the Yard as seen from the inside of the new structure, or from its landscaped roof. Just as importantly, allowing the building to surface brings daylight into the interiors.

From the beginning, the Pusey Library was seen as an interconnecting link among three existing libraries — Widener, Houghton and Lamont (see site plan right), and an extension of each. Its roof has become a link as well, its paths and landscaping reinforcing the existing circulation network in the Yard. Inside the library, the principal circulation corridor is directly beneath the main diagonal path on the roof. The three major entrances to the new library are at important campus nodes. The principal entrance is directly to the east of the grand staircase of the Widener Library; the second is at the corner formed by Houghton and Lamont; the third is adjacent to 17 Quincy, the former official residence of the president of the university, now used for miscellaneous functions.

The new structure, which has been so precisely and definitively attached to its neighboring build-
ings and to the campus infrastructure, adds 87,000 square feet to the buildings that comprise the Harvard College Library, which is a subdivision of the Harvard University Library, the largest university library in the world. Of the eight libraries within the College Library, three required their own reading rooms and better conservation of their priceless collections. These are the Harvard Theatre Collection, the Harvard University Archives and the Harvard Map Collection. The memorabilia of President Theodore Roosevelt needed adequate storage and display. Since, with the passage of time, books once regarded as commonplace have become rare, space had to be created that would allow such books to be kept at a temperature and humidity protective of their paper and bindings. Finally, as in all college libraries, the variety of services had increased and the collections were growing at rapidly accelerating rates. The new library accommodates the expanding general collections of Widener Library and the manuscript collections of Houghton.

In visible exterior form, the Pusey Library is a slanting grass-covered embankment as can be seen in the photos at right. Its roof is a stone-rimmed platform of earth containing a lawn, trees and shrubs, diagonally bisected by paths and stairs. On axis with the Neo-Georgian bow-front of Houghton is a square sunken courtyard (opposite page bottom right), which admits light to major interior spaces.

The portion of the building that appears above the surface is surrounded by a broad band of brick paving, which forms a moat between the berm and the window wall. At the top of the berm is a deep concrete trough planted with shrubs and vines.

Construction began on the Pusey Library in 1973 and was completed this spring at a cost of $5,653,000.—Mildred F. Schmertz

As the main level plan (opposite page top) indicates, the library has been organized to provide good visual control from the circulation desk located just beyond the lounge adjacent to the exhibition gallery. The photograph (top) shows the degree to which the apparent bulk of the library has been minimized by the slanting berm. To the left of the photo is the corner of Emerson Hall and 17 Quincy. To the rear are Lamont and Houghton and to the right is Widener. The courtyard (right) is two levels deep. It is faced with panels of shipsaw granite alternating with bands of glass. The court is a small garden with a brick surround.
All the interiors and custom-built fixtures were designed by the architects. Nylon carpeting is used throughout except in bookstack areas. Most of the furniture is of oak, as is the trim. Walls are covered with a textured vinyl fabric with a flat off-white, non-reflective surface. The acoustic ceilings are also off-white. Chairs are upholstered in either muted tweeds or brown leather. The daylight is softened by window hangings of natural hemp in an open-weave geometric pattern. All metal, from the window mullions to the smallest door hinge, is of bronze or bronze-finished aluminum. Accent lighting is either incandescent, or fluorescent warmed by gold reflectors within the light fixtures.

The photo (top) is of the reading room for the theater collection. The principal corridor (middle) is an exhibition gallery. It contains four large oak framed, acrylic-fronted exhibition cases for changing exhibitions. The gallery opens into the lounge (left) with a long display case beneath the window overlooking the moat. The lounge is a hub that provides access to the theater collection and archives, as well as to the central circulation desk just visible at the edge of the picture.
Like many other firms across the country, Gwathmey-Siegel finds an increasing percentage of its new commissions in the areas of renovation and interior design. The three shown here and on the pages that follow are in many ways typical of their recent work. Among the givens in each case was an awkwardly shaped space and a rather specific program to be accommodated in that space. Although the three projects are quite different in function, they have a similarity of scale and commonalities in architectural treatment that mark them as the work of a single firm—a firm that leaves the distinctive print of quality on all the work it does.
PEARL’S RESTAURANT: BY CAREFUL RESHAPING, SOME OF IT MORE APPARENT THAN REAL, THE VIRTUES OF LINEAR SPACE ARE SKILLFULLY EXPLOITED
the owner of a well-known restaurant in midtown Manhattan, forced to move to a nearby, new location. The new space is a 14-foot-wide by 100-foot-volume at street level. To interact these inhospitable portions, the architects developed a half-vaulted section that reflected in the mirrors over the banquettes, appears to complete along the entire length of the bar (see photos).

The front elevation reflects the section with surprising accuracy, and, in so doing, gives the suggestion that the entire volume was slipped into place.

The kitchen, unexpectedly, runs parallel to the dining area and is linked by a stair to food storage areas in the cellar. A small office, for the owner, is also located downstairs.

The character of the finished interior is elegant, but there is no design overreach. Though the cuisine is Chinese, there is a notable absence of ethnic or thematic decor. The carpet is dark brown, the bar and cabinet work are white oak, the bentwood chairs are cane and white. A combination of wall-mounted and recessed lighting provides enrichment and visual accent without disturbing the restaurant's pleasant, low-key aura.

VIDAL SASSOON: 
TRANSPARENCY AND GLOWING HIGHLIGHTS IN AN ELEGANT SPACE FOR GROOMING

Located in a shopping mall facing an enclosed pedestrian street, this men's and women's hair cutting salon announces its presence by means of bold signage and a rear-screen projection system visible from the street. Customers are divided at the reception area by gender, then follow two separate but orderly routes through washing, cutting and drying (see plan). The women's areas, larger because of the preponderance of female customers, are broken down into several smaller volumes to make the spaces more intimate. The areas where the ceiling has been dropped are finished in metal pan. The high-ceilinged areas are covered in mylar and, in combination with mirrors and accent lighting, give these spaces a glowing, reflective character.

Working more or less within Vidal Sassoon's standards, the architects selected other finishes that are durable and easy to maintain: dark brown quarry-tile for floors, plywood cabinets covered in plastic laminate. Colors throughout are rather subdued, a conscious effort to let the materials rather than their color express the character of the space. Detailing is elegant.

The ambience is dressy and tinged with a glamour that seems not inappropriate in a country where style is a large part of it's all about.

In this apartment renovation for designer Kay Unger, the architect had three givens: a stepped-down living room, a northern exposure, and a regular grid of columns. Within these constraints, the architect was free to plan a series of interconnected spaces that pivot around cabinets, columns and a travertine-clad fireplace wall. The two-riser change of level and the sweeping arc of the sofa back define the living room but only a part of the larger entrance and gallery space. The private zones, in
The living area, a den that doubles as a guest room, are grouped at the apartment’s west end. The existing kitchen, next to a small studio, was not renovated at the request of the owner.

The extensive cabinet work, most of it designed by the architects, is finished in white oak and detailed with exquisite care. The walls are covered in white vinyl and the carpet is a soft grayown. The selective use of floor-to-ceiling mirrors on one wall of the living room is echoed in the choice of polished metal window blinds that, by reflection, turn the apartment inward on itself at night.

The 6-foot by 6-foot painting of an Old Tenement, by Hugh Kepets, a curious and ironic contrast to its surroundings, is a very strong graphic element facing the entrance.

In the apartment's rather extensive private areas, skillfully designed and detailed cabinetwork is an integral part of the solution. Also important is the lighting, which is carefully balanced and flexible. Throughout the apartment, mirrors are used to expand the spaces in subtle—and sometimes surprising—ways.
I think we take architecture seriously—at least I hope we do. But too many people have become too serious; they’ve become believers in some one right way. Except there is none,” argues Stanley Tigerman.

Tigerman, who has done a lot of serious and important building in and around Chicago (and also around the world), has always been an explorer and an articulate exponent of alternatives. He now has an eight-man (“including the receptionist”) staff all under 30 (“except for me”) and is being “a little less serious. We’re doing a lot of funny and wry and satirical things—work that makes people feel good and that makes us feel good.

“Architecture is pluralistic today. There are people doing boxes, people who express structure, advocacy people who do totally user-oriented design, formalists, guys who look to another time in a reminiscing way, even people who look only to themselves—self-eclectics. All of these things are possible and should be.

“We’re doing something else—political, social, humorous, sardonic, of course relating to Venturi and that stuff. I think that’s reasonable too. I don’t think architecture needs to be cleansed anymore.”

Tigerman’s recent “not too serious” work—as the drawings on the pages that follow show clearly—is exploring curved shapes. It began with his studies for a library for the blind (page 116), where all of the curved shapes “have a reason.” In some of the other work, the reason may be harder to rationalize, though Tigerman has a reason—even if its is to be purposely irrational. And if you cannot accept his reasons why, it is nonetheless difficult to answer his “why not?”

—W.W.
The important use of curved shapes in this house is to make it as abstract as possible—although in fact it is a simple, 14- by 70-foot winterized weekend and vacation house on the prairie in northwestern Illinois built within a $35,000 budget.

The important design idea is that the house is not four-sided, but two-sided—an idea established by the rounded ends divided by a louvered vertical strip on the centerline. And beyond that, the house is intended to be a series of oppositions or inversions. On the side facing the road (bottom in drawing, upper photo) the house is totally opaque and solid, with even the front door let in with curved shapes. Tigerman sees this side of the house as a performer on a stage, or as a proscenium, with an audience of apple trees to be planted 30 feet on center. The approach is deliberately not on axis—one is intended to see the house, then have it hidden behind the trees, enter the drive, "lose focus," and then unexpectedly come upon the house with no opportunity to study it or even know how big it is. Even its cedar wall is "an opposition" to the natural trees planted in a geometric (unnatural) way.

Once you enter the house and move to the living spaces, you are immediately "thrust out of it"—with glass walls in an (unnatural) Mondrian pattern overlooking a section of the site that slopes down to a swimming pond and huge old trees beyond.

Functionally, the glass wall reflects the simple plan behind: The tall window lights the stairwell, the small window adjacent is over the tub, the larger windows open to bedrooms on the upper level, dining and living spaces below. Guests sleep on curved built-in couches on the main level.

The Hot Dog House (as it is inevitably known) has 1,600 square feet of living space, for a cost of $22 per square foot.

uilt on a high dune overlooking Lake Michigan, this house in Indiana is a direct offshoot and elaboration of The Hot Dog House—the owner of this house saw and liked it and came to Tigerman. For all of its varied symbolism, from Spanish mission to male/female, the house is extremely functional and practical. The owners wanted extreme informality and got it—the front door, after a long climb up the steps of the dune, opens directly to the kitchen and a centrally-placed round kitchen table. Down a few steps—the kitchen equipment and clutter is hidden—is the living room, which opens through large and fancifully shaped glass areas to a main living deck and the magnificent view down the dune to the Lake. Directly off this main living space, but reached by opaque and serpentine passageways lit by curved neon tubes ("why not be unexpected, full of surprises?") is the master bedroom and, on the opposite side, bedrooms for the family's two daughters. Stairs in both sides of the living room lead down to unprogrammed, on-purpose made spaces—one for the parents and one for the children—and both with decks separated for privacy by the sand dune that reaches up to the edge of the upper level deck.

The house is finished inside and out in cedar—except for the north-view wall (top elevation) which is again—in total opposi-
St. John's is the center of the Catholic community at the University of Illinois, Champaign-Urbana. Both the 800-seat chapel and the L-shaped Newman Foundation dormitory that wraps around it were crowded for space; and Tigerman created the needed space and a whole new circulation and organization for services and other church functions with an extraordinary "cloud room" in the U shaped by the two existing buildings.

The design scheme involves removing the stained-glass windows on the "inner" side of the chapel, creating a series of seven openings to a new, six-foot-wide cloister at the level of the chapel floor. This area is skylighted, incorporating part of the stained glass. Beyond that space is the "cloud room"—a large, essentially open space under a concrete roof that sweeps down in waves from a high point near the chapel to a low point at the wall of the dormitory. The functional explanation is simple, for the roof not only helps create a dramatic shape inside soaring upwards towards the great space of the church; it drops low enough on the Newman Hall side to avoid blocking the lowest level of dormitory windows.

This strong curve in elevation is echoed in the plan in several ways: Just outside the church and cloister, and at that level (four and a half feet above the floor of the "cloud room") are a series of professionals and sacrists, floating in space under the "clouds"—for the concrete roof is to be blue with trompe l'oeil clouds.

Echoing these shapes (and best seen at the left of the new room in the plan top right), are a series of "banquette spaces" carved out of the floor of the cloud room. They are at the basement level of the church, where the priests maintain offices, a conference room, and classrooms.

The new room also creates a new circulation for the church, which is especially useful in winter. Worshipers now enter through a new entrance into the cloud room—move up to the church by processional stairways at both the narthex and altar. There are also short stairways down to the basement offices and to the lowest level of the dormitory.

This project is awaiting funding for construction.

three narrow stores on a
in Chicago's West Side are
being transformed by volun-
ter labor into The Ukranian Insti-
tute of Modern Art. The building is
used as a meeting place for the
community, a museum ("with
extraordinarily good art"), a
courtyard, and a working studio
for painters and sculptors.

With the dividing walls re-
oved, the three stores combine
to an area 50 feet wide, with
columns which—fireproofed
covered—will serve "as mod-
ular of the space," dividing the
eight-foot-tall exhibit room (lower end of
into varied exhibit and ser-
vice areas. The main room will
(from bottom to top in plan)
will form a museum "store" just in-
front of the entrance, a reception
room, and office, a conference
room, toilets, and a storage area.
The left of the plan is the main
exhibit room, with a free-
ing projection booth for more
pictures or slides. At the rear
site (top in plan), will be
a cinder-block studio space
acting doors opening into
alley at the rear. This space
will be subdivided as needed.
Between the new building and the
will be an open courtyard—
for use, for drawing classes, or
a sculpture garden.

Again, Tigerman's curved
are everywhere. "Mainly,"
explains, "they are intended to
use and express the columns
modulators of the space." On
front elevation, the wall sim-
stands back to expose the col-
and to begin to express what
opening inside and beyond in
courtyard (where the columns
imply freestanding). In "a
urse kind of preservation," Ti-
man left only one narrow strip
existing terra cotta coping,
covered the three ornaments so
the top half of each bends for
about 45 degrees—"so they now
over the street like gar-
ments" in extraordinary contrast
to the white stucco wall with its
and butt-glazed strip window.
The ornaments still serve to
carry the pattern of ornament that
extends the length of the block.

All interior walls, and the
walls of the courtyard, will be
painted white to unify the varied
surfaces of block, drywall, and the
brick party walls.

This project is now under
construction.

UKRAINIAN INSTITUTE OF MOD-ER ART, Chicago, Illinois. Archi-
sect: Stanley Tigerman & Asso-
ciates—Stanley Tigerman, design;
Robert E. Fugman, associate-in-
charge.
Probably the very best building Tigerman has ever done—and surely the most sensitive—is this Illinois Regional Library for the Blind and Physically Handicapped, now under construction on Chicago’s West Side near the Circle Campus of the University of Illinois.

In this building, Tigerman’s curved shapes, which in other work might be considered fanciful, are completely functional, everywhere working to assist the blind or wheelchair-bound to use the library on their own with a minimum of assistance from the staff.

And perhaps more completely than in the other work shown in this article, Tigerman has developed his “reversals” or “oppositions and inversions.” For example:

- Where the building is tallest—on the hypotenuse and short side of the triangular building—the space is in fact one story inside; a tall “people space.” In the center, where it is lower, are layered three low (7½-foot-high) levels of stacks.
- The building is brightly colored inside and out. The metal exterior panels are a Mondrian-red baked finish; all structural members are painted yellow; and all of the mechanical elements, exposed inside and on the rooftop, are blue. Why the color? Tigerman gives three reasons: “Some of the users, while legally blind, are not totally blind—and light and bright colors are the only things they are able to see. It’s whimsical and playful—and it’s good for a library to be thought of as ‘fun’ instead of as ‘a serious place for serious learning.’ Finally, the building will be used by people with other physical disabilities, by friends and relatives of the blind, and by the community residents. I wanted to design a building that gives everyone who uses it a lift...”
- The final “inversion” is perhaps the most striking: The solid portions of the wall (drawing lower right) are made of lightweight metal panels. Yet it is the one dense wall—the poured concrete wall of the longest side—that is made transparent with an extraordinary window (drawing at right). The window is 165 feet long, butt-glazed without columns or support of any kind—which of course requires the wall above the window to act as a massive beam. “This is irrational,” Tigerman would agree. “But so is blindness irrational...”

Significantly, the window is set at such a height that only those in wheelchairs and seated staff members at service desks can really see outside.

The shape of the great window reflects in elevation the beautifully thought-out circulation system just inside the window. Using the curving shapes (easier to “read” than tactile changes in surfaces), the blind visitor will be able to “feel” where he is. The circulation system is also (see caption on facing page for details) entirely linear—“easier for a blind person to remember,” says Tigerman, “than any system with free-standing elements. And everything has rounded corners—there are no surprises.”

The building is 32,000 square feet, will cost $1.9 million, and is slated for completion in May 1977.

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How the circulation works: When a blind visitor enters the building (1 in ground level plan, below left), the reception desk (2) is just a few steps away. There are washrooms immediately adjacent (3). The receptionist guides the visitor to the Braille card catalog—and from that point on he can function on his own. From the card catalog, the visitor can follow the wall back to a banquet area (5) for reading or use of "talking books." To get a book from the stack area, he follows along the curving counter into the library. The counter is curved not just in plan—at each point that it curves inward, it also dips down, signaling the visitor that there is a circulation desk at that point (6, 7, 8, and 9 in plan and counter detail, upper right). The card catalog tells the visitor that the book he wants is at, for example, "the second dip." Because the counter curves inward, people lined up for service are out of the main traffic pattern.

Finally, the visitor can continue along the counter to reach toilets (10) or the elevator to the second floor (11). On the upper level (plan left), the visitor is just steps from the librarian's office (12) or the large community meeting room (13).
Zipper house is the inevitable "office name" for this group of 12 townhouses to be built in Evanston, Illinois. In an earlier scheme, the "zipper teeth" (best seen in the plan at right) were part of a curving wall with windows that looked down the central courtyard. When this proved too expensive at bid time, the "teeth" were redefined as on-grade planters in the central court, and as terraces off the living rooms screened from each other and the neighborhood by shaped hedges—which are in the budget.

Beyond that, Tigerman's "curved lines" are used on both elevations of what is, in essence, a very simple box. Rather more than a "decorated box," the use of two siding materials divided by the curved line is, in Tigerman's words, "a study in ambiguity." On alternate elevations, 4-inch vertical boards stained gray and 8-inch horizontal shiplap stained brown are reversed, and separated by a trim piece painted magenta. This strong line (which occurs on both front and back elevations, but is best seen in the rear elevation at the bottom of the page) not only scribes the curved line between the two sildings, but reaches up between adjacent units and then turns back around one window—but not both. Thus, in the use of two siding materials and colors, and by "sliding the windows sideways" with the magenta line, the design suggests that parts of one unit belong to the other, a confusion intended to complicate a perfectly straightforward plan. "A study in ambiguity"—and a final example of Tigerman's efforts to be a little irrational, a little humorous, and a little irreverent about "the rules of design." And even if you cannot accept his "reasons why"; it is nonetheless difficult to answer his "why not?"

Whenever the issue of a regional style in architectural design is raised, it can quickly become the source of controversy both among architects and among clients who may be sensitive to a feared brand of provincialism. Still, the recognition of existing surroundings and localized construction methods coupled with differing regional background influences is going to produce some important and appropriate variation—whether purposely created or not. And it may be surprising to see that one of the largest degrees of regional variation can be found in that most routinely conformist of image-conscious building types, banks.

On the following pages are a group of banks in different parts of the country by local architects who were not afraid—as were not their clients—to express (intuitively or purposely) a strong sense of where they are. The resulting diversity shows an increasingly better and more confident sense of unique location than perhaps at any time since architecture took over local craftsmen's efforts. And it is certainly to be applauded in the face of much of the "sameness" that has gone before. In RECORD's August, 1974 (page 109) issue, it was pointed out that the recent proliferation of smaller banks (mainly branches) is meant to bring business geographically "closer to home." Here it will be illustrated that these businesses are now not only closer to home; they can look like they are closer to home.

—C.K.H.

EVEN SMALL BANKS CAN EXPRESS A REGIONAL VERNACULAR
A CASUAL AMBIANCE FOR THE CALIFORNIA "WILDS"

In an immediate area stripped of its natural environment by highway oriented commercial development, the Vallejo branch of the Redwood Bank is an inviting reminder of distant natural forests and an informal lifestyle that brought many of the present settlers in the first place. Sheathed inside and out by wood from the bank's namesake tree, the fireproofed wood-frame structure nestles low and unobtrusively within a surrounding grove of redwoods, which are intended to grow as a vertical contrast and as an appealing identification marker. The trees also visually shield the parking area and help to form a park-like plaza for neighborhood use at all hours (photo above). Access to the drive-in teller windows also involves experiencing the natural setting by leading cars directly through it.

Within, the 5,700-square-foot building continues an appreciation for the unartificial by primary lighting from the sun through heat-insulated fiber glass ceiling-roof panels and by a consequent thriving profusion of plants. Pipe standards above the panels hold lighting for nighttime effect. The banking facilities can be closed off from the main room to allow its use during non-business hours by the community (dotted line on the plan, left). They include offices on a mezzanine above the tellers. Mechanical equipment and toilets are located rear to the vault. In the photograph at left, the main banking room can be seen with the tellers' counters, rear.

THE REDWOOD BANK, Vallejo, California. Architects: Smith Barker Hans; Engineers: Forell/Elsesser Engineers, Inc. (structural); Norris Nelson (mechanical); Tage Hansen (electrical). General contractor: Krull & Krull.
BANE SCULPTURE IN A MECHANISTIC ENVIRONMENT FOR NEW YORK'S SUBURBS

Alluding to the Villa Savoye, architects Michael Harris Spector & Associates state that the Bank of Suffolk County makes no pretense of assimilating into its environment—the V-shaped intersection of two major highways. Like the Villa, it appears as a machine—but for banking instead of living. Accordingly, it is a visual extension of the much larger man-made environment of nearby New York City and—at the same time—complements by the contrast of its stark-white, porcelain-finished metal panels the surroundings of dark greenery and paving.

It also projects its surroundings to passers-by through reflective-glass windows, which are gasketed into, and are flush with, the panels. Unlike those of the project on the opposite page, this bank’s designers and owners clearly believe that the building itself should be highly visible to the public. Like that project, this is a well thought-out response to environmental conditioning.

The building’s sculptural quality is achieved by verticality in predominantly flat surroundings and by an arrangement of elements that are composed for equal interest from any view. The banking floor is freely defined by a number of enclosed forms containing specific functions such as the vault and stairs, and it is capped by a rectangular floor of flexibly planned offices. Drive-in teller windows are located within the building.

AN ELEGANT UNIVERSAL STATEMENT OF "BANK" THAT PROUDLY SAYS TEXAS

Far from the wide open plains but recalling them in its strong horizontality, the Northpark National Bank occupies a corner of the site of the innovative Northpark Shopping Center (Record, January 1976, pp. 135-40) in suburban Dallas. Designed by the Omnidan architects (who were also responsible for Northpark), the relatively small but purposely strong proportions and white brick cladding are intended to achieve an additional objective to that of complementing the Center's forceful horizontality. They are also intended to visually assert the bank's importance, which could have been easily overwhelmed by its massive neighbor.

A large banking room on the steel-framed main level is designed to accommodate the demands of a planned additional three-story banking facilities. A central teller's "island" has direct vertical access to the bookkeeping department on the concrete constructed floor below. The bank's interiors were designed by Mrs. E. G. Hamilton, wife of the Omnidan partner, and contain red carpeting and blue-holstered seating of unusually muted coloring. These furnishings contrasted to white brick walls on which are hung a rotating display of artwork loaned by Raymond Nasher, the owner of Northpark and the chairman of the bank.

RUGGED FORMS BORN OF NEW MEXICAN TRADITION

Perhaps the most determined of the architects here in a search for a regional vernacular, Antoine Predock has evolved highly individual imagery in his designs for these branches of The First National Bank in Albuquerque. He sees this imagery as more of a response to environmental considerations than to a stylistic recall of indigenous architecture, although the allusion is clearly evident.

In the case of the three branches shown here, each occupies a location in a different roadside commercial area of varying appeal for the extremes of varying income groups. Each has different problems of relating to views, wind, sun—and, of course, the public. But the three share common materials such as warmly-colored, bushed-hammered concrete walls and—perhaps more importantly—a certain ruggedness which speaks distinctly of the hearty Southwest. Each of the branches is essentially triangular in plan. In the case of the two on this and the opposite page, the roof—like a sheltering hat—slopes down toward the southern corner, a prow into sandstorms and the heat of mid-day. On the opposite “open” side of the building, the treatments are very different. At Manzano, the tellers occupy this focal position in a low projection from the main room, and a clerestory over them is the main source of the natural light and limits views of the pervasively commercial surroundings. The higher-ceileding main room is devoted to a large space required by the particular program for a large banking consultation area. Roof-top mechanical equipment is concealed by high parapet walls. The steel structure is clad in sandblasted precast-concrete panels, while the vault is constructed of contrasting poured-in-place concrete. The exposed walls of the vault are carefully articulated from the panels (photo above).

At Sandia Plaza, the open side of the triangular plan is literally open through glass walls to a court, paved with quarry tile which continues into the banking room and onto the sloping roofs. The expansive views visually extend the banking room and include distant mountains above a planted berm in the court. The berm largely conceals the low-lying commercial development of the surrounding gional center. The diagonal through the site made by the building provides a convenient path for pedestrians to other locations within the center. The entire building’s structure and enclosing walls are poured-in-place concrete. The walls are sandblasted, and the roof is a pre-tensioned “waﬄe” slab in which recessed lighting brightens an ambiance that feels open to the outside. Two other interesting projects shown overleaf illustrate Predock’s versatility with different programs and the purposefulness in his designs.

BRANCHES OF THE FIRST NATIONAL BANK IN ALBUQUERQUE, Albuquerque, New Mexico. Architect: Antoine Predock. Engineers: Randy Holt (structural, Manzano); Robert Krause (structural, Sandia Plaza); Allison Engine (mechanical); Don Fowler (electrical). General contractors: Bellamah Construction (Manzano); Lemble Construction (Sandia Plaza).
The Sandia Plaza branch has exterior walls that—like Manzano—are parallel to surrounding roadways, which are connected to an adjacent shopping center. However, here the resulting rectangular volume has been cut away to provide a walled court, shielded from the streets in a locally traditional fashion (photo, right) and extending the sense of space from within. Earth berms, planted with local materials, and a fountain create a quiet oasis within the walls.
The West Central Branch is located in the most visually and economically deprived area of the three. Accordingly, it has its own pleasant internal environment with minimal windows. The angled entrance is designed to occur in the juncture of the existing building and a future wing. The latter will be located in a large lawn which extends down an adjacent hill and covers a screening berm to the east, where dominant views of mountains are then framed.

Other projects for the First National Bank by Predock include a remodeling of the downtown headquarters, which the architect described as a previously badly abused neoclassic building. In a shift from his design for new buildings, he has restored the building to its former character. At the other end of the spectrum are steel-frame mobile branches, which can be pulled from temporary site to temporary site on wheels. The wheels are sunken below grade during the units stay in one place. These units are expected to be replaced by the construction of permanent branches. Steel framing and decking is exposed on the interior.
PUBLIC ADMINISTRATION BUILDINGS

How well are we designing for the public realm? The question of the quality and the efficiency of our public architecture has become a subject of increasing concern to professional architects, who design these buildings, and to the governmental entities who commission them and use them. Here is a portfolio of recent successes—focusing on medium-size buildings in medium-size towns, the kind most architects find themselves working with.
This building is a 25,000-square-foot neighborhood center in Charlotte, North Carolina, and its facilities include a day care service, a branch of the Charlotte Public Library, offices (designed to be flexible) for various social-service agencies including the county health department, a multi-purpose auditorium, classrooms, and meeting rooms. Outside, the day care facility has an enclosed play area, and there is also extensive parking space on the site and drop-off and pick-up areas for buses and cars.

The site (see plan on the left) is in the shape of a trapezoid, and it slopes downward approximately 35 feet from its highest point to a small creek (which is at the bottom of the plan). The architects decided that the building should be multi-level, and it should be located near the highest point on the site. Parking is located nearer the creek, and partially within its flood plain (large photograph above).

The main entrance to the building (photographs opposite) faces the main street and the passing traffic, thus announcing itself to passers-by, and also being accessible for entry from the adjacent parking lot. A secondary entrance, with convenient drop-off and pick-up points for buses and cars, is located off the secondary street (at the top of the adjacent site plan, and shown in the large photograph on the following page).

The lowest level of the Belmont Regional
Center houses the day care facility, which has its own entrance from the parking lot (extreme right of the three plans on the opposite page). The main floor of the building (center plan opposite) contains all of the social-service and educational facilities, which are grouped around the public lobby, shown in the photograph on the opposite page. Circulation through the lobby is accomplished by ramps, one of which can be seen in the background of the photograph opposite, behind the receptionist, who from her central position has visual control of the entire area.

The upper, or mezzanine, floor of the building houses the administrative offices for the center; above it, clerestory windows allow sunlight to flood into this area and into the lobby below.

The structural system for the building consists of one-way poured-in-place concrete slabs for the upper floors, and concrete columns, beams, and slabs on grade. The exterior walls are of red brick on block, with exposed concrete spandrel beams. The windows are bronze tinted glass which are housed in bronze anodized frames.

AMSTERDAM PUBLIC SAFETY BUILDING
Schenectady, New York, is a small industrial town that lies on a steep bank of the Mohawk River in upper New York State. The town was about to lose its police station and central fire station—each in separate buildings and both inadequate—to a major downtown urban renewal project. In the face of this, the town's council decided that it would make sense for both of these public services in a new building—dubbed the Amsterdam Public Safety Building. Doing this, the council hoped, not only would save money on construction, but it would also give the new building the chance to be big enough, visible enough, and public enough to provide an important cornerstone, a landmark, for the ambitious rebuilding that was contemplated for the center of the town.

The cleanliness of this logic seems evident. But so, too, is the fact that—even though both fire protection and police services are conceptually similar as public safety operations—they in fact have almost nothing to do with each other in terms of actual operations. So to the architects fell the task of developing a clear separation of these two operations within a single building.

The architects in this case are Feibes and Schmitt of Schenectady (RECORD, June 1974, pages 136-37), and their design depends heavily on the peculiar nature of the new building's site, which is shown on the left. It is a long and
narrow piece of land hemmed in on its two long sides by limited access state roads. One of the roads is 16 feet higher than the other, resulting in a steeply sloping site. Its short sides are stopped on one end by a creek and on the other by a steep street.

Thus the Amsterdam Public Safety Building is long and narrow and three-stories-high, nudging itself into the hill. The main entrance, which is shown in the large photograph above, is reached from the road on the upward side of the site, and it is on the middle of the building’s three levels (see plans on the opposite page). Access for fire engines and police cars is on the downward side of the site. The main lobby separates the police services, which are on one side (and which contain the small courtyard shown opposite), from those of the fire department, which are on the other side. The building, according to the architects, is meant to seem like it is growing out of the hill in layers like the natural ledges on which it is built. The floors cantilever outwards on the downhill side, and on the uphill side they form a soaring, pyramidal shape, as shown in the photograph on the previous page.

Malden Government Center
town of Malden, with a resident population of 55,000 people, is adjacent to Boston and is a separate municipality. The firm of Doxiadis Associates had been retained by the Malden Redevelopment Authority to plan the renewal of Malden’s downtown—which, if everything goes according to present plans, will eventually involve turning the main thoroughfare into a mall. Doxiadis Associates subsequently became involved in the design of Malden’s new Government Center. It replaces the old city hall with a handsome and more functional building, which also includes new quarters for the police department. Flexible open planning is the basic interior concept of the Malden Government Center, since government operations, local or otherwise and no matter what particular kind they are, change over the course of time, requiring the redistribution of a building’s space. The most striking feature of the Malden Government Center is the full-height atrium in its center (photograph above). Its glass roof allows sunlight to pour into the center of the building, and on every floor there is a wide landing all around the atrium. Offices in turn open onto this atrium, and it is hoped that the atrium will become a focus for openness and social interaction among the building’s residents.

There are virtually no private offices in the new building—with the exception of the office for the mayor, which is private, and which has
one wall that opens up to make the office part of a conference room, as is shown in the two photographs above right. The other offices are in open areas.

HOSKIE POST OFFICE

The building shown here is a small post office for a small community in eastern North Carolina. Here, as with the post office in Winston-Salem shown on the following page, the architectural conviction is that simplicity will best carry the day. Customer parking and the main entrance to the building are directly in front, and employee parking and loading and unloading docks are in the back, reached from a secondary street. The color and scale of the new post office building, together with some additional planting and the retention of several old trees on the site, are all meant to create an effect that is harmonious with the surroundings—which are residential in character, with small wood-frame or brick buildings. The floor plan of the building is derived directly from the Postal Service's work flow requirements; the only public areas are the small lobby which contains the lock boxes and which is open 24 hours a day and the service lobby, which is open only during normal business hours. These areas achieve a sense of openness by the use of glass, which is tinted gray and mounted in black aluminum frames.

WAUGHTOWN STATION
POST OFFICE

This is a small branch post office in a transitional neighborhood in Winston-Salem, North Carolina, and it is built on a site that was formerly the parking lot for an adjacent industrial building. The design of the building is intentionally simple and intended to act as a billboard to signal the postal presence. It has a strong 45-degree portico to indicate its public entrance—which serves people who walk straight in and those who arrive by way of the parking lot as well.

All of the parking for employees is located on the side and in the rear—the part of the site that is adjacent to the industrial facilities and out of the sight of the neighboring small wood-frame houses.

The building, like its design, is simple, with an on-grade concrete slab floor, steel columns and beams, bar joists, and metal decking. Exterior walls are of wire-cut brick and block back-up, and the windows are green-tinted glass with black anodized aluminum frames. Inside, the public lobby has vinyl fabric walls and a concealed spline ceiling, with the work areas having standard finishes.

Functional simplicity in design for earthquake resistance

Piedmont Junior High School, located in the San Francisco Bay Area, replaces an older complex of buildings that could not be economically upgraded to meet California's earthquake resistance codes. While only one example of such school development now occurring throughout the state, it is particularly a design of refined simplicity—and ultimately of economy.—Janet Nairn
Prompted by what is commonly known as the Field Act—an act which outlines the minimum structural requirements for design, construction and reconstruction of all California public schools for earthquake resistance—the Piedmont Unified School District ordered examination of all its schools by local engineers, and found the junior high school unsafe. It became evident that a new school building would be more economical to construct than structurally reinforcing the existing complex.

The Field Act was passed by the state legislature on April 10, 1933 (one month after the Long Beach earthquake in which many schools suffered damage). Amended through the years, it stands in the forefront of California's attempts to set minimum requirements for public safety specifically due to earthquake hazards. In 1967, an amendment to a related act required that all schools built prior to 1933 be brought into conformance with the Field Act, thus including the Piedmont Junior High School, built in 1924. Piedmont capitalized on state assistance, so much so that the school was 100 per cent paid for with state aid.

The school is located, along with elementary and senior high school buildings, in an area adjacent to community and recreational facilities, encircled by private residences. The key to its design is simplicity. The configuration of the buildings is a V-shape, with two classroom wings (of equal dimensions: 73 by 115 feet) connected by a triangular building—all conforming to the contour of the hillside. Rather than designing a traditional classroom scheme with rooms branching off a central corridor, the classrooms were placed in the center with a corridor on the perimeter. This permitted mechanical and electrical systems to circle the classroom core and extend into each room. This core was designed for maximum flexibility, for it was open-planned with sliding wall partitions on a 15-square-foot grid pattern. To facilitate the handicapped, a ramp connects the street with the main classroom wing and an elevator is provided.

Specific structural construction for earthquake resistance was entirely by addition of symmetrical shear walls at each corner of all buildings, to restrict horizontal movement due to the expected lateral forces of an earthquake. Extensive geological studies—specifically of the site in relation to the nearest earthquake fault—were conducted, substantiating the engineering solution in use of shear walls.

It is a combination of the buildings' configuration, use of perimeter corridors, classroom grids and engineering solution for earthquake resistance that also make the design of this school extremely economical.


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While the perimeter corridors are important in allowing for open-planned classroom space and efficient circulation, they also—especially through angular corners—guide views in one direction to the open plaza, and in another direction to the play areas on the lower portion of the hillside and to San Francisco in the distance. Teachers' private offices and work rooms are located in the corners (plans page 142). An open walkway under the complex (top) connects the plaza and play areas. A need for flexible space on the two-acre site necessitated an open-planned classroom core (bottom), which creates a maximum of 12 rooms on each of the first and third floors of the main classroom wing. A multi-media center and library are combined on the second floor (middle); and the gymnasium (not shown) serves a dual purpose as auditorium, having an acrylic plastic window wall (nearly unbreakable), tinted to filter strong light from the south. During construction, most trees on the site were saved, including a row on the northwest seen from the library.
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Cookson Rolling Grilles. The best way to close an opening.

Specified nationwide by architects who demand dependability, superior craftsmanship, and outstanding performance. For information on our custom-engineered rolling door grilles and counter doors, consult our catalog in Sweet's (8.7/Co) or send for your own copy. The Cookson Company, 700 Pennsylvania Avenue, San Francisco, CA 9410.
ergonomic seating offers automatic response to changes in sitting position

A range of office chairs, designed by Emilio Ambasz and Piero Liotti, incorporates mechanisms permitting the backrest to tilt backward and the seat to slide forward when the user sits up, backward, etc. There are no adjustments of any other parts.

Under the seat of pedestal base chairs provides forward tilt for work situations. Some of the mechanisms are concealed by rubber bellows, forming the arms on some models. All mechanisms work independently of each other, resulting in seating that is adaptable to a wide variety of working positions and job functions, according to the company. Vertebra's ergonomic design is recommended for mass seating, classrooms, waiting rooms and executive suites, to name a few. Seat and backrest components are dark molded ABS with complementary finishes on the pedestals. A black finished disc base is also available. Four distinct groups comprise the line. Institutional seating (lower left) is 48 cm wide, and has stack chairs with black tubular steel frames, with or without arms and tablet arms. Operational seating (lower right) is also 48 cm wide, but features pedestal bases. Both have upholstered options. Managerial seating is 54 cm wide, while executive seating (upper left) is 60 cm wide. Both are offered with or without arms, fully cushioned and upholstered, and have pedestal bases.

Circa 300 on inquiry card

More products on page 131
Overly makes pools for all reasons

You name the type of aluminum or stainless steel pool you need and Overly will design, fabricate and install it. We specialize in indoor, outdoor and rooftop swimming pools, in custom-designed therapy pools, executive exercise pools and movable bulkheads to add flexibility to pool use. A variety of water filtration systems is also available.

We can do the big jobs, too. One of our most recent installations was the fabrication and installation of over 100,000 square feet of shallow, reflecting pools at the Empire State Plaza in Albany, N.Y.

Overly pools have many distinct advantages. They resist damage from earthquakes far better than ordinary pools. They won't rust, helping to keep maintenance to a minimum. And there's no grouting, caulking or sealing to fail.

We warrant our pools for five years as to workmanship and leakproof performance. And all welds are vacuum tested.

Our design, fabrication and installation capabilities are detailed in our new brochure, Overly Pools. Write for your copy, or see us in Sweet's Catalog.

Overly Manufacturing Company, 574 West Otterman Street, Greensburg, Pa. 15601

For more data, circle 71 on inquiry card
OFFICE LITERATURE

FIRE DETECTION SYSTEMS / An eight-page brochure illustrates and describes a full line of fire-detection devices and alarm systems. Most models are intended for industrial and light commercial applications, though a single-station ionization detector/intrusion alarm unit for residential use is included in the catalog. ▪ Pyrotronics Div. of Baker Industries, Inc., Cedar Knolls, N.J.

Circle 400 on inquiry card

AUTOMATIC SPRINKLER/STANDPIPE / Two recent publications from the National Fire Protection Association deal with sprinkler systems. The first volume in a projected textbook series is “Automatic Sprinkler and Standpipe Systems” by Dr. John B. Bryan of Maryland. He presents the basic concept and principles involved in design, installation and function of standpipe and sprinkler systems. Chapters deal with such topics as: fire department procedures; the automatic sprinkler head; wet pipe, dry pipe, deluge, preaction and specialized automatic sprinkler systems; and exposure sprinkler and water spray systems. The text is fully illustrated, with bibliographies for each chapter. (400 pp.; $14.95) Sprinkler installation standards for one- and two-family dwellings and mobile homes are now available in NFPA 13D, with Tentative Interim Amendments printed from the text to which they apply. Included in NFPA 13D are sections on system design for both wet- and dry-pipe; sample hydraulic calculations and layouts; water supply, pipe, and fitting requirements for home sprinkler systems. (40 pp.; $2.50) Both, from the NFPA Sales Dept., 470 Atlantic Ave., Boston, Mass. 02210.

Circle 408 on inquiry card

MEDICAL WALLS / An illustrated 24-page bulletin is available for the professional involved in the design of medical care facilities. It describes a new series of “Modular Medical Walls” intended to increase medical efficiency in patient care. Major features, technical characteristics, installation steps and a design guide are included. ▪ Square D Co., Oshkosh, Wis.

Circle 409 on inquiry card

BUILDING SYSTEMS / Included in this brochure is information on space frame and glazing, an integrated modular system with multi-story capability, a system with large, open bays, central columns, open web trusses and standing seam metal roof that augment the standard rigid frame product line. ▪ Butler Mfg. Co., Kansas City, Mo.

Circle 410 on inquiry card

CHAIRS, TABLE BASES / Ten accent chair designs, plus a table base series, are introduced in a six-page catalog supplement published by the contract division of the company. Nine of the 10 chairs shown are pedestal models, three with Mediterranean-style bases featuring wrought iron trim. Also shown is a new “6-Series” chrome table base, coordinated in design to a new sled chair frame and offered in a range of sizes. Included are general specifications for all new products pictured, as well as price list. ▪ B. Brody Seating Co., Chicago, Ill.

Circle 411 on inquiry card

TERMINAL HVAC / This is an updated publication on the company’s line of heat/cool “thru-the-wall” air conditioners. The six-page color illustrated publication presents ratings and specifications on 16 models for 230/208- or 265-volt operation in cooling capacities from 6,000- to 15,000-Btuh, with electric heating from 2.0- to 5.0-kW. ▪ General Electric Co., Louisville, Ky.

Circle 412 on inquiry card

For more information on Sando-Flash, call or write:

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CY/RO is the news in transparent plastics.

For more data, circle 73 on inquiry card
GAS/MICROWAVE RANGE / This cooking unit combines a top-mounted microwave oven, with timer dials and selector control; four surface burners with pilotless electric ignition; and a 25-in., continuous cleaning lower oven, with roll-out broiler underneath. Both ovens have see-through black-glass windows with interior lights. Model "76-4886" is available in white, avocado and gold colors. * Tappan Appliances, Mansfield, Ohio.

Circle 305 on inquiry card

RECESSED FIXTURES / Six different housing sizes and a wide range of lens cell configurations are features of the new Paradour II series of low brightness recessed fixtures for static air supply or heat transfer/air supply functions. One-, two- and three-lamp models are available; all are said to provide good light control, high co-efficients of utilization, and favorable light loss factors. Louvers are either natural aluminum or gold finish; the black reveal gives a floating appearance. * Day-Brite Lighting Div., Emerson Electric Co., St. Louis, Mo.

Circle 306 on inquiry card

The Yale Series 3000 Door Closer.

It can be anything an architect wants it to be.

We've made the Yale® Series 3000 closer as versatile and flexible as a closer can be, to make a complicated job a whole lot easier for architects, specifiers and installers.

The problem: special design factors that can make it necessary to specify as many as three or four different closer series in a single building.

The Series 3000 Yale Door Closer is the solution. Need that check, power adjustment and full cover? Specify the 3500. Need a closer with a narrow cover for an entrance door? Specify the 3300. Want that check, but don't need power adjustment or a cover? Specify the economical 3000-BC.

No question about it: The Series 3000 Yale Door Closer is the most versatile closer that can be specified on a job.

For more information, contact your Yale representative. Or contact Eaton Corporation, Lock and Hardware Division, Yale Marketing Department, PO Box 25288, Charlotte, N.C. 28212. We have a 3000 series catalog you want you to have.
Plaster in a Roll® the no problem heavy duty wallcover that covers problem walls...including concrete block!

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If you're involved in renovation or construction in hospitals, hotels, motels, schools, apartments, public buildings or any high traffic area...if you're looking for lead paint hazard elimination or want a one-step process that takes you from a problem to a finished wall...take a look at Flexi-Wall covering systems. We're a one-step time and money saver which can turn your problem walls into a decorator's dream. Specify Flexi-Wall Plaster in a Roll® wherever you would use Type III heavy duty vinyl wall-covering.

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For complete architectural data and swatch book, write Flexi-Wall Systems, P.O. Box 477, Liberty, South Carolina 29657.
PHILBEN EXACTA 17 MAKES OVER OUTDOOR LIGHTING

PHILBEN, pioneer in outdoor lighting and first to produce integral cast low-profile fixtures, now offers a complete line of wall, column and spreader mounting, further expands its line of low-profile fixtures with new EXACTA 17, the ultimate cut-off glare light fixture. For area/street lighting.

OPTIMUM EFFICIENCY
EXACT DISTRIBUTION
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EVERLASTING INTEGRAL DIE-CAST CONSTRUCTION
ULTIMATE IN QUALITY

In all sizes, in 20 models utilizing Mercury Vapor Metal Halide, and High Pressure Sodium sources ranging from 100 to 1000 watts. The winners—in efficiency, glareless performance, precision optics and everlasting, weatherproof, integral die-cast aluminum construction—with economy.

OFFICE SEATING / "CAS Series" chairs feature a short arm and base design for easier maneuverability and good posture support. The frames are cast aluminum alloy available in six colors; seats and backs are finished in a smooth nylon. The line comes in seven models designed for managerial through secretarial functions. • Sunar Ltd., Waterloo, Ont.

Circle 310 on inquiry card

more products on page 157

PARKER RECEPTACLES...

In a washroom where space is at a premium, providing a waste receptacle can be a real problem, but, Parker offers a variety of attractive solutions. The three Parker receptacles shown all supply generous waste capacities while consuming a minimum amount of room. Though diverse in style, all are constructed of durable stainless steel and designed for easy servicing. When you must make the most efficient use possible of limited washroom space, choose a Parker receptacle—you'll really eliminate waste!

Circle 307 on inquiry card

Circle 308 on inquiry card

Circle 309 on inquiry card

PRODUCT REPORTS continued from page 153

AUTOMATIC DISHWASHERS / Functional improvements, options for energy conservation and more decorating flexibility are featured in this 1977 line of residential dishwashers. Six undercounter and four portable models are included, all with an adjustable upper rack, new pump impeller and filtering system, and concealed door latch. Each unit is insulated for noise reduction. An optional "dry selector" switch permits the user to air dry dishes without extra heat. • Whirlpool Corp., Benton Harbor, Mich.

Circle 307 on inquiry card

THERMAL WINDOWS / The "E-series 560" picture window shown is a new addition to this line of insulated glazing. Its "thermal-break" design incorporates a closed-cell vinyl foam insulation to resist shock, racking and twisting, as well as providing noise-deadening qualities. A "zero" air infiltration feature is said to seal the entire window against temperature change, dust and dirt. Fin windows with colonial lines and snap-on exterior box frame trim are available for residential, commercial and institutional construction. • Capitol Products Corp., Mechanicsburg, Pa.

Circle 308 on inquiry card

POOL LIGHTING / A new line of incandescent lamps is especially designed for use in swimming pool areas. The moisture-resistant lights have a rugged Pyrex envelope and heavy-duty filament construction for shock and vibration resistance. Most of the lamps can operate in any burning position; outputs range from 100 to 500 watts. • North American Philips Lighting Corp., Hightstown, N.J.

Circle 309 on inquiry card

More products on page 157

Charles Parker
290 Pratt St., Meriden, Conn. 06450
If you specify any computer floor but aluminum, it's a bad compromise!

Truth is that in 1956 when the need for raised flooring in computer rooms became apparent (with function the chief design criteria) a stringerless floor made up of pedestal mounted die-cast aluminum panels was the choice. That's how the Floating Floor System was developed. Since then, Floating Floors® have been providing trouble-free service in thousands of computer rooms.

Stringerless design makes Floating Floors the only true infinite access floor system. Male and female locking devices, at four corners of each floor panel, provide the highest lateral stability. In fact, Floating Floors meet Federal specifications for seismographic zone #3 (San Francisco).

The sad truth is that in order to compete with Floating Floors, other manufacturers have had to promote floor systems of inferior materials and design such as stringer-supported wood and steel. While costing a little less initially, these other floor systems can represent a very bad investment over the long term.

Computer downtime due to electrostatic build-up or magnetic dust may result from one of these wood or steel stringer-supported floors. Costly delays are often caused by the inconvenience of working under stringers, or disassembling and re-assembling them.

Floating Floors on the other hand have proven to be problem-free even after as many as 20 years of service. Monolithic construction with aluminum ensures dissipation of static electricity. And since aluminum is non-magnetic and does not require painting, iron rust and paint flakes are not present to enter the air and interfere with computer operation. Aluminum will not of course-rust, warp or burn.

The Floating Floor system is designed to meet future expansions and changes. Components can be easily changed around since precision die cast and milled aluminum floor panels ensure a uniformity in size (machined to +.005 — .000) not found in hand assembled products. And there is plenty of strength for the installation of new equipment.

In fact, the overall quality of Floating Floors is so good that we are able to give a FIVE YEAR UNCONDITIONAL GUARANTEE AND BUY-BACK PROGRAM with every floor installed.

For more complete information refer to Floating Floors bulletin 10.27 FL as shown in SWEETS under Specialties — Access Flooring. Call us for assistance.

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For more data, circle 78 on inquiry card

FLOATING FLOORS, INC.
Available World-wide from Licensees and Distributors • Installations Coast to Coast
Monroe High School, Monroe, Michigan, and Daverman Associates, Inc., Architects, of Grand Rapids, Michigan, are two of a growing number of professionals who prefer Massey Seating. Primarily because Massey seats are as beautiful as they are durable and comfortable.

For full information, see Sweet's Architectural Catalog File 12.5/MA. For the name of your nearest distributor, write or call Massey Seating Company.

The Monroe installation features two turntable sections which, through rotation, can be closed off to form individual instruction areas.
Introducing the CLEANLINE® Sprinkler.
A beautiful way to help save lives.

Now there’s a new way to design in fire protection for life safety in modern high rise and other buildings without intruding upon design aesthetics. Grinnell’s new CLEANLINE® Recessed sprinkler is so unobtrusive, so trim and compact, once it’s installed you’ll hardly know it’s there.

But don’t let CLEANLINE’s quiet good looks fool you. Beneath that attractive closure you’ll find one of the most reliable sprinkler heads in the industry. When room temperature reaches a predetermined level, the attractive closure falls away, exposing the fast-response Duraspeed sprinkler. As a second predetermined temperature is reached, the sprinkler activates, distributing a uniform water spray to put down a fire.

The standard finishes available are satin chrome and white. CLEANLINE Sprinklers are also offered in a variety of finishes to match any décor. All metallic finishes are UL-listed.

There’s a lot more to tell about CLEANLINE. For more information and complete specifications, call your nearest Grinnell district office listed in the Yellow Pages, or write Grinnell Fire Protection Systems Company, Inc., 10 Dorrance Street, Providence, Rhode Island 02903.

For more data, circle 80 on inquiry card
PRODUCT REPORTS continued from page 157

STRIP LIGHTING / "Counterpoint" uses standard lighting components to produce highly individual strip lighting effects, according to the manufacturer. Single- or continuous-mounting uses standard 90 deg inside and outside corners for lighting patterns. The decorative closure, in mirror chrome, gold, black or white finishes, snaps into the extruded aluminum housing. Standard units come in lengths up to 96-in., and widths of 2½, 5-, 12-, and 24-in. Clear or colored lamps are available on 4- or 6-in. centers. • Neo-Ray Lighting Systems, Inc., Brooklyn, N.Y. Circle 315 on inquiry card

SPiral Staircases / A competitive price is claimed for this line of wood spiral staircases. The treads are made of 3-inch-thick split hardwood that resists loosening; wooden balusters are 2-inch-thick. The installation shown is one of 45 produced for a condominium development in Vail, Colorado. • Scott Douglas Design Inc., Gulfport, Fla. Circle 316 on inquiry card

SIGNAGE SYSTEM / Combining words and graphics for fast recognition, this pictographic signage system uses individual 6½-by-6½-in. plaques. These signs, said to be both tough and lightweight, can provide a uniform method of identification throughout a variety of buildings, and include both general information and special subject signage. Standard colors are white against dark brown, with custom colors available. • The Letter Factory, Minneapolis, Minn. Circle 317 on inquiry card

MULTI-MEDIA CARRELS / "4-Plex" is one of a series of student study carrels available in trapezoidal, round or rectangular configurations. All panels are interchangeable and can accommodate such audio-visual equipment as slide projectors with integral rear-projection systems; synchronized cassette players; 8- and 35-mm projectors; and TV receivers and players. Plastic laminate panels can be surfaced with acoustical carpeting, chalkboard, pegboard, etc. • Monroe Industries, Inc., Wichita, Kan. Circle 318 on inquiry card for more products on page 161

For more data, circle 81 on Inquiry card

For more data, circle 82 on Inquiry card

Hastings Checker Block provides the solution to the problem of overflow parking, emergency vehicle and service roads where a grass surface is preferred. Projects from Maine to California have used Checker Block because they are manufactured as close to each job site as possible. Each paver is 24\'\'x24\'\'x4\'\' reinforced with 8\' gauge wire and has a minimum 5,000 psi. Checker Block offers an environmental advantage because they offer the highest ratio of grass to concrete of any similar material, permitting water to be returned to the earth. For descriptive literature, write Hastings, 410 Lakeville Road, Lake Success, N.Y. 11040.
Another Paddock First

A SURGE CONTROL RECIRCULATION SYSTEM THAT WORKS AUTOMATICALLY AND INSTANTANEOUSLY

Revolutionary New System Activated By Number of Swimmers and Type of Activity

The Paddock SCRS* Perimeter System responds automatically to dynamic impulses activated by the swimmers in the pool. The following recirculation phases are maintained continuously and automatically for the life of the pool:

- Pool water level to provide a constant minimum flow rate from pool surface at all times.
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- Increase or decrease recirculation rate to prevent gutter overflow.
- Push button water level control for competitive swimming.

In addition to automatic control, the Paddock SCRS System also provides surge containment capacity and flow rates up to 3,000 gallons per minute right in the pool wall.

Check out Paddock's new surge control recirculation system for new construction or renovation today. It offers untold economies and efficiencies now and for the life of the pool. Write Vice President, Marketing, Paddock Pool Equipment Company, Inc., P.O. Box 511, Rock Hill, S.C. 29730.

Paddock's Hydro-Analyzer automatically controls pH level and chlorine residual in your pool and saves you thousands of dollars annually.

Paddock can supply the total Mechanical Package—slid mounted and pre-wired—eliminates field errors.

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Delta's DASH guarantees delivery on the flight or routing you specify between all Delta cities and most cities served by other airlines through interline agreements. Packages accepted up to 50 lbs. with length plus width plus height not to exceed 90".

Call Delta for an expedited pick-up, or bring your package to Delta's passenger counter at least 20 minutes before scheduled departure time (or to the air cargo terminal at the airport 60 minutes before scheduled departure time). The package can be picked up at the Delta Claim Area next to the airport baggage claim area 30 minutes after flight arrival at destination. Or we deliver it at an additional charge.

Delta reservations can give actual DASH charges between specific points. You may pay by cash, company check, most general-purpose credit cards, special credit arrangements or, on government shipments, by GBL.

For expedited pick-up and delivery at extra charge, call 1-800-424-1022 toll free anywhere in the United States, Canada, Mexico, and Japan.

Delta is ready when you are.

For more data, circle 84 on inquiry card

STANDBY POWER / The new "Fast Response" power systems, ranging from 30- to 250-kW capacity, are said to have a recovery time of 0.05 second or less from load transients. These generators also have an increased short circuit capability; under such conditions, the current output initially reaches as high as 1000 per cent of rated current, and is able to sustain 300 to 500 per cent capacity. This high amperage trips breakers connected to the short, permitting quick return of power to unaffected circuits. The generator is described as having no voltage collapse point. A standard programmable electronic controller, the "Decision Maker," governs instrumentation and fault lamps for all units in the line. • Kohler Co., Kohler, Wis.

Circle 319 on inquiry card

STANDARDS. / Pictured is a 50,000 gallon-per-day capacity physical/chemical process packaged waste treatment system now in use in Florida. The highly-automated installation processes domestic wastewater to produce an effluent meeting EPA standards. It is not affected by toxic substances in the sewage, making the "Package Waste Treatment System" suitable for marinas, recreational vehicle dumping stations, airports, etc., as well as the typical apartment development. A 100,000 gpd model is also available; units can be combined into larger systems to process any desired volume of wastewater. The power required is 230 VAC, 60 Hz, 3 phase; necessary chemicals are said to be readily available. • General Electric Co., Re-entry and Environmental Systems Div., Philadelphia, Pa.

Circle 320 on inquiry card

ICE MAKER / A compact mini-cube ice maker designed for low-volume requirements, model "SC70-30" can be put in a space 18.5" W X 17.0" D X 19.5" H (47.0 cm wide and 43.8 cm deep). Its height is 38 in. (96.5 cm) without legs. The unit can produce 70 lbs (30 kg) of small, 11-sided cubes in 24 hours and stores up to 30 lbs. (13 kg). • Liquid Carbonic Corp., Chicago, Ill.

Circle 321 on inquiry card

ESCAPE FROM THE ORDINARY — WALL PANELING

When you’re looking for something dark in wall paneling, you aren’t looking at just any old wood background. It has a dark grain with a deep golden background that is available either quartered or flat sliced. When quarter cut, it produces a marvelous figure. We have a strong inventory. Ask for a sample.

"Bee’s Wings" is the figure revealed by a quarter cut of exotic NARRA. We’d be delighted to send you a hand sample.

AVODIRE is an African wood that was once very, very popular—but never common. It is highly figured with a lively grain over a light background. Most of our inventory is quarter cut and lends itself to most designs of today. It would grace any feature wall with its golden color.

FLITCH SPECIFICATION. There may be times when simply specifying stock wall paneling is inadequate—times when you wish to more precisely express your own individual taste. The flitch specification process—plus Stem’s bold inventory of woods—allows you to do just that. You handpick the veneer that best meets your aesthetic criteria for color and grain patterns. We welcome your inquiry.

Chester B. Stem, Inc., 2704 Grant Line Road, New Albany, Indiana 47150. Manufacturers and importers, sliced wood and lumber. Fifteen minutes from Louisville, Ky. airport. Phone (812) 945-6846.

Let’s face it: only wood is wood.
Economical steel joists provided flexibility in installing mechanical, electrical and telephone systems for Mission State Bank.

For the Mission State Bank, Mission, Kansas, economy and flexibility were just two of many good reasons for selecting steel joists. Steel joists also facilitated installation of the bank's versatile bronze glass curtain wall. Erection during the winter months was made easier by the use of steel joists.

The attractive five-story bank used H-Series joists, mostly 16 and 18 inches deep. The general contractor was John M. Fogel Construction Company. The Architect was William M. Conrad, A.I.A., of Team 1—Architects, Engineers, Planners. The steel fabricator was The Bratton Corporation.

Aside from economy, flexibility and ease of installation, steel joists aid fast occupancy and design flexibility in construction.

Send for Specifications and Load Tables for Open Web Steel Joists, Longspan Joists and Deep Longspan Joists.

For more data, circle 85 on inquiry card.
CEILING MODULE / A high-efficiency filter unit for clean room applications is capable of delivering up to 99.99 percent efficiency in the sub-micron particle size range and true laminar flow characteristics, meeting or exceeding requirements for Class 100 clean rooms in engineered system installations. • Comp-Aire Systems Inc., Grand Rapids, Mich.

MINI WAREHOUSES / A building system for construction of mini warehouses is available in standard 5-ft height increments from 20 ft to 35 ft spans. The buildings feature metal roofing with 1/4-in. per ft slope. Eave heights up to 16 ft are a standard feature and integrated wall panels are offered in various color options. • Butler Mfg. Co., Kansas City, Mo.

LIGHTING/CEILING SYSTEMS / The company offers 3 distinct lighting/ceiling systems with replaceable and interchangeable modular suspension elements. The "Vaulted Linear" (VL60), "Vaulted Directional" (VN60), and "Flats Linear" (FL60) are the three basic 5-ft sq ceiling planning modules. Each module can be rotated 90 degrees and is designed to accommodate its own lighting, partitioning, acoustic, air distribution, sprinkler penetration and access. Unlighted modular choices are available. • Conwed Corp., St. Paul, Minn.

pre-engineered or custom steel doors, frames---and hardware---all from one well-stocked local source.

Good news, because it means you can be flexible in your door and frame design without causing headaches on down the line. Curries Distributors are complete distributors. They carry almost everything required to fill an opening in the wall.

In addition to pre-engineered steel doors and frames of nearly every size, face width and jam depth, they can also supply custom made doors and frames.

They carry finish hardware, too. They have fabrication shops. And, because they are stocking distributors (with a major manufacturer behind them) they can deliver material on time.

For details on our doors and frames, call your local Curries Distributor. He's in the Yellow Pages under "Doors" or "Doors-Metal".

Or see Sweets/82.

Or write: Curries Manufacturing, Inc., 251 9th St. S.E., Mason City, IA 50401. (515) 423-1334.

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Cut maintenance costs with vinyl-acrylic handrails. Installed on a free-floating aluminum retainer system, they shrug off impacts that would seriously damage unprotected walls. Easily-cleaned HRB-2 and HRB-4 are available in 7 integral colors.

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**New King Size Glasbord, frp paneling eliminates seams**

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Sooner or later, everyone needs an extra hand.

Think about it. Next time you approach a building door with your arms full, think what you go through, just to get through. Think how often it happens to you. To everybody.

Then think about how a Stanley Automatic Entrance is indeed a helping hand. How it keeps traffic moving. Enhances the look of the building. Makes things just a little bit easier for the people who use your building.

The Stanley Magic-Door® people — who originated the whole idea of automatic entrances some forty-five years ago — are ready to give you a hand on your next project. Just ask. Stanley Door Operating Equipment, Division of The Stanley Works, Farmington, Connecticut 06032.

STANLEY helps you do things right

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New, clear, vital solid colors. Patterns and woodgrains that mirror nature itself. Much that's new—so many options—you'll find just what you want for every commercial and residential need. And we mean every Formica's Design Center—unique in the laminate industry—has worked closely with customers, architects, designers and the Color Marketing Group to insure that each design will fill a need. Not just today, but tomorrow as well!

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Bobrick's New Distinctively Styled Bathroom Accessories 
... thirteen models of 300 series stainless steel. Will retain original beauty for a building's lifetime.

Satin or Bright Polished Finishes to harmonize with modern decor in new hospitals, hotels and institutions.

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Shows new concept custom mixing or matching several colors in same blind

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Elegance in home refrigeration

BUILT-IN TO BLEND-IN
All units built to 24" kitchen counter depth to fit flush with cabinets • Front & side panels to match your decor • Units will accept wood, glass, metal, leather, plastic... or use your imagination • 24", 30", 36" & 48" wide models • Largest capacity home units manufactured • All refrigerator, all freezer or combination models • "Over-n-under" or "side-by-side" units • Built-in ice makers • Superb workmanship and individually factory tested for total performance.

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168 ARCHITECTURAL RECORD September 1976
A howling success at securing exits

Nobody makes the same mistake twice when emergency exits are guarded by Detex Exit Control Locks. Let an unauthorized person misuse the door and all hell breaks loose. Can't say we didn't warn him. When the clearly marked panic bar is pushed, two loud battery-powered horns erupt and a unique dead-locking latchbolt releases to allow exit. Available with 2 or 4 lock/unlock control modes.

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Jewett offers morgue/autopsy planning service

Whether you are planning a new morgue/autopsy facility or modernizing and equipping present facilities, Jewett specialists provide expert design counseling. Jewett will analyze your requirements with you and your architect or consultant and will send you plans of the complete layout including equipment specifications. Jewett’s morgue/autopsy planning services can save you time and costly mistakes. Your new construction or renovation project will not only be right for your current needs, it will also allow for future growth. Send for 16 page equipment catalog.

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ponded water is for fish.
Don't Let Your Clients Accept Substitute Docklevelers

With today's high labor costs and safety emphasis you design loading docks to include permanent docklevelers. Facts prove they can easily pay for themselves in one year. However, to assure maximum return on investment, specify genuine Kelley Docklevelers of the right type, size and capacity.

Docklevelers with patented automatic safety features and a predictable life span to stand-up to high volume use year-after-year. Choose hydraulic or mechanical, standard heavy duty or extra-heavy duty models. Kelley Docklevelers cost about the same, or even less. So there's no reason to accept substitutes. Get the complete facts from your Kelley Representative or contact:

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not roof decks!

One of the most devastating elements contributing to roof membrane deterioration is ponded water. Positive slope to drains is the most effective means of solving this problem — no man-made mechanical device — just non-failing gravity!

All-weather Crete sloped to drains is the answer. Unique insulation not only offers a completely seamless deck application with excellent thermal protection, but it's ability to be contoured can provide positive slope to drains. Why "fish around" insulations that only insulate? Use the one that also helps increase roof life, can be applied for a thermal protection and sloped to drains.

All-weather Crete! Silbrico Corporation, 99 River Road, Hodgkins, Illinois 60525, phone (312) 735-3322.

ALL-WEATHER CRETÉ
ROOF AND PLAZA DECK INSULATION

SILBRICO:
Please send the following information:
☐ Complete AWC technical brochure.
☐ Guide to calculating roof deck energy conservation.

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172 ARCHITECTURAL RECORD September 1976
Ceco forms floor slabs for world's tallest hotel

Just one more example of Ceco's forming services designed to save time and money

Ceco is forming nearly a million square feet of concrete slabs in Atlanta's new 70-story Peachtree Center Plaza, world's tallest hotel. Work on this project includes all floor slabs and ramps for the base buildings above and below grade, as well as all slabs for the 70-story cylindrical tower.

For more than half a century, Ceco has helped contractors by developing better ways of forming concrete slabs and providing lump-sum prices that represent cost savings to them and building owners. Consequently, Ceco's forming services are used on hundreds of projects every day.

Ceco's field crews are the country's leading specialists in placing and removing formwork for rib-slab, waffle-slab and flat-slab floor construction. For more facts, refer to Sweet's or your nearest Ceco office.

For more data, circle 101 on inquiry card
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SPECIAL CONSTRUCTION SEMINAR! Topics will range from the impact of the Federal Trade Rule to new markets for plastics construction to solar heating and energy consumption to new building codes...plus others on management, marketing, processing technology that will enable you to cut costs, increase sales, innovate, and plan for the future.

In the three years since the last Plastics Show, a lot has happened. The plastics industry moves fast. So catch up at NPE/76. Save time and money by registering in advance. Write The Society of the Plastics Industry, Inc., 355 Lexington Avenue, New York, N.Y. 10017, or...CIRCLE READER SERVICE NO. 102.
We tested theatre seats against fire.
Neoprene cushioning foam performed best.

We conducted three burn tests at Factory Mutual's Test Center. In each test we used seven theatre chairs in an environment intended to simulate that found in a typical theatre or public auditorium. Our fuel source in each case was typical theatre trash—popcorn boxes, drink cartons, cups and napkins—placed under the center chair.

As the photographs above show, there was considerably less flame damage among the chairs cushioned with deep foam of Du Pont Neoprene than among those cushioned with other common cushioning foams.

The Test Chairs
Test #1 used cushions of Neoprene deep foam. Test #2 used cushions of high resiliency (HR) polyurethane foam containing flame retardants. The chairs in these two tests were otherwise identical, with upholstery fabric and plastic seat backs containing flame retardants.

Test #3 was conducted with a standard type polyurethane cushioning foam in chairs with untreated components.

Smoke Obscuration
During each test, light obscuration by smoke was measured by photo cells six feet from the floor. Data gathered show the chairs cushioned with Neoprene produced less total smoke because only one chair was consumed by the fire.

Combine the results of these tests with the resilience and comfort of Neoprene foam, and it's easy to see why this versatile, durable material has been widely specified wherever public safety is at a premium.

For complete test data, plus information on suppliers of Neoprene foam cushions or finished seats, write: Du Pont Company, Room 24402C, Wilmington, DE 19898.

Cushioning Foam of DuPont Neoprene
Hager gives you the edge on hospital doors with Camtro

Hager's new patented Camtrol® double action pivots insure snug bathroom door fittings without rounding door edges. Camtrol's unique double acting pivot action is specially designed for hospital and nursing home bathroom doors weighing up to 100 lbs. Top and bottom anchor arms are precisely machined from strong, fine quality 3/16" steel for mortising into 1-3/4" doors. Only three moving parts insure a lifetime of dependable use. Plastic cinch anchors make masonry floor installation simple and fast. Base dust covers help provide extra sanitation.

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Now! save up to 60% on installation!

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What a difference Microzinc 70 makes! This pre-packaged, pre-formed batten fascia system saves 60% labor over conventional sheet metal installation practices. Comes in 5' or 9' interlocking sections packaged specifically for your job. No special tools are needed. For maintenance-free enduring beauty, specify Microzinc 70 on your next job. Send today for a free installation manual showing how you can save up to 60% on labor with Ball’s Batten Fascia System.

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Add a touch of drama to the design of your public space projects. Do it with skylights.
And for creative design assistance, call on Roper IBG, the skylight people.

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For other countries—Gerhard Schultz, IBG International, Box 100, Wheeling, Illinois 60090, (312) 634-3131.
See us in Sweet's.

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The beauty of a bygone day captured in a heritage for tomorrow.

AMERICAN

Roofing Tile by Ludowici.

...from the rugged hand-hewn character of split shakes used during our country's colonial period, Americana has become one of the most versatile tile patterns in the portfolio of today's architects. Bold butt lines and a simulated wood finish combine to provide an interplay of light and shadow, soft but rich colors create varying moods with every angle of light.

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Ludowici Tile stands out, handsomely and gallantly, in any climate.

Beautiful and lasting as Americana and other Ludowici tiles are, they often cost no more—and frequently less—than fire-resistant wood shakes, slate or other premium priced roofing materials.

For further information on the design versatility offered with Ludowici Tile, look in the Yellow Pages for your local Ludowici distributor, or refer to Sweet's Catalog. Or, mail the coupon.

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Clark's see-through Clearstrip curtain reduces air flow and noise.

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Just like no hinge at all

Some hinges are decorative. Some are functional. But only one hinge is invisible. So when the best hinge would be no hinge at all, specify SOSS. Choose from 18 models and four finishes. All models open 180° and disappear when closed.

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If you want a really handsome sidewall, Red Cedar shakes or shingles will give you a first-class job. But for a 500 square foot sidewall you’d end up handling a lot of materials. Like 840 shingles, another 840 undercourse shingles, over 50 8-foot lengths of nailing strips, and more than 3,500 nails. Of course, you could do the same job with 8-foot long Shakertown Panels. You’d use only 54 panels and less than 700 nails. And that’s all.

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How to use classroom and library space more efficiently with MEG EDUSPACE storage systems.

LIBRARY SYSTEMS

Now, from a single source, you can specify a wide array of high-quality, space-saving storage systems that provide the ultimate in interior planning and design, deliver the optimum in efficiency and operation.

EDUSPACE systems by MEG includes: Library Systems; Space-Mobiles; Roll-Shelf; Fixed Casework, and DECORGRAPHICS ... an original MEG concept that directs readers, students, technicians and teachers to the books and materials they need — quickly.

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SPACE-MOBILES A complete line of movable storage units for total classroom flexibility. Tote tray storage, general storage, and wardrobe storage units can be modified to meet architects or individuals requirements with a variety of inserts. Fabricated from high pressure plastic laminate, SPACE-MOBILES are available in your choice of decorator colors or wood grains. Features include: Heavy duty construction, full mobility, complete versatility and contemporary styling.

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FIXED CASEWORK Educational Fixed Casework Systems by MEG represents the most advanced, most versatile and most economical system of contemporary styled cabinets. Educational Fixed Casework Systems are designed to meet the ever-demanding needs for improved storage and greater accessibility to teaching aids. Its flexibility and adaptability makes it a highly serviceable perimeter storage system for classrooms, teaching laboratories, arts and crafts, industrial arts, music, home economics, science and general school areas.

EDUSPACE is but one way MEG helps schools function better. MEG is also a leading source for a complete range of Distributive Education facilities. Today, find out what MEG can do for your school, library or learning center.

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There are many different waterproofing conditions. That's why there are many different Tremco waterproofing systems.
You know that many factors have to be considered when you design a waterproofing system. For example, some will be on grade, some below, some above grade. You may be looking for products with special qualities, such as quick adhesion to damp or green concrete, or surface finishes that are rougher than usual. Some systems will be limited by tight budget.

When you work with Tremco, there's one factor you don't have to concern yourself with: the quality of the system you choose. Just tell us your waterproofing requirements and you can count on us to recommend a proven Tremco system that will do the job effectively. To help you get the most out of the system, we'll work with you from drawing board to job-site application instruction.

Tremco offers a broad line of the best of both hot- and cold-applied liquid membranes that will help you meet most conditions.

A versatile hot-applied system

Say, for example, the job has to be done under a wide range of temperatures and the concrete surface finish may be a little rougher than usual. TREMproof 150 is an excellent choice, particularly for unexposed waterproofing applications such as bridge decks, parking garages and plaza decks.

With the recommended application thickness of ⅛-inch to ¼-inch, it will tolerate some surface irregularities, span structural cracks up to ¼-inch without cracking or becoming brittle. Service temperature range is −45.6°C (−50°F) to 82.2°C (180°F).

Its recovery and self-healing properties provide a safeguard against job-site abuse. Punctures will reseal or can be quickly repaired by heating with a torch.

High-performance cold-applied systems

Tremco gives you a range of job-proven cold-applied systems to meet a broad range of two-course concrete construction techniques, plus critical areas (planters, reflecting pools, etc.) Take TREMproof 50. This two-part bitumen modified moisture-curing urethane provides a high-performing, flexible rubber-like seamless blanket that becomes an integral part of the structure. It can withstand constant water submersion. And because it's highly elastomeric, a 60-mil application provides up to 90% recovery. Service temperature range is −40°C (−40°F) to 65.6°C (150°F). It can be used on both vertical and horizontal surfaces and can be applied with trowel, squeegee or spray.

TREMproof 90W is a unique rubberized polymeric emulsion modified with asphalt. The system sprays on quickly and easily and cures within 15 minutes which prevents wash-off. It can be safely applied to green or damp concrete.

When you need a system for waterproofing traffic-bearing surfaces such as plazas, balconies, terraces, Interior floors, etc., TREMproof 850 will do the job. This decorative liquid polymer cures to a flexible seamless blanket then becomes an integral part of the structure and provides excellent resistance to abrasion, chemical spillage and ponded water.

If you plan to use precast pavers, consider the Tremco Plaza Deck System which includes ingenious KingPin® pedestals and a TREMproof liquid polymer. The system eliminates unsightly surface drains, excessive slopes and joint sealants. KingPin pedestal fingertip height adjustment allows for deck or pedestal irregularities. The open joint design helps avoid ponding and freeze-thaw problems, such as heaving and spalling.

One source for all systems

That's the beauty of working with Tremco. One convenient source that can supply any system you need. Tremco meets special waterproofing challenges head-on.

So remember. There are all kinds of waterproofing conditions and all kinds of waterproofing systems. But there's only one company that can offer you job-proven systems plus 45 years of on-site experience. And that's Tremco. Let us work with you on your next waterproofing job. Tremco, Cleveland, Ohio 44104. Toronto, Ontario M4H 1G7.

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omo FAcade
It’s designed
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It’s a completely new concept in rain carrying systems. Omni Facade provides both gutter and fascia in a single piece of aluminum that’s channeled to hold either pan or continuous roll soffit. It reduces time and material costs and provides architects with a clean-line look in roof design. It’s Omni Facade.

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AE/UPDATE

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NEW MEDICAL LABORATORY EQUIPMENT CATALOG illustrates Jewett’s complete line of refrigerators and freezers for hospital and installation. A wide range of morgue equipment is also included in a sturdy binder. Comprehensive drawings and specifications feature metric as well as English dimensions to accommodate Jewett’s international market of over 100 countries throughout the world. The Jewett Refrigerator Co. Inc., 2 Letchworth St., Buffalo, N.Y. 14213.

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Designing with steel?

Look at the aesthetics and structure/ability of Regal Welded Steel Tubing

Our clean-lined, smooth squares and rectangles assure better appearance and give you basic design advantages. Higher strength-to-weight ratios let you use lighter structural columns and beams, trusses, Mullions, and stairways. Also provide handsome concealment of conduit, pipe, etc.

You can simplify layout and speed construction due to easy joining to the four flat surfaces. These are only a few of the cost-saving advantages of Regal structural steel tubing. Learn more about how Regal structural steel tubing can save you time and costs. Write for our new catalog, free on request. Or contact your steel service center.

The Copperweld Tubemakers

REGAL TUBE COMPANY
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Phone: 312-458-4820

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The economical approach to hospital walls.

For ICU/CCU, recovery or general patient care areas, Square D modular hospital walls offer these major advantages:

LOW INITIAL COST. The latest numerically controlled, high production techniques are used to assure the highest quality at the lowest price.

ADDITIONAL SAVINGS. Each modular wall is completely piped and wired at the factory to meet all existing codes. Therefore, installations may be completed in hours instead of days.

APPEARANCE. Available in a wide variety of attractive colors and wood tones, these walls are designed for long life and quality appearance.

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For the best buy in modular hospital walls for new construction or renovation projects, contact your nearby Square D field office...there are 140 of them nationwide. You can also write or call us directly: Square D Company, Dept. SA, 3300 Medalist Drive, Oshkosh, WI 54901. (414) 426-1330.
...AU NATUREL
The **Hauserman Office System** gives you freedom to choose.

Hauserman provides flexible space division, storage and work components for your design requirements. And, with new products and a wide variety of color, fabric and finish options, the Hauserman Office System accommodates you.

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See the Hauserman Office System at NEOCON, Merchandise Mart, 410A, June 23-25. Or, visit our Demonstration Centers in Chicago, Cleveland, San Francisco, Dallas, New York City or Toronto, anytime.
Bally where all our energies are aimed at reducing your energy costs.

In Bally Walk-Ins the packaged refrigeration systems use less electricity (up to 20% less) than comparable size remote systems assembled on the job site

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The use of less electricity results from many things. For example, every component in the system is perfectly balanced in size and capacity... our coil design obtains maximum air flow to fully utilize its BTU output... defrost periods are time-limited and carefully monitored... tubing size and length are predetermined for maximum efficiency... and each system has a precisely correct refrigerant charge.

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It's a beautiful, modern office building. And PPG Solarban 480 Twindow® reflective insulating glass played an important part in the transformation.

First of all, it looks sensational. Seeing the blue Oklahoma sky and dazzling sunsets reflected in this building, it's hard to remember the dowdy, old bricks.

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The glass is also double glazed for insulation. So when those bitter cold snaps blow down from the north, everybody stays warm and cozy.

Not all old buildings can or should be remodeled. They shouldn't all be destroyed either. Some, like the Skirvin Tower Hotel, present a genuine architectural opportunity. Not to mention a challenge.

We think there's no better way to meet the challenge and take advantage of the opportunity remodeling offers than with PPG reflective glass.

Write to us. We'll send you a Sweet's Catalog telling you more about it. PPG Industries, Inc., One Gateway Center, Pittsburgh, Pa. 15222.

PPG: a Concern for the Future

Owner: Continental Federal Savings & Loan.
Architect: Koff, Lawrence, Lawrence and Flesher, Oklahoma City, Okla.

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The Glo-Metrics system also includes Appleton's unique Mardi-Gras™ luminaire. It has an internal, motor-driven projection system that makes the spherical diffuser appear to revolve in a dramatic blaze of colors and patterns. For wall or pole-top mounting.

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Asbestogard meets Factory Mutual Requirements for Class I Construction and is the only UL rated vapor barrier system.

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For more information on Asbestogard or the J-M single-source built-up roofing system, call Dick Ducey, Johns-Manville, P.O. Box 5108, Denver, Colorado 80217, 303/770-1000.

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Benjamin Franklin

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For more information:
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- The day Disneyland opened

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OFFICE NOTES

Name changes, new firms
Christopher D. Craiker and David C. Hanche, planners and architects, announce the opening of their office in the Shelter Bay Office Complex at 655 Redwood Highway, Suite 301, Mill Valley, Calif.

Gensler & Associates architects have moved to larger facilities located at 248 Battery St., San Francisco, Calif.

The architectural firm of Barry E. Milowitz, architect, p.c., has relocated its offices to three new locations: 455 Central Avenue, Scarsdale, N.Y., 277 Northern Blvd., Great Neck, N.Y., and 405 Lydell Ave., Rochester, N.Y.

Armand Bartos and Associates, architects, have moved their office to 10 East 40th St., New York, N.Y.

Frost Associates Architects, Frost Interior Design, Inc. announce the opening of a Westchester office at 503 Grasslands Road, Valhalla, N.Y.

Cohos, Evamy & Partners, architects, engineers, planners, interior designers, announce the relocation of their offices to 902-11th Ave., S.W., Calgary, Alberta T2R 0E7.

John H. Hadley, Jr., AIA, has formed his own firm, Hadley/Architects, headquartered at 335 N. La Cienega Blvd., Los Angeles, Calif.

C. Randolph Wedding, AIA, St. Petersburg, Fla. architectural/planning firm, and Alcott and Lomax, consulting civil engineering firm, Manchester, England, have formed a professional association offering their combined architectural/engineering services.

New associates, promotions
The Perkins & Will Partnership, architects, have appointed Stanley Pinska and Richard S. Thomas as associates.

The Kling Partnership, architectural, engineering and planning firm, have announced the appointment of Berdoll Buckley as director of business development.

Philip A. Nicholas, AIA, has joined Albert Kahn Associates, Inc., architects and engineers, as manager of marketing.

Stone, Marraccini and Patterson, architects, planners and health planning consultants have announced that Dr. Robert H. Chapman, AIA, AAHC, will assume major responsibilities in development of the firm’s health planning and health facility projects.

Edward R. Jones, Jr., AIA, and Richard C. Niblack, AIA, have been named senior vice presidents and members of the executive committee of Charles Luckman Associates.

Poor, Swanke, Hayden & Connell Architects, announces that Der Scutt AIA has become a partner in the firm and that Ralph A. Krass AIA and Susan Podufaly Schaub AIA have become associates.

John S. Crane, James B. Gwin, Jr., and Allen Rice have been named partners in the firm of Golemon & Rolfe, architects.

Erratum
On page 61 of the July 1976 issue, we neglected to indicate that the second set of cost figures published for "Warehouses" refers to "Refrigerated Warehouses."
### ADVERTISING INDEX

Prefilled catalogs of the manufacturers listed below are available in the 1976 Sweet's Catalog File as follows.

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- Industrial Construction File (blue)
- Light Construction File (yellow)
- Interior Design File (white)

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#### B
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- Bradley Corporation
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- Cy-Ro Industries

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- Dow Corning Corp.
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- Harvey Hubbard Inc., Lighting Div.
- Hastings Tile
- E.F. Hauserman Co.
- Haws Drinking Fountain Co.
- Hewwood-Wakefield Co.
- Hilliard-Helvelco Co.

#### I
- Ilion Inc.
- INRICO, Inc.
- International Masonry Institute

#### J
- Jewett Refrigerator Co., Inc.
- Johns-Manville

#### K
- Kawneer Company Inc.
- Kelly Co., Inc.
- Kemlite Corp.
- Kohler Company

#### L
- Latco Products
- Libbey-Owens-Ford Div.
- Ludovici-Celadon Co.
- Lundia, Myers Industries, Inc.
- Lyon Metal Products Inc.

#### M
- Marathon Carey—McFall Co.

#### N
- National Gypsum Co.

#### O
- Olympic Stain Company

#### P
- Paddock Structure Inc.
- Page Fence Division of Acco
- Parker Co., Charles
- Pella Rollscreen Co.
- Philips, Eindhoven
- PPG Industries Inc.—Coatings & Resins
- PPG Industries Inc.—Commercial Glass
- PPG Industries Inc.—Fiberglass

#### R
- Rauland-Borg Corp.
- Raynor Mfg. Co.
- Regal Tube Co.

#### S
- St. Joe Minerals Corporation
- Sandell Mfg. Co.
- Shalowtown Corp.
- Silbrico Corp.
- Sloan Valve Company
- Smith, Elwin G., Div.
- Sovereign California Corp.

#### T
- Thielok Corp., Chemical Division
- Tremco Incorporated

#### U
- United States Gypsum Co.
- United States Steel Corp.

#### V
- Vulturic Div. of Nucor Corp.

#### W
- Warth Paint Co.

#### X
- Wessco Products, Inc.
- Weyerhaeuser Company
First Prize $7,500

Creative Design Award Program
For Mobile and Modular Homes

Enter an awards program that gives the designer an opportunity to test his inventiveness and originality against the necessity of practicality. It's the field of manufactured housing — mobile or modular. The competition is open to architects, industrial designers, their firms, and students in accredited architecture or design schools. Entries should concentrate on practical, and pleasing, single-family units that can be mass-produced and transported to the site. A crackerjack design could win you $7,500. Four other awards will be made for designs that rank well.

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Please send me all the information on the Reynolds Fourth Transhelter Design Competition.

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Firm or School ____________________________

Address ____________________________

City ____________ State ____________ Zip ______

2-5, 3-chome, Kasumigaseki, Chiyoda-ku, Tokyo, Japan
Park Ridge Hospital prevents epidemic of slapped-up signs with integrated signage system.

The interior of Park Ridge Hospital—a warm, harmonious blend of wall colors, textures and carpeting—is therapy in itself.

Located in Greece, New York, and serving the Greater Rochester area, the hospital was dedicated in September 1975. A two-building complex, it covers approximately 300,000 sq. ft. The medical building contains 194 patients' rooms—all private—in addition to offices, conference rooms, labs, therapy departments, etc. It is connected to the adjoining Supply, Processing and Distribution building via a glass-enclosed walkway.

Signage as a subsystem
A hodge-podge of signs, slapped up as an afterthought to construction, would have seriously marred the hospital's handsome interior. But the architects and hospital administrators, aware of the need for an efficient traffic moving system, wrote a complete signage program into their initial plans.

Matthews was called in a year before the building completion date to design and fabricate a total, integrated signage system for both interior and exterior traffic control.

Over 300 individual signs—interior and exterior—were installed. Most were fabricated of damage-resistant NOMAR fiber reinforced polyester. All of the signage is tastefully understated but highly functional, with complete continuity of color and letter style.


Architect: Stevens, Berlin & O'Connell, Rochester, NY
Construction Mgmt. Firm: John W. Cowper
Signage Contractor: Empire Sign Co., Inc.
Buffalo, NY
Rochester, NY

1, 2, 3, 4, 5, 6, 7, 8, 9: NOMAR with screened graphics embedded. 6. Cutout aluminum logo. 7. NOMAR post and panel assemblies with surface applied reflective pressure-sensitive legends. 8. Reverse screen process on acrylic identifies patients' rooms. Slide-in cards and strips for adaptability.
Staggered Truss Steel framing system saves 45 working days in Las Vegas hotel expansion.

The Showboat Hotel and Casino, one of Las Vegas' most popular spots, has recently undergone a $6 million expansion program. Nine new floors and 198 new guest rooms—as well as larger banquet facilities—have been added to the existing nine-story, 154-room structure.

The choice of Staggered Truss Steel Framing for this new construction provided several benefits to the owners: (1) It conformed with the existing framework and permitted identical elevation treatment within original foundation load limits. (2) By eliminating interior columns, it provided unobstructed floor space for two column bays the entire width of the building. (3) Preassembly of the trusses in the fabricator's shop allowed construction to proceed without interrupting service or creating undue disturbance in the guest area immediately beneath the new addition. (4) It shortened the erection time of the steel frame to only five weeks, saving 45 working days, and permitting earlier occupancy.

In this project, and many others, Staggered Truss Steel Framing—developed by M.I.T. under a grant from U.S. Steel—proved to be the most practical and economical construction system. For more information on the design of Staggered Truss structures, contact a USS Construction Representative through your nearest U.S. Steel Sales Office. Or write for our booklet, "Staggered Truss Framing Systems for High Rise Buildings" (ADUSS 27-5227-02), to U. S. Steel, P.O. Box 86 (C600), Pittsburgh, Pa. 15230.
You waste a lot of water when you use flush tanks instead of Sloan Flush Valves.

Figure it out for yourself.

<table>
<thead>
<tr>
<th>Number of tank toilets in your building</th>
<th>Number of gallons a Sloan Flush Valve saves compared to a flush tank</th>
<th>Total number of gallons wasted by flush tanks on every flush</th>
<th>Plus the number of gallons wasted by unnoticed leaks</th>
</tr>
</thead>
<tbody>
<tr>
<td>x 0.64 = ?</td>
<td>+</td>
<td>?</td>
<td></td>
</tr>
</tbody>
</table>

No matter what figure you got, remember it's only for a single flush. Think of how many times all the toilets in your building are flushed every day. Every month. And since every Sloan Flush Valve uses 0.64 gallon less than a flush tank, think of how much water you could be saving, instead of wasting. What’s more, a Sloan Flush Valve saves you money by using this same minimum water volume with every flush. No more, no less. That’s because it completes its cycle, then shuts off automatically. Again, there’s less water wasted and a lower water bill. Remember, it takes energy to pump water. The less water you have to pump, the less energy you have to pay for.

So stop wasting water and start saving money. To tell you how, we’d like you to have the test report from an independent laboratory that proves Sloan Flush Valves use 0.64 of a gallon less than tanks. For your free copy, just write to us.

Sloan Flush Valves. Anything else is a waste of money.

SLOAN VALVE COMPANY
10500 SEYMOUR • FRANKLIN PARK, ILL. 60131

For more data, circle 142 on inquiry card