Progressive Architecture

November 1983

Azrock and your Imagination

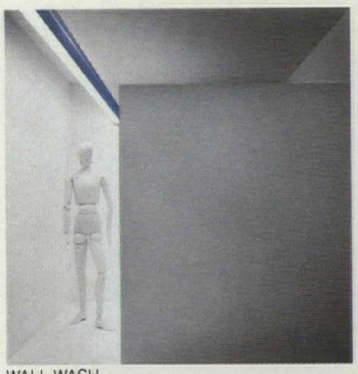
The floor in this setting is Yuma Clay in Vinylcraft II combined with a field of Pebbled-Onyx and accents of colorful Feature Strips.

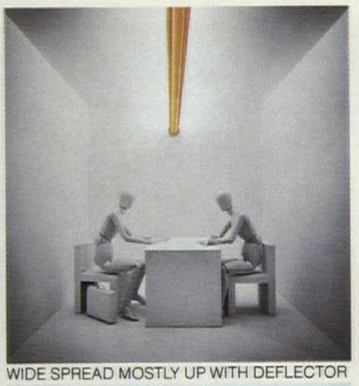
Create one-of-a-kind floors with Azrock vinyl composition tile. The custom design combinations are endless with Azrock's wide choice of colors, patterns and textures. What's more, Azrock tile offers durability, long life and easy maintenance. It's ideal for new construction or remodeling. For information, contact your Azrock flooring contractor or write Azrock Floor Products, Dept. 417A, P.O. Box 34030, San Antonio, Texas 78265.

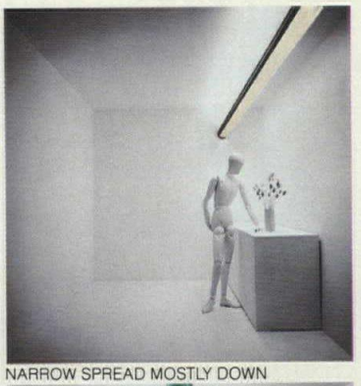
Azrock®

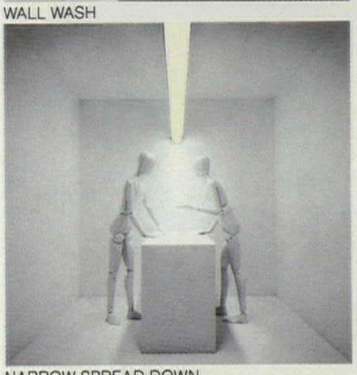
High-style in resilient floor tile.

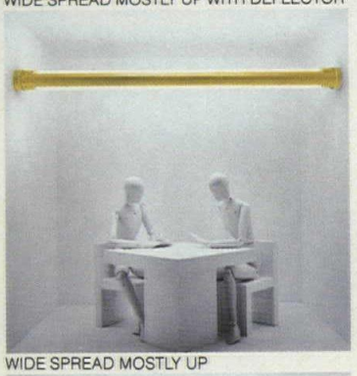
Illustrated: 6" Lite Duct fixtures with specialized and, in some cases, patented Softshine Optics. Lite Duct is one of the 13 Longlite systems and comes in seven diameters and configurations, in any finish, and extends to any length.

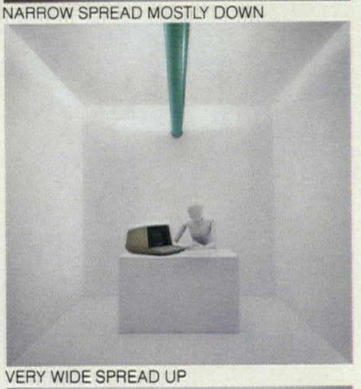

WALL WASH

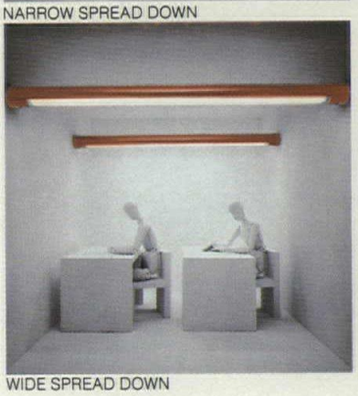

WIDE SPREAD MOSTLY UP WITH DEFLECTOR

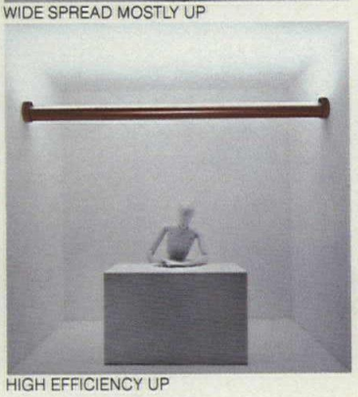

NARROW SPREAD MOSTLY DOWN

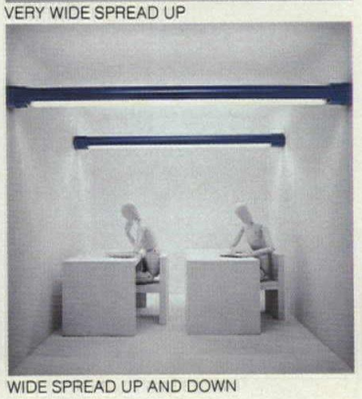

NARROW SPREAD DOWN


WIDE SPREAD MOSTLY UP


VERY WIDE SPREAD UP


WIDE SPREAD DOWN


HIGH EFFICIENCY UP


WIDE SPREAD UP AND DOWN

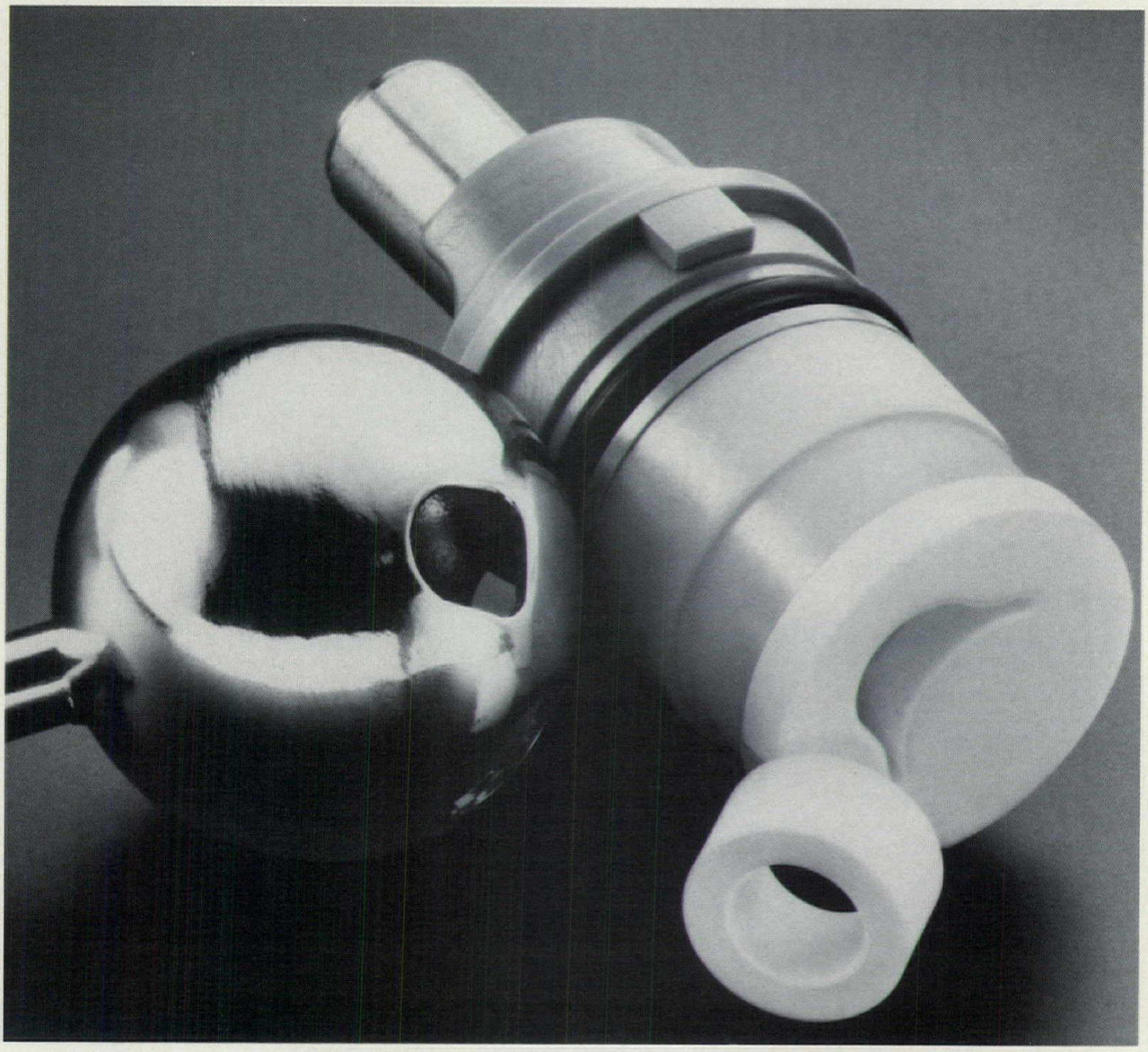
LIGHTING REINVENTED

Now you can solve your lighting problems with the same fixtures you use to solve design problems. These fixtures show how easily one 6" round fluorescent fixture adapts. It can even light a room brightly or for mood. It can spread the light evenly or provide planned accents. Reinvented lighting means controlled lighting, to the point where you'll never again be forced to change the shape of a fixture just to change the type of light.

LONGLITES BY PEERLESS

PEERLESS ELECTRIC COMPANY, BOX 2556, BERKELEY CA 94702-0556. TELEPHONE (415) 845-2760.

DELTA® GETS TOUGH WITH CERAMIC AND STAINLESS STEEL.



Tough commercial jobs require tough commercial faucets. That's why we created the Workforce.™ And why we equipped this line of washerless faucets with two extra-heavy-duty valve mechanisms.

Most of our two-handle *Workforce* faucets feature a ceramic stem and seat. Built to withstand rigorous use, this valve mechanism will outlast standard compression and washerless valves with rubber seats. And it's so incredibly hard, it can withstand most foreign particles found in the water without damage.

Single-handle models work with our exclusive stainless steel ball. It's so tough it easily stands up to foreign particles and resists corrosion. And that means it stays smoother longer, resulting in an extended seat-life.

Both valves offer lower life-cycle costs than conventional faucets. And to prove it, we're backing them with a 5-year limited warranty.*

The *Workforce*.

Delta made them tough, to help make your job easier.

See your *Delta* representative for all the details on how to put the *Workforce* to work for you.

*Slow Close, *Delta* Mix and Scald-Guard* carry our standard two-year limited warranty.

DELTA® WE'RE FIRST BECAUSE WE LAST.™

Delta Faucet is proud to bring you the 1984 Summer Olympics on ABC-TV
© 1981 ABC Inc., "Star in Motion"
© 1980 L.A. Olympic Committee

DELTA FAUCET COMPANY, A DIVISION OF MASCO CORP. OF INDIANA, 55 E. 111th ST., P.O. BOX 40980, INDIANAPOLIS, INDIANA 46280, © 1983, MASCO CORPORATION OF INDIANA

Circle **No. 325** on Reader Service Card

November 1983

Progressive Architecture

Progressive Architecture (ISSN 0033-0752) is published monthly by Reinhold Publishing, A Division of Penton/IPC, P.O. Box 95759, Cleveland, Ohio: Philip H. Hubbard, Jr., President; Harry I. Martin, Robert J. Osborn, Vice-Presidents; Penton/IPC: Thomas L. Dempsey, Chairman; Sal F. Marino, President; James K. Gillam, N.N. Goodman, Jr., Paul Rolnick, Executive Vice-Presidents.

Executive and editorial offices, 600 Summer St., P.O. Box 1361, Stamford, CT 06904 (203-348-7531).

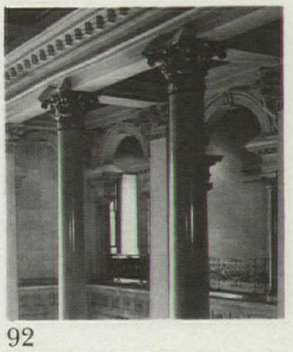
Subscription information:
Send all subscription orders, payments, and changes of address to Progressive Architecture, P.O. Box 95759, Cleveland, OH 44101 (216-696-7000). When filing change of address, give former as well as new address and zip codes, and include recent address label if possible. Allow two months for change. Publisher reserves right to refuse unqualified subscriptions. Professionals include architectural and architectural-engineering firm personnel and architects, designers, engineers, and draftsmen employed in allied fields.

Subscription rates, payable in advance, are:

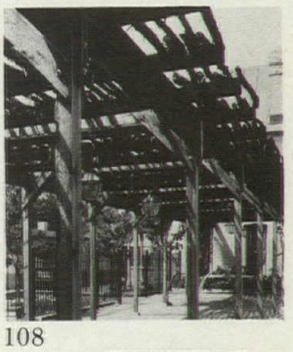
Professional:	U.S.	Canada	Foreign
1 year	$25*	$33	$ 60
2 years	45	53	115
3 years	70	85	—
*Student rate also			
Nonprofessional:			
1 year	$45	$60	$ 85
Single copy:	$ 7	$ 8	$ 9

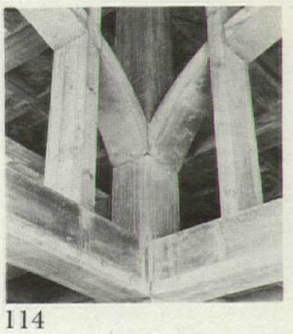
Indexed in Art Index, Architectural Index, Engineering Index. Second class postage rates paid at Cleveland, Ohio, and additional mailing offices. Volume LXIV, No. 11. Printed in U.S.A.


86

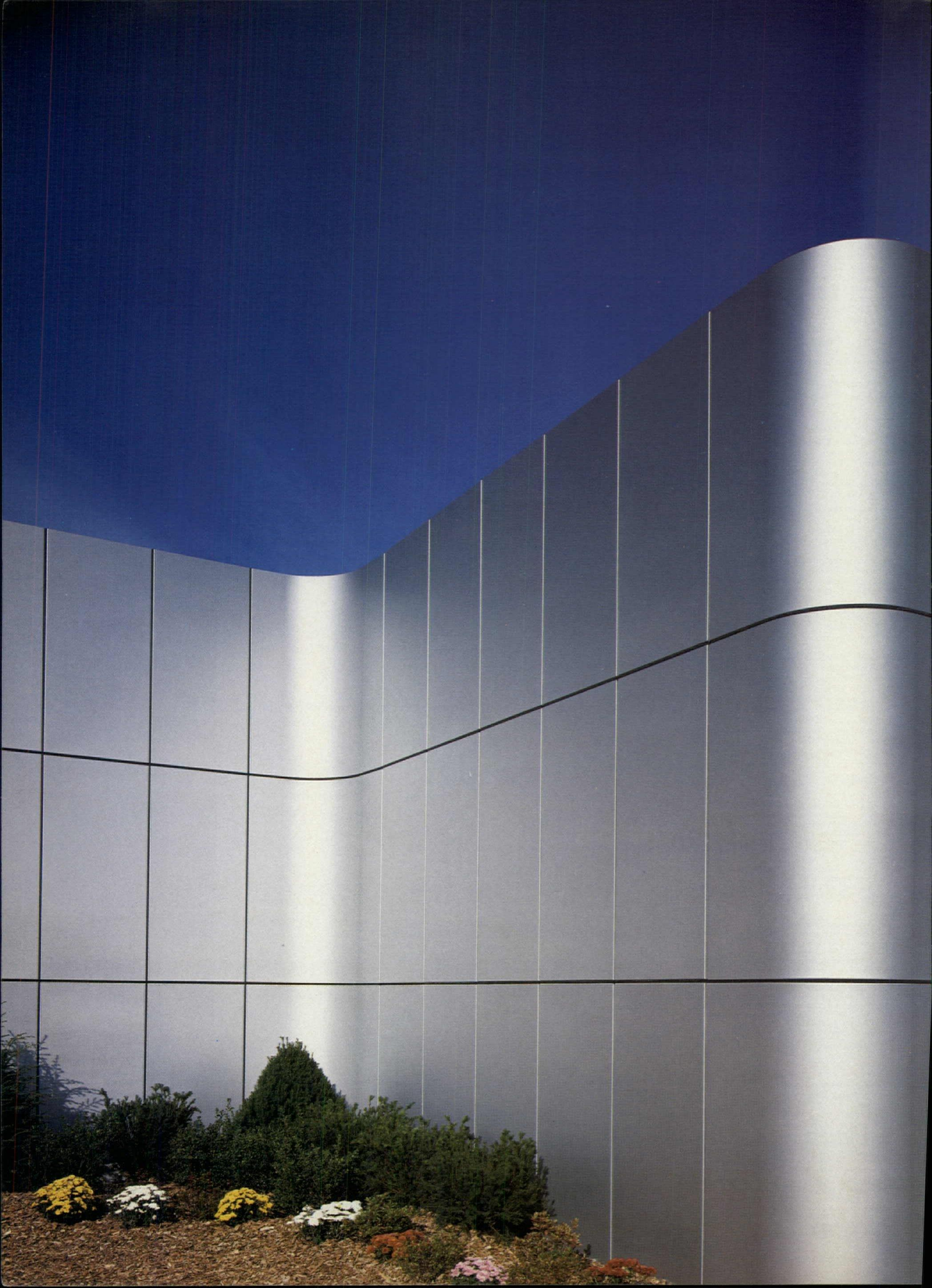

92


96


108


114

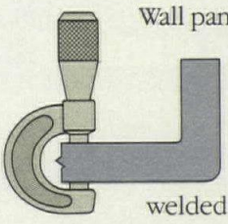
Cover: *Detail of restored ceiling in the courtroom, Chenango County Courthouse (p. 104). Photo: Patricia Layman Bazelon.*



Introducing Tech Wall®, the uncompromised aluminum wall panel!

Now Tech Wall panels offer architects and builders a solid new option where a hi-tech, zero site line, metal skin is the look of choice.

Water can't hurt it, fire can't burn it and it will never delaminate because a Tech Wall panel is solid .120" thick aluminum with formed edges and welded corners.



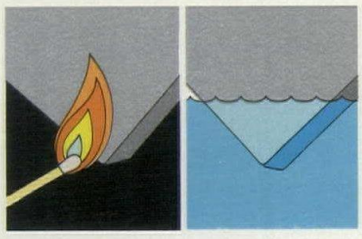
A SUPERIOR SYSTEM

Tech Wall is truly superior to composite panel systems, with tested wind-loading capacity that can withstand typhoon conditions. Superior flatness is

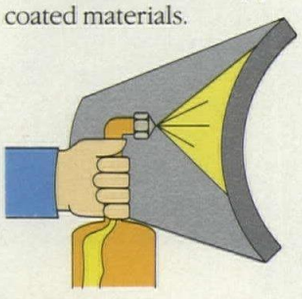
assured by the panel's edge design. That, combined with our unique fastening system and rugged .120" aluminum virtually eliminates any possibility of "oil-canning."

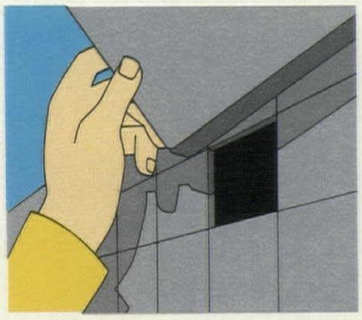
BEATS COMPOSITES

Tech Wall has other features unmatched by composites too! A front access fastening system means individual panels may be removed at any time. And there's no plastic substrate, so there can be no toxic fumes in



the event of fire. A positive joint seal combined with solid aluminum and welded panel corners insure weather integrity. (A composite's core, if exposed to weather, may absorb and trap moisture.) Unlike composites, Tech Wall panels are formed and contoured before finishing. An additional step; but it prevents the cracking, crazing and micro-splitting of finish films inherent in contouring precoated materials.





MORE COLORS, BETTER FINISHES

Tech Wall offers a greater range of finishes too. Besides clear and bronze anodize, there are 26 Kynar® Tri-X, 20 year warranted colors which have proven panel to panel consistency and will not crack or craze.

ONE SOURCE

There are no potential installation snafus with Tech Wall. Conspec Systems, Inc. is a vertically integrated organization. Unlike some composite systems which involve a separate manufacturer, fabricator, distributor and installer, we handle everything from detailing through installation.

COSTS NO MORE

Best of all, Tech Wall is *the premium wall system* without a premium price. It costs no more than the compromised alternatives!

TECH WALL

Not a composite, not a compromise, but a solid aluminum panel, at no extra cost!

CONSPEC SYSTEMS, INC.

Suppliers and installers of C/S architectural products worldwide

Cranford, N.J.
(201) 272-2771

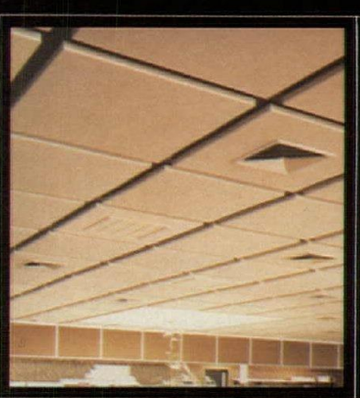
San Marcos, CA.
(714) 744-5871

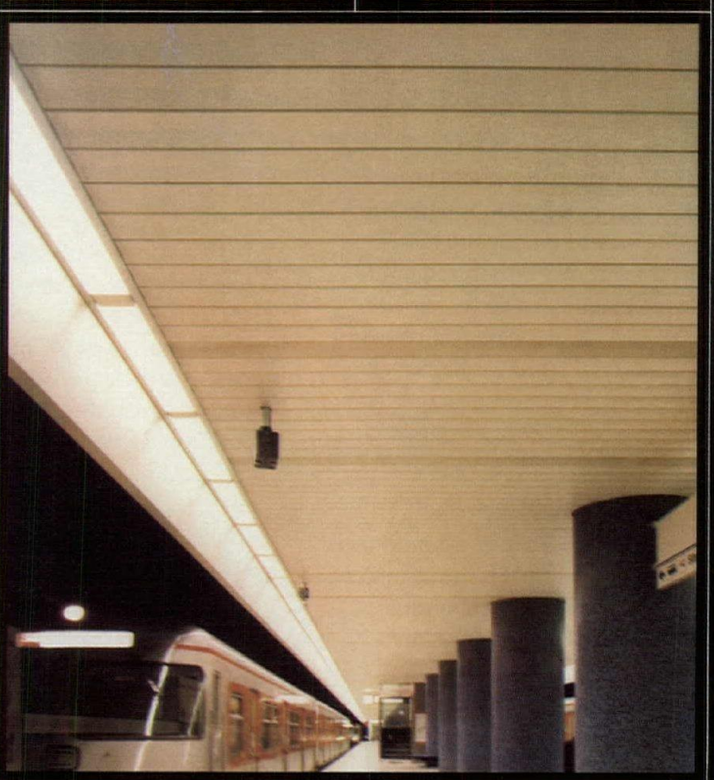
Circle **No. 319** on Reader Service Card

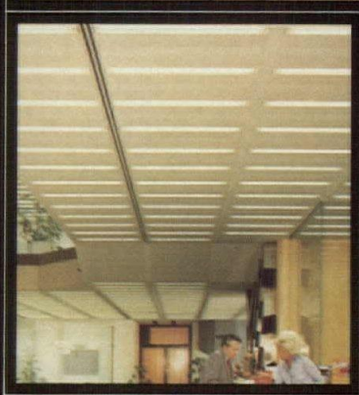
Metal Panel Ceilings

Our Metal Panel Ceilings offer a broad spectrum of functional advantages combined with unusual design flexibility and meticulous detailing. A wide range of panel forms and sizes is available with a selection of suspension systems to meet individual project requirements. Surfaces can be plain, perforated, embossed or etched. Select from a wide range of colors on galvanized steel or aluminum, and polished or satin finishes on stainless steel and other metals.

Forms & Surfaces
Box 5215 Santa Barbara, California 93108 (805) 969-7721







forms+surfaces®

Revelations

The cleaned and restored building fronts appearing throughout our older city cores are vivid symbols of economic rejuvenation and rediscovered object lessons in urban architecture.

Revisit the downtown of almost any American city today and you are likely to see handsome old buildings that you never noticed before. Your appreciation of Pre-Modern architecture may have increased, of course, but many of the venerable façades you now pause to inspect were simply not visible a few years ago. They have recently reappeared from behind masks of dull gray grime (see Technics, pp. 127–131). We can again examine the polychrome masonry of 19th-Century Venetian Gothic and Romanesque Revival, the light-colored relief of American Renaissance Classicism, and the exotic colorings of Art Deco.

This revelation of long-obscured architecture is rarely the result of local programs, but typically the outcome of innumerable private decisions, spurred on by several favorable factors. There have been, since 1976, federal tax policies with incentives for rehabilitation (in contrast to earlier policies that were biased against it). These incentives have worked, however, only where there was a market for reused space and owners interested in serving it, where buildings of greater volume were either not in demand or not permitted by law.

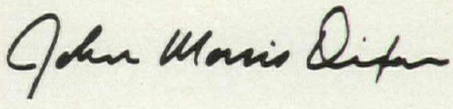
The locations involved may be on previously marginal city blocks, but often today they are on prime real estate, where a decision has been made to refurbish what is there, rather than simply anticipate another wave of bigger buildings. The sensuous surfaces of granite, limestone, brick, and bronze that have thus been brought back to light speak more vividly of the urban revitalization than any shiny new structures. We are not going to replace whole downtowns with new construction—most of us have finally realized—and it was the shabbiness of so many old survivors that long made urban revival seem a futile dream. (Without better municipal services and reduced crime, the future of many of our downtowns is still in doubt, but architecturally, at least, it looks more encouraging.)

The effect of recent building-by-building rehabilitation is just the opposite of the earlier programs of urban renewal. The clear-and-rebuild renewal of the 1950s and 1960s may have been more constructive than most of us now admit—it may have been a necessary forerunner in some cities of today's more prudent rehabilitation—but it had the devastating side effect of draining away the economic base of older buildings, calling their long-term survival into question, and thus obstructing respectful renovation. It was then that owners either neglected their properties totally or desperately "modernized"—obscuring lobbies and entrances with tacky materials and poking air-conditioner holes through elegantly ornamental spandrels.

There are, of course, some troubling aspects to current building rehabilitation. Where pressures for larger scaled development are strong—and zoning laws adaptable—we are seeing more and more urban landmarks restored as nostalgic vestiges, huddling at the base of towers that have been expanded by the amount of the landmark's "air rights." To retain the elegance of New York's Villard Houses (now Urban Center and Palace Hotel public rooms), we have to abide the banality of its adjoining hotel tower; Boston's old Federal Reserve Bank (now Meridien Hotel) is similarly linked to an office tower that is less banal, but more assertive. New York's South Street Seaport expands this effect to neighborhood scale: a few city blocks of old and new low-rise structures are being besieged by a ring of conspicuously overblown, air-rights-borrowing towers. The air rights system of preservation—like many ingenious government programs before it—is clearly no panacea.

Though it may sometimes depend on questionable trade-offs, the reappearance of so many fine old urban façades is valuable in itself, not only for its contribution to the urban scene, but for the lessons it exposes for designers of new buildings. It is one thing to understand the need for formal richness, color, and incident in urban buildings academically or by reference to exemplary townscapes abroad. It is quite another thing to see a variety of our past accomplishments lining our own city streets.

Adoption of lessons from older urban neighbors is a major theme in the works of architects such as Kohn Pedersen Fox (P/A, Oct. issue, pp. 69–91) and in individual successes such as the recent courthouse in Colorado by Hoover Berg Desmond (same issue, pp. 96–100). If architects as a group can learn from the urban architecture of our past, there may be less public apprehension when any of these old buildings is to be replaced by a contemporary creation.



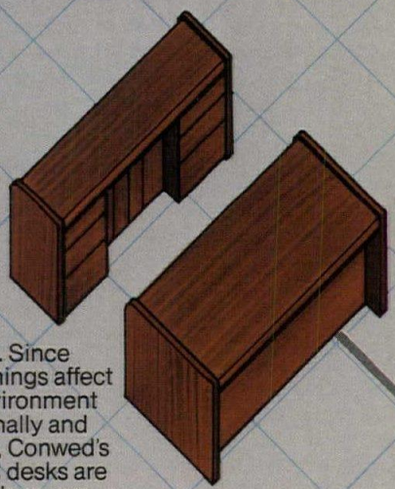
INTÉRICS

The science of creating environments that work SM

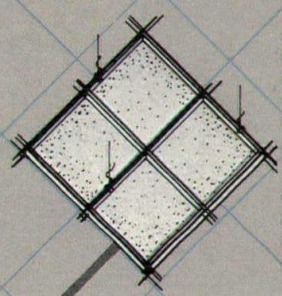
In the past decade, the traditional office environment has undergone fundamental changes.

Inherent in these changes has been the growing realization that the physical environment of an office has a dramatic effect on the productivity and satisfaction of the people in that office.

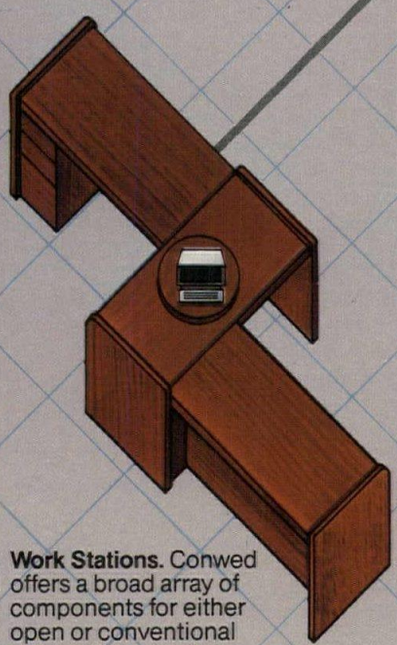
Today, Conwed is uniquely positioned with the industry's most comprehensive range of products and services to



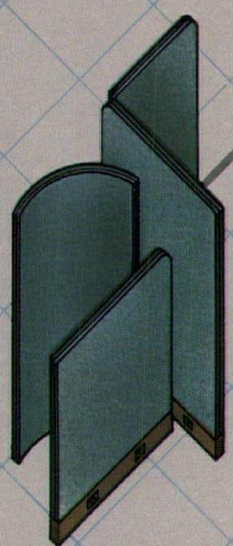
Wood Desks. Since office furnishings affect the work environment both functionally and aesthetically, Conwed's natural wood desks are designed with an eye towards both.



Acoustical Ceiling. The ceiling is the largest uninterrupted surface in the office and is critical to acoustical control. Conwed acoustical ceilings are specifically designed to absorb sound and accommodate sound masking and lighting systems.



Work Stations. Conwed offers a broad array of components for either open or conventional offices. You can choose from freestanding desks or complete work station systems.



Acoustical Panels. Conwed acoustical panels work with Conwed ceilings to reduce noise levels so workers will be less distracted and more productive. These panels are also available with electrified bases to provide wire management and power distribution.

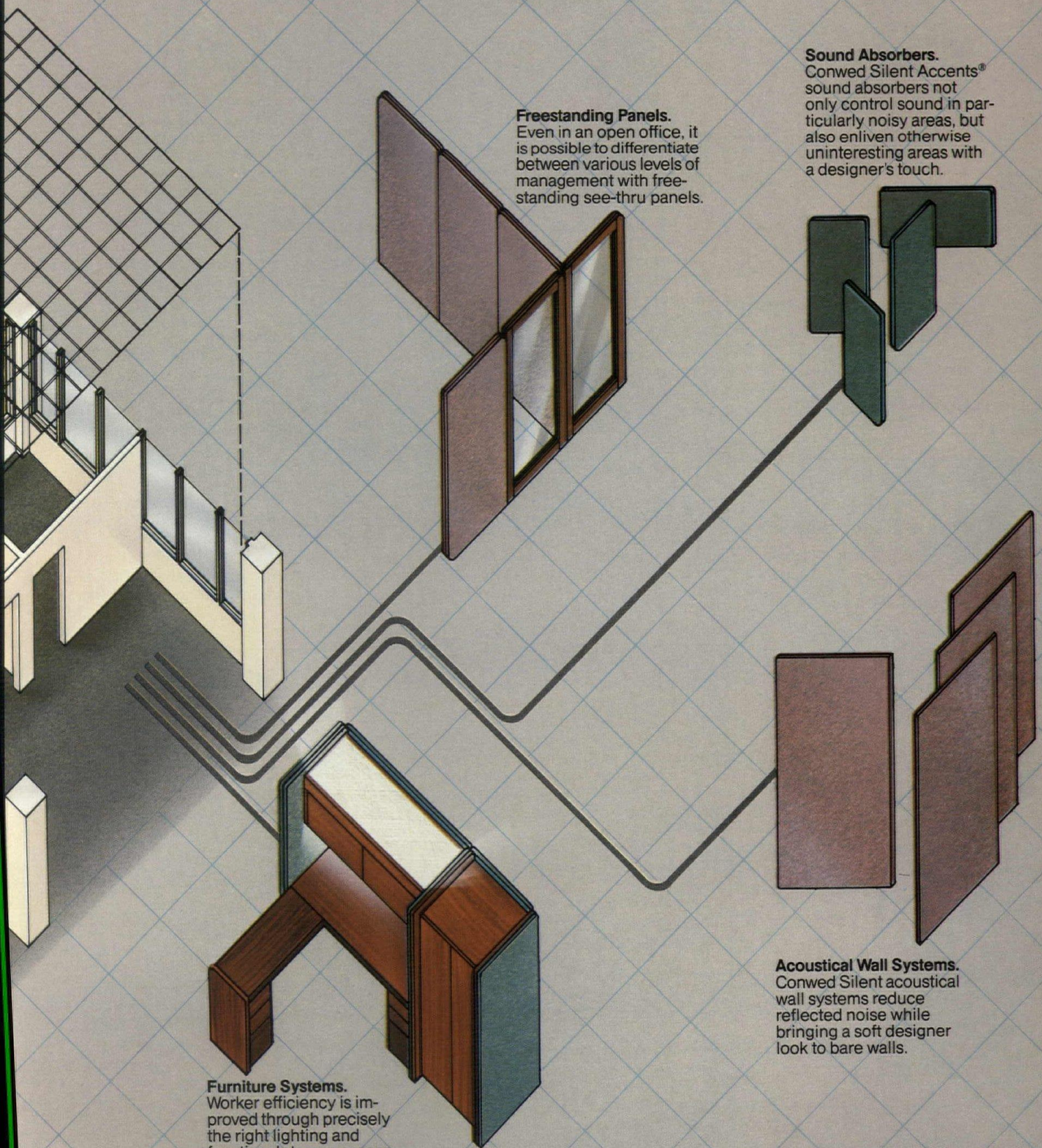
maximize the efficiency and effectiveness of the workplace. Utilizing our technical expertise and experience we have developed a consistent, unified approach which yields predictable performance in the office.

We call this approach **Intérics**: The science of creating environments that work.

Through the principles of Intérics, Conwed can significantly improve the productivity, cost effectiveness and physical appearance of a company's workplace. Each component of the office is selected for its impact on organizational interaction, acoustics, illumination, aesthetics and return on investment. From ceiling tiles to wall panels, from office furniture to task lighting, every element is considered for its effect on the total environment.

To learn how Conwed can put the science of Intérics to work for you, contact Conwed Corporation for the representative nearest you. Write Conwed Interior Products Division, P.O. Box 43237, St. Paul, MN 55164. Or call (612) 221-1177. You can see the wide array of Conwed products, including new finishes, colors and fabrics at our showroom Suite 929, Chicago Merchandise Mart.

CONWED



Freestanding Panels. Even in an open office, it is possible to differentiate between various levels of management with free-standing see-thru panels.

Sound Absorbers. Conwed Silent Accents® sound absorbers not only control sound in particularly noisy areas, but also enliven otherwise uninteresting areas with a designer's touch.

Acoustical Wall Systems. Conwed Silent acoustical wall systems reduce reflected noise while bringing a soft designer look to bare walls.

Furniture Systems. Worker efficiency is improved through precisely the right lighting and functional storage spaces built into Conwed furniture systems.

Circle **No. 320** on Reader Service Card

Views

Computer project management
We read with interest the July P/A Editorial and found what you meant was the CAD (or drafting) computer joins the firm. You do note in passing that "computer systems are widely used now for nongraphic purposes (accounting, specs, etc.)."

We sense the omission of an excellent and productive nongraphic way in which the computer can join, and to a wide extent has not joined, the firm, and that is as an integrated project management tool.

Project management (the effective monitoring, control and direction of the firm's resources to meet its project commitments) is traditionally carried out by a combination of partners (or senior associates), accountants, bookkeepers and project architects. When you consider the time cost of all these personnel in their portion of the project management function it is high. A very significant cost saving and product improvement can be achieved by having the computer "join the firm" as a project manager. More of the partner's and project architect's time is freed for creative and productive endeavor, and much less bookkeeping and accounting time is required at great cost to the project and firm. As a result, a better service may be provided for less money.

As an architectural firm who obtained an IBM PC shortly after this machine's release in 1981, we watched closely for such a package. Not finding one, we have allied ourselves with computer professionals for the purpose of the design and production of a software package [with a list of features omitted in Views for brevity]. The package is being written in Pascal to run on the IBM PC. We are now in the process of testing the package and are very pleased.

If there is sufficient interest we are considering preparing documentation and packaging and offering this software to our fellow architects and engineers for a reasonable cost.
Rand Thompson
Chernoff Thompson Architects
Vancouver, B.C., Canada

[The May P/A Product & Literature department (p. 236) included project management programs by Data Basics (AEMAS), Gateway (The Scheduler), Computer Applications (Cost Acumen), and Kaypro programs, as well as software catalogs.—Editors]

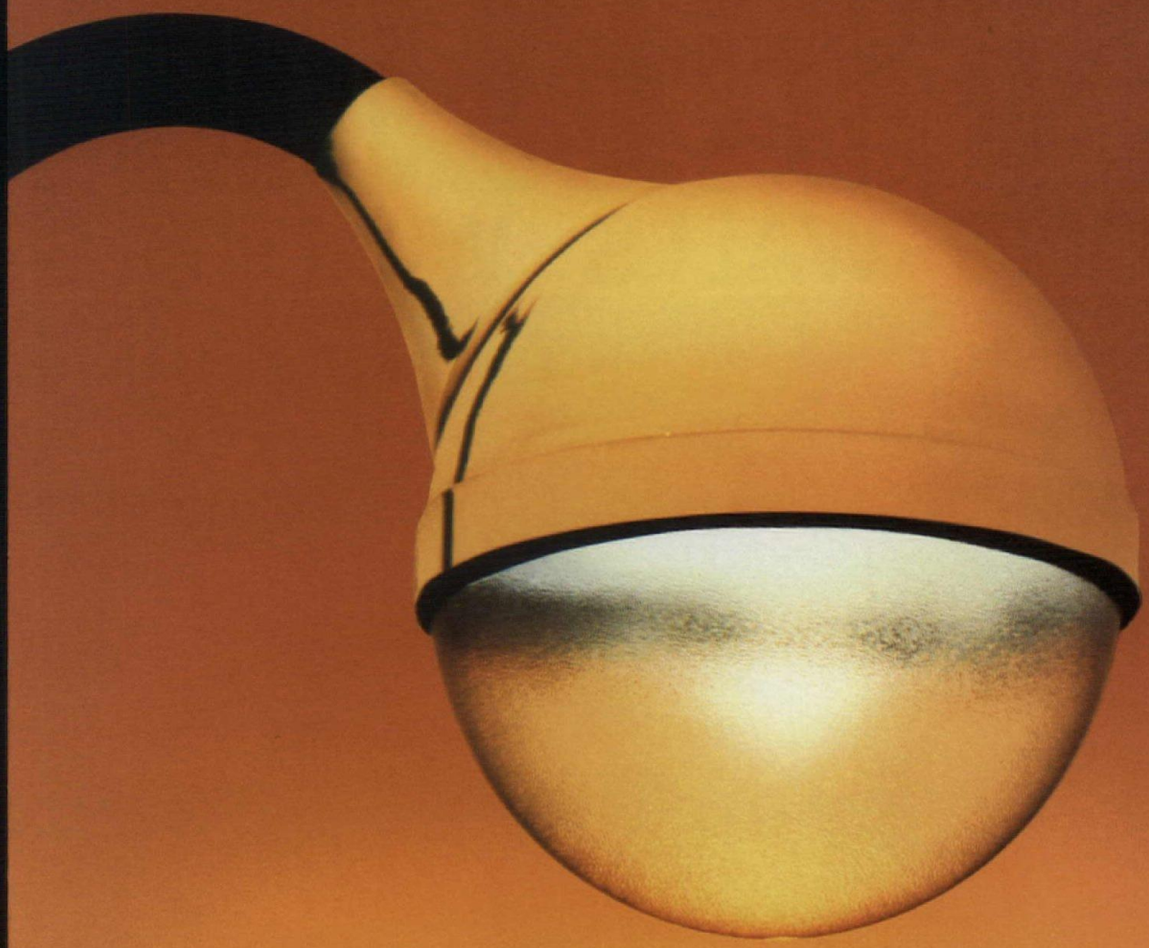
Credit corrections
Among the many credits that accompanied the articles on Kohn Pedersen Fox Associates in the October issue, a number were in error. The corrections by project or subject are as follows: 8 Penn Center, Paul Pichardo, job captain and Robert Cioppa, managing partner; ABC Washington, Gary Stluka/Dow Jarret, job captains and Robert Cioppa, managing partner; 333 Wacker, Gary Stluka, project manager for KPF, and credit for detail base drawing, Alexander Ward; Proctor & Gamble, Ben Curatolo, job captain; AT&T Long Lines, dePolo/Dunbar, associate interior designers; Amoco, Bun Wah Nip, job captain; Tabor Center, Urban Design Group, architect for the hotel; Bucknell, Charles Alexander, job captain. Spelling corrections: Alan Schwabenland (Third National Bank), Randolph Gerner (Hercules consultants), and photo, p. 69, Jock Pottle.

The name of the project architect for the Toledo Museum of Art (P/A, Aug. 1983, pp. 66–71), Craig Swanson, was misspelled. Darlene Fridstein was in charge of interiors and Monica Morrow was part of the interiors team. Alfred Katz and Alan Schwartz were in charge of construction coordination.

In the article on the Guardian Safe Depository, "Banca Rotunda" (P/A, Sept. 1983, pp. 100–103), two names were omitted from the credits. Jorge Rodriguez was the glass carver for the project and Marc Nugent executed the planetary frieze.

Roofing correction
In our August technics article "Radical Roofing" (pp. 109–115), we wrongly implied that all Neoprene is susceptible to ultraviolet degradation. Neoprene can be compounded to resist ultraviolet radiation.

Cooper correction
Bill N. Lacy was incorrectly listed as dean of the Cooper Union School of Engineering in the article "Cool Flashes" (P/A, Sept. 1983, pp. 128–131). Mr. Lacy is the president of The Cooper Union for the Advancement of Science and Art.



Conesphere. The world's most efficient outdoor light... until tomorrow's sunrise.

The most innovative new outdoor lighting design in a decade, Conesphere is engineered to achieve 82% light efficiency—nearly 10% above industry standards. Its clean design adds a human, natural scale to every environment, and is available in three primary, attractively polished finishes—copper, goldtone and aluminum.

Conesphere, from the TrimbleHouse Corporation. For more information call toll-free 1-800-241-4317.

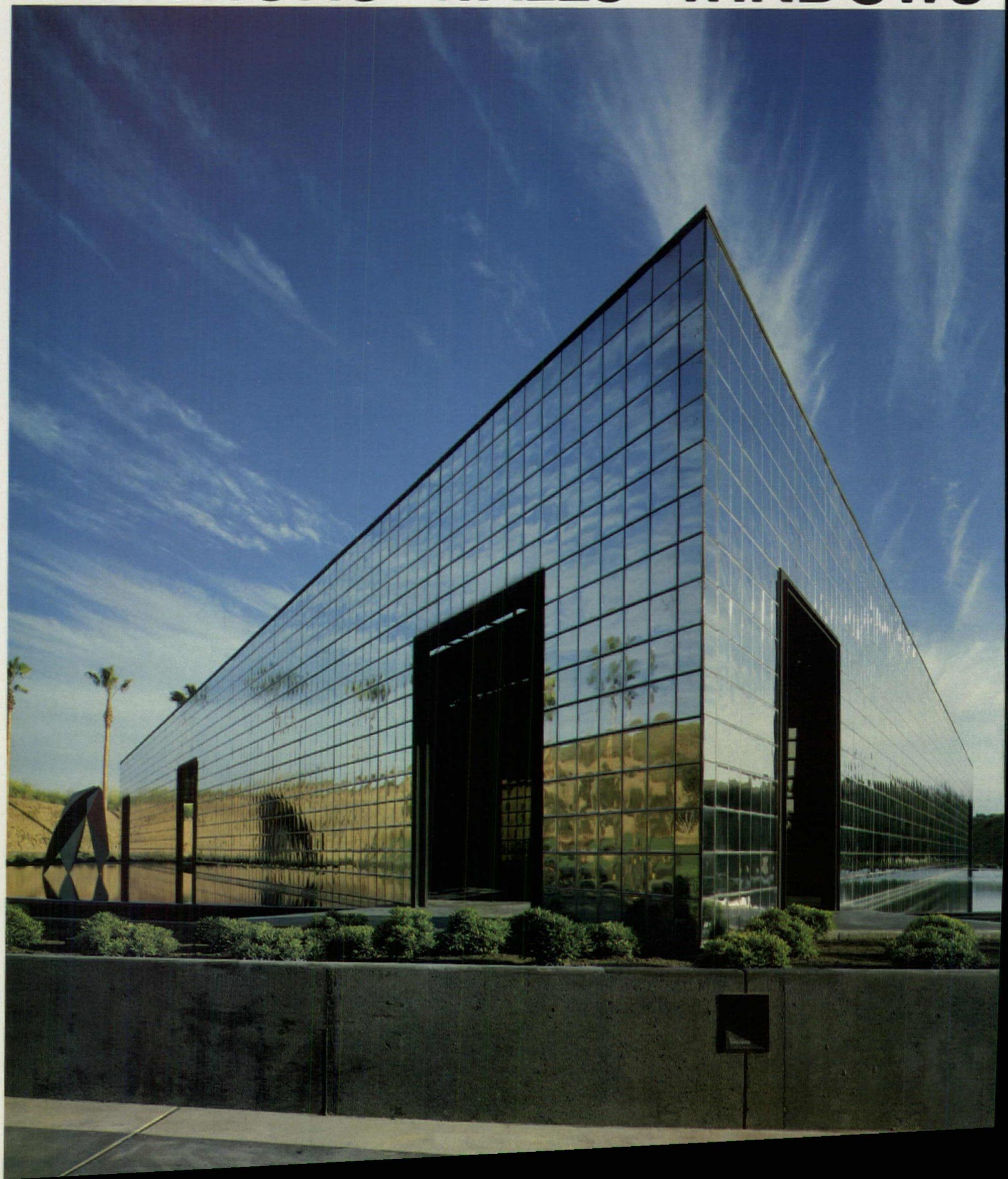
CONESPHERE™

TrimbleHouse™

4658 Old Peachtree Road
Norcross, Georgia 30071

PC GLASS BLOCK™

PARTITIONS - WALLS - WINDOWS



PITTSBURGH PC CORNING

Create exciting partition, wall, and window designs with versatile PC GlassBlock™ units. They combine the natural appeal and light-transmitting qualities of glass with the efficiencies of masonry installation. Use sinuous curves or clean, straight panels of PC GlassBlock™ to shape space comfortably and functionally.

Enjoy the nearly unlimited lighting flexibility offered by the wide selection of PC GlassBlock™ patterns and sizes. By designing exterior walls and interior partitions of PC GlassBlock™, you can make optimum use of available light, create a sense of open space, yet maintain privacy.

Achieve striking visual effects—and increase a building's energy efficiency—with SOLAR REFLECTIVE Glass Block. With either the gray or bronze appearance, a building reflects and blends beautifully with its environment. And you create comfortable interiors because SOLAR REFLECTIVE Glass Block reduces solar heat gain and transmitted light.

Quality, American-made PC GlassBlock™ are excellent insulators. You can use them to help reduce heating and air conditioning requirements. Design with confidence.

For more information on PC GlassBlock™ patterns and sizes, contact Pittsburgh Corning Corporation, Marketing Department AGB-3, 800 Presque Isle Drive, Pittsburgh, PA 15239, Tel: (412) 327-6100. In Canada, 5075 Yonge Street, Willowdale, Ontario M2N 6C6, Tel: (416) 222-8084.

Circle No. 373 on Reader Service Card

Above
DECORA® Glass Block
Bank of Orange County
Culver City, CA
Architect: Michael Bench

Left
VUE® and ARGUS® Glass Block
Chemineer Corporate Headquarters, Dayton, OH
Architect: Lorenz & Williams Incorporated

Left
*SOLAR REFLECTIVE Glass Block**
Wateridge Marketing Pavilion,
San Diego, CA
Architect: WZMH Group California

**Corners are reflective glass, cut to size and*

AGB-183

2

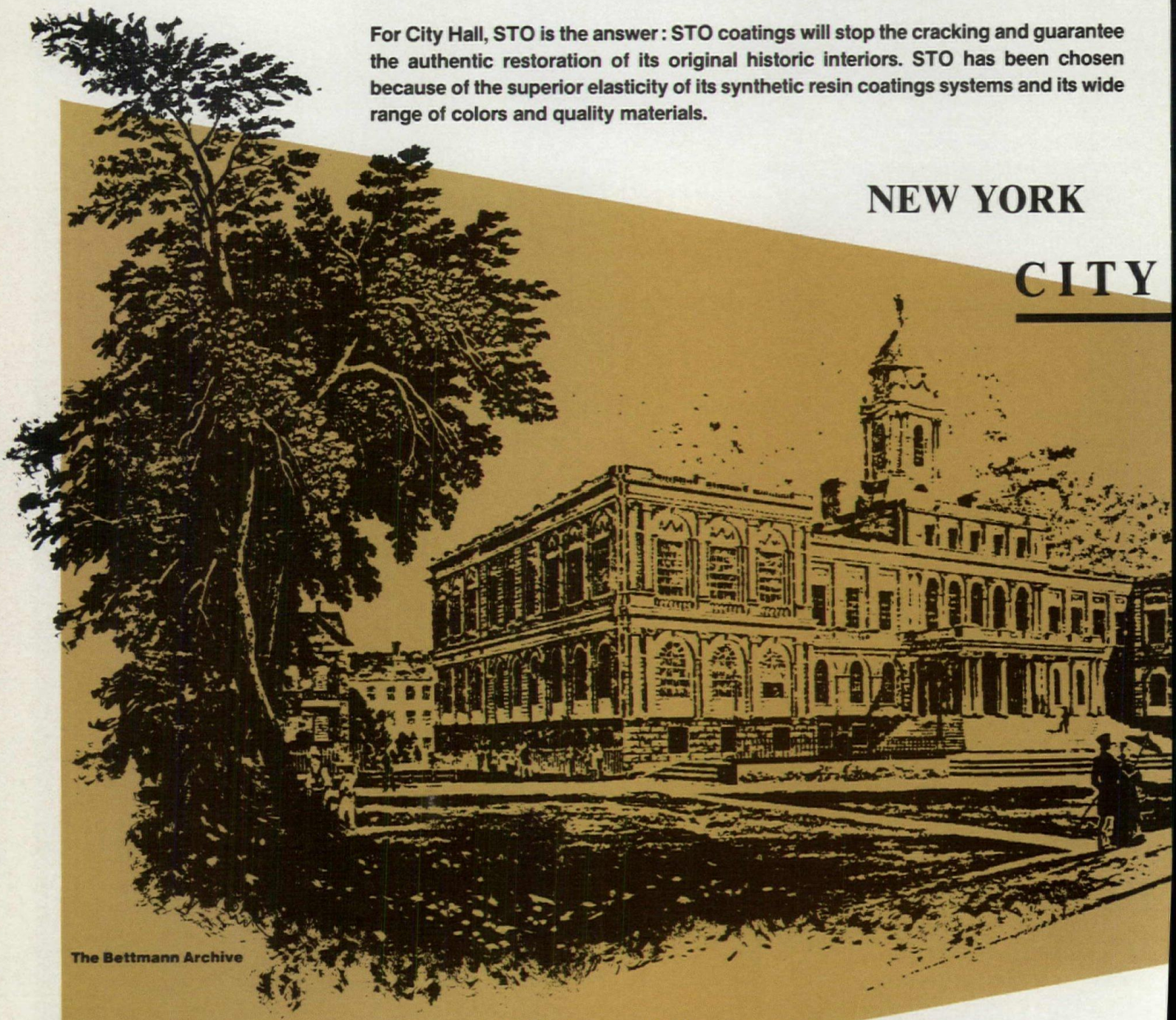
interior coatings

interior restoration

When City Hall was built in 1812, no one anticipated the subway system under the building or the resulting vibrations that have cracked the plaster walls and ceilings.

For City Hall, STO is the answer: STO coatings will stop the cracking and guarantee the authentic restoration of its original historic interiors. STO has been chosen because of the superior elasticity of its synthetic resin coatings systems and its wide range of colors and quality materials.

NEW YORK CITY



The Bettmann Archive

STO has proven itself in such work over the past 30 years in the restoration of Europe's historic public buildings.

STO INDUSTRIES
INCORPORATED

QUALITY LANE, BOX 219, RUTLAND, VERMONT 05701 / 802-775-4117

sto®

the originator and world's leading producer of synthetic resin coatings and exterior insulation systems

sto

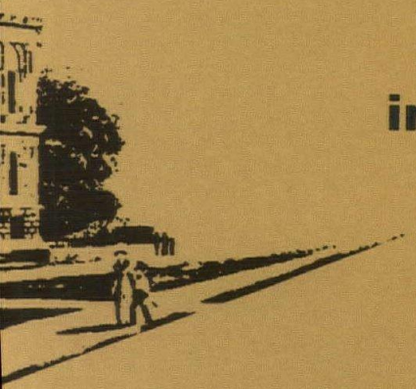
Products & Systems

member EIMA Exterior Insulation Manufacturers Association

1 exterior insulation systems

HALL

2 interior and exterior coatings



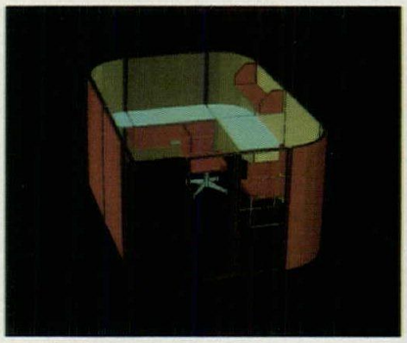
Damora

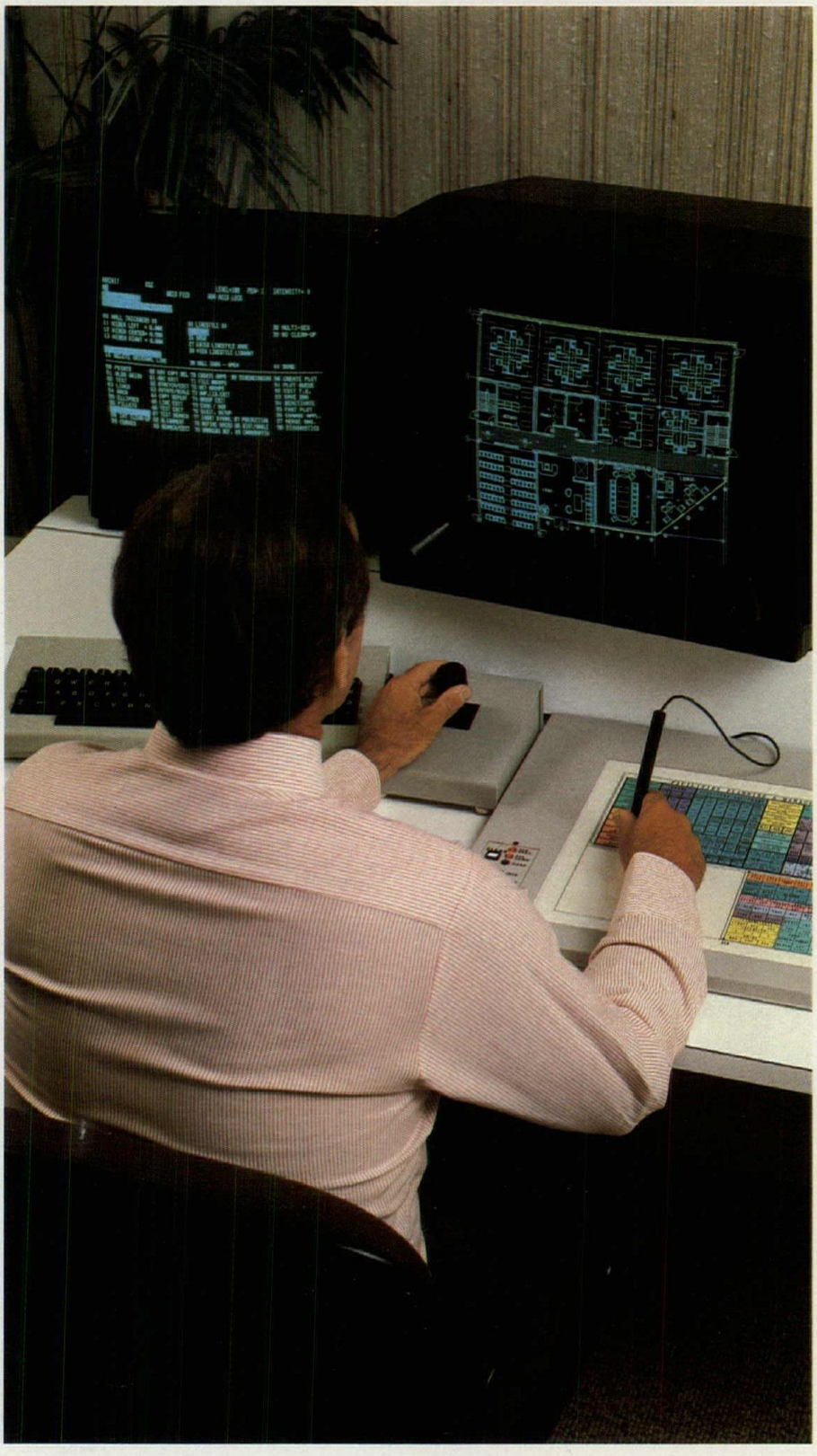
3 prefabricated exterior insulation panel systems

Circle 123

389 F FLINTSTONE DRIVE, TUCKER, GEORGIA 30084 / 404·939·9590

PLAN AND MANAGE FACILITIES SO FAST, YOU'LL WONDER HOW YOU MANAGED BEFORE.





The building is a tangle of wires, walls, pipes and personnel offices. Yet, it all must be arranged for maximum operating efficiency in a minimum amount of time.

And it is. Your CalComp IGS 500 computer-aided design system helps you design, plan, manage, remodel or revise your company's facilities with electronic speed and precision that are many times more productive than manual methods.

The IGS 500 automates repetitive drawing tasks, drafting and generation of furniture and equipment reports. In addition, powerful 3-D rendering and immediate access to update information further increase your company's productivity.

The IGS 500 is just one example of CalComp's computer graphics line, the broadest in the industry. We are a leading supplier of pen and ink plotters, desktop plotters for business use, electrostatic plotters, digitizers, and the CalComp line of Vistagraphic™ vector and raster displays.

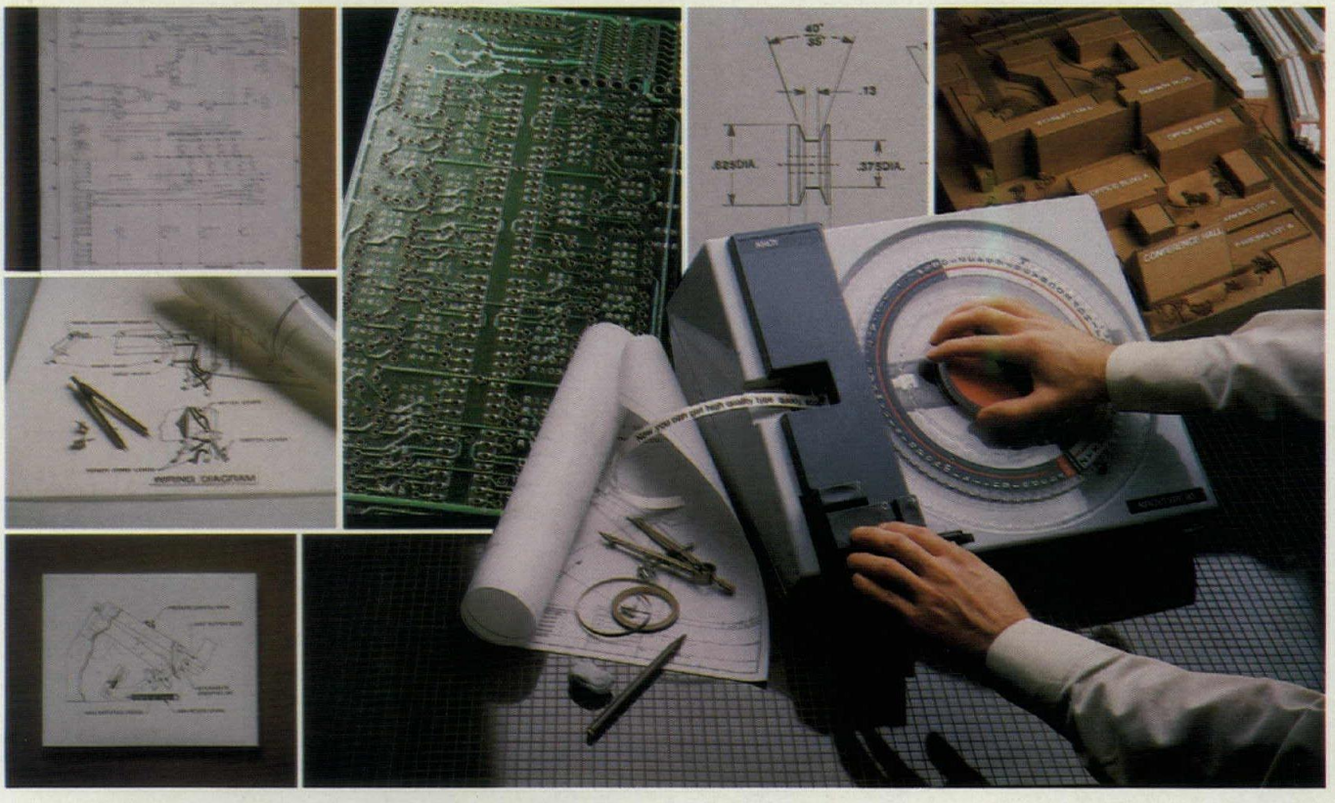
CalComp computer graphics products share a wide base of the highest technology with Sanders' other major business area: defense electronics. And like our defense electronics systems, CalComp computer graphics products are designed, produced and maintained to the highest standards of reliability and operator convenience.

The CalComp IGS 500 is an example of our response to your need for convenience and economy. Learn more about it and CalComp's complete line of computer graphics systems and products.

Contact CalComp, Inc., 2411 West La Palma Avenue, Anaheim, CA 92803. Or call CalComp at 800-556-1234, Ext. 156. In California, 800-441-2345, Ext. 156.

CALCOMP
A Sanders Graphics Company
SANDERS

Circle **No. 378** on Reader Service Card



Now there's a fast, easy, economical way to get lettering that meets the same high specifications as your drawings.

Most architects and engineers are perfectionists. They're simply not satisfied with any project until every detail is just right—including the lettering.

Until recently, this attention to detail meant painstaking hours using press-on or mechanical drafting lettering. Or perhaps even hand lettering your drawings, presentations, finished models, and preliminary designs.

Now there's a much faster, easier way to get the professional lettering look you want. It's the remarkable Kroy® lettering system.

Kroy lettering is a unique, patented process that prints Type-on-Tape.™ Simply turn the typedisc to the letter, number, or symbol you want and press the print button. You'll get neatly spaced, good looking lettering on adhesive-backed tape. Peel the

tape from its backing, and it's ready to position in place.

Kroy lettering comes in 25 different typestyles, (including Microgramma and Helvetica), and a wide range of sizes from 8-point to 192-point (1/16 to 2 inches). Typestyles and sizes depend on which Kroy lettering machine model is used.

There are four types of specialized Kroy lettering supplies. Kroy 100 provides sharp edgeline definition (at up to 200% enlargement) for photo reproduction.

Kroy 200 Diazo minimizes ghosting, or shadow, during diazo reproduction.

Kroy 300 Labeling and Kroy 400 All-Purpose are suited to a wide variety of lettering projects. Like all Kroy lettering tape, they adhere quickly and easily to virtually any clean, dry surface—even photographs and negatives.

There are five Kroy lettering machine models currently available, including the deluxe Kroy 80® lettering machine pictured here.

Call toll-free 1-800-328-1306 for a free sample of Kroy lettering.

Find out why architects and engineers all over the country are using Kroy lettering in place of slower, more expensive lettering methods.

Call toll-free, 1-800-328-1306. (In Arizona, please phone 602-948-2222.) If you prefer complete and return the coupon.

We'll send you a **free sample of Kroy lettering, and a copy of our latest, full-color brochure.** Or, we can arrange for a no-cost, no-obligation demonstration of the Kroy lettering system right in your office. Call or mail the coupon today.

Kroy,® Kroy 80® and Type-on-Tape™ are registered trademarks of Kroy Inc.

Headline set with Kroy® lettering.

KROY

Free sample of Kroy® lettering and full-color brochure.

☐ Please arrange to have a representative call on me for a no-cost, no-obligation demonstration of the Kroy lettering system.

☐ Please send me a free sample of Kroy lettering, and a copy of your latest brochure.

Name (please print)

Title

Company

Address

City State Zip

In order to complete your request we must have your telephone number.

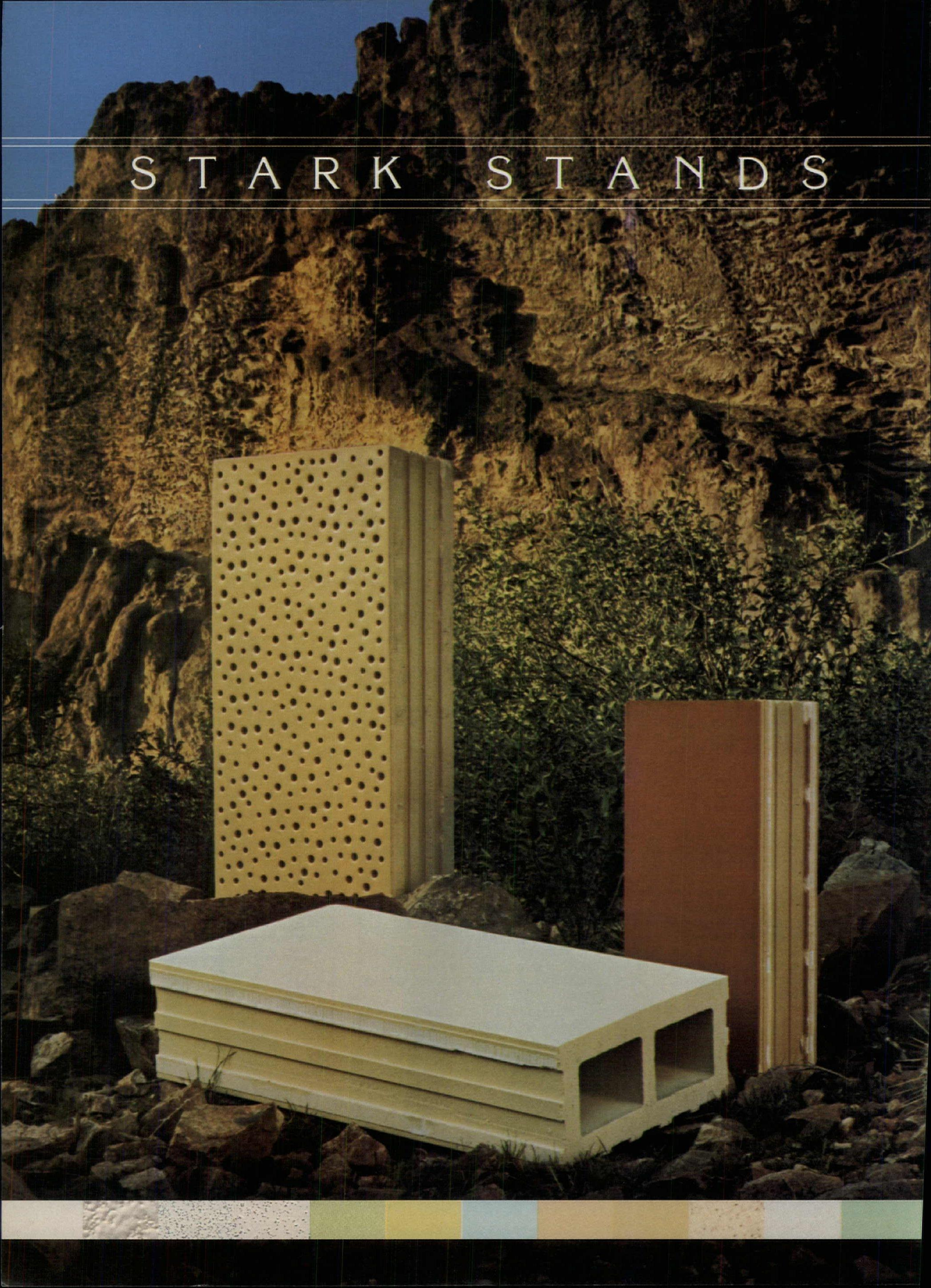
_____/_____/_____

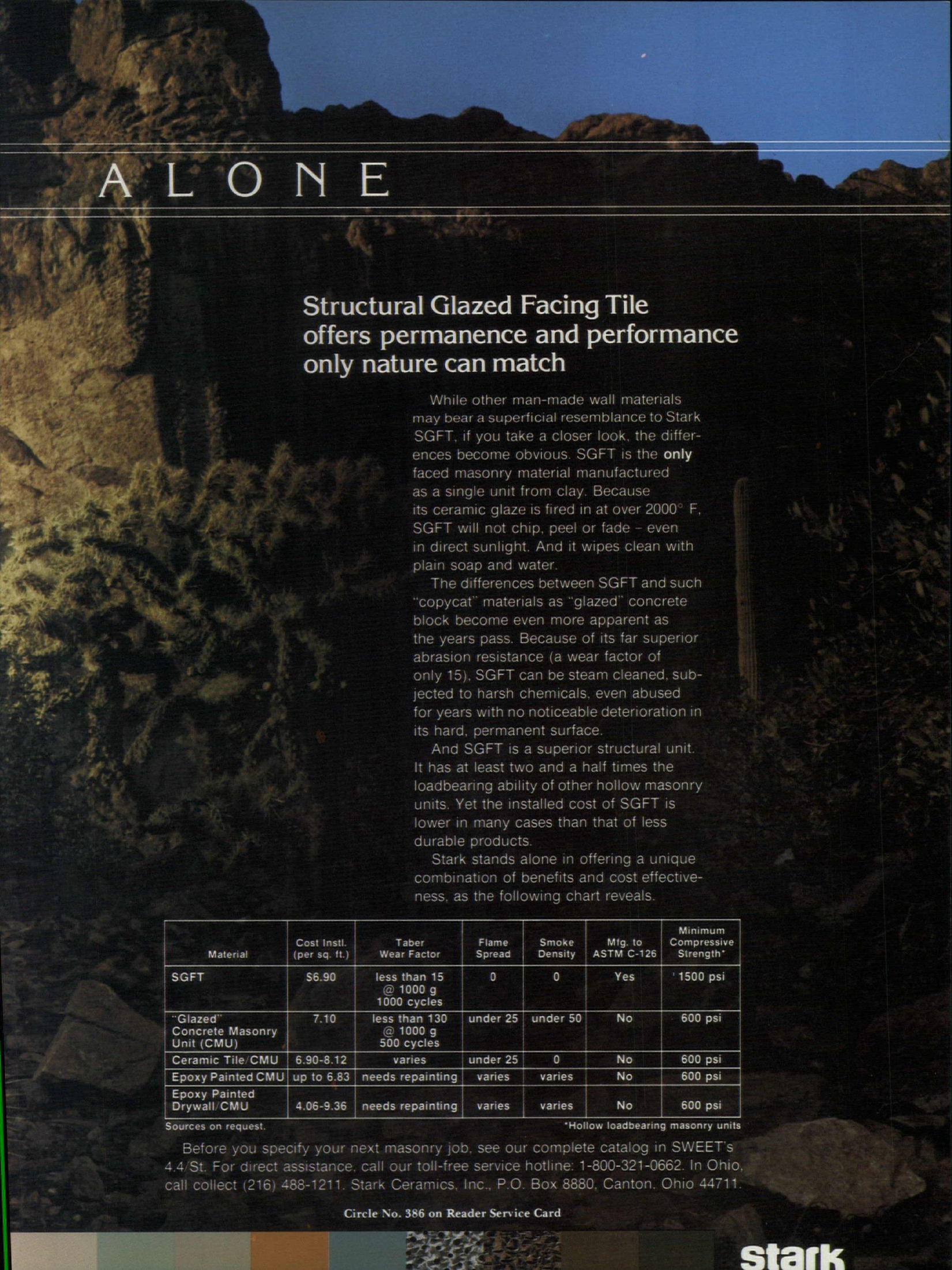
Area Code/Number

Complete this coupon and mail to Kroy Inc., Scottsdale Airpark P.O. Box C-4300 Scottsdale, AZ 85261 1978-1

Circle **No. 355** on Reader Service Card

STARK STANDS





ALONE

Structural Glazed Facing Tile offers permanence and performance only nature can match

While other man-made wall materials may bear a superficial resemblance to Stark SGFT, if you take a closer look, the differences become obvious. SGFT is the **only** faced masonry material manufactured as a single unit from clay. Because its ceramic glaze is fired in at over 2000° F, SGFT will not chip, peel or fade – even in direct sunlight. And it wipes clean with plain soap and water.

The differences between SGFT and such "copycat" materials as "glazed" concrete block become even more apparent as the years pass. Because of its far superior abrasion resistance (a wear factor of only 15), SGFT can be steam cleaned, subjected to harsh chemicals, even abused for years with no noticeable deterioration in its hard, permanent surface.

And SGFT is a superior structural unit. It has at least two and a half times the loadbearing ability of other hollow masonry units. Yet the installed cost of SGFT is lower in many cases than that of less durable products.

Stark stands alone in offering a unique combination of benefits and cost effectiveness, as the following chart reveals.

Material	Cost Instl. (per sq. ft.)	Taber Wear Factor	Flame Spread	Smoke Density	Mfg. to ASTM C-126	Minimum Compressive Strength*
SGFT	$6.90	less than 15 @ 1000 g 1000 cycles	0	0	Yes	1500 psi
"Glazed" Concrete Masonry Unit (CMU)	7.10	less than 130 @ 1000 g 500 cycles	under 25	under 50	No	600 psi
Ceramic Tile/CMU	6.90-8.12	varies	under 25	0	No	600 psi
Epoxy Painted CMU	up to 6.83	needs repainting	varies	varies	No	600 psi
Epoxy Painted Drywall/CMU	4.06-9.36	needs repainting	varies	varies	No	600 psi

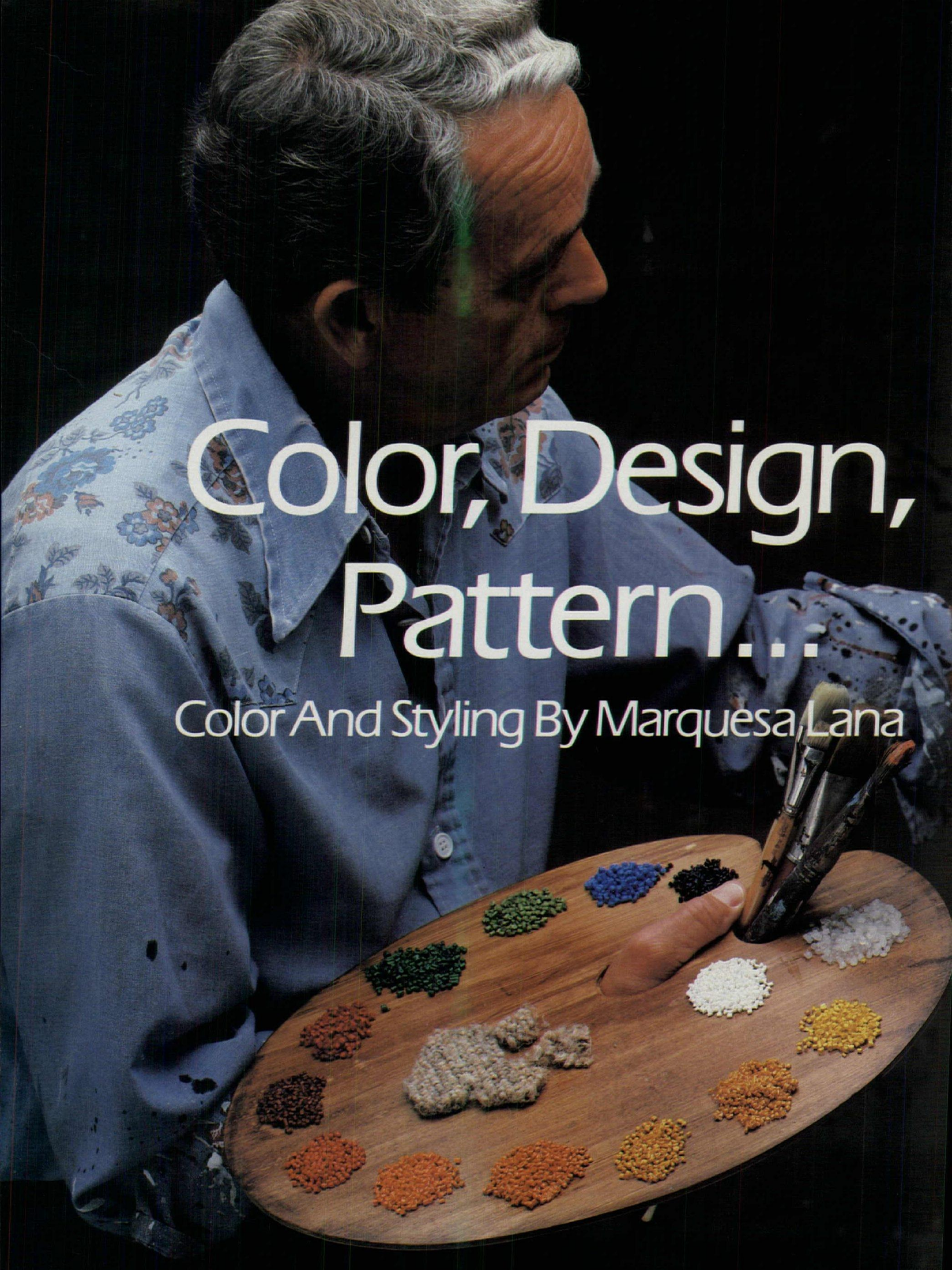
Sources on request.

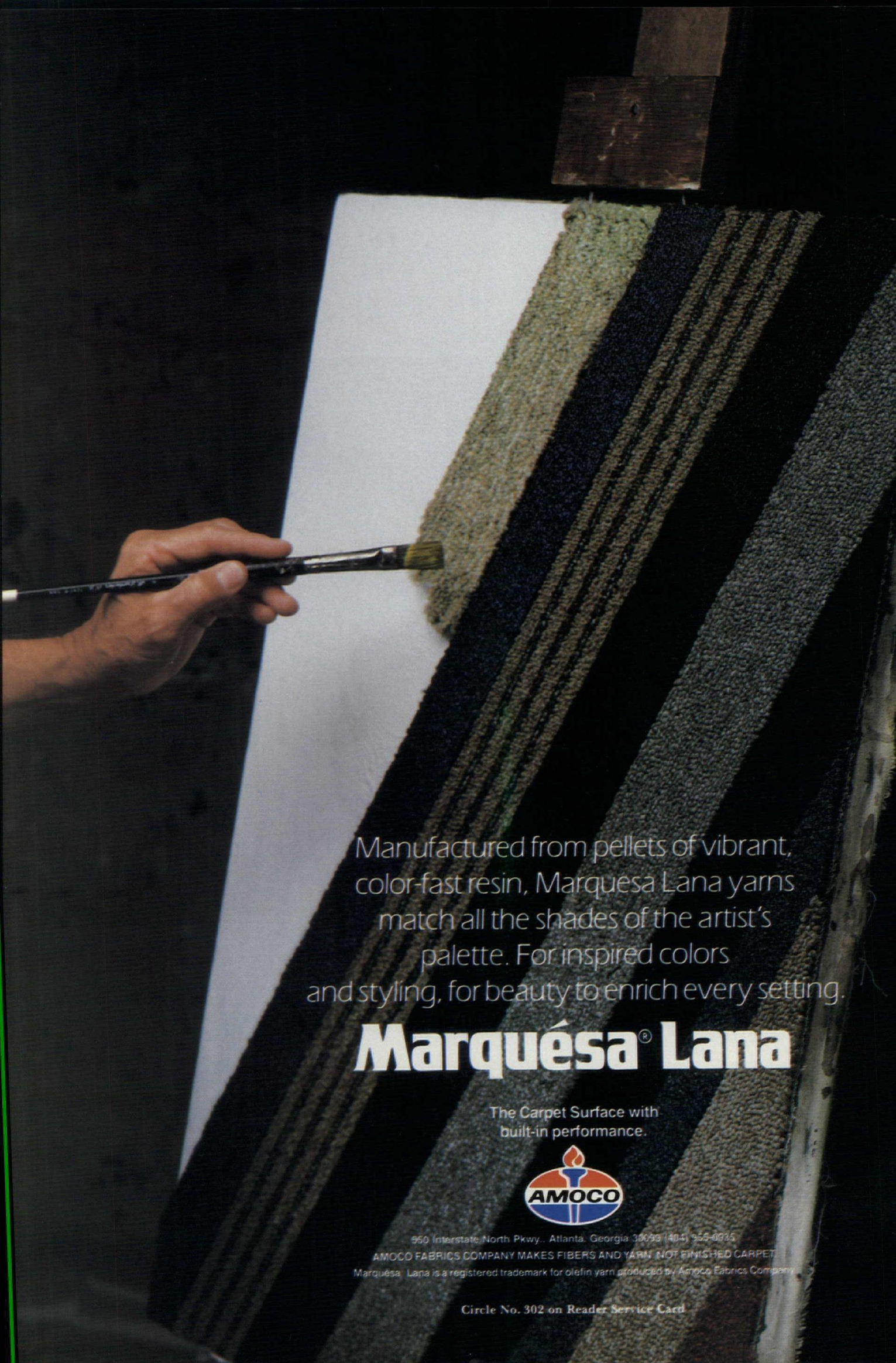
*Hollow loadbearing masonry units

Before you specify your next masonry job, see our complete catalog in SWEET's 4.4/St. For direct assistance, call our toll-free service hotline: 1-800-321-0662. In Ohio, call collect (216) 488-1211. Stark Ceramics, Inc., P.O. Box 8880, Canton, Ohio 44711.

Circle No. 386 on Reader Service Card

stark

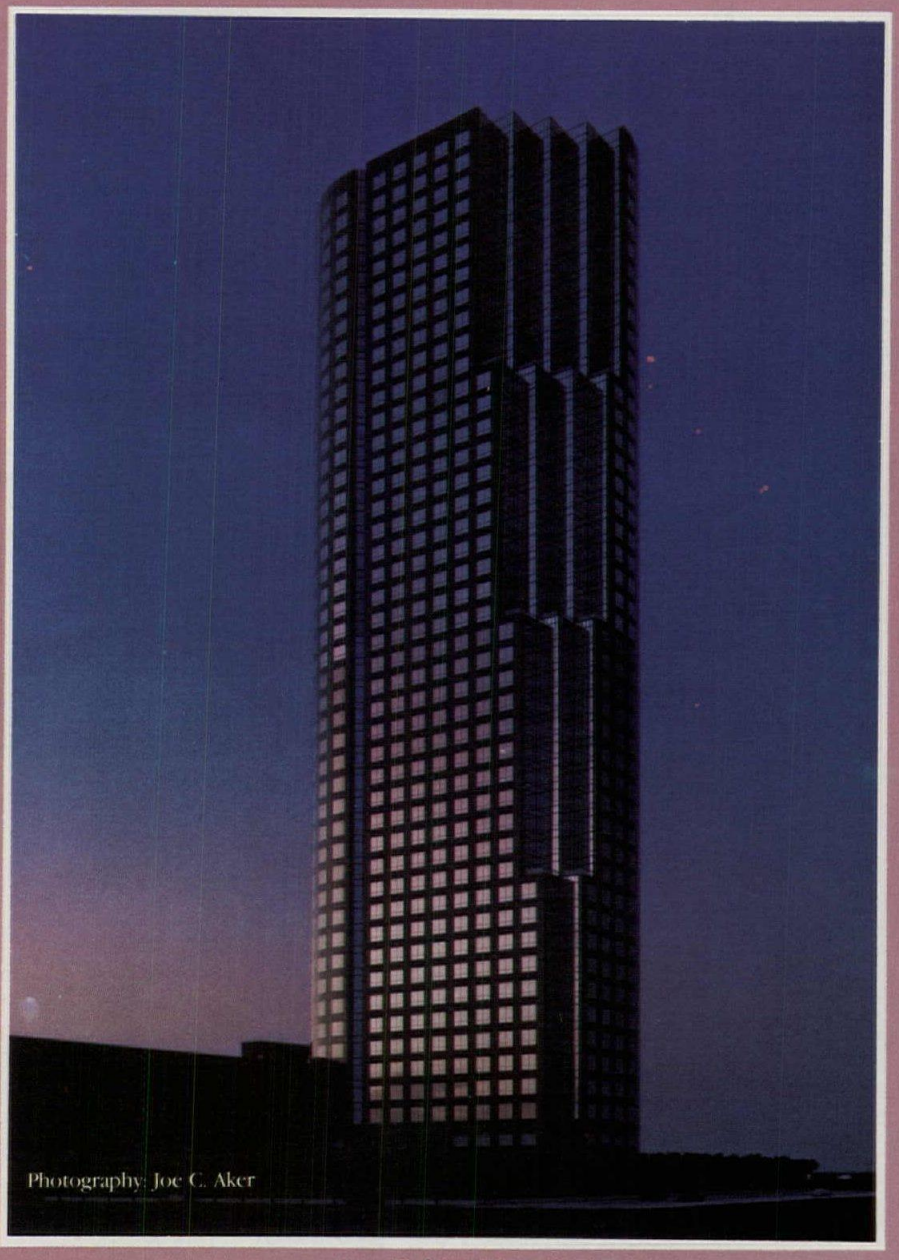

Color, Design,
Pattern...
Color And Styling By Marquesa, Lana



Circle No. 302 on Reader Service Card

CM&G *Continental Marble & Granite Co., Inc.*

providing the total stone needs of the architectural and construction industries...as suppliers, engineers, designers, fabricators and contractors of natural stone and fabricated stone products.



San Felipe Plaza

Client: Farb Co. · **Architect:** Skidmore, Owings & Merrill, Houston · **General Contractor:** Linbeck Construction Co. · **Subcontractor—Stone Erector:** Continental Marble & Granite Co., Inc. · **Stone Supplier:** Granicor · **Major Materials:** Caledonia polished granite from the Granicor facility, Quebec, Canada on CM&G's unique preassembled truss system.

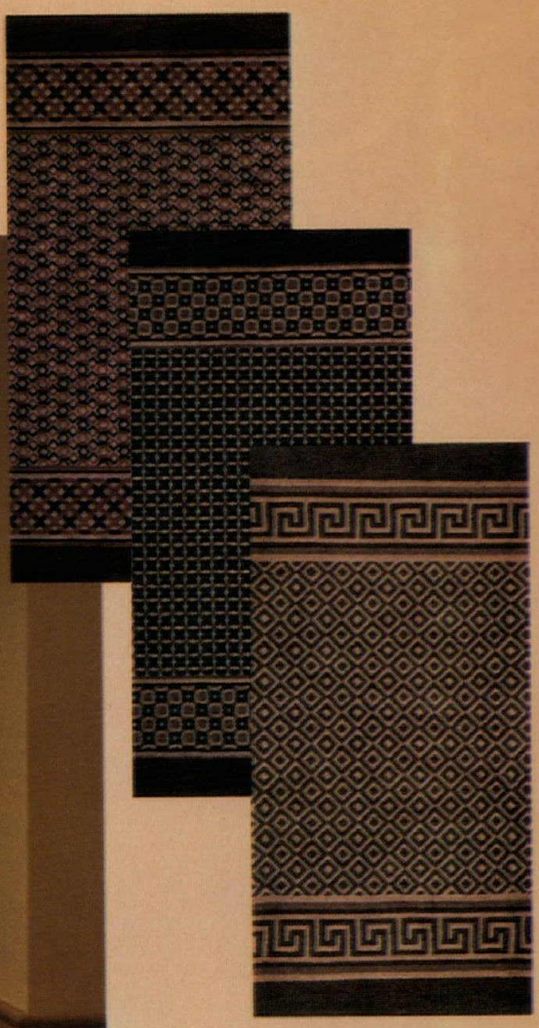
Continental Marble & Granite Co., Inc.

Main Office
P.O. Box 1326
Gretna, LA 70053-1326
(504) 393-9212
telex: 58-4110

Chicago Office
800 Central Ave.
Mount Prospect, Illinois 60056
(312)577-0033
telex: 27-0551

Circle **No. 322** on Reader Service Card

Bigelow:
Your partner in design.



Now—the elegance, practicality, and prestige of patterned corridor carpet are truly economical: thanks to Bigelow's Beauvais Corridor Carpet Coordinates. You get the aesthetic advantages of expensive custom woven corridor designs—at the much lower **price** of modern tufted carpet. And Bigelow engineering matches proven Tuft-Dye® technology with durable Anso X® nylon for long wear, with coordinating solid color broadlooms available to complete your total design aesthetic.

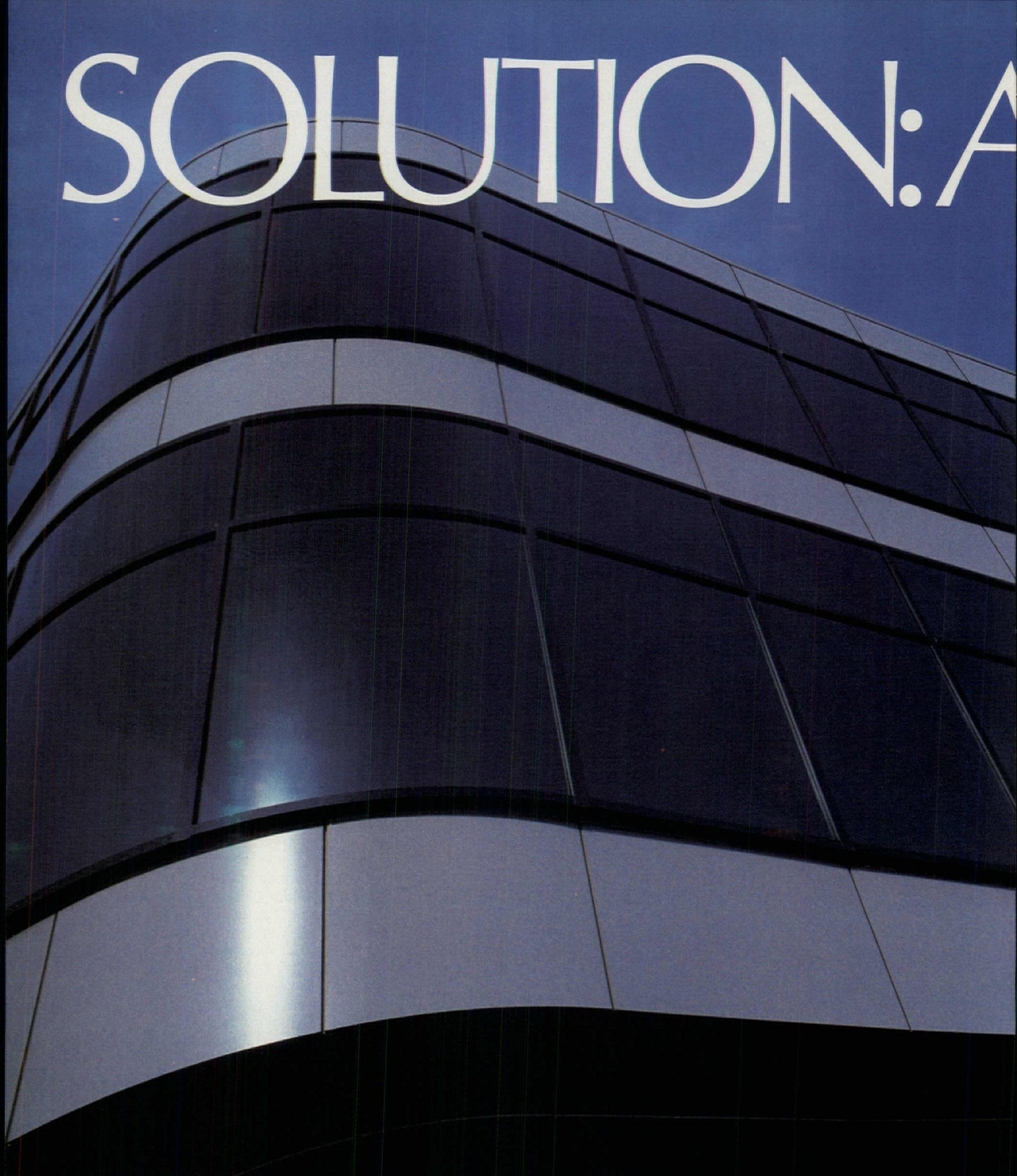
For more information, call us today at 1-803-299-2000.

Bigelow®
Commercial Carpet

P.O. Box 3089, Greenville, SC 29602

Circle **No. 308** on Reader Service Card

SOLUTION: A



The remodelling required a cladding material that was formable, but very flat and true. It had to adapt to the watertight joining system of the curtain wall and accept a durable painted surface.

The solution was Alucobond® material.

Formability: Alucobond aluminum composite material can be curved to a minimum bending radius of fifteen times the material thickness.

Flatness: Alucobond material does not oil-can. It remains visually flat with virtually no substructure support.

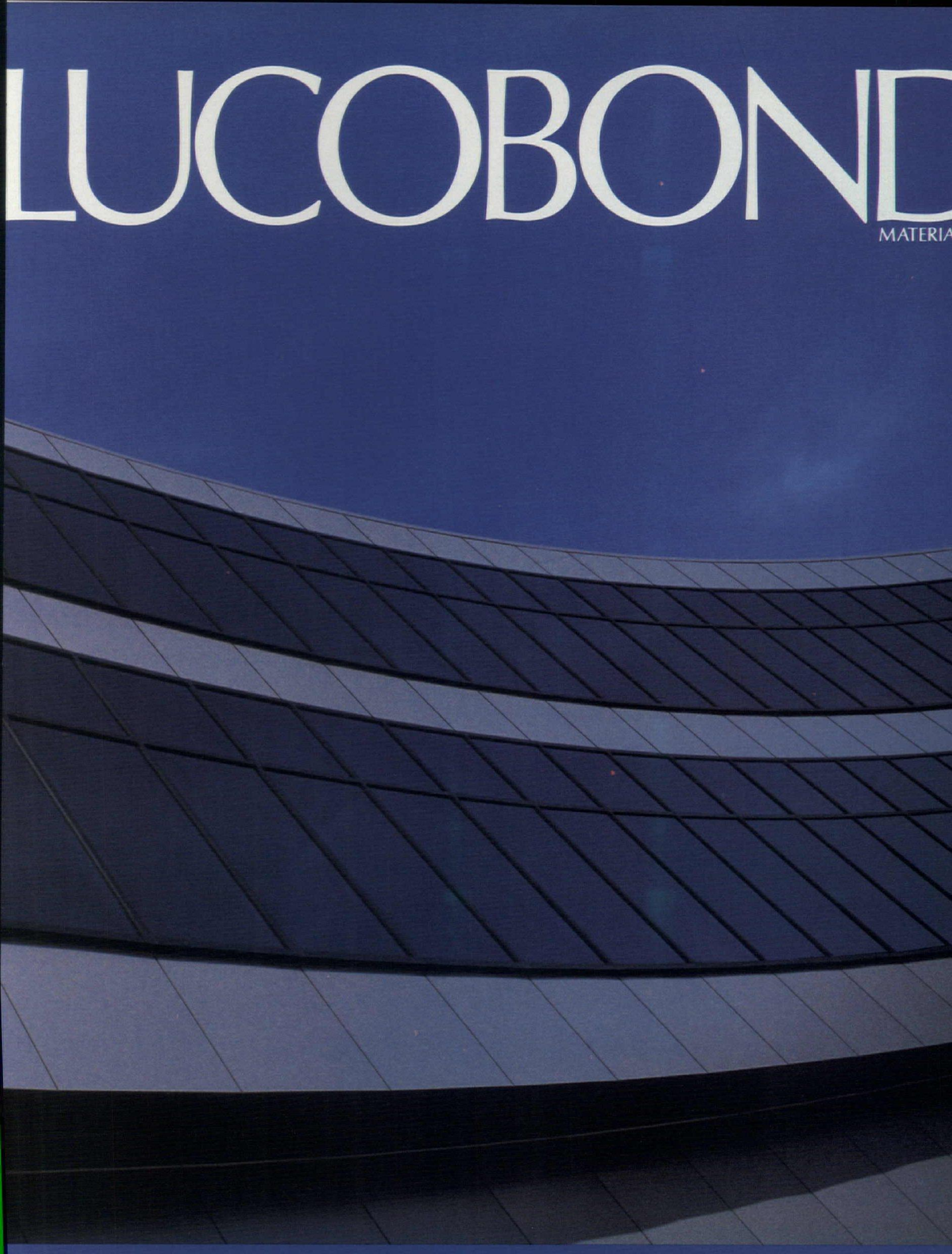
Adaptability: The material was installe on L-shaped hanging clips and locked in on its sides with vertical clip joints that hel the panels in place and functioned as a watershed, adding only 2¼" to the existi building facade.

Surface durability: A custom thermall cured Duranar® 200 finish was appli to provide protection against chalking, weathe and chemical attack.

Project: Monument Circle Building, Indianapolis, IN. Architect: McGuire & Shook Corporation, Indianapolis, IN.

LUCOBOND

MATERIA



More information: Alucobond material is available from Consolidated Aluminum, a leading developer and producer of composite materials for specific needs. For technical data and specifications, see our catalog in Sweet's General Building File, section 7.5/ALu. For more information contact National Sales and Marketing Manager, Carla Lane, at (314) 851-2346.

Distributor/Fabricator: Shaffner Associates, Inc., Carmel, IN

Consolidated Aluminum, Composite Material Division, 11960 Westline Industrial Drive, St. Louis, Missouri 63141. Alucobond is a registered trademark of Consolidated Aluminum for its composite material.

CONSOLIDATED ALUMINUM®

Composite Material Specialists

Circle No. 318 on Reader Service Card

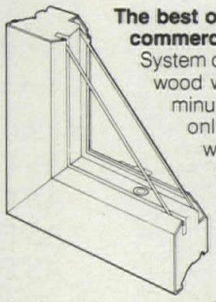
Partition walls may change to meet new needs.

A continuous band of Pella Clad Windows insures that new rooms won't be left in the dark.

Few buildings are as complex as health care facilities. Not only must they meet today's functional requirements as efficiently as possible, but ideally they should be able to adapt to new procedures in health care delivery. This need for versatility is especially true in ancillary services, and here at United and Children's Hospital, long, almost continuous bands of Pella Clad Windows assure that changes in partition walls will create new rooms that still meet code requirements for light and ventilation.

Part of the territory of design for complex functions is a complicated building form. The long horizontals of reflective glass wrap their way around corners visually uniting the various building shapes.

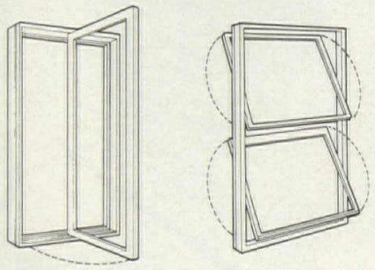
Pella Clad Windows were specified for a number of other reasons, too. The Clad System allows versatility in joining together fixed and venting windows. Solid wood construction offers energy efficiency without complicated thermal breaks. And maintenance costs will be lower because windows can be washed from the inside.



The best of wood and aluminum in a commercial window. The Pella Clad System combines the best features of wood with the best features of aluminum, asking each material to do only what it does best. Solid wood construction offers outstanding thermal performance, strength, and beauty. Aluminum cladding offers superior protection from the elements, and an efficient mullion system.

And now you can specify Pella Windows prefinished on the interior with two coats of acrylic and a top coat of urethane. This extra-cost option offers a window that's virtually complete the moment it's installed.

Easy washing. Just one reason why Pella is the window that's easy to live with. Pella Casement Windows feature a patented hinging arrangement that allows the sash to rotate towards the middle of the frame. This gives more than ample room for maintenance staff to reach every corner of both sides without leaving the building. This same feature is found on Pella Awning Windows. Pella Traditional Double-Hung windows feature a sash that rotates all the way into the building. And because the sash pivots at the middle, the weight is counterbalanced for safe handling.



The Pella Slimshade.® An attractive option with energy saving benefits as well. These narrow-slat metal blinds are set between panes of glass in the Pella Double Glass Insulation System where they're protected from excessive dust and damage. They're easily adjusted with just a turn of a dial. When completely closed they offer considerable heat retaining benefits that can be even further improved if low-emissivity type blinds are specified.

Not only does this option offer attractive benefits, it's attractively priced as well.

See all that Pella offers for commercial installations. Contact your nearest Pella distributor for the latest information on Pella Products: Windows, Sliding Glass Doors, Sloped Glazing, Skylights, Wood Folding Doors, Traditional French Doors and Circlehead Windows. And the new Pella Clad Monumental Window that can fill openings on a scale from the modest to the magnificent.

Send for a free copy of the 1983 catalog. Call Sweet's Buyline Number or see Pella in Sweet's General Building File. You'll also find Pella listed in the Yellow Pages under "Windows".

Name _____

Firm _____

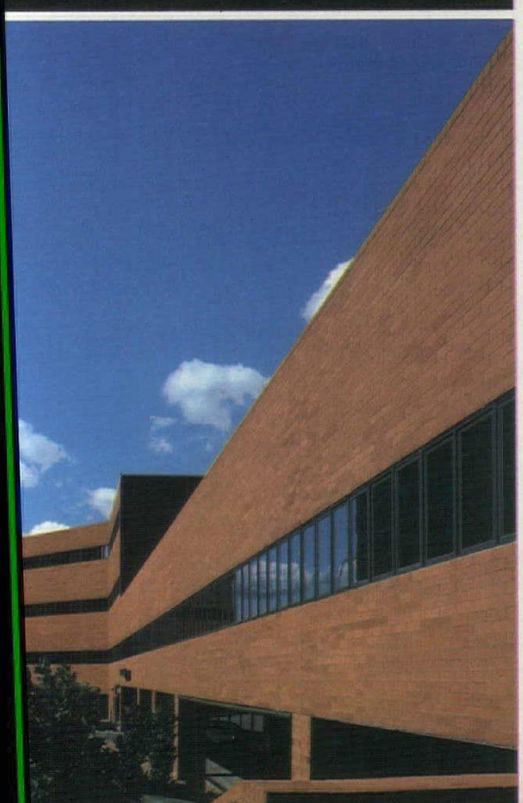
Address _____

City _____

State _____ Zip _____

Telephone _____

Mail to: Pella Windows & Doors, Dept. T35K3, 100 Main St., Pella, Iowa 50219. Also available throughout Canada. This coupon answered within 24 hours.

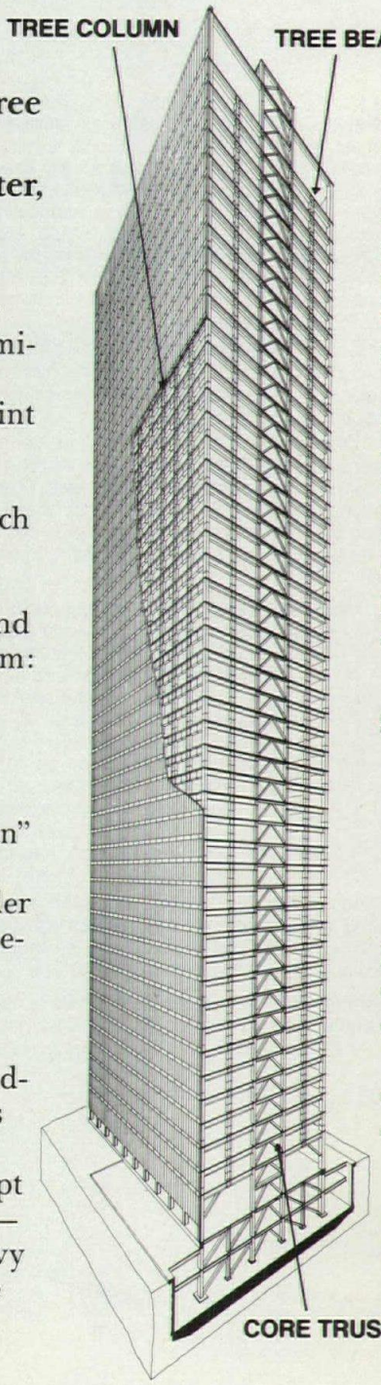


Pella. The significant difference in windows.

United and Children's Hospital, St. Paul, MN
Architects/Planners: Ellerbe Associates, Inc., Bloomington, MN
Contractor: FDC/M.A. Mortenson Const. Co., Minneapolis, MN

Circle **No. 377** on Reader Service Card

1+1+1=4



It took not one, not two, but three steel design concepts to make the building of Four Allen Center, Houston, possible.

And it was a difficult challenge for the designers. The extremely narrow tower, an elongated rectangle with semi-circular ends, had a height-to-width ratio in excess of 6.85, and the constraint of a central sheer truss core depth of only 25.75 ft. In hurricane-prone Houston, that meant a unique approach was required.

As it evolved, the architect and engineer combined existing concepts and molded them into one structural system:

1. an innovative hybrid framing method consisting of a four-celled bundled "frame tube" system.

2. the perimeter frame was assembled from two-story high "tree column" modules located at 15 ft. on center around the building perimeter in order to cope with high strength and serviceability requirements.

3. cross frames that subdivided the plan into its four-celled grid were formed by horizontal "tree beam" modules interacting with diagonal trusses in the shallow center-core area.

And although the tree beam concept introduced six vertical stub columns—added at midspan to moderately heavy horizontal wind girders—in the lease area of most floors, they in actuality caused only a minimal loss of spatial flexibility.

The resulting new building, Four Allen Center Tower, not only provides space planning flexibility and exciting panoramic views, but also proves that when steel is used, it always adds up right.

For more information, contact a USS Construction Representative through your nearest U.S. Steel sales office. Or write for our Building Report on Four Allen Center (ADUSS 27-8470-01) to Box 86 (C-1842), Pittsburgh, PA 15230.

LOCATION:

- Central business district, Houston, Texas, south of Antioch Park.

STRUCTURAL STEEL:

ASTM A588	1,288 tons
ASTM A572-42	142 tons
ASTM A572-50	4,666 tons
ASTM A36	13,165 tons
TOTAL	19,261 tons

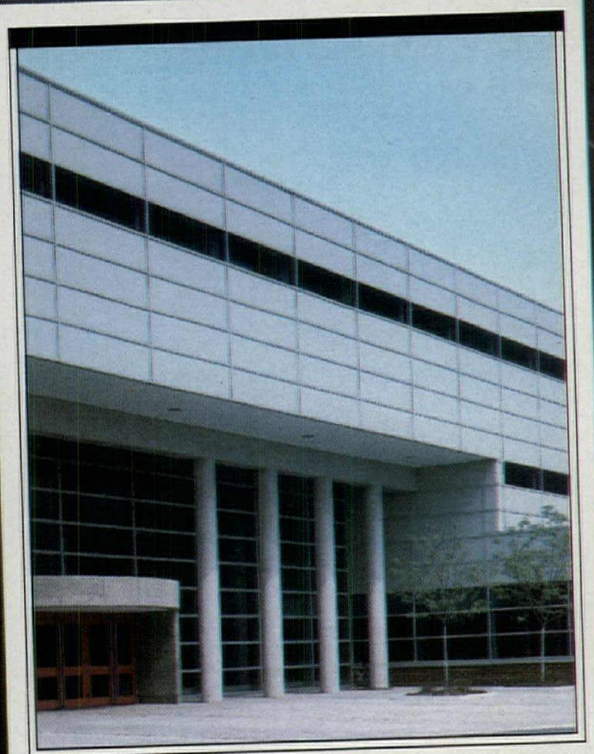
DESIGN FEATURES:

- Overall dimensions 109.4 ft. by 259.4 ft.
- 50 levels above grade and 2 levels below grade.
- Gross area 1.44 million sq. ft.
- Rentable area 1.20 million sq. ft.

USS TRADEMARK **United States Steel**

Circle **No. 399** on Reader Service Card

OWNER: Allen Center Company; A joint venture of Century Development Corporation, Centennial Equities Corp. (subsidiary of Metropolitan Life) and American General Realty Co., Houston, Texas. DEVELOPER: Century Development Corporation, Houston, Texas. ARCHITECT: Lloyd Jones Brewer Associates, Houston, Texas. STRUCTURAL ENGINEER: Ellisor & Tanner, Inc., Houston, Texas. SHELL CONTRACTOR: McGregor Construction Co., Houston, Texas. STEEL FABRICATOR: Mosher Steel Company, Houston, Texas. STEEL ERECTOR: American Bridge Division, U.S. Steel Corp., Pittsburgh, Pennsylvania.



ALLIANCEWALL PORCELAIN ENAMEL ON STEEL.

IT'LL WEATHER THE STORM.

Nothing affects the durability of porcelain enamel. Not acid rain, blistering heat, smog or severe cold. Our 65 vivid, standard colors won't fade, blister, oxidize or corrode. Even grafitti can't mar porcelain's hard-as-glass surface, so costly refinishing is not needed. Contact us to see how we can help with your next design project. Porcelain enamel on steel —for color stability and maintenance-free beauty.

AllianceWall® Corporation

The World's Largest Producer of Architectural Porcelain Enamel on Steel

AllianceWall Corporation, P.O. Box 48545, Atlanta, Georgia 30362, 404-447-5043

Circle No. 301 on Reader Service Card

Pencil points

Who got the Opera?
The jury made its six selections months ago, but President Mitterrand took all summer to make up his mind.
¶ Here, at last, the three finalists for the competition for the Opéra de la Bastille: Carlos Ott, Toronto; Rocco S.K. Yim, Hong Kong; and Dan Munteanu, Peador Peorteseo, Odile Perreau-Hamburger, Allee and Theodore Tufan, France.
¶ Critics claim the jury was overruled; their first choice was the French firm of Viguier/Jodry, who tied for first place in La Défense (P/fi, Sept. 1983, p. 32).

Wright for sale in New York
When the Taliesin Foundation announced its sale of 100 Frank Lloyd Wright drawings at the Max Protetch Gallery (on view Sept. 16–Oct. 16) in New York, some critics cried foul.
¶ The Foundation maintains that the sale was necessary to meet the mounting bills of Taliesin and the Frank Lloyd Wright School of Architecture, and also claims to have near duplicates of every item still in the archives.
¶ Fears were expressed that the exquisite originals would be dispersed to private or inaccessible collections. Fortunately, however, three major lots have been bought by museums: the Metropolitan purchased the Imperial Hotel and Midway Gardens series, and the Guggenheim got the Guggenheim.

Also available . . .
A second sale of Wright furniture and drawings was staged by Fifty/50, the new New York gallery of mid-century design.
¶ Items ranged from an early oak arm chair (1901) from the Ward W. Willitts house (p. 39) to 1950s Usonian pieces.
¶ Both gallery sales coincided with the Cooper-Hewitt's spectacular showing of Prairie School drawings and furnishings.

Meeker resigns
David Olen Meeker, Jr., plans to resign from his position as executive vice president of the American Institute of Architects in December.
¶ Meeker has held the position since 1978. His successor has not yet been designated.

San Juan Civic Center
The San Juan Capistrano City Council has selected Moore, Ruble, Yudell to design the city's new civic center. The firm was selected from a group of 18 architects who had responded to an RFP. Moore, Ruble, Yudell has already done consulting work
[*Pencil points continued on page 49*]

P/A News report

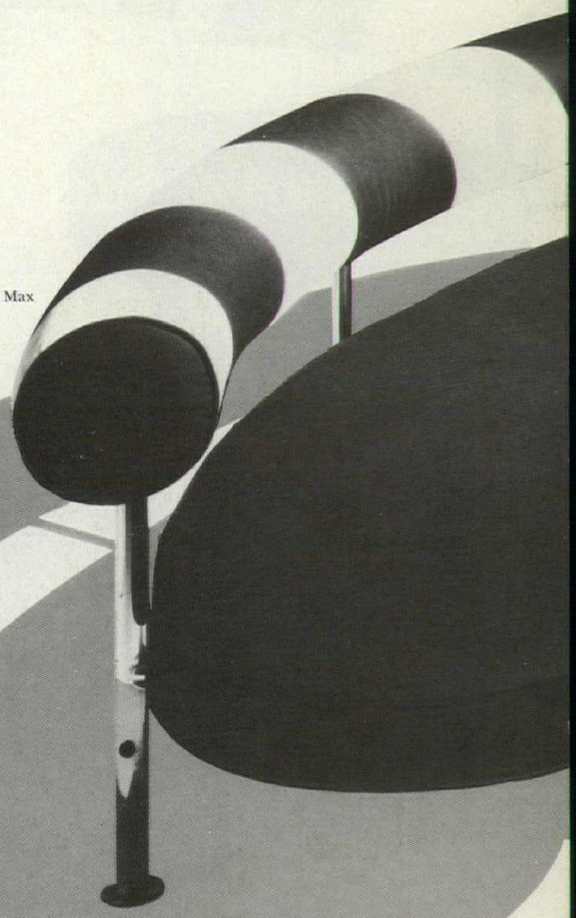
Milan furniture fair

This could be a gloomy report on the 23rd annual Milan furniture fair, but it's not going to be. The bad news first, though. Italian furniture manufacturers are going through the most difficult period in their history. After becoming the largest exporters in the world, Italy experienced a decline in production, which began with its recession three years ago, and hit bottom this year. The domestic market is still falling, but there is one bright spot for the industry: exports were up 9 percent for the first quarter of 1983, attributable to a turnaround in some importing countries. There is also general belief that Italy's own economy will begin a turnaround next year.

If the economic news in Milan was bad, one had to look hard to notice it. There were enough high spots to keep anyone jumping for the six days (and nights!)—Sept. 10 to 15—of the event.

Although the fair grounds opened on Saturday, for an invited couple of hundred, the real inaugural event was Sunday's dinner in a courtyard of Milan's Sforzesco Castle, where brought-in palms, flaming torches, and balmy breezes added to an already enchanting setting. By closing day, 150,000 tired lookers had trooped through the fair's 1.6 million square feet of display area to see the wares of 2500 producers (only Italian this year), including those in the Euroluce (lighting) and EIMU (office furniture) sections.

Among the most talked of products were Aldo Rossi and Luca Meda's chair and settee of clear-finish or lacquered walnut with slip seat for Molteni, called Teatro, and Rossi's beech chests, small side chairs, and cabinas (portable closets) for Longoni in yellow dye finish or blue, black, or pink, or combinations thereof. Zanotta introduced Achille Castiglioni's adjustable Imperiale deck chair of stainless steel structure with wood armrests and cotton sling with



Max

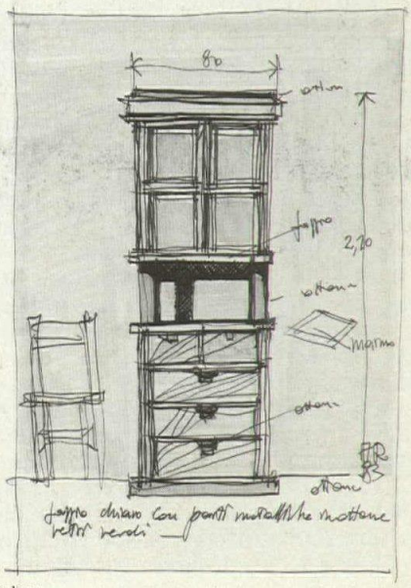
Teatro

Imperiale

Mario Carrieri

Cinquecento

Gelosa



Rossi chest

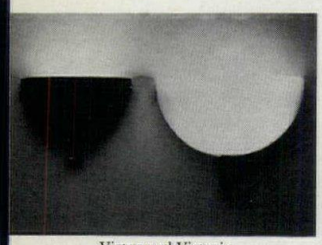
News report
continued from
page 37

First

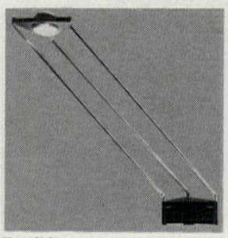
Max

Nastro

Bibi Bibo



Victor and Victoria



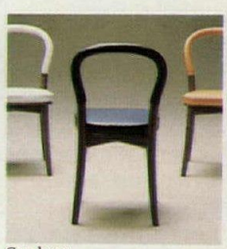
Kandido

Ustorio

down headrest, and Alik Cavaliere's Cinquecento table with silk screen printed glass top and burnished steel legs. Driade presented the ingenious Bibi Bibo bed system by Massimo Morozzi; with head and foot boards of blue lacquered wood, red cylindrical wood legs, and metal tube framework painted yellow, it can be single, double bunk, or single with draperies.

Danber is new to the furniture business, but has been making plywood forms for other manufacturers since 1941. Its new Gelosa chair of plywood and metal tube by C.B. Berruti looks extremely fragile, but a 250-pound oaf couldn't wreck one. Max and Phil are not your best friends, but sofas designed by Antonio Citterio for Flexform. With polished stainless steel legs and back support, and stuffed seat and back, they look like a 1930s designer's vision of the fabulous '50s.

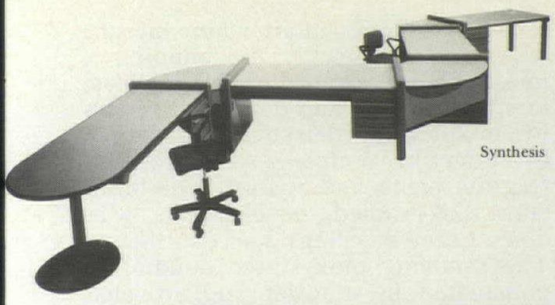
Senna



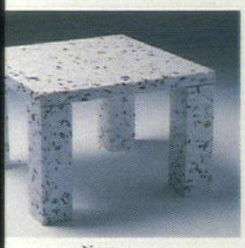
Goteborg

At Euroluce the objects ranged, as they did at the rest of the fair, from the awful to the sublime. Stilnovo's Nastro table lamp by Alberto Fraser was certainly among the show stoppers. With a base and reflector of black Makrolon, its infinitely adjustable arm (which could even be tied in knots) was a multicolored and clear plastic ribbon of structural and electrical elements. F.A. Porsche (designer of the 911 and nephew of the doctor) introduced his Kandido table lamp at Luci. Between its black base and diffuser, three TV antennalike extensible metal arms allowed it to shine in almost any direction from almost any position. Carrying on their great tradition in glass, Venini unveiled some of the most elegant lighting: the Ustorio table lamp of chrome metal structure and glass adjustable reflector by Alessandro de Santillana and the Victor and Victoria glass wall sconces by his brother Ludovico (grandsons of Paolo Venini).

At EIMU, Olivetti Synthesis showed new additions to its Icarus office line by Ettore Sottsass and Michele De Lucchi. This very handsome system is now complete with both acoustic and transparent partitions of various heights with vertical and horizontal raceways, a large variety of adjustable work surfaces and storage units, integrated lighting, and compatible seating.



Synthesis



Nara

Tangram

Aldo Ballo

All of the activity was not at the fair, though. In town, gallery and showroom openings each evening usually overflowed to the sidewalks and streets. Matteo Grassi, *Domus,* and L'Archivolto showed at the latter's bookstore gallery table designs, models, and prototypes, including from this side of the ocean, one by Machado-Silvetti. Studio Marconi introduced Vico Magistretti's new wood side chair and Mario Botta's powerful steel and marble table that ICF is to unveil in New York and California on January 1st. One of the most memorable events was Cassina's unveiling of the "reissue" of Asplund's gorgeous and impeccably crafted Senna lounge chair of 1925 (first introduced at the Copenhagen Exposition in May) and his smaller Goteborg side and arm chairs of 1934, and their introduction of Massimo Morozzi's striking sectional Tangram table of different colored parts. Among the most exciting pieces, as usual, were those at Memphis: Michele De Lucchi's innovative First armchair of wood and metal tube, and Shiro Kuramata's Kyoto and Nara end tables in Terrazzo of cement and colored glass.

For many, the crowning event was Formica's European introduction of the Colorcore pieces (P/A, Aug. 1983, p. 29) at a gala buffet dinner for about 3000 back at the castle on Tuesday night, where the objects were almost upstaged by James Wines, Allison Sky, and Michelle Stone of SITE, and Susan Lewin of Formica, who wore Colorcore—a tie and necklaces, respectively, designed by SITE. [DM]

Rescuing the Willitts house

A novel proposal to "save" the Ward Willitts House north of Chicago has been put forth by a coalition of three East Coast architects. The house, Wright's first major work in the Prairie style, was put on the market months ago by the holder of a second mortgage who wishes to dispose of the property. Given the list price of $450,000 and the additional $500,000 required for restoration, it is not surprising that no individual buyer has stepped forth. Paradoxically, the house is worth even more in pieces: the windows alone, if removed and sold on the art market, could bring anywhere from $1 to $2 million, and the threat of such dismemberment by a future owner is all too real.

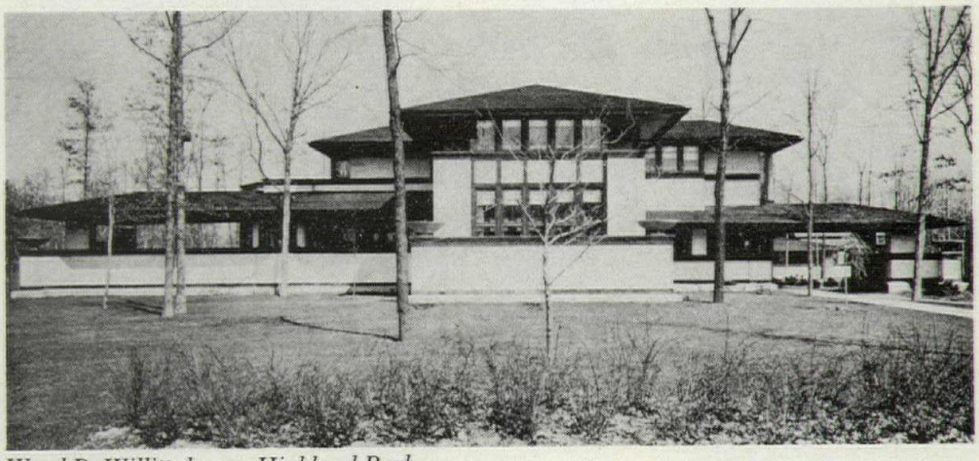
Now the Ward Willitts Foundation, whose principal officers are Woodson Rainey and William McDonough of New York and David Sellers of Vermont, propose to purchase the house and convert it into a kind of architectural "retreat," a guest house for hosting up to ten architectural scholars and students at a time. They expect to finance a complete restoration through guest fees ($60 a night), grants (an application already filed with the National Trust for Historic Preservation Endangered Buildings solicits funds to retire the mortgage), and the sale of reproduction glass and furniture.

The scheme suffered a major setback on Sept. 20 when the Highland Park Planning Commission rejected the request for a special-use permit, necessary for multiple dwellings. Highland Park residents, who would prefer that the house remain a single-family dwelling in private hands, organized to voice their objections. But the Planning Commission appears to have based its decision less on the neighborhood's gripes than on the issue of ownership: similarly the National Trust would prefer to wait until the Foundation actually has the building in hand before issuing the endangered building grant. The Foundation is thus faced with a classic case of chicken or egg: the funding of the project is contingent upon approval and approval is contingent upon funding.

Undaunted, the Foundation is developing a syndicate of guarantors to back their proposal and has a contract for purchase pending. They continue to solicit support from the architectural community, press, and general public. Already I.M. Pei, James S. Polshek, Stanford Anderson, and the Frank Lloyd Wright Foundation have thrown their weight behind the project, and there is still hope for a happy ending if the City Council moves to approve.

Willitts would not be the first, however, to fall through a patchy safety net. Both the crisis and its proposed resolution have broader implications. Converting the house to a residential "hotel" for architects and scholars is an interesting alternative to the museum method used to save other monuments, and has already been tested on the Gamble House in California. Moreover, the licensing of reproductions to a furniture manufacturer (ICF has already expressed interest in reproducing Willitts furniture and windows) could provide much needed funds and relieve the tremendous pressure on the market for originals.

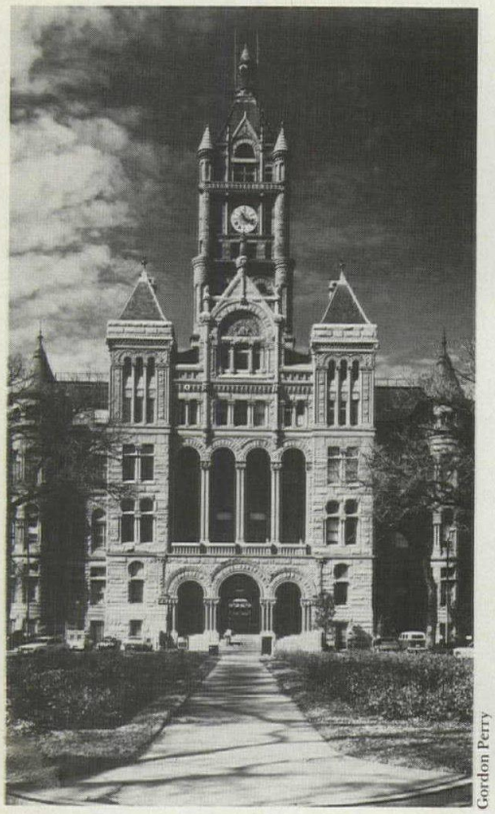
Ironically, Willitts is not unprotected: the house is on a state register that prohibits major alterations such as the gutting of rooms or removal of windows, but the register has never been challenged in court and is therefore a less than adequate guarantee. The transfer from private to semipublic use, anathema to Highland Park residents, may in fact be the best way to ensure that the house—and the neighborhood—survives. [DDB]



Ward D. Willitts house, Highland Park.

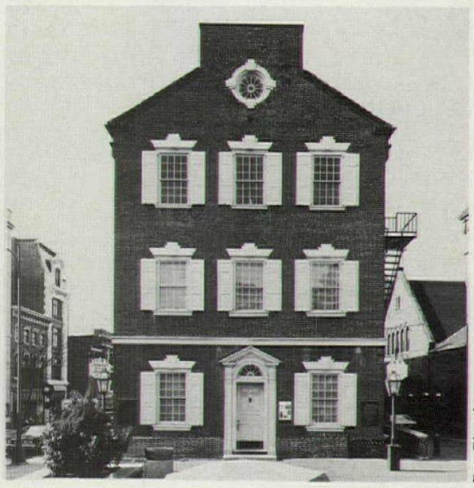
News report continued from page 39

City halls: Salt Lake City, 1894 (left); New Orleans, 1799 (below); Lancaster, Pa., 1798 (bottom).



Gordon Perry

John Ferguson



Dan Eisenhart

On the road: America's city halls

Subject of a traveling exhibition and a book due out in December, "America's City Halls" surveys 114 eclectic examples from 40 states. The show, sponsored by the Smithsonian Institution Traveling Exhibition Service (SITES), was organized in observance of the 50th anniversary of the HABS and is scheduled to appear in 11 cities in 1984. (It is on view in Cleveland through Nov. 27, then in Austin, Texas.) The accompanying catalog will be published by the National Trust for Historic Preservation.

Is it live or is it Memorex?

As the home of Disneyland and the Crystal Cathedral, Orange County has long been the theme-building capital of Southern California. Recently, however, a remarkably authentic theme building has been added to the ranks: Pacific Federal Plaza designed by Craig Combs & Associates of Newport Beach, Calif.

An enormous Spanish Colonial Revival style structure, which would seem more at home in Santa Barbara than Costa Mesa, the 147,000-square-foot building occupies a 7.4-acre former school site. Designed after nine months of extensive research, the building is finished to an extraordinarily high level of craftsmanship and detail. It includes five multilevel garden courts landscaped by Emmet L. Wemple & Associates with fragrant plants and Spanish-style fountains, oak-framed, beveled-glass windows, beamed ceilings, and tiled floors. The rambling pink stucco building is punctuated by a tower and crowned with a terra cotta tile roof. The building is the first phase of a larger redevelopment project being carried out in conjunction with the city of Costa Mesa. [Barbara Goldstein]

Wright restored: The V.C. Morris Store

Frank Lloyd Wright's V.C. Morris Store of 1948 is famous chiefly as a forerunner of the Guggenheim Museum. Located on Maiden Lane, the store was itself a remodeling of an old building, and it contains Wright's first constructed ramp spiraling up to a luminous acrylic ceiling.

The windowless façade translates stony Richardsonian Romanesque into smooth Roman brick, the entrance a remarkable passage through a low brick arch into a half-glazed tunnel and thence into the 25-foot-high rotunda. Originally intended for the display of fine porcelain and glassware, the dramatic space was not very successful for merchandising. After the Morrises vacated the store, other occupants came and went. This year, the Circle Gallery leased the landmark and restored it with the aid of architecture consultant Michel A. Marx, who worked with Wright at Taliesin and in San Francisco at the time of the Morris commission.

Now Wright's magical spiral-bound space is once again uncluttered, and his original furnishings in walnut, executed by the Nicaraguan Manuel Sandoval, have been exhumed from the basement. These include a two-piece table that can

[*News report continued on page 42*]

Boyd/Connell

Circle Gallery

Above: V.C. Morris Store; left: Pacific Federal Plaza.

News report continued from page 40

assume several configurations, a number of low stools, and eliptical, glass-topped display cases.
[Sally Woodbridge]

Out of sight at NYU

The best art conservation goes unnoticed, leaving the restored work of art as if untouched. Architect Michael Forstl has aptly followed that same practice in his design for New York University's Institute of Fine Arts Conservation Center, placing, almost unnoticed, 15 levels of lecture rooms, offices, book stacks, and laboratories behind an apparently untouched 1917 Renaissance Revival façade on East 78 Street.

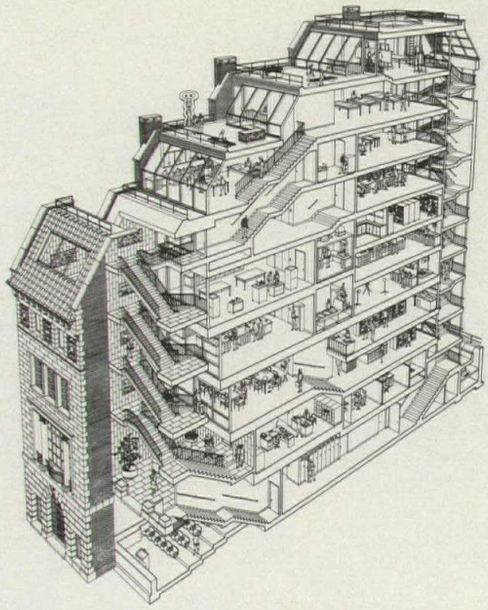
Since the landmarked façade faces north, the architect placed those labs requiring north light on the building's roof and stepped them back behind the skyplane of the façade's tile roof to hide them from the street and create a series of outdoor terraces. The façade's openings also dictated floor-to-floor heights varying from 10 to almost 14 feet, higher than required for most functions. Forstl resolved that dilemma by placing an open stairwell behind the façade and by concentrating spaces that could benefit from higher ceilings, such as the library reading room and the chemistry labs, toward the front of the building, separated from more densely packed offices, labs, and stack areas by a central elevator and stair core. The library and labs borrow light from the front exit stair (sprinklered in lieu of a properly rated wall) through walls of laminated safety glass. A sprinklered rear exit stair also filters light to interior offices.

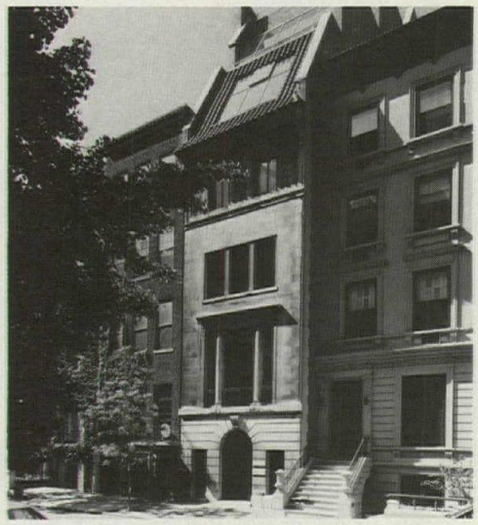
The NYU facility is both a model conservation center—a genre proliferating almost as fast as new museums—and a model preservation project that increases square footage and preserves historic fabric without evident disruption. [TF]

Preservation paradox at Harvard

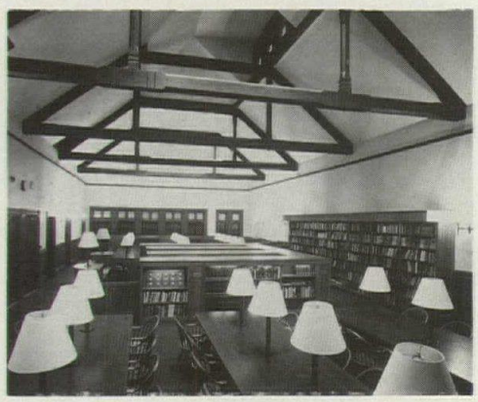
Harvard University is currently engaged in a major renovation program, which this year includes the restoration of two architecturally significant buildings; Henry Hobson Richardson's Sever Hall, 1878–1880, and John Andrews' Gund Hall, the Graduate School of Design, 1972. The briefs demanded major structural and mechanical repairs and improvements, including the redesign of the HVAC (the obstreperous heating systems were as famous as the buildings themselves) and the modification of the classrooms to meet changing teaching conditions. Lo-Yi Chan of Prentice & Chan, Ohlhausen served as architect of Sever Hall and wrote the Gund Hall study; Don Hisaka of Cambridge and

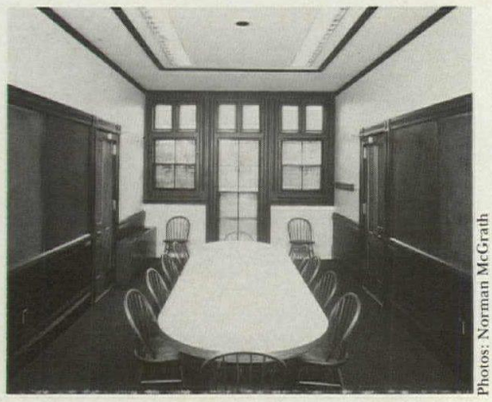
[*News report continued on page 44*]





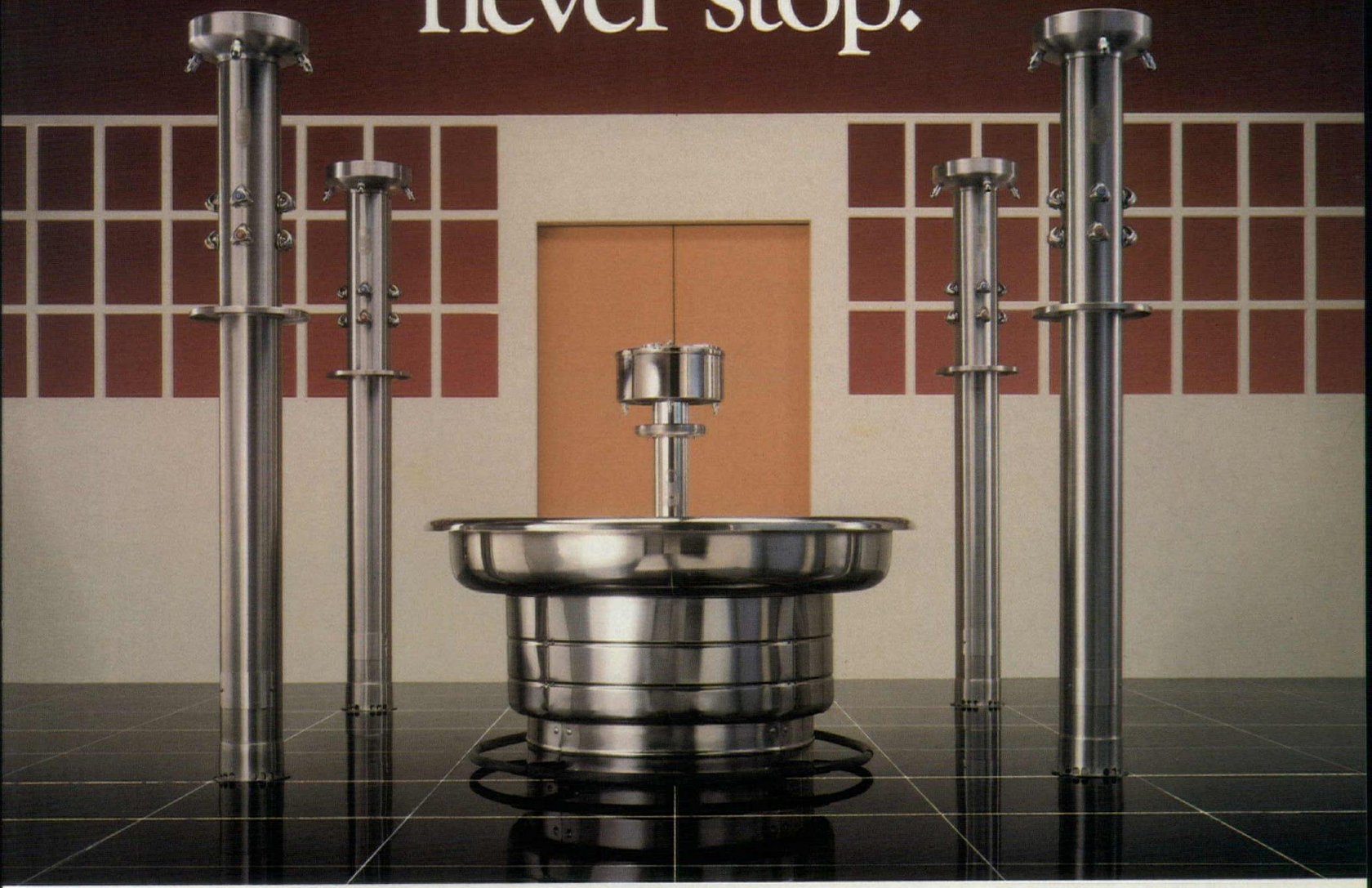
Above: NYU Conservation Center; below: Sever Hall interiors.





Photos: Norman McGrath

Savings never stop.



Bradley products start by saving space, then keep on saving with lower installation and operating costs.

Designing the greatest value per square foot into today's high-traffic washrooms takes imagination — and the unique efficiency Bradley fixtures and accessories offer.

Our Washfountain, for example, does the job of up to eight individual lavatories in a fraction of the space. Plus, with only one set of plumbing connections, you can deliver dramatic cuts in installation costs.

Easy to clean and highly vandal resistant, Washfountains also save on maintenance costs — you can spec 'em and forget 'em. With water-saving sprayheads, plus sectional foot and hand controls, savings are even greater.

Bradley column showers provide equal benefits. Up to six people can clean up under a metered flow of water — with only one set of plumbing connections. And water-saving showerheads extend the economy.

Whether you're designing from the ground up or remodeling, spec long-lasting savings with long-lasting Bradley fixtures — because we get the job done better. For complete information see your Bradley rep. Or contact Bradley Corporation, 9101 Fountain Blvd., Menomonee Falls, WI 53051. 1 414 251-6000.

Bradley CORPORATION BRADLEY

We get the job done better.

Circle **No. 310** on Reader Service Card

Cleveland was retained for the design and construction of Gund, on which John Andrews consulted.

Although Sever Hall required more fundamental changes to assure compliance with code, the 100-year-old building proved paradoxically easier to preserve and adapt to today's energy and teaching requirements than did Gund. Standard materials demanded standard preservation techniques—reroofing and new stamped-copper gutters—and repointing restored the building's monochrome and monolithic qualities. The basement was excavated, the granite foundations were provided with new concrete underpinnings, and the eaves were opened up to create new teaching studios for the undergraduate arts program. Four enormous chimneys, remnants of Richardson's hot-air heating system, harbor secondary stairs and elevators, which leaves the original cruciform circulation space intact. Painted aubergine, this generous corridor retains a dark Victorian quality sympathetic to the austerity of the original design, but is much better lighted. Load-bearing masonry was easily made to conform to energy conservation guidelines. Finally, an entirely new library in the Richardsonian manner was created, and the single remaining Richardsonian classroom was meticulously restored. Both the new space and the preserved lecture hall reflect the confidence and sympathy with which the renovation of this important National Register monument was achieved.

Great caution was required and exercized at Gund. The experimental glass and concrete technologies used for creating its four-tiered single studio have aged badly. At any one time, climatic conditions varied from floor to floor, and in Piper Auditorium, from minute to minute. The doubling of the size of the school and the ascendancy of case studies, seminars, and course work over studio increased the need for classrooms. Innovative remedial work in the HVAC—cleverly placed return ducts and air diffusers in the studio zoning, and tickless timers allowing individual heating for evening classes—along with new classrooms and new roofing, solves the problems discreetly while preserving the studio silhouette and light quality and volume. Aesthetic changes, though much debated, were limited to the redecoration and relighting of Piper Auditorium and to the more controversial opening up of the back wall behind the tiers, lighting up lugubrious corridors. Despite general dissatisfaction with the ungracious ground-floor spaces—very much the "downstairs" to the studio tiers' "upstairs"—and their confusing circulation patterns, Andrews' design was left generally intact; curiously, Gund has been more strictly preserved than Sever. [Hélène Lipstadt]

Hélène Lipstadt *is a Cambridge, Mass., social historian and writer on architecture.*

[News report continued on page 47]

CLIENT—BANK OF MONTE DEI PASCHI DI SIENA, NEW YORK
ARCHITECT—MBA/ARCHITECTS AND PLANNERS
INSTALLER—PORT MORRIS TILE & TERRAZZO CORP.

MARBLE WALLS —GL33 1x2 RED ALICANTE AND
GL53 1x2 BRECCIA AURORA
MARBLE FLOORS—MT25 6x6 BROWN TOURMALION

GL Marble · Natural Marble Only ¼" Thick In Large Sizes

Marble ... A Timeless Ancient Material ... Now A Revolutionary New Product

Introducing GL Marble - a new product for the designer who wanted to use real marble but couldn't because it was too heavy, or too expensive to install, or simply not available in large sizes. GL Marble is real marble only ¼" thick stocked in large sizes 1'x2', 2'x2' and 2'x4' in a wide variety of colors. Backed with fiberglass, it is thin, lightweight, and strong...thin enough to be installed with adhesive without wasted space; light enough not to require structural reinforcement; and strong enough to be used as flooring. Commercial or residential...ideal for lobbies, reception areas, stores, shops, bathrooms...wherever the natural beauty of real marble is desired.

Phone or write for free catalog and specifications. A library type sample folder containing actual color samples is available at a nominal charge of $15.00.

Boston
Louis Mian Inc.
(617) 241-7900

Washington DC
Tile Gallery
(202) 546-2500

Connecticut
Integrity Tile
(203) 792-8918

Atlanta
Palmer Stone
(404) 934-7628

Philadelphia
Integrity Tile
(215) 627-4811

Florida
West Florida
(813) 355-2703

MARBLE TECHNICS LTD

SHOWROOM • ARCHITECTS & DESIGNERS BLDG
150 E. 58 ST. NEW YORK, N.Y. 10155 • (212) 750-9189

Chicago
Old World Tile
(312) 329-1295

Minneapolis
Minnesota Tile
(612) 533-2461

Dallas
American Tile
(214) 263-6248

Houston
Master Tile
(713) 688-2271

Denver
Capco Tile
(303) 759-1919

Seattle
United Tile
(206) 251-5290

Los Angeles
Del Piso Tile
(714) 634-4676

Portland
United Tile
(503) 231-4959

San Diego
Del Piso Tile
(213) 887-5820

San Francisco
Intertile
(415) 788-6880

Circle **No. 360** on Reader Service Card

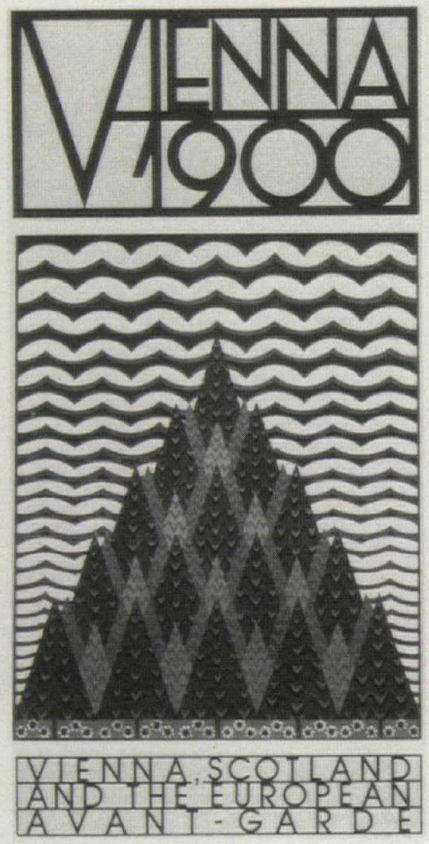
A sleek, sophisticated office park in Kansas.
ELEVATORS BY DOVER

Beautifully sited on 294 acres in suburban Kansas City, Corporate Woods is a sophisticated combination of sleek urban structures and artfully preserved natural landscaping that includes jogging paths, creeks, and picnic areas. A total of twenty-nine Dover Elevators (four Oildraulic,® twenty-five traction) serve the varied needs of the Corporate Woods buildings. For more information on Dover Elevators, write Dover Corporation, Elevator Division, Dept. 693, P.O. Box 2177, Memphis, Tennessee 38101.

DOVER® ELEVATORS

Corporate Woods, Overland Park, Kansas
DEVELOPER: Jones & Company
ARCHITECTS: Marshall & Brown Incorporated
CONTRACTOR: J. E. Dunn Construction Co.
Dover Elevators sold and installed by Dover Elevator Company, Kansas City, Missouri

News report continued from page 44



Vienna and Edinburgh: The Mackintosh touch

Most of Charles Rennie Mackintosh's work can be found in and around Glasgow, the city where he was born in 1868 and lived until 1913 when he ended his career as an architect. In August, the city hosted the tenth anniversary celebration of the Charles Rennie Mackintosh Society. Titled "Mackintosh: national and international," the international conference examined the part played by the Scottish architect in the development of an international "free style" in the early years of the 20th Century.

As most of the conference speakers were historians, the question of "who met or influenced whom" loomed large. The struggle to develop distinct national styles was also a hot topic. The conference started with the English scene: Muthesius (Dennis Sharp), Lethaby (Robert Macleod), and Edgar Wood, Mackintosh's close associate (John Archer). Turning to America, Louis Sullivan (Paul Sprague), F.L. Wright (Don Kalec), and Greene & Greene (Randell Makinson) were studied for the particularly American qualities of their work.

A whole day was devoted to CRM himself (Andrew MacMillan, Tom Howarth, speakers), beginning and ending with visits to his buildings, among them the Willow Tea Rooms, Scotland Street School, Hill House at Helensburgh, and the magnificent Glasgow School of Art (P/A News Report, Dec. 1982, p. 31), whose library is considered by many to be Mackintosh's finest achievement. Delegates also visited a restored version of the Mackintosh home, built into the

News report continued from page 47

Hunterian Art Gallery at Glasgow University, and a reconstruction at the Fine Art Society of the first retrospective exhibition (1933) of the work of Mackintosh and his wife Margaret Macdonald. Reproduction Mackintosh furniture by Cassina of Italy and by BD Ediciones and EIX Barcelona was on view at the Hunterian and the Willow Rooms, respectively.

The European part of the conference was opened by Dr. R.J. Clark, who spoke on the joint Olbrich/Mackintosh exhibits in Turin and Moscow. Peter Vergo, who organized the Edinburgh "Vienna 1900" exhibit (more on that in a moment), spoke on Fritz Wäerndorfer, patron and founder of the Wiener Werkstätte and friend of the Secessionists, who was sent by Hoffmann to Scotland to invite Mackintosh and his colleagues to exhibit in Vienna, and who commissioned CRM to design a music room. Other speakers covered Gaudí and Guimard who, along with Klimt, were featured in a special exhibit at the Glasgow School of Art.

Mackintosh was also a featured player at the season's Edinburgh Festival. His Scottish Room, designed for the eighth exhibition of the Vienna Secession, was reconstructed at the Fine Art Society to complement the main "Vienna 1900" show at the Museum of Antiquities. In Edinburgh, as in Glasgow, the importance of Mackintosh in the early, malleable stages of 20th-Century architecture and his continued relevance were reaffirmed. [Monica Pidgeon]

Footnote: An added boon to the festival was the excellent illustrated guide to Edinburgh architecture, just out from the RIAS, by Charles McKean.

Housing art: a conference on museums

There lives in Edinburgh an Italo-Scottish artist Richard Demarco, who has run his own gallery for 20 years and is renowned for his wide-ranging artistic entrepreneurial activities. He only just missed becoming the latest director of the Edinburgh Festival, but his ability to administer was evident by his organization, as a Festival hors d'oeuvre, of an international conference called "Towards the housing of art in the 21st century," which brought some 150 individuals from Europe, Asia, and America to Edinburgh.

The conference topic—the current museums building boom—was brought into focus by two exhibitions organized for the Festival by Demarco and dedicated to two of today's richest and most devoted private collectors: Dr. Arthur Sackler (whose collection is housed in the Sackler Wing of New York's Metropolitan, in the forthcoming Stirling/Wilford addition to Harvard's Fogg and elsewhere) and Count Giuseppe Panza di Biumo (owner of the great collection of modern American paintings at Varese). Both patrons were among the 30 invited to present papers.

"Remember people," admonished Festival Director John Drummond on opening the conference, to which speakers added "remember the artist." Many new museums were examined, and varying opinions expressed on general design principles. The problems aired included how to house discrete, proffered collections such as that of William Burrell, whose new museum outside Glasgow, designed by Barry Gasson, just opened; how to guard the contents of a museum while making it accessible to the public; how to fund programs and use local, community resources; and how to choose an architect, be it by competition or reputation. [Monica Pidgeon]

Studying Toronto: "The city that works"

A pair of New Yorkers arrived in Toronto at the end of September to offer impartial assessments of the city's waterfront and downtown core before an overflow audience of 550 architects, planners, builders, and heritage enthusiasts. The occasion: the tenth anniversary of The Heritage Canada Foundation, a nonprofit organization dedicated to the preservation of the built environment.

Craig Whitaker, master planner of Manhattan's Westway project, covered the waterfront. The brunt of his attack fell on Harbourfront, the 92-acre strip of federally owned land (including 20 acres of waterlots) on the shores of Lake Ontario. Originally intended as a public park, Harbourfront is now the site of a controversial $300 million renewal project sponsored by the private sector, to consist of 3500 apartment units, a million square feet of commercial space, and 40 acres of public open space and parkland.

"Well-meant confusion," commented Whitaker. His two main criticisms were the scarcity of streets in the Harbourfront plan—"only 13 percent of the project is street space"—and the confusion of private and public space. He reserved his praise for the recently renovated warehouse on the site and Harbourfront's extensive programming activities.

Next, pioneer preservationist Dr. James Marston Fitch took apart Toronto's banking district. He noted that the city's celebrated bank towers, like glass boxes everywhere, are "insanely wasteful" of space and energy, and questioned the "attention to local deviations in climate, culture, and fuel."

Dr. Fitch's forthright, empirical observations were lost on the panel assembled to respond, but they inspired an impromptu speech by Jane Jacobs (*Death and Life of Great American Cities*), which met with an ovation. Jacobs panned the panel but praised the speaker: "He wasn't abstract. The only thing we can trust is our way of seeing in a concrete way." [Adele Freedman]

Adele Freedman *is architecture critic for the* Toronto Globe and Mail.

Pencil points continued from page 37

with the city, formulating its design guidelines, and was a finalist in the library competition won by Michael Graves. The other finalists in the civic center competition were WZMH and Flood Myer Sutton working with Machado and Silvetti.

Elsewhere in San Juan
Michael Graves's San Juan Capistrano Library opens mid-November.

Getty plans
The J. Paul Getty Trust has announced plans to build a $100 million fine arts center on a mountainous site in West Los Angeles. The complex will include an additional museum building, a center for the history of art and the humanities, and a conservation institute. Kurt Forster has been selected as director for the center for art and the humanities.
¶ Architectural firms will be invited to submit their credentials for review by an advisory committee chaired by Bill N. Lacy, president of Cooper Union. Other members of the advisory committee are Reyner Banham, Richard Bender, Kenneth Dayton, Ann D'Harnancourt, Ada Louise Huxtable, and Craig Smyth.

From the Left Bank to SoHo
Art Deco details from the Au Bon Marché department store in Paris have found their way to New York.
¶ The SoHo establishment Urban Archaeology bought up the collection from Bob Snagel, a Dutchman who salvaged the Deco light fixtures, bronze railings, glass, and marble details from the store when it was remodeled in 1975.
¶ The pieces are pricy—in the $2500–$25,000 range.

Stirrings at Stirling/Wilford
The office of James Stirling and Michael Wilford International, London, is currently working on the design for a new satellite town outside Bologna, Italy.
¶ The firm has also revealed its design for a Performing Arts Center at Cornell University, Ithaca, N.Y.
¶ Then there's also, of course, the National Museum, Stuttgart, West Germany (P/A, Aug. 1983, p. 98), the Fogg, Cambridge, Mass. (P/A June 1981, p. 25) and Clore Gallery, Tate, London (P/A, Nov. 1981, p. 26), all on the verge of completion.
¶ The Columbia University Chemistry Building, New York, is not proceeding, however. Department officials and the new University VP, himself a biochemist, reevaluated their needs and decided they could do without.

Architectural drawings at Christie's
Proceeds from a Christie's auction of drawings by contemporary architects benefited Architects for Social Responsibility.
¶ On the block were works by Stern, Meier, Agrest/Gandelsonas, Franzen, Ambasz, Venturi, Graves, and others.
¶ Unrelated lots in the same auction include drawings and watercolors by John Nash, F.L. Wright, Erte, and John Ruskin.
[*News report continued on page 52*]

M O B I U S™

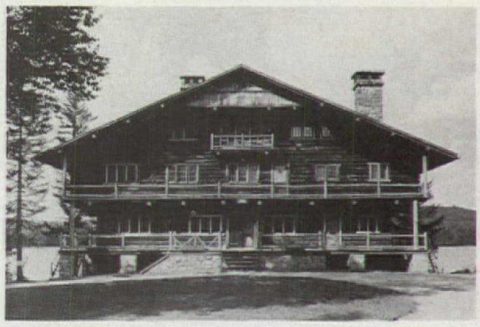
Circle No. 312 on Reader Service Card

WARD BENNETT DESIGNS FOR BRICKEL ASSOCIATES INC., 515 MADISON AVENUE, NEW YORK, NEW YORK 10022 (212) MU 8-2233

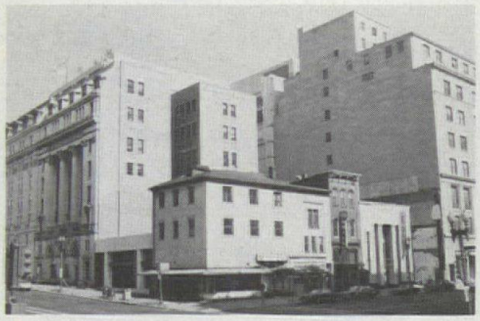
News report continued from page 49

Preservation watch

This section spotlights projects of uncertain status which have generated grassroots preservation activity.

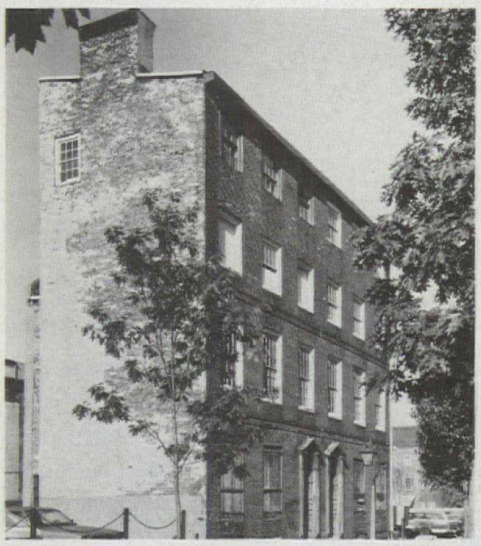


1



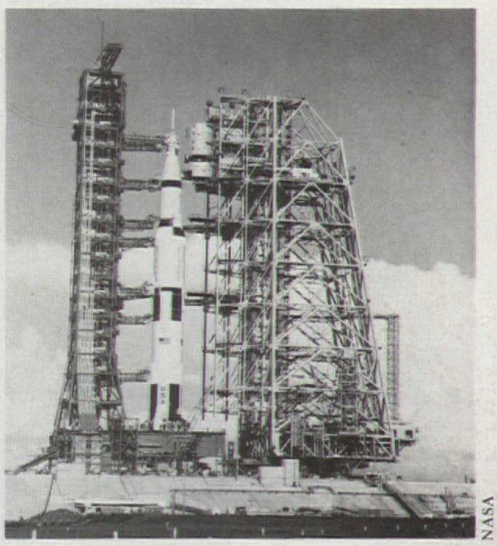
2

3



4

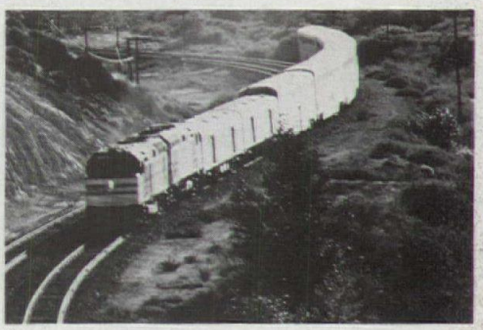
James Dillon



5

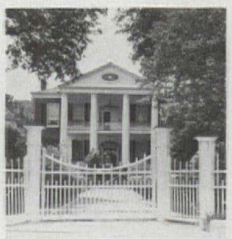
NASA

6



7

6a



6b

8

Reported by Robert Jefferson, with Thomas Vonier

1 Camp Sagamore. The Gilded Age rich brought the butler to Camp Sagamore, a rustic estate in New York's Adirondacks. The camp has since deteriorated badly, but under New York's constitution, those portions of Sagamore sited in "forever wild" preserve may not be inhabited or repaired. New York's voters will decide whether to save Sagamore this month when they consider a scheme that gives Sagamore ten public-preserve acres in exchange for 240 now private ones.

2 Rhodes Tavern, Washington, D.C. Nestled into the nearly complete Metropolitan Square complex, opposite the U.S. Treasury Building, this tawdry little house has become the most recent cause célèbre dividing D.C. preservation and development proponents. At issue is whether the structure, the neglected site of many historic episodes, should be razed or moved. So great has been the controversy, and so uncompromising the positions, that the matter will go to nonbinding public referendum in November.

3 McDonald's. It's hard to get one's preservation sensibilities worked up over a 1950s fast food joint, but McDonald's first drive-in restaurant in Des Plaines, Ill., is being replaced by a third-generation Mc-restaurant just across the street. The corporation has no plans for the outmoded structure, but next month, when the new one is finished . . .

4 James McCrea Houses. Someday, this picture could be of five parking spaces. If the young Preservation Coalition of Greater Philadelphia has its way, though, it will remain the James McCrea Houses. The 1794 Georgian-style double houses have a six-month reprieve (up in February), but the city can only delay—not deny—a demolition permit pending a long-term solution.

5 Apollo 11 Launch Tower. The battle is over, but its aftermath continues—the National Trust has persuaded NASA in court to disassemble the historic Apollo 11 Launch Tower and store the pieces in such a way that they can be rebuilt. Now: anyone have a tall display case?

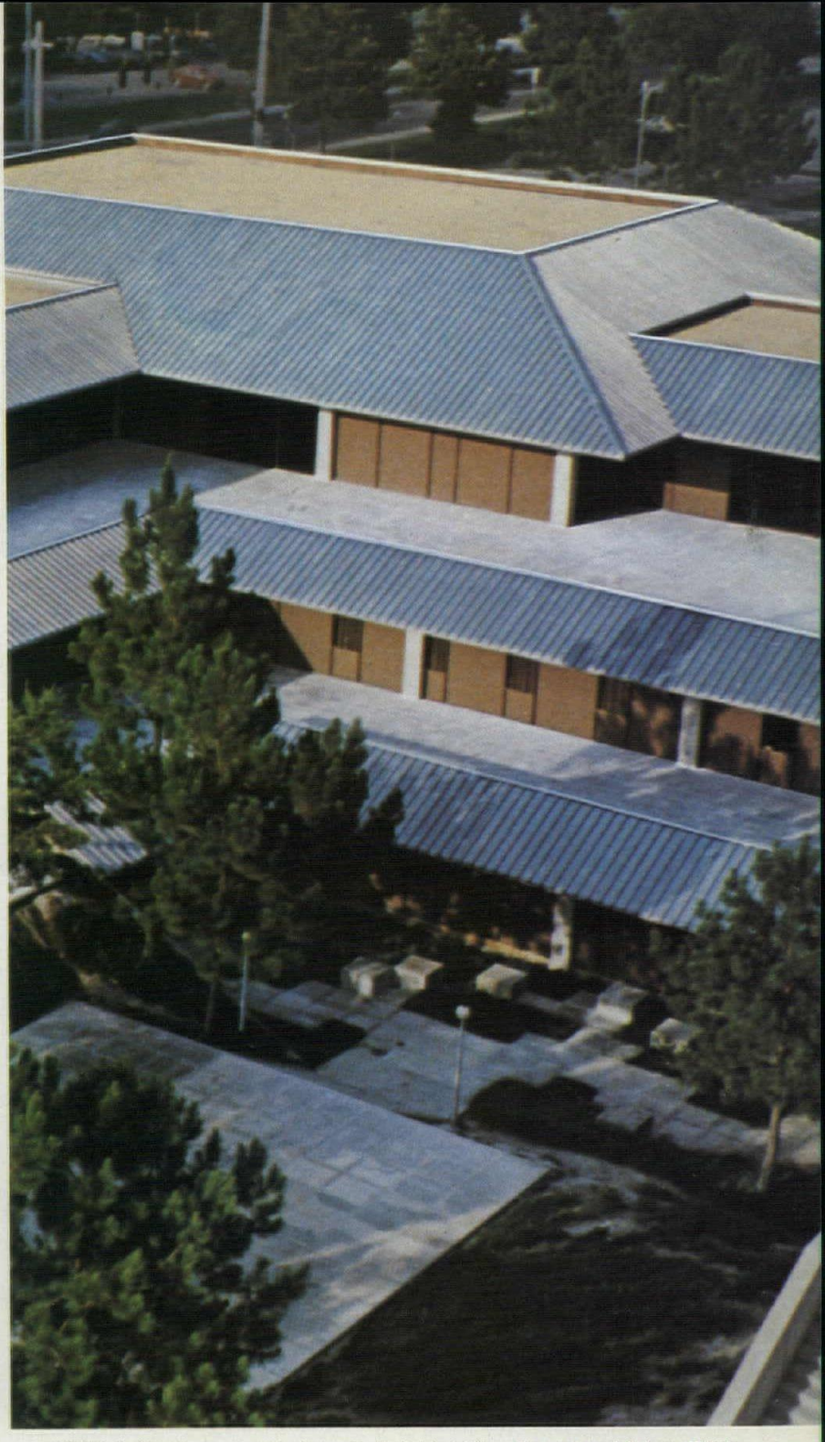
6 Natchez Mansions. Nature, not man for a change, is threatening a group of antebellum and Late 19th-Century structures in the historic Under-the-Hill section of Nachez, Miss. The high bluff above the Mississippi River upon which the buildings sit is eroding at an alarming rate, bringing some to within eight feet of the edge. Among the houses threatened: the Smith-Bontura House, a rare pre-Civil War house owned by a free black; and Rosalie, Union headquarters during the occupation.

7 Rio Grande Zephyr. The route of the Zephyr, the last of the great private passenger trains, has been taken over by Amtrak, which will run the round trip Denver to Salt Lake City with its own double-decker superliners. The Zephyr's magnificent glass-domed observation cars, perfect for the unparalleled scenery through which the train passes, will be put into storage by Amtrak, but no plans are yet in place for use.

8 Fort Lawton. This turn-of-the-century army base, sited on cliffs overlooking Puget Sound in Seattle, is the subject of a battle between preservationists and the city parks department, which wants a wilderness area there. The 14 Greek Revival buildings are endangered not only by municipal bickering, but also by neglect and, most recently, arson.

[*News report continued on page 56*]

1863: North Railway Station, Place de Roubaix; Architect: Jacques Hittorf.



1982: Florida State Museum renovation, Gainesville, FL; Architect: Vickrey-Ovresat-Awsumb & Assoc., Orlando.

120 years ago
this zinc roof
was installed in Paris.

120 years from now
people may be talking
about this Microzinc® roof!

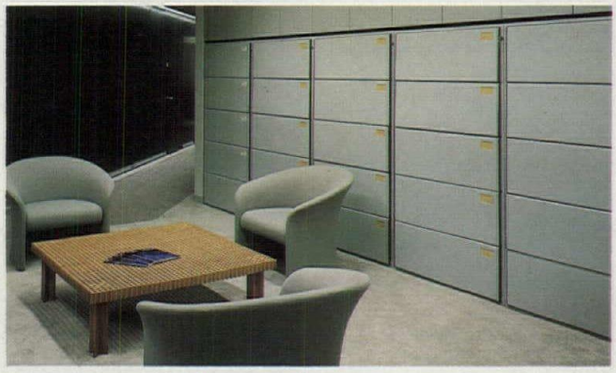
Zinc is for many years.

Some things stay around a long time...and remain maintenance-free! That's the added beauty of Microzinc roofing systems. Barring earthquakes or other "acts of God," the Microzinc roof you specify today should still be around looking as good as ever, many years from now—and assuming normal atmospheric conditions remain water-tight, free of leaks, run-off stains or adjacent rotted materials. Get the full story on pre-weathered Microzinc 70 and mill-finish Microzinc 80. Write or call Ed Pejsa (free) at 1-800/251-7506.

Ball Zinc Products Division
GREENEVILLE, TENNESSEE 37743 • 615/639-8111

Circle **No. 307** on Reader Service Card

Synergistic Storage Links Systems Without Sameness



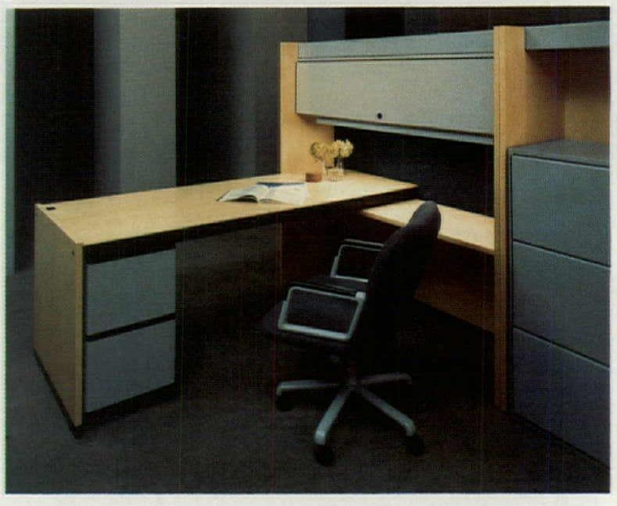
Douglas Ball's Uniwall lateral file and storage system and S Drawers are basic to many SunarHauserman Systems– no mindless alliteration here.

They were designed to anticipate the individual and general need, in an office, to cope with the proliferation of both the humdrum and the special–pencils and folders, microfilm and print-outs, kleenex and running-shoes.

Systems, too rigidly conceived and adhered to, quickly become regimentation. A military lock-step takes away richness, shuts the door on a natural variety in the way people behave. On the other hand no one wants chaos. So a basic system which can become the framework for choice and change is essential.

SunarHauserman boasts more systems to divide space effectively than anyone in the marketplace–ceiling to floor, wall to wall and many in between.

But what provides the link within and between these partitioning systems, lifts them out of the ordinary into the realm of the extraordinary, is a varied and performance-tuned system for storage and filing–lateral files, drawers, wall and panel-mounted overhead storage and shelving. Each piece is technically and visually compatible with another. The details–the turn of metal, the roll of solid wood, the juxtaposition of finishes, edges and joinings–planned with the single design purpose of making effective and pleasant working environments possible.



Overhead storage, S drawers, and Uniwall with Douglas.

Design: Bonnell Design Associates Inc.

SunarHa

S Drawers and Uniwall with PAS.

Overhead shelving and S Drawers with Race.

Uniwall file and storage systems, for under the worksurface or freestanding, are skillfully and carefully engineered. The double-wall, envelope construction makes doors very rigid. Precision welding lessens the chance of imperfections on the face of doors and cabinets. In the design, metal does not touch metal so noise and wear are minimal. Side panels, like doors and drawer-fronts, are double-wall construction to give a smooth and finished appearance inside and out. The back and top of the cabinets are finished with the same precision as the front. Inserts are planned for every possible filing contingency.

The S Drawers are the same fastidious design and construction as Uniwall. As part of a desk, worktop, independently as a Mobile Pedestal, or resplendent as a console, S Drawers are a total system. They can be beam-mounted on Race, hung from worktops in Race and PAS and have been expanded in the Cameron group to 30″ wide file drawers in wood–in natural or colorful paint finishes–or steel, to take hanging, print-out files. These can be used in credenzas and run-offs as well as desks.

For more details may we send you our brochure *SunarHauserman: a structure for the future?* **Circle No. 392**

SunarHauserman, Inc.
5711 Grant Avenue, Cleveland, OH 44105

SunarHauserman, Ltd.
One Sunshine Avenue, Waterloo, Ontario N2J 4K5

Are you on our *Leading Edge* mailing list? **If not please write on your letterhead.**

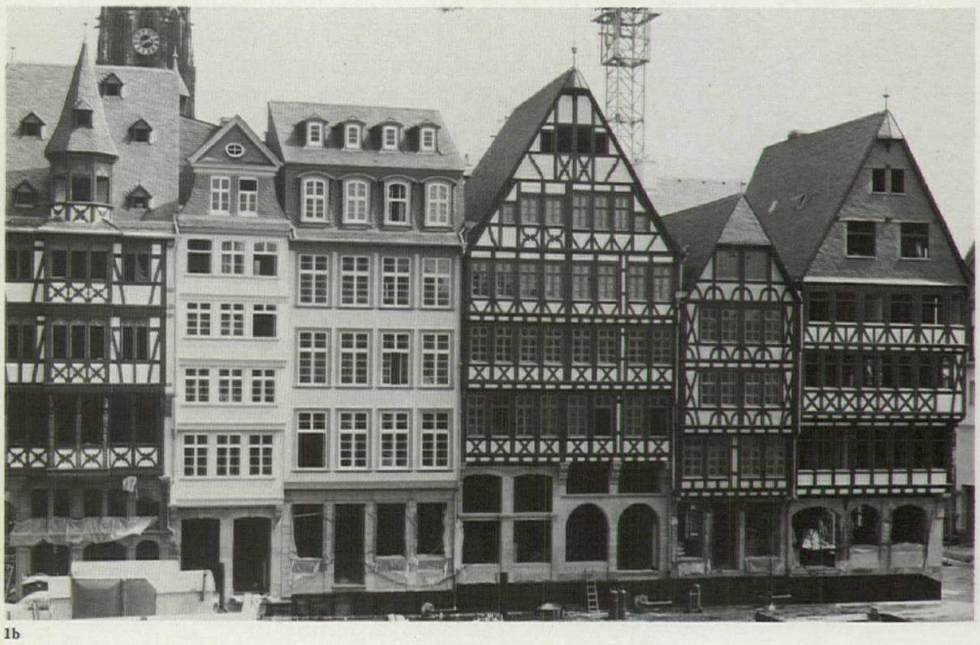
S Drawers with Cameron

userman

News report continued from page 52

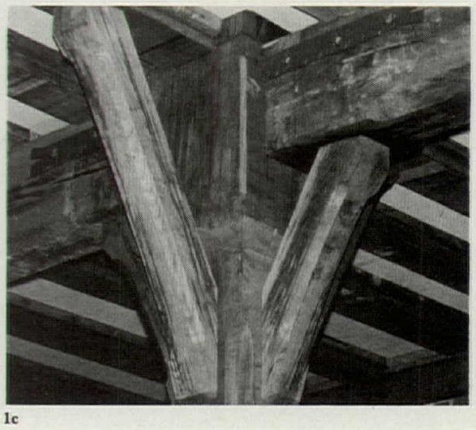
In progress: preservation

1a

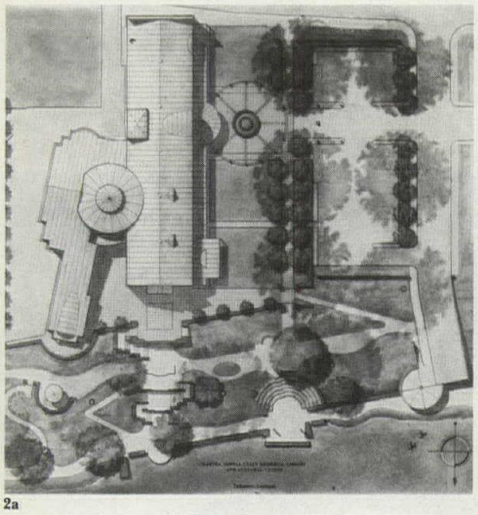


1b

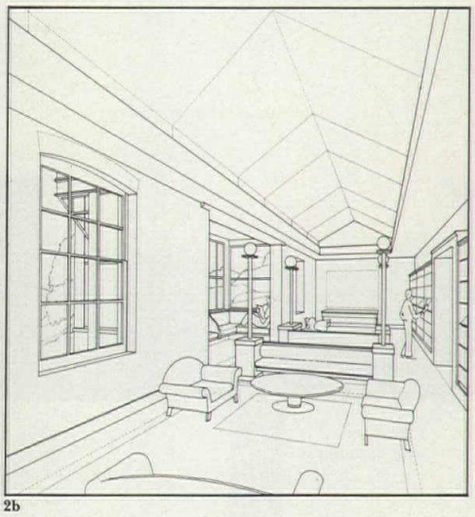
1a–c Römerberg, Frankfurt, West Germany. *Frankfurt Landmarks Office, director.* Frankfurt am Main's campaign to restore its prewar appearance has produced more than one paradox. Currently underway is the reconstruction of six medieval houses on the site of the Römerberg; built of hand-cut stone and 200-year-old oak beams imported from other parts of Germany, the six rentals are, however, equipped with expected modern amenities. The city once considered tearing down some of the historic buildings restored in the 1950s because they lacked "authenticity," but the cost of the Römerprojekt—$50 million and climbing—and the advent of a more eclectic preservation movement have provoked some second thoughts. Also under construction, a new residential building behind the Römerberg (left in model), an infill arcade (right) of galleries, art studios, and recreation spaces just off the main square, and a street of new houses (to right of arcade) each designed by a separate architect, including Charles Moore and Adolfo Natalini. On the Main, the riverbank of museums (P/A, Aug. 1983, pp. 94, 97) continues to develop.



1c



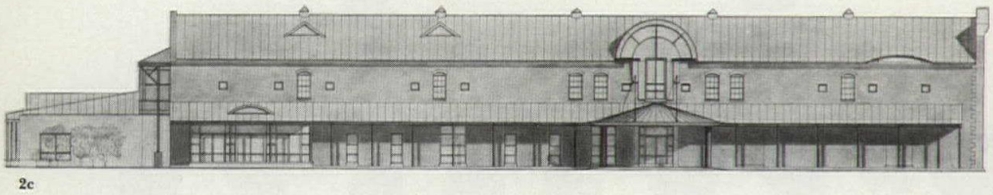
2a



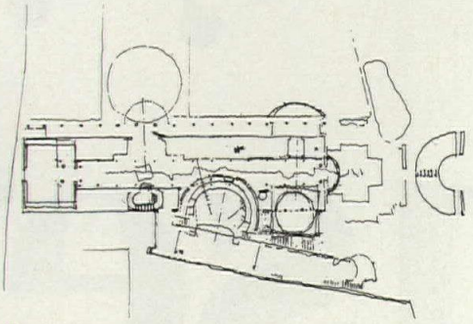
2b

2a–d Martha Sowell Utley Memorial Library and Cultural Center, Thibodaux, La. *Architect: Alan Chimacoff, Architect, Princeton, N.J.* A 19th-Century brick market and warehouse is to be transformed into a library and cultural center for the people of La Fourche parish. Situated on 2.25 acres along the bayou, the site incorporates two parks, a formal, urban forecourt, and a casual, sloping, bayou-side promenade with a small amphitheater. The existing 20,000 square foot brick building is to be restored and subtly modified to include a gallery, café, and offices on the first floor organized along a central "street" and a library on the second. An additional 10,000 square feet of new construction intersects the old, hinged by a cylindrical theater.

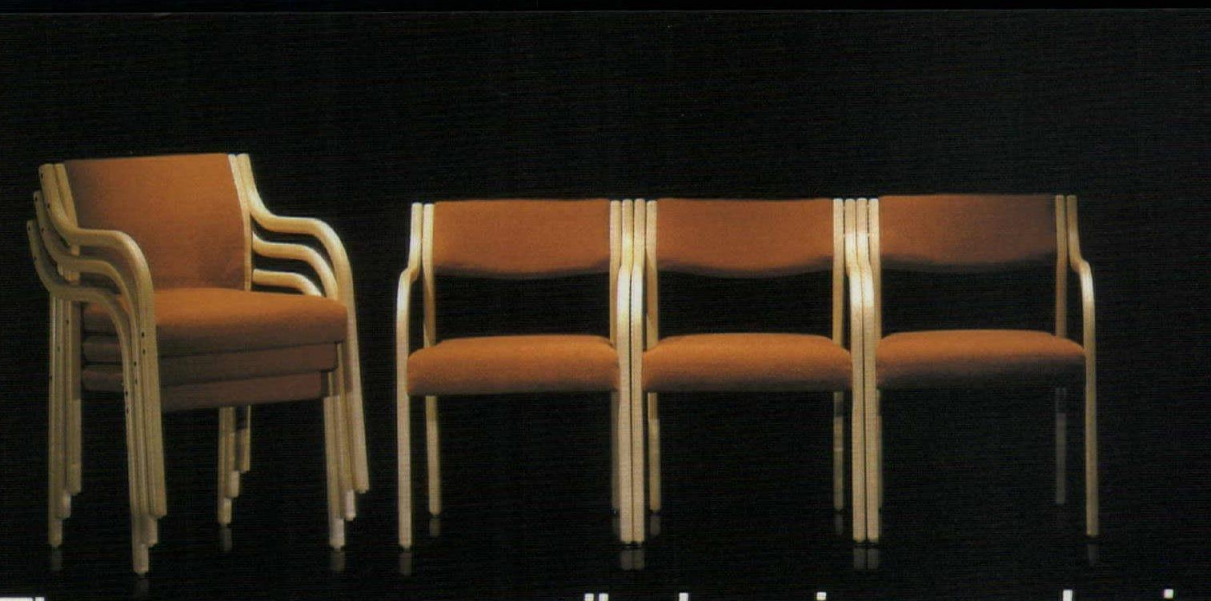
[*News report continued on page 58*]



2c



2d



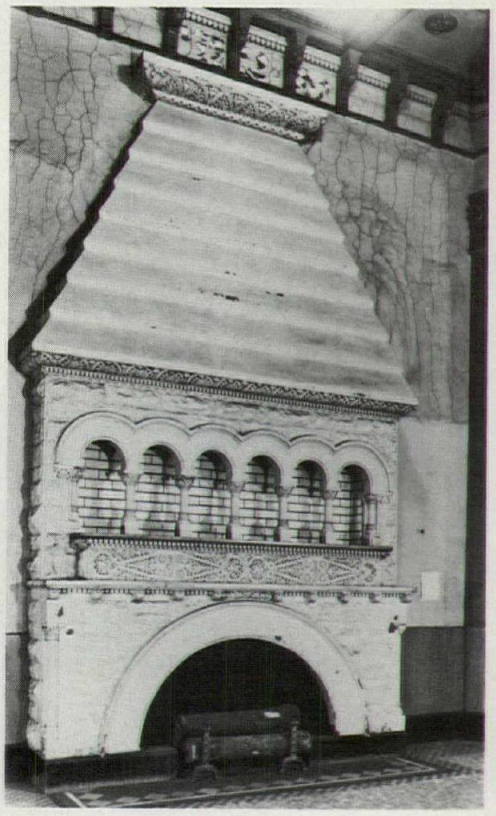
The very versatile lamineer chair.

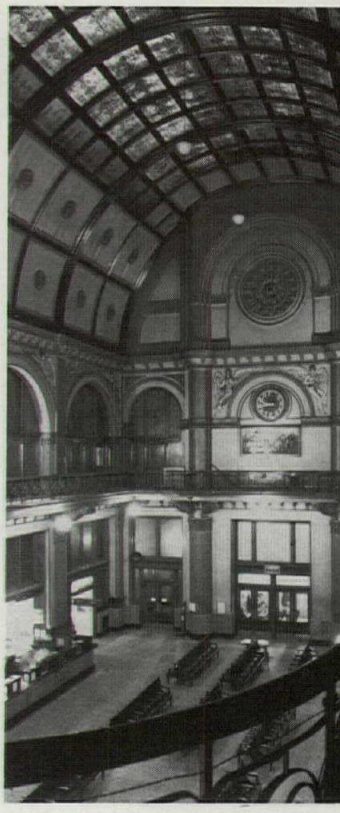
Dining • Reception • Conference • Systems • Everywhere

Westin-Nielsen
CORPORATION

3752 North Dunlap Street, St. Paul, MN 55112 (612) 484-3329

continued from page 56





n, Nashville. *Architect: Jack is.* The headlines might have ic Nashville vs. the General inistration vs. the pigeons." successful multi-million-dollar GSA to rid the abandoned Union Station of disease-carrying pigeons, Historic Nashville, the local preservation group, filed a breach of faith suit against GSA. Appropriately, Sen. William Proxmire bestowed on GSA his "Golden Fleece" award. The city finally found a developer for the expensive, difficult project, and GSA's third pigeon-ectomy worked. The train shed widest span gabled roof in the become a Rouse-esque open The cavernous main waiting r public lounge, with the rest o housing offices.

[News report continued on page 60]

Glazier: Federal Glass and Hardware Glass Type: Polarpane Silver Reflective, 8% clear.

Environmental Control With a Silver Lining

Polarpane® Silver Reflective Insulating Glass Units by Hordis, combine a timeless, brilliant appearance with outstanding insulating properties.

A uniform metallic coating provides extremely high reflectance of solar energy, low transmitted heat gain, and controlled visible light transmission.

Total relative heat gain can be as low as 39 BTU/Hr.-sq. ft. compared to 168 BTU/Hr.-sq. ft. with a comparable clear glass unit. The low shade coefficient and U values reduce initial equipment costs, as well as daily heating and air conditioning operating costs.

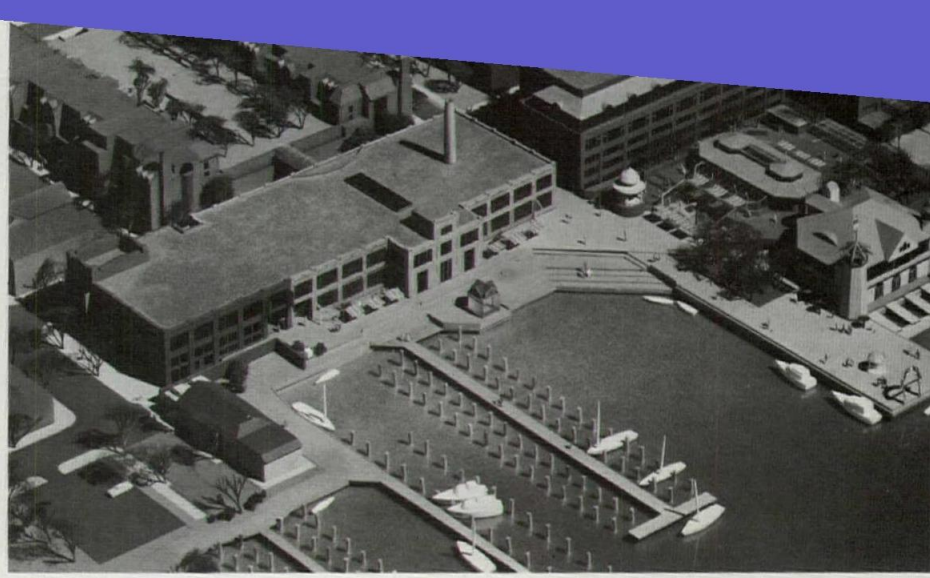
Polarpane Silver Reflective is available in 8, 14, and 20% light transmittance values on clear, bronze, gray, and green glass to offer a broad range of aesthetic effects.

Formerly C-E Glass, Hordis pioneered the development of tempered and insulating glass products, and first introduced Polarpane Insulating Glass Units over 25 years ago. Today Polarpane is sold from 8 sales offices coast to coast.

For more information on Polarpane Silver or Polarpane Gold, check your Sweet's Catalog section 8.26a/Ho; or call or write Rick Wright, Product Manager, Reflective Glass, Hordis Brothers, Inc., 825 Hylton Road, Pennsauken, NJ 08110,(609) 662-0400.

HORDIS
BROTHERS, INC.
Formerly C-E Glass

Circle No. 341 on Reader Service Card



Torpedo Factory, Alexandria, Va. *Keyes Condon Florance and Metcalf & Associates, Washington, D.C.* The redevelopment of the old Navy Torpedo Factory complex on the Potomac River at the edge of Old Town Alexandria restores a major portion of the industrial waterfront to public use. The central, 1918 munitions plant (with smokestack; detail top), occupied by artists since 1974, has been renovated as an arts center by KCF. To the north (right, model), a 1943 concrete building has been partially demolished for reuse as an office building, its new façade ornamented in glazed polych patterns (detail, bottom). A smaller bu (left portion of arts center) situated end of King Street's retail district co new shops and offices. Future constr of a boat club and waterside market w be carried out by KCF. The factory's ernmost building (top, model) has razed and will be replaced by condomi atop a parking structure, by Metcalf sociates. [*News report continued on pa*

Republic CorriDoor Is The Answer To Your Volume Interior Door Needs

CORRIDOOR

FITS A STANDARD RBPC 16 GAGE COLD ROLLED STEEL FRAME TO PROVIDE MAXIMUM SECURITY.

AVAILABLE IN SIX PANEL (AS SHOWN) OR FLUSH EMBOSSED DESIGNS FOR AESTHETIC APPEAL.

24 GAGE GALVANIZED STEEL FACE SHEETS (22 GAGE OPTIONAL) AND SOLID POLYSTYRENE INSULATED CORE FOR STRENGTH AND DURABILITY.

PREPARED FOR A STANDARD DEADLOCK.

PREPARED FOR 2 3/4 INCH CYLINDRICAL LOCKSET.

PREPARED FOR 4 1/2 INCH X 4 1/2 INCH COMMERCIAL WEIGHT HINGES.

CONTINUOUS 18 GAGE ROLL-FORMED STEEL PERIMETER CHANNEL CONSTRUCTION.

EASY INSTALLATION IN DRYWALL OR MASONRY CONSTRUCTION.

CorriDoor is the unique steel door for high volume interior applications where commercial hardware is required. For hotels, motels, offices, apartments and condominiums, it is the competitively priced alternative to wood or laminated doors, combining the strength, durability and security of steel with the aesthetic appeal and beauty needed for the volume door market.

And, when CorriDoor is combined with a standard Republic hollow metal frame, it is the complete opening package...both door and frame available from a single source, your local Republic distributor. To find out more about CorriDoor, The Answer to your volume interior door needs, contact the Republic distributor nearest you. Find him in the Yellow Pages under "Doors—Metal" or call (toll free) 1–800–238-8374.

Republic
doors · frames

Republic Builders Products Corporation
Post Office Box 508 • McKenzie, TN 38201

Circle No. 375

...and let the genius, imagination and beauty of Italy's superior tile products enhance your next architectural or interior design project. Over 20,000 designs, sizes, color variations, textures and motifs from over 400 tile companies are available for use in any contract or residential installation. For information contact the Italian Tile Center.

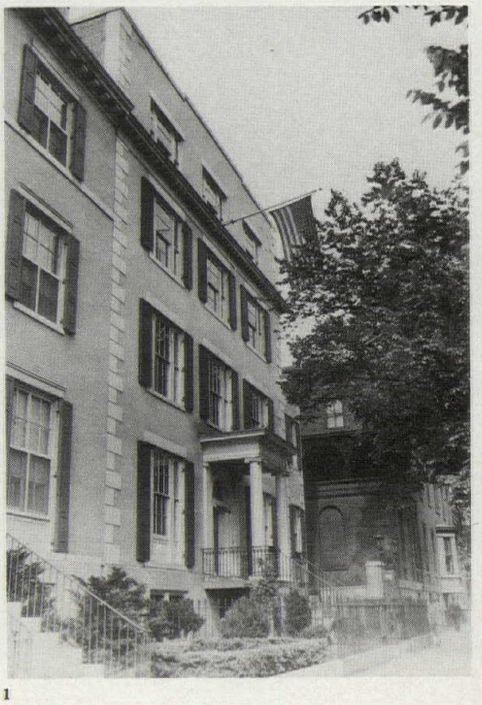
CERAMIC TILES OF ITALY

REQUEST A FREE COPY OF THE CASA TILE IDEA BOOK ON YOUR LETTERHEAD.
ITALIAN TILE CENTER, 499 PARK AVENUE, NEW YORK, N.Y. 10022 • (212) 980-8866

Circle No. 351 on Reader Service Card

News report continued from page 60

1 Blair House, Washington, D.C. *Mendel-Mesick-Cohen-Waite, Architects/Engineers, Albany, N.Y.* Blair House, for years the guest residence opposite the White House for visiting heads of state and other foreign dignitaries, is actually four buildings, including the former Lee mansion. The complex has been closed except for occasional State Department receptions for nearly a year, awaiting complete interior and exterior rehabilitation, which will commence in late 1984. A historic structures survey has been completed in anticipation of the restoration. Meanwhile, stonework repairs continue immediately next door at the Smithsonian's Renwick Museum (the original Corcoran Gallery of Art). Congress has also approved a law limiting the size of placards carried by the nearly permanent cadre of protesters stationed in Lafayette Square, thus assuring a much-improved view out of the Oval Office for its occupant, whoever that may be, a year hence.



1

2a, b Union Station, Washington, D.C. *U.S. Department of Transportation, National Park Service, Union Station Redevelopment Corporation, AMTRAK, etc.* The newly formed USRC is now carrying out the mandate of the 1980 Union Station Redevelopment Act, which anticipates returning the station to its former glory and maybe more. Most travelers will be quite happy just to see Daniel Burnham's building in use as a train station again, after the hopelessly ill-conceived conversion to a "National Visitors' Center" in 1976 (P/A, Nov. 1977, cover story). Congress has approved $70 million for repairs, and a developer, as yet to be selected, will add station retail facilities. The dismal "temporary" train station now behind Union Station will be removed, and the trouble-plagued parking garage (intended for the Bicentennial but still incomplete) finished. For the first time in years the building is dry, thanks to roof and drainage repairs already complete.

[*News report continued on page 66*]

Gary P. Fleming

2a

Photos: Thomas Vonier

2b

In offices: Carpets of Antron® perform with style.

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

Outstanding performance. Tremendous selection of styles. No wonder carpet of DuPont ANTRON* nylon is specified more than any other commercial carpet.

DuPont works to satisfy your design needs with fiber styling innovations that help mills produce a wide variety of colors, styles and textures. In fact, the largest variety in any one carpet fiber.

For instance, the carpet above is constructed of a new ANTRON continuous filament fiber specifically engineered for cut pile carpets that can withstand the traffic of a commercial environment. With a clean, smooth texture that won't fuzz or shed.

And all carpets of DuPont ANTRON provide the outstanding performance you would expect. Soil-resistance and wear-resistance that mean lasting beauty and easy maintenance.

So whether you're designing space to impress the heads of industry or just to take the pressures of daily traffic, there's no better choice than carpet of DuPont ANTRON.

For a free copy of our new Specification Guide, write DuPont Carpet Fibers, Room X-39830, Wilmington, DE 19898.

DUPONT ANTRON.® AMERICA'S MOST SPECIFIED CARPET FIBER.

DUPONT
REG. U.S. PAT. & TM. OFF.

Circle **No. 326** on Reader Service Card

News report continued from page 63

Calendar

Exhibits

Through Nov. 20. Richard Morris Hunt at the École des Beaux-Arts. The Octagon, Washington, D.C.

Through Nov. 24. Taste, an exhibition about values in design. Boilerhouse Project, Victoria and Albert Museum, London.

Through Nov. 26. Architecture in Silver. Max Protetch Gallery, New York.

Through Nov. 30. Furniture by Peter Korn. Appalachiana, Bethesda, Md.

Through Jan. 8. Design Since 1945 exhibition, Philadelphia Museum of Art.

Through Jan. 15. LaFayette Square 1953–1983: Historic Preservation and Modern Architecture. Renwick Gallery, Washington, D.C.

Through Nov. 15. Follies: Architecture for the Late 20th Century Landscape. Leo Castelli Gallery, New York.

Through Jan. 4. Urban Sculpture: Architectural Concerns. Gallery at the Plaza, Security Pacific National Bank, Los Angeles.

Through Jan. 29. Cervin Robinson: Photographs 1958–1983. Wellesley College Museum, Wellesley, Mass.

Nov. 25–Dec. 30. Arthur Brown, Jr.: Architectural Drawings of Ornament and Decoration. Philippe Bonnafont Gallery, San Francisco.

Competitions

Nov. 15. Application deadline, Rome Prize Fellowships. Contact American Academy in Rome, 41 E. 65 St., New York, N.Y. 10021.

Nov. 18. Registration deadline, urban design competition to resurrect and embrace the City of Chandler (Ariz.) "city beautiful" plan. Contact Competition Advisor, Department of Planning and Development, 200 E. Commonwealth Ave., Chandler, Ariz. 85224 (602) 965-3536.

Nov. 30. Entry deadline, Fifth Arango International Design Competition: Glass That Works. Contact Intercon Arts, Inc., 4225 Lennox Dr., Miami, Fla. 33133 (305) 666-7307.

Dec. 6. Entry deadline, 1984 CSI Specifications Competition. Contact CSI, 601 Madison St., Alexandria, Va. 22314 (703) 684-0300.

Jan. 18. Submission deadline, First Annual Wall Surface Competition. Contact CCF Design Competition, % Creamer Dickson Basford, Inc., 1633 Broadway, New York, N.Y. 10019.

Jan. 25. Registration deadline, A New American House. Contact Harvey Sherman, Minneapolis College of Art and Design, 133 East 25 St., Minneapolis, Minn. 55404 (612) 870-3238.

Jan. 26, 1984. Postmark deadline, P/A's 4th Annual International Furniture Competition. See p. 27 for information and entry form.

Jan. 31, 1984. Entry deadline, Innova, student design competition, sponsored jointly by Wilsonart and the Interior Design Educators Council. Contact Innova: A Design Challenge Competition, % McKone & Company, 2700 Stemmons Tower East, Suite 800, Dallas, Texas 75207 or call toll-free 1-800-433-3222 (in Texas, 1-800-792-6000).

Jan. 31. Application deadline, National Institute for Architectural Education Traveling Fellowship in Architecture. Contact NIAE, 30 W. 22 St., New York, N.Y. 10010.

Feb. 15. Entry deadline, Colorcore "Surface & Ornament" Competition II (for completed installations or in-production designs). Contact Colorcore "Surface & Ornament" Competition, Formica Corporation, One Cyanamid Plaza, Wayne, N.J. 07470.

Conferences, seminars, workshops

Nov. 18–19. Conference on new technology and the future of architecture, Hyatt Regency Hotel, Oakland, Calif. Contact Guidelines, Box 456, Orinda, Calif. 94563 (415) 254-0639, 254-9393.

Nov. 19–21. 83rd Annual Meeting, American Society of Landscape Architects, Indianapolis. Contact ASLA, 1733 Connecticut Ave., NW, Washington, D.C. 20009 (202) 466-7730.

Nov. 29–Dec. 2. Sixth World Engineering Conference, Georgia World Congress Center, Atlanta. Contact Association of Energy Engineers, 4025 Pleasantdale Rd., Suite 340, Atlanta, Ga. 30340 (404) 447-5083.

Dec. 6–8. Mid-Atlantic Energy Conference and exhibition, Baltimore Convention Center. Contact Elliot Boardman (301) 251-9250.

Jan. 18–24. Bau 84, Trade Exhibition of building materials, systems, and renovation, Munich, West Germany. Contact Gerald G. Kallman Associates (201) 652-7070.

dorsal®

Affordable ergonomic seating

In terms of productivity, worker discomfort is closely associated with fatigue, stress and strain caused by seating. Without controls to manipulate, ergonomically designed Dorsal seating *automatically* responds to the user's movement and constantly changing comfort requirements.

And it does so economically!

Designed by Emilio Ambasz and Giancarlo Piretti for

OPENArK®

Produced and distributed in the U.S. under an exclusive license from OPEN ArK B.V. by

krueger

Technical innovation... by design

New York (212) 371-9595
Wash., D.C. (202) 484-0242
Philadelphia (215) 277-7100
Jackson, MS (601) 362-8062
Indianapolis (317) 788-4737
Chicago (312) 467-6850
Minneapolis (612) 374-4033
St. Louis (314) 241-8431
Dallas (214) 747-7629
Houston (713) 222-1408
Denver (303) 294-0150
Seattle (206) 322-1070
Los Angeles (213) 659-2133

Krueger
P.O. Box 8100
Green Bay, WI 54308
(414) 468-8100

Why the design center of the world will be in Long Island City:

When you're planning a design center for the true design capital of the world, you have to plan on many things.

Vast amounts of space are a necessity, for example. And the space must be beautiful. Convenient. And at rents the entire industry can afford.

Trying to satisfy even the first requirement ruled out Manhattan. Financially and logistically, the best option was Long Island City. The area New York Magazine calls "The Next Hot Neighborhood."

The movie studios are already there. So are the tennis courts. The bistros cater to the artists. And the whole community is anticipating the $600 million waterfront development. In the meantime, the City is spending $4 million to beautify the neighborhood.

In the midst of all this activity, on 10 magnificent acres, will be IDCNY. The International Design Center, New York.

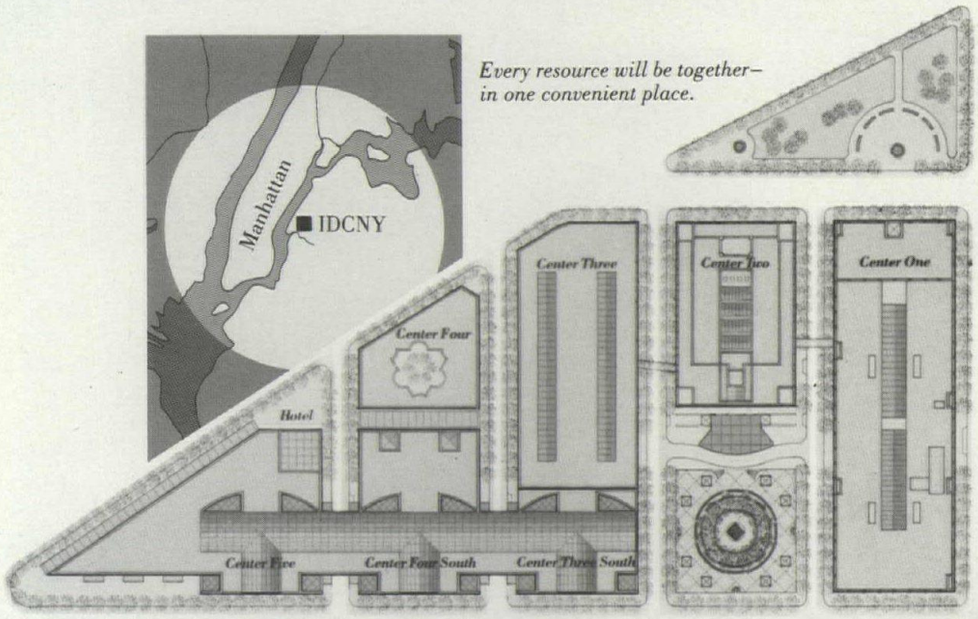
IDCNY is 4½ million square feet of showroom space. It's a spectacular master plan by I.M. Pei & Partners. It's wonderful interiors by Gwathmey Siegel & Associates Architects. Innovative graphics by Vignelli Associates. It's elegant restaurants created by Joseph Baum. It's market weeks. Special events. Seminars.

It's all happening closer to midtown Manhattan than most of Manhattan. Because Long Island City is just a quick trip by our free transportation service. By train. By bus. By cab. Or by limo.

And wait till you see the rents. Finally, all the great design sources—both contract and residential—can afford to be where they belong.

Together at last in New York City. In IDCNY. The design center worthy of the city it's named for.

Circle **No. 348**



IDCNY

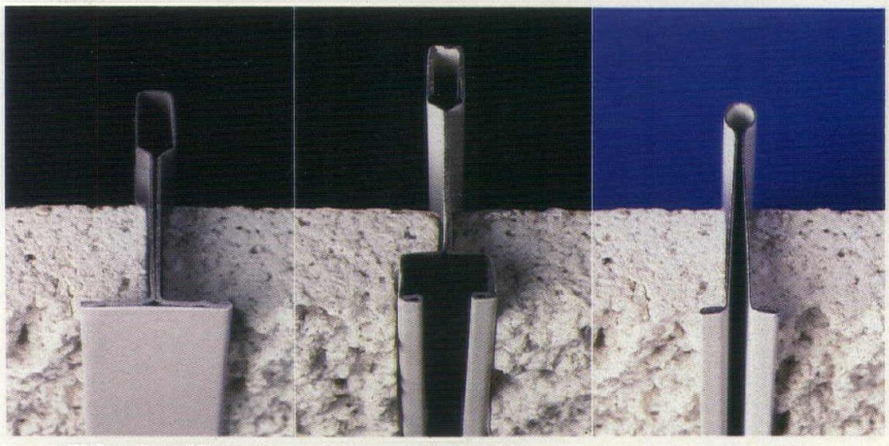
It's why New York will remain the design center of the world.

To talk about your place in the IDCNY, call Emmett L. Dineen, President of IDCNY at (212) 486-5252 or Len Lemlein, Director of Leasing at (212) 486-5260.

NEW from U.S.G.

new sophistication
for low-cost
ceilings

panels suspended by shadow



Old style grids are flat and wide. Give ceilings a boxed-in look.

Some "trim" grids work only with specially cut panel edges, not standard.

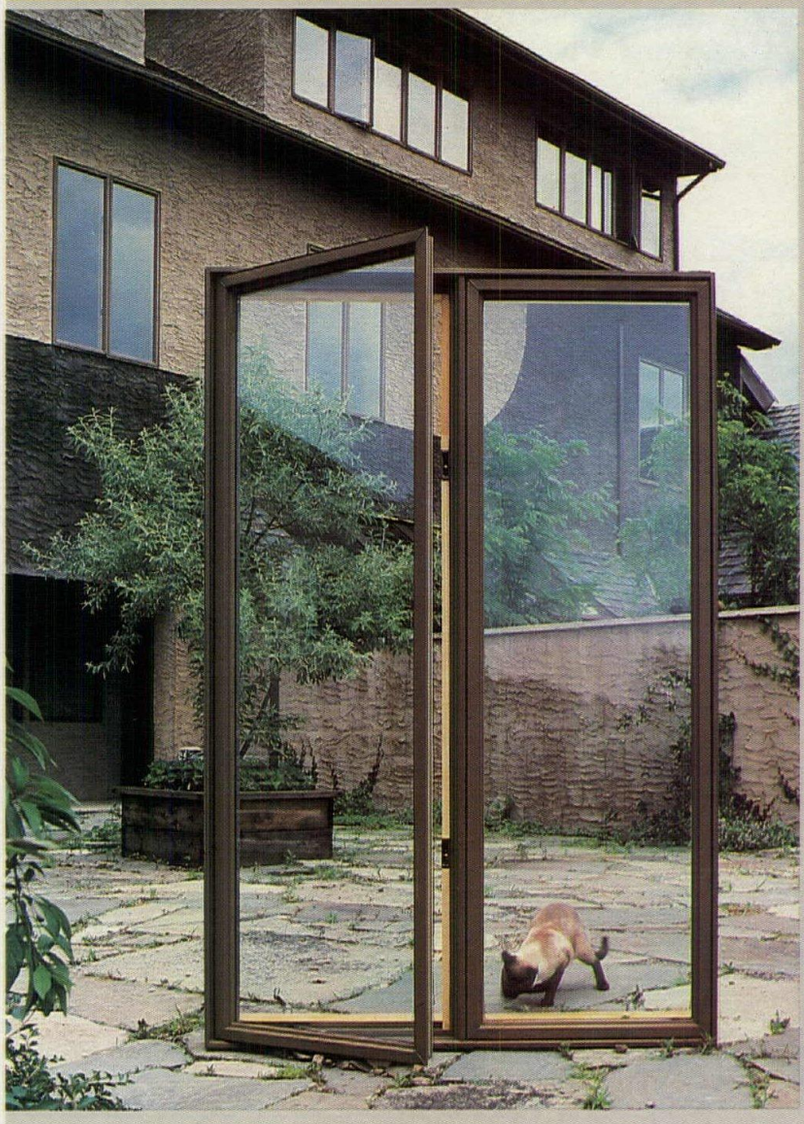
New Profile grids take standard, square-edge panels.

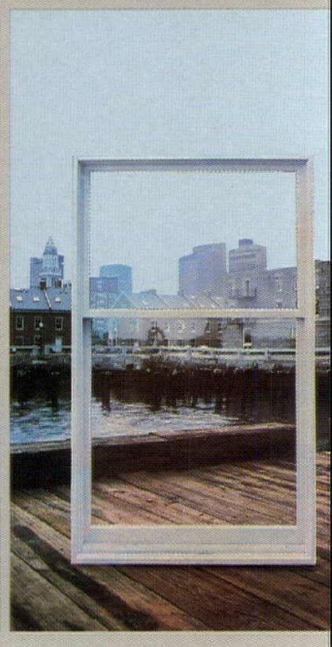
USG Profile™ Ceiling Grid System

The new USG PROFILE grid is a neat, narrow, almost invisible "V." The void in the "V" profiles each panel with a deep shadow on all four sides. It's as though panels are suspended by shadow!

This new, sophisticated design looks expensive, but it's not. USG PROFILE grids are moderately priced; take standard, economical AURATONE® or ACOUSTONE® 2 x 2 or 2 x 4 ft. panels with no special edges needed. For details, see your U.S.G. Representative or write us at 101 S. Wacker Dr., Chicago, IL 60606, Dept. PA 1183U

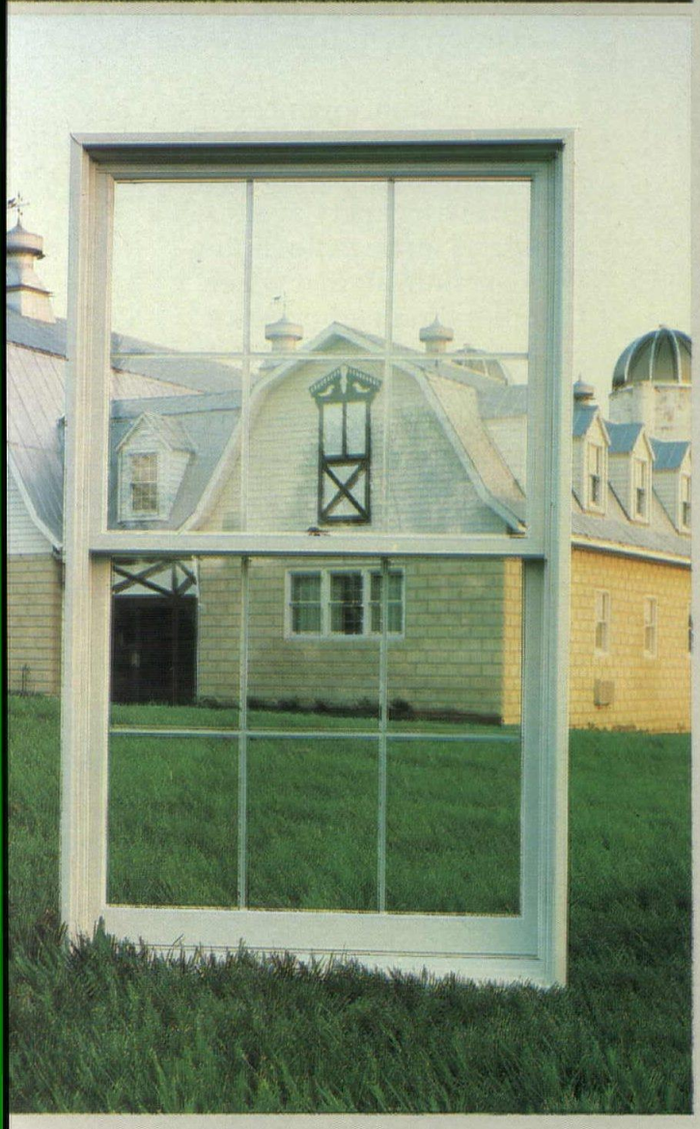
UNITED STATES GYPSUM
BUILDING AMERICA





If Andersen® windows can blend in at a 120-year-old creamery,

make a seaside renovation shipshape,



Whatever changes the job calls for, one specification can remain constant: Andersen® Perma-Shield® windows.

Because they're built to blend. In all building styles. Their white or Terratone color, complete range of styles, and hundreds of sizes and glazings insures harmony.

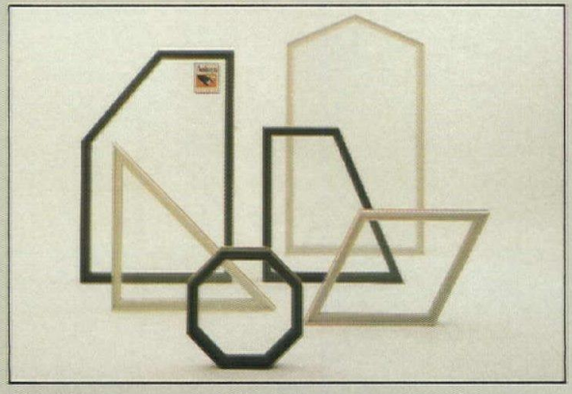
The Andersen Window Replacement System assures they'll fit.

The System custom-fits stock-size Perma-Shield windows into virtually any opening. Fits them in energy-tight. And trims them out beautifully, regardless of wall construction—wood, brick, stone, shingle, stucco, you name it.

And Perma-Shield windows have the features that match today's needs.

With fuel-saving double-pane insulating glass (triple glazing optional), a snug-fitting design well above industry air-infiltration standards and a rigid, long-life vinyl sheath that won't need painting.

Think of your next remodeling or restoration job. Then think of how beautifully Perma-Shield windows and gliding patio doors can match it. Now go to Sweet's File 8.16/An and 8.22/An.



New! Now an octagonal opening, a pentagonal port or a trapezoidal transom won't keep you from specifying Andersen. Now there's Andersen® Flexiframe™ windows. They're fixed wood windows prefinished inside and out in a long-lasting, weather-resistant white or Terratone color finish. Made to any shape. See Sweet's File 8.16/An.

Come home to quality. Come home to Andersen.™

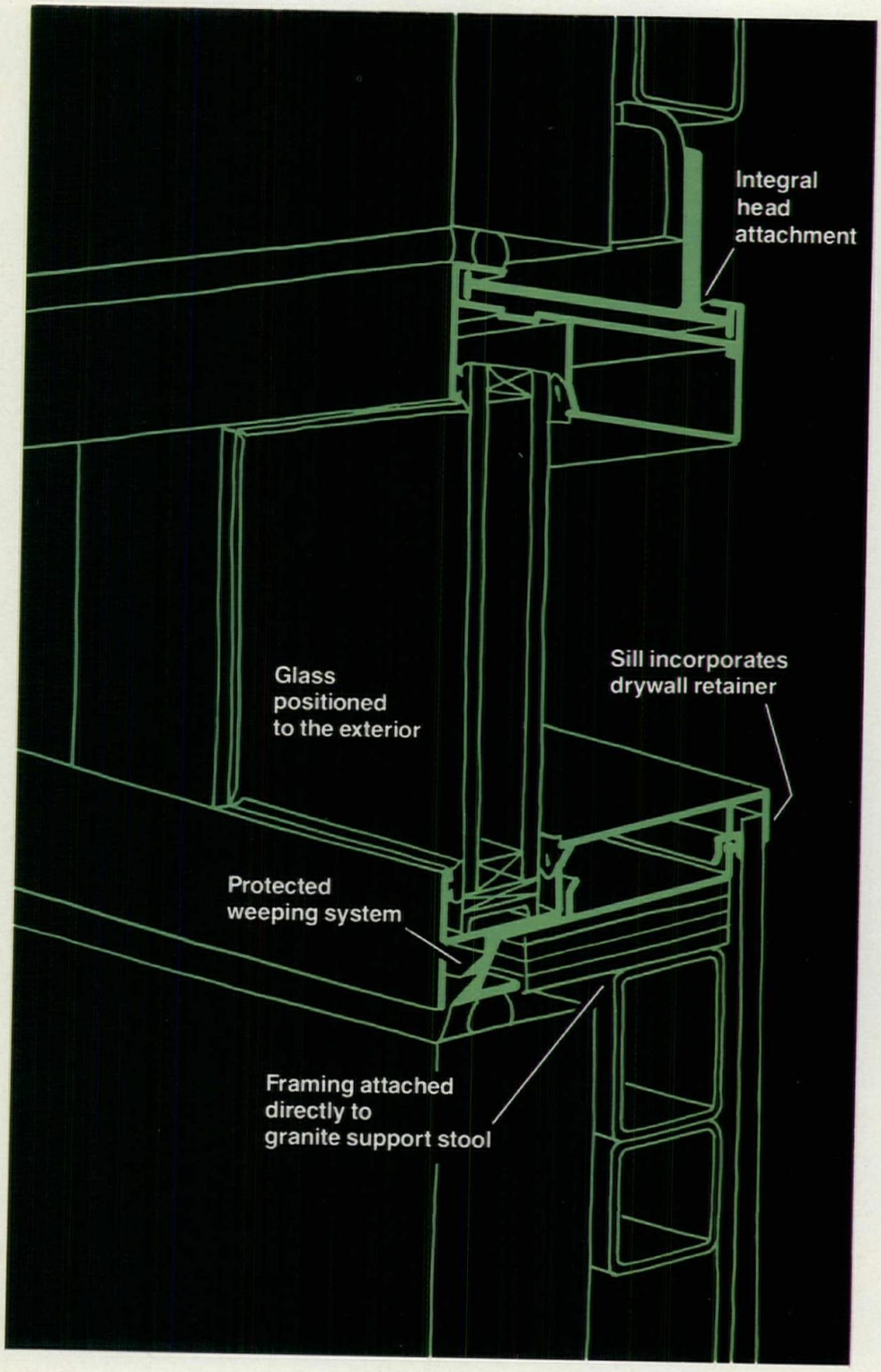
Andersen® Windowalls®
ANDERSEN CORPORATION BAYPORT, MINNESOTA 55003

and preserve our grassroots heritage,

think what they can do for your remodeling and restoration jobs!

Circle **No. 303** on Reader Service Card

Echelon from Tubelite . . . when standard window framing systems are not good enough.



Custom designed to fit the unique requirements of many of today's outstanding buildings, Echelon from Tubelite is our very best.

Custom engineered for your specific project, Echelon window framing systems can be used to achieve a variety of aesthetic effects while maintaining maximum air and water infiltration performance.

There's a very practical side to Echelon too. Unitized construction can speed installation and lower building costs. Echelon is glazed from the interior to achieve maximum labor savings and minimize replacement costs.

The next time you want something more than standard window framing systems, consider custom engineered Echelon from Tubelite. Let us send you our new Echelon brochure with details and examples of custom installations around the country. Call 616-832-2211 or write Customer Service Department, Tubelite Architectural Products, P. O. Box 118, Reed City, Michigan 49677

Tubelite

Circle **No. 396** on Reader Service Card

IF ALL YOU'VE SEEN ARE OUR DRAFTING TABLES, THEN YOU HAVEN'T SEEN THE LIGHT.

If you're running a top of the line design department, then why be in the dark when it comes to your light table? Our newest line of light tables for the contemporary interior now feature solid-state, full-range, dimming control.

At the simple twist of the wrist you can shed light on all those extra jobs you have to do that need light under the subject as well as on it . . . like viewing transparencies, tracing artwork, plans and photographs, aligning blueprints and more.

The full-range dimming switch lets you vary the light precisely to the conditions you work in . . . and when you're working over a light table for any length of time, it can keep a good day from becoming a bad one.

Mayline light tables come in ten styles, 14 colors with an almost endless selection of drawer combinations. All distinctively designed, beautifully built and backed by the name that's meant quality for nearly fifty years. Mayline. America's finest manufacturer of drafting furniture.

Send for our free literature on Mayline light tables, or just visit any of 4500 dealers nationwide and see the light . . . for yourself!

Mayline Company, Inc.,
619 N. Commerce Street,
Sheboygan, WI 53081

Circle **No. 361**

MAYLINE

The Congoleum difference

THE SOURCE for the toughest sheet vinyl floor you can buy.

- Superior to competition in durability tests.
- Superior stain resistance and easy no-wax care.
- 9′ and 12′ widths for fast, easy, seamless installations.
- Wide selection of designs and colors that complement any commercial interior.

THE SOURCE for outstanding service.

- Trained, responsive Congoleum sales professionals.
- Superior service from a national wholesale distribution network.

THE SOURCE for the commercial flooring program that makes your job easier.

- Sample portfolio with the latest designs and colors for your easy use.
- Literature and sampling programs designed to work for you.

To learn more about THE SOURCE, clip the coupon and mail with your business card to:

Mr. H.L. Biester
Manager of Marketing, Commercial Contract
Congoleum Corporation
195 Belgrove Drive
Kearny, N.J. 07032

☐ Yes, I'd like to see the Congoleum Commercial Contract Program.
☐ Please send me product and program information.

Congoleum

The difference is quality.

Circle **No. 317** on Reader Service Card

A synthetic rubber roof can go down in half the time of BUR– and stand up for years.

An experienced roofing contractor will usually install a quality single-ply rubber roof in about half the time it takes to cover the same area with built-up roofing. The table below shows the average number of squares laid per-man, per-day as reported by single-ply and BUR roofing systems suppliers and contractors:

	Single-Ply Synthetic Rubber			4-Ply Hot BUR
	Loose-Laid Ballasted	Fully Adhered	Partially Adhered	
Squares per Man/Day*	up to 12	5-8	8-12	3.5-5.5

*variation due to roof and system type, penetrations, flashings, etc.

In addition to faster installation and less labor, single-ply synthetic rubber roofs offer long life. Installations stand up to punishing weather, stay flexible in cold and don't get soft or sticky in heat.

Maintenance is easy, too. If something causes a leak to develop, repairs are usually simple. Most cuts or tears require only a patch of the synthetic rubber membrane.

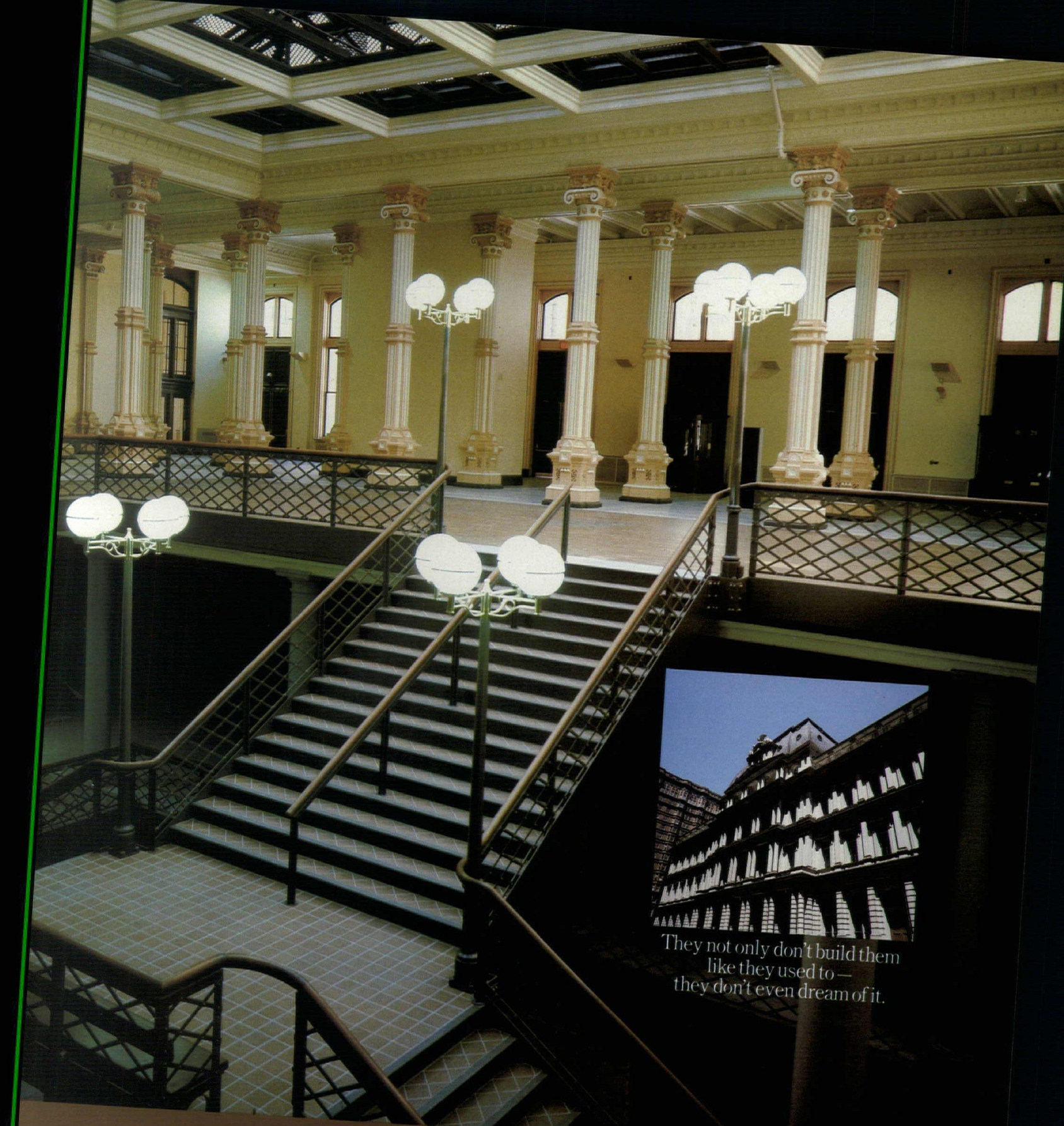
Call toll free 800-441-7111 Ext. 43.

Our experienced DuPont staff is available to discuss your specific problems, applications and needs. They'll give you information about synthetic rubber roofing membranes made from HYPALON,® NORDEL® EPDM or Neoprene. Or for free literature, write DuPont Company, Room X37822, Wilmington, DE 19898.

DUPONT

REG. U.S. PAT. & TM. OFF.

Circle **No. 329** on Reader Service Card

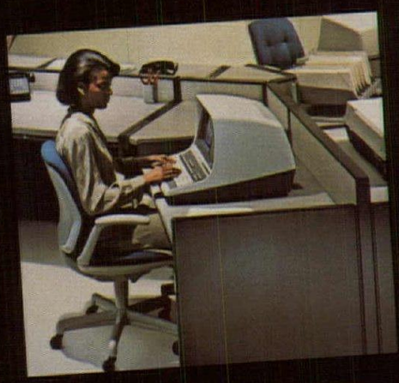


They not only don't build them
like they used to—
they don't even dream of it.

The Evolution Of A Classic.

This grand old U.S. Post Office in St. Louis is now a beautiful new federal office building. Mid-State's Carolina Colony Quarry Pavers were used to warm up the decor and stand up to traffic. Available in 6" x 6", 8" hex and 8" x 8" in five natural color ranges. Write for catalog at Box 1777, Lexington, N.C. 27292.

Mid-State Tile Company



No matter whose electronic equipment is used, be it Apple® to Xerox®, or Digital® to Wang®, Ultronic 9000 systems furniture supports it all. It is the most versatile, adjustable and comprehensive system to house everything from everybody... VDT units to printers.

Ultronic 9000 also helps increase the productivity of the people who operate the equipment and increases your design options in planning today's electronic offices.

For further information on Ultronic 9000, visit one of our Regional Offices or contact your Steelcase Representative. For worldwide product, service or sales information, write Steelcase Inc., Grand Rapids, MI 49501. Or, call toll-free 800-447-4700.

Steelcase

Ultronic 9000™ from Steelcase. It supports whichever button is pressed.

Circle No. 387 on Reader Service Card

AIS, Altos, Apple, Burroughs, CPT, Data General, Datapoint, Digital, Four-Phase, GE, Harris, Hewlett-Packard, Honeywell, IBM, ITT, Lanier, Lear, NBI, NCR, NT, Paradyne, Perkin-Elmer, Prime, Printronix, Raytheon, Sperry-Univac, Texas Instruments, Tektronix, Wang and Xerox are the registered trademarks of respectively... American Bell Advanced Information Systems; Altos Computer Systems; Apple Computers, Inc.; Burroughs Corporation; CPT Corporation; Data General; Datapoint; Digital Equipment Corporation; Four-Phase Systems.

General Electric Company, Harris Corporation, Computer Systems, Div., Hewlett Packard Company, Honeywell, International Business Machines Corporation, ITT World Communications Inc., Lanier Business Products, Inc., Lear Siegler, Inc., NBI, Inc., NCR Corporation, Northern Telecom Inc. Electronic Office Systems, Paradyne, The Perkin-Elmer Corporation, Prime Computer, Printronix Inc., Raytheon Company, Sperry-Univac, Mini-Computer Operations, Tektronix, Inc., Texas Instruments Inc., Wang Laboratories Inc., and Xerox Corporation

VULCRAFT'S INTEGRATED ROOF SYSTEM ADDS A NEW DIMENSION TO CONVENTIONAL CONSTRUCTION.

Vulcraft's unique pre-punched, pre-notched end lap assures proper installation and weathertightness.

The Snow Moving & Storage Company facility in Fort Worth, Texas involved a design quite common in conventional construction: the parapet wall. While the design offers a number of advantages, both aesthetically and functionally, it presented a challenge to find a roof system that would meet the demands of time, budget, and endurance.

Vulcraft met the challenge by designing a totally integrated roof system using our innovative standing seam roof in conjunction with our steel joists and joist girders.

The product of two years of intensive research, the Vulcraft Standing Seam Roof offered the general contractor, RED-E Builders, Inc., a weathertight roof system which effectively resists the detrimental effects of the freeze/thaw cycle so harmful to built-up roofs. Our "floating" clips allow up to 1 1/16" of roof expansion or contraction, independent of the internal structure. Our unique pre-punched, pre-notched end lap also helps assure proper, efficient installation and weathertightness.

Since the Vulcraft Standing Seam Roof was developed for conventional construction applications, we have roof-wall interface designs specifically for parapet walls.

Apart from the distinct advantages of the Vulcraft Standing Seam Roof, the real key to this job was the total integration of every element of the roof system. The joists, joist girders, and the standing seam roof were designed to work together for maximum efficiency. This also offered the contractor the added benefit of an enduring integrated roof system from a single source in a single shipment on a single purchase order. Couple these benefits with Vulcraft's lower costs and you have an exciting new dimension in conventional roof construction that can easily be summed up in one word: performance.

For more information concerning the Vulcraft Integrated Standing Seam Roof System or a copy of our catalog, contact the nearest Vulcraft plant listed below. Or, see Sweet's 7.2/Vu.

Roof-wall interface details for parapet wall.

P.O. Box 637, Brigham City, UT 84302 801/734-9433
P.O. Box F-2, Florence, SC 29502 803/662-0381
P.O. Box 169, Fort Payne, AL 35967 205/845-2460
*P.O. Box 186, Grapeland, TX 75844 409/687-4665
P.O. Box 59, Norfolk, NE 68701 402/371-0020
*P.O. Box 1000, St. Joe, IN 46785 219/337-5411

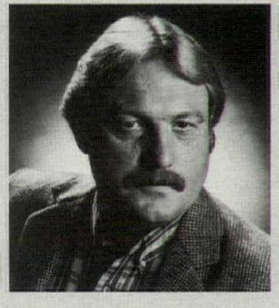
**Standing Seam Roof manufacturing locations*

VULCRAFT
A Division of Nucor Corporation

Circle **No. 367** on Reader Service Card

"THE BEAUTY OF GLASS WITHOUT COLOR."

"Every design, every work of art, must incorporate a plan for the control of light. Much of the orchestration of how the exterior impacts upon the interior in contemporary architecture is with the use of glass. My goal is to assist architects and designers in taking natural interior light far beyond its original expression via the simplicity and elegance of glass."



RONALD NEILL DIXON, N.D.D.
EXECUTIVE DESIGN DIRECTOR

Ronald Neill Dixon, N.D.D., Irish born and educated, is one of Europe's most highly awarded designers. Under contract with Interior Arts, Inc. as Executive Design Director, Mr. Dixon has created innovative, exciting and beautiful methods to control natural interior lighting by means of sculpted glass. For more information or initial consultation, call or mail us an inquiry on your letterhead.

InteriorArts

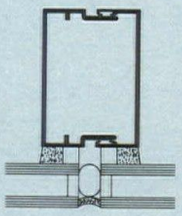
INTERIOR ARTS, INC.
POST OFFICE BOX 4169
LYNCHBURG, VA 24502 804/525-0941

Circle **No. 350** on Reader Service Card

Design View by Kawneer.

Less of the metal. More of the performance.

The flush-grid look. There is more to it than mere eye appeal. Because, even when aesthetic requirements are great, there still can be no substitutes for engineering integrity and performance assurance.



The Kawneer Design View framing system offers designers the opportunity to create the clear and seemingly unbroken expanses of glass which are so visually appealing. Design View achieves its beauty with a unitized pre-glazed system which eliminates the need for metal covers between lites of ¼" to 1" insulating glass. Design View features better engineering, such as head and sill glass retention, expansion-contraction between units, and performance testing results which prove its ability to

*Test results available on request.

resist the wear and tear of the elements, as well as the years.*

Reduced installation costs are part of the beauty of Kawneer Design View, too. The system is engineered to install completely from the interior, eliminating exterior installation costs, such as scaffolding.

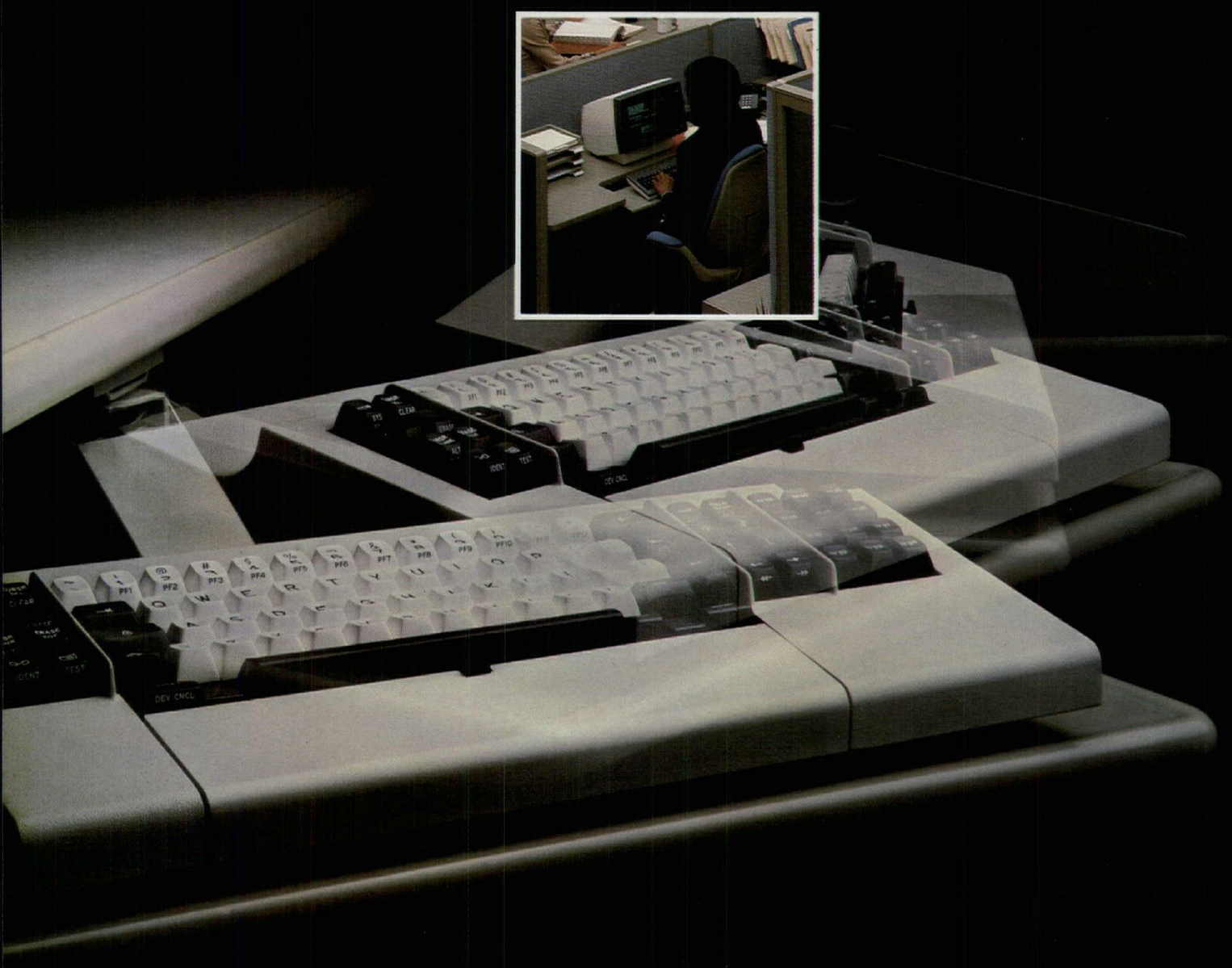
Lasting performance is assured in the Design View system by the combination of the structural silicone sealant that bonds the glass to the metal and the fact that the system is preglazed for better control of the workmanship. In addition, the unitized construction allows positive expansion and contraction, eliminating stress on the silicone joint. And, glass retention at head and sill provides greater security and peace of mind.

Kawneer's Design View system can give your design the look of today, and the strength for tomorrow. For more information, contact your Kawneer representative, or write: The Kawneer Company, Dept. C, 1105 North Front Street, Niles, MI 49120.

Kawneer
The designer's element.

Circle **No. 352** on Reader Service Card

We'll put your electronic office plans in motion.



With Award-Winning UniTek™ Adjustable Keyboard Pads by Haworth. Place keyboard pads on any work surface or table, and we'll put your ideas in motion. In-out, side-to-side, swiveling back and forth, or tucked away from view, IBD Gold Award-winning UniTek Adjustable Keyboard Pads will accommodate.

Then add to your options UniTek panel-mounted freestanding, mobile, and carousel designs, and the support of TriCircuit ERA-1®, the most versatile powered-panel system you can imagine. And make your move to the electronic office today, with Haworth.

Send for the "UniTek Electronic Support Package": Haworth Inc., One Haworth Center, Holland, MI 49423 U.S.A.

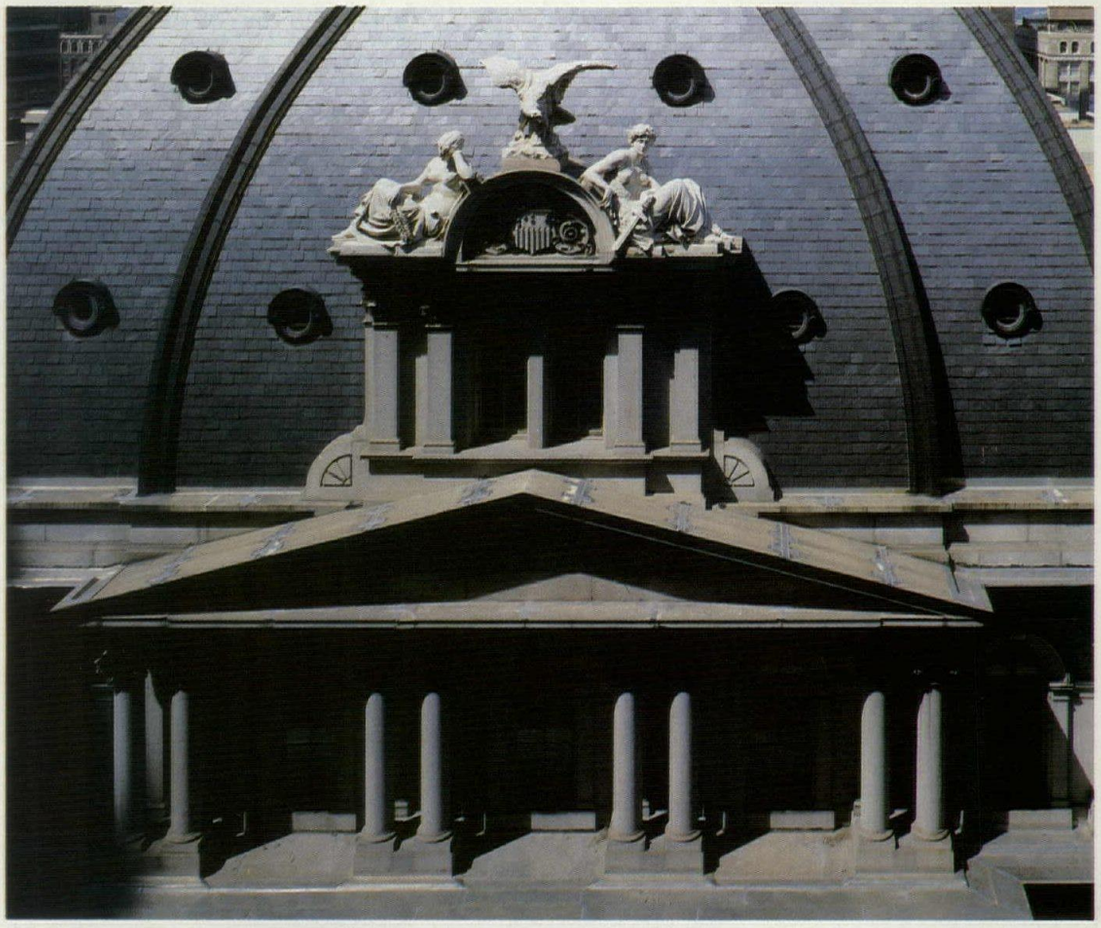
HAWORTH

OFFICE INTERIOR SYSTEMS

Circle No. 342 on Reader Service Card

Governments in reuse and preservation

Governments are among the largest property owners. As such, both their responsibilities and their opportunities for preservation and reuse are as great as those of the private sector. The stories of some recent efforts, that range from city activities to international involvement, are told on the following pages.



The Old Post Office in St. Louis, Mo. (right and p. 86), has been restored by PBNA Architects and Harry Weese & Associates. Shown here is a detail of its mansarded dome.

Until recently, involvement in preservation and reuse by governmental bodies has not always been encouraging, but things have not always been so. As Lawrence Durrell relates in *Sicilian Carousel* (Viking Press, 1977), "The Emperor Hadrian . . . made a valiant attempt (in Sicily) to make-over Athens anew, to restore its former glories by the addition of new temples and restored monuments." We no longer have emperors, but must count on good will and public support, beneficial tax credits, and proof of the advantages of reuse over new construction.

All of the projects shown in this issue were government sponsored, and some were the subject of long and often embittered struggles. It took a 16-year battle to save the St. Louis Post Office (pp. 86–91). Many preferred an office slab to the "dingy and empty building." Philadelphia City Hall's Conversation Hall (pp. 92–95) had been used as a trash room in which later a two-story office shell was built. The new Florida State Capitol was built inches from the old one (pp. 96–99) which, until a citizen uprising, was to be removed for a reflecting pool. In 1969 it was acceptable that our nation's primary diplomatic reception rooms (pp. 92–95) could be "motel moderne."

A bright spot here is the Chenango County Courthouse in Norwich, N.Y. (pp. 104–107), which has never changed use and sparkles anew as a jewel of the naïve Greek Revival common to its area. The two districts described in this issue are its oldest subjects. La Villita in San Antonio (pp. 108–113), now beautifully restored, has had a checkered career since the 1500s. The Friuli region of Italy (pp. 114–118), where Leonardo da Vinci once designed a town plan, was the victim of a terrible earthquake in 1976, but today is an example of what international cooperation can accomplish. This issue looks at preservation, reuse, and reconstruction from modern Washington to Renaissance Italy, and all with government support. One hopes, with such expanding activities, we can all breathe easier. [David Morton]

Old Post Office
St. Louis, Mo.

Divide and restore

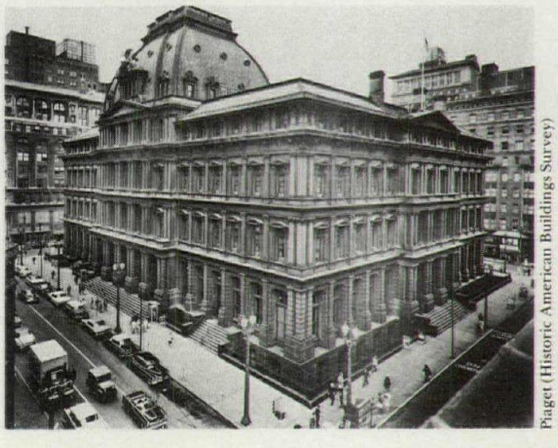
George McCue

Legislation has allowed mixed uses in an Alfred B. Mullett building restored by PBNA Architects and Harry Weese & Associates.

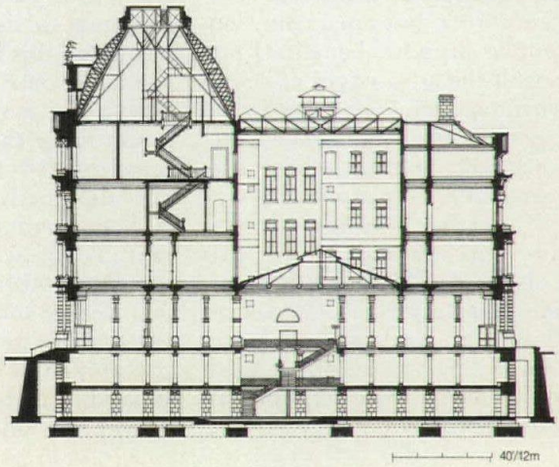
The United States Court House, Custom House, and Post Office—completed in 1884, on the decline after 1935, vacant after 1965, and for 16 years involved in a struggle for survival—has now regained its queenly demeanor in the heart of downtown St. Louis, thanks to a $16 million restoration and renovation that has established its future as a public center by the novel, and until 1976 unlawful, division of the building into government-occupied and commercial retail spaces.

The Old Post Office has four floors and two basements. Offices of federal officials and agencies are on the upper three floors. The main floor, now identified as the mall level, is a huge, skylighted, public circulation area with an apportionment of commercial space. The basement and subbasement are being subdivided and finished for commercial rentals according to tenants' needs and established design guidelines.

Even for those familiar with the building, visiting the restored structure is like seeing some of its features for the first time. Colors, they discover, had been used to enhance the deep-cut plaster moldings, cornices, medallions, and scrollwork, and to highlight the detailing in the forest of cast-iron supporting columns on the first floor, the rows of iron pilasters that relieve the long expanses of upper-floor corridors, and the iron stairway posts and balusters.



Piaget (Historic American Buildings Survey)



40/12m

The Old Post Office in St. Louis (right), one of only two surviving Second Empire buildings by A.B. Mullett, has walls of Maine granite with a Missouri granite base, and a slate mansard roof and dome with cast-iron trim. In the renovation, the only major design intervention on the original scheme was the removal of the central section of the first and basement floors (opposite page and section, right), to create a well for a new, grand staircase and for light to penetrate the lower multiuse stories. The glass from the original skylight has been removed, and a new skylight has been placed at the top of the original light well.

Color and light

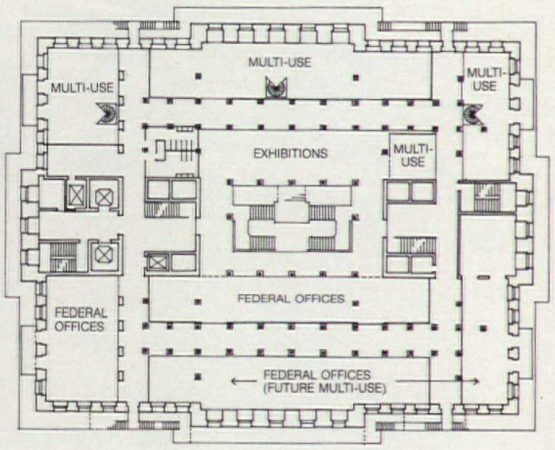
The exploratory removal of thick layers of interior paint, including considerable applications of bureaucrat green, brought to light a varied palette of brown, pink, russet, cream, and bluish gray that followed the scheme of ceramic floor tile still in good condition in stairwells and some hallways. For the first time since the Old Post Office was completed, it became evident that light colors were part of its design, not just as surface decoration, but integral with the architectural conception, to help illuminate the richly ornamented, palatial, and rather cavernous building.

The massive building, with gray granite walls tapering from four to three feet thick above the five-foot-thick foundation walls, was designed to admit as much daylight as possible through its numerous windows along the streets and around the 87′ x 70′ central light well. On the first floor, the windows—17 on the Olive and Locust Street sides, 13 on the other sides—are seven feet wide, alternating with wall units five feet wide. In the upper walls these proportions are reversed.

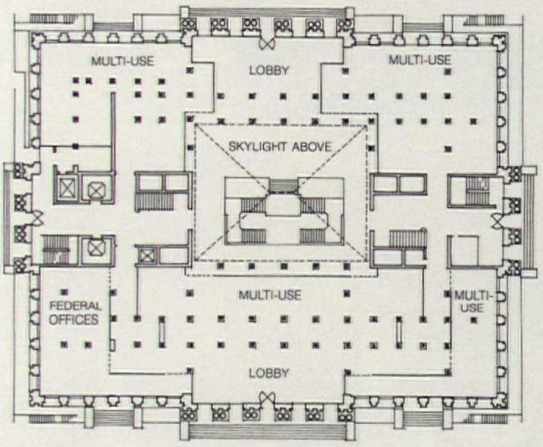
The configuration of the light well has now been subtly changed. Within it, a glassed skylight originally spanned the mail-sorting area on the second floor. The skylight glazing, damaged when covered with roofing after electric lights were installed, has now been removed. A new sawtooth skylight has been placed at the top of the light well, and the old skylight, its steel structure sandblasted to remove the old cement and paint, is now merely ornamental. Sunlight filters through the iron honeycomb grille, and lacy shadows are cast on the floor.

Minimum intervention

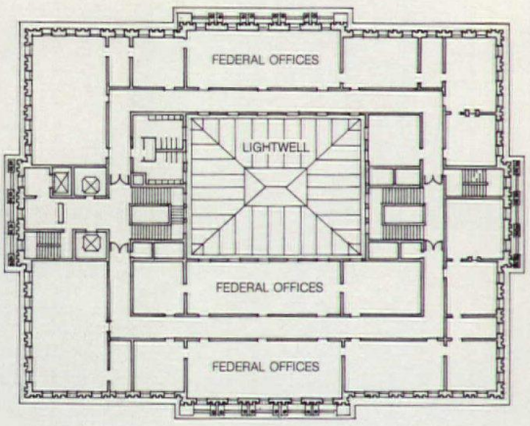
The St. Louis Old Post Office and the State, War, and Navy Building (now the Executive Office Building) in Washington, D.C., are the only survivors among the six Second Empire buildings designed by Alfred Bult Mullett, supervising architect of the Treasury Department from 1866 until 1874, who designed about 32 federal buildings in all. In



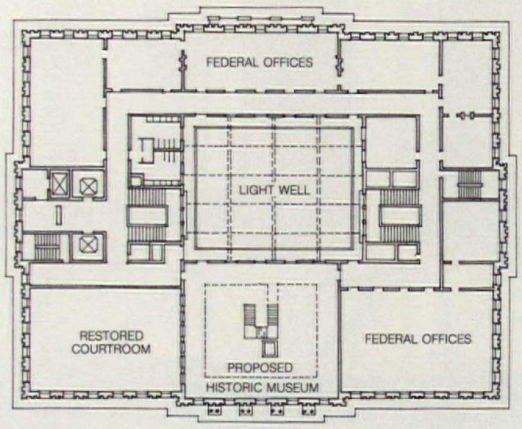
BASEMENT



FIRST FLOOR



SECOND FLOOR



FOURTH FLOOR N↑ 40'/12m

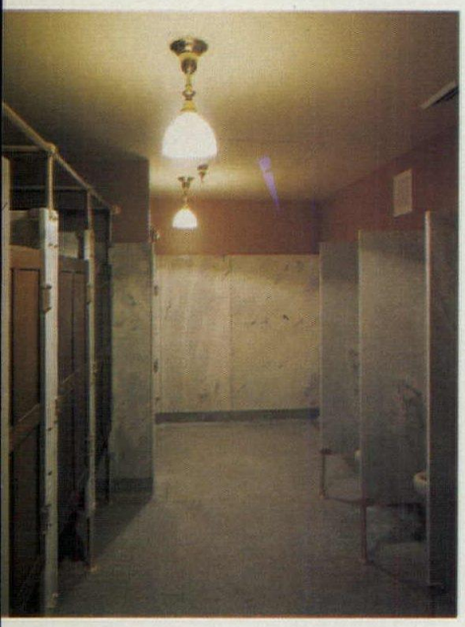
The 87' x 70' light well (top), now covered with a skylight, was part of the daylighting scheme for the original gas-lighted building, allowing sunlight into upper-floor corridors and offices. The scheme included, for reflective purposes, a surprisingly light and varied palette of colors, which has now been recreated throughout the building, with details carefully picked out in the grandly columned first floor (opposite page and above). The now unglazed skylight over the center of the area casts lacy shadows.

general, the philosophy of the renovation architects, PBNA Architects and Harry Weese & Associates, called for a minimum of intervention upon the original scheme of the building.

The most decisive intervention was the removal of the old mail-sorting floor area and the center of the first basement floor below it to extend the light well to the subbasement level, constructing within it a grand stairway in the Victorian tradition. Built entirely of steel ornamented with 5000 brass-coated acorn nuts, the comfortably proportioned staircase celebrates the structural and decorative values of its materials.

The basements are surprisingly spacious, with 16-foot ceiling heights. Their new center light well illumination is supplemented by daylight from windows in the "moat"—actually an areaway 28 feet deep and 8½ feet wide surrounding the building. Among the tantalizing historical remnants in the subbasement are the bricked-up openings to a railroad tunnel (later sealed because locomotive coal smoke billowed up through the building) which was considered for years a potential element in a rapid-transit system; and the fortress nature of the space, used originally as one of the country's three subtreasuries—it had its own well, could stock provisions for a defending force, and had windows fitted with sliding sheet-iron shutters 1½ inches thick that at the time were a newly patented protection against fire and are still in place.

The original Court of Appeals room on the third story had been converted to office space with a hung ceiling and fluorescent lights after the courts were moved to a new building. Now its full 35-foot ceiling height has been regained, with a pair of chandeliers that copy some in the State, War, and Navy Building. This 175-seat room in the building's federal territory is being used for conferences, receptions, lectures, and the like, but is also available for noncommercial community use,



The original color scheme, revealed by the careful removal of layers of paint, was based upon the hues found in the ceramic tile floors still in good condition in stairways and some halls (top). Faithfully restored features of the first basement are the washrooms (above), complete with original marble. The brass fittings were cleaned and given a baked-on vinyl coating.

such as concerts. A stage has replaced the judges' bench.

Number one preservation issue

Federal offices began leaving the Old Post Office for their own new building, completed in the early 1960s. In response to an inquiry by the GSA, which was eager to dispose of its unneeded property, the Park Service declared it to be of sufficient architectural and historical importance to merit preservation as a community landmark, and therefore be eligible to be conveyed without cost to the city—but for noncommercial use, such as a museum.

Meanwhile, several offers had been made to build an office tower on the site. The National Trust for Historic Preservation stated firmly that the building should be preserved, but in St. Louis there was uncertainty between clean-slate urban renewal, the typical solution of that time, or retention of what was seen as a dark, dingy, empty, and neglected building of the General Grant era.

In an article written for the *Post-Dispatch,* Buford Pickens, an architectural historian at Washington University, pointed to the "expression of permanence, stability, and the kind of spatial elegance no longer feasible in this age of forced obsolescence" under the grime. He outlined a conception of the building rehabilitated, with a rooftop skylight, first-floor concourse, good restaurants, commercial leasing, "as little space as possible" for offices, and "no museums"—a vision similar to the final renovation.

Several years of explorations of both preservation and replacement presented usable design conceptions, but financing remained a serious problem. Not even the preservationists favored a block-square museum in the middle of downtown, and the cost of a tower would have to include demolition, estimated at more than a half-million dollars, and involving some 10-ton granite blocks.

The man who finally wrought the miracle of organizing preservation and adaptive reuse support, although he did not live to see the result, was Austin P. Leland, a publisher of railroad freight tariffs, a trustee of the National Trust, and a director of Landmarks Association of St. Louis. Though he originally thought it was an "ugly building," he headed a committee to save the Old Post Office, and in the next seven years led four groups making presentations in Washington. His team produced a succession of designs by William Peckham and feasibility studies for various commercial uses.

U.S. Representative Leonor K. Sullivan, who had been dubious about preservation feasibility, sponsored a St. Louis meeting in 1971 where, for the first time, preservationists and opposed downtown interests were brought together with government spokesmen. S.K. Stevens, chairman of the Interior Department's Advisory Council on Historic Preservation, said that "preservation of all the remaining federal monumental buildings in the United States may well depend on finding a solution to the problem of the Old Post Office in St. Louis." In fact, it was gaining credentials as the number one preservation issue in the United States and became, in 1968, the first building in Missouri to be entered on the National Register of Historic Places, and in 1972 was declared a National Historic Landmark. In the *New York Times,* critic Ada Louise Huxtable, citing the St. Louis problem, devoted several articles to pointing out the national importance of keeping the government's historic buildings in self-sustaining service, as an alternative to, in effect, condemning them to death by restricting them to museum uses.

Mrs. Sullivan sponsored what became known as the "Old Post Office Law" to permit the free transfer of federal surplus buildings for community commercial use, under safeguards. Ironically, this was never applied in St. Louis because revenue bonds could not be issued to finance renovation, but the law has been useful elsewhere.

Eventually, the GSA found that its needs for more space could best be provided by the Old Post Office, after all, and it was willing to allow commercial use of part of the building. That took another law, the 1976 Public Buildings Cooperative Use Act, which Sen. Thomas F. Eagleton and Rep. Richard A. Gephardt said "has been the key to finally getting the Old Post Office restoration off the ground." At least two other cities were waiting to apply it the moment it was signed. The 1976 act cleared the way for the final outcome—an architectural design competition, two years of renovation, and now a return of the building as a downtown centerpiece with profitable uses. □

George McCue *is the retired arts and architecture critic of the* St. Louis Post-Dispatch. *This article is reprinted in shortened form from* St. Louis Commerce *magazine.*

Data

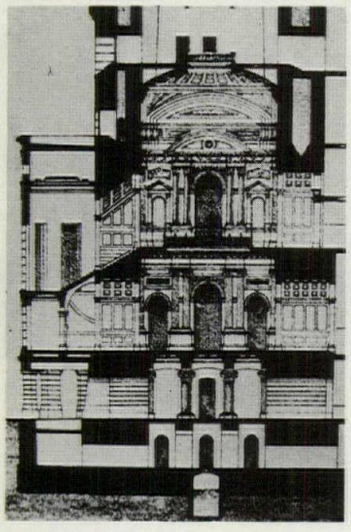
Project: *Old St. Louis Post Office renovation, St. Louis, Mo.*
Original architect: *Alfred Bult Mullett.*
Renovation architects: *A joint venture of Patty Berkebile Nelson Associates, Kansas City, Mo. (Thompson C. Nelson, principal in charge; David Immenschuh, director of interior design), and Harry Weese & Associates, Chicago.*
Client: *General Services Administration—Region VI.*
Site: *one full block in downtown.*
Program: *restoration of historic 1880s U.S. Treasury Department Second Empire building, to provide federal office space, commercial and multiuse spaces, a gathering room/convertible theater in the restored courtroom, and a proposed historic museum.*
Structural system: *existing masonry bearing walls with interior cast-iron columns and wrought-iron floor framing. Floors—brick segmented vaults spanning between purlins, with concrete fill. Foundation—stone footings bearing on pine piles. Wrought-iron dome framing. New structure—steel.*
Major materials: *exposed masonry in moat level, restored plaster (including ornate plaster in courtroom and public spaces), and new gypsum board on upper floors. Encaustic tile floors on original stairs and upper-level corridors. New steel stairs to basement levels.*
Consultants: *Gillum-Polk, structural. HOK Engineers, mechanical. Gage Babcock & Associates, fire protection. Hanscomb Associates, Inc., cost estimating. James Marston Fitch, historian.*
General contractor: *Rallo Contracting Company.*
Photography: *Barbara Elliott Martin, except as noted.*

The suspended ceiling that had subsequently been added to the Court of Appeals room on the third floor (above) has been removed, and its original splendor regained. A stage replaces the judges' bench, and its new uses include conferences, receptions, lectures, and concerts. The chandeliers are copies of some found in the State, War and Navy building in Washington, by Mullett.

Interior design:
Conversation Hall
North Portal
Philadelphia City Hall

Uncovering a cover-up

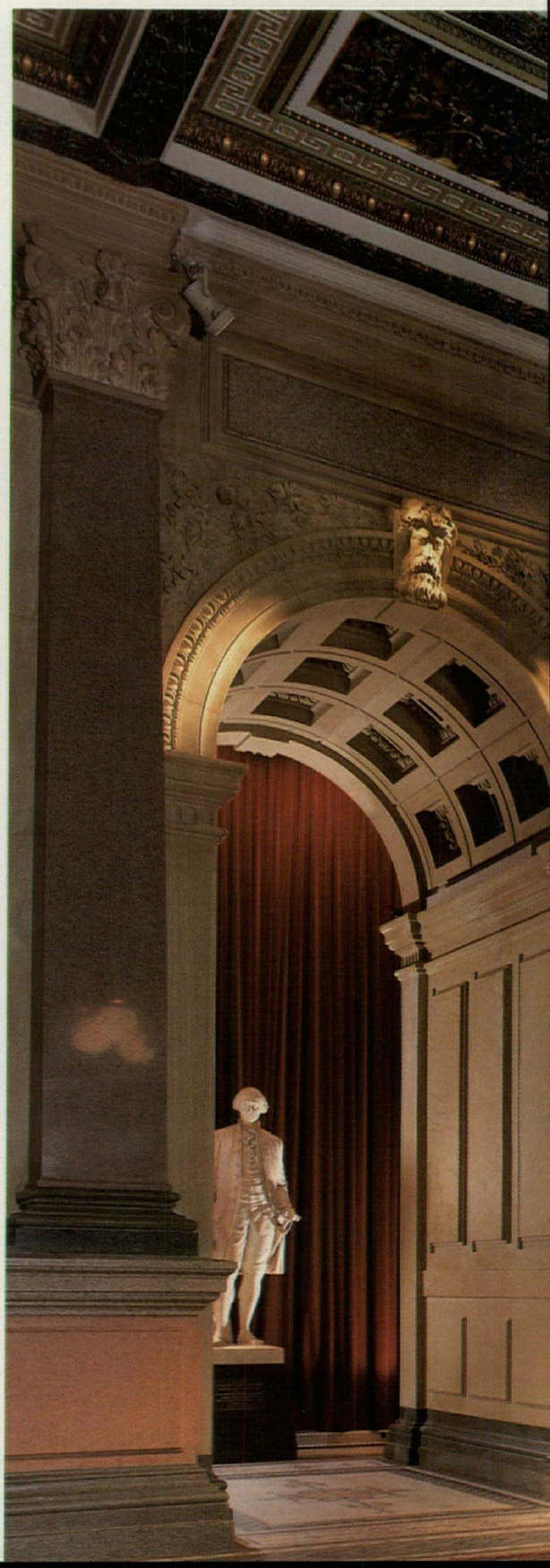
Hymen Myers with the Vitetta Group has restored one of Philadelphia City Hall's grandest rooms and one of its best kept secrets.



Government bureaucracy often grows at the expense of its public accessibility. No better example of that exists than Conversation Hall—Philadelphia City Hall's grand public reception room—that was used, over the years, as a drafting room, a trash room, and finally, as a two-story maze of offices. The recent restoration of Conversation Hall is a story of how the public regained access to the halls of government by circumventing the bureaucracy.

In John McArthur, Jr.'s 1873 design for City Hall, Conversation Hall functioned as a public lobbying room and caucus space for members of Philadelphia's common and select councils, whose chambers stood to either side of the hall. It lost that role, however, during the construction of city hall, when the city's government changed to a mayoral system with a single common council whose chambers moved to another floor. Further jeopardizing Conversation Hall were structural problems that developed during the construction of the 500-foot masonry bearing-wall tower above it. That forced McArthur's successor, William B. Powell, in 1895, to fill in some windows and doors, to remove a semicircular stair leading up to the new council chambers, and to separate the lower section of Conversation Hall from a domed space above with an intervening floor. Although those changes respected the ornamental detail of the original hall, they irrevocably altered the spatial character of McArthur's 1873 design.

With City Hall's completion in 1901, Conversation Hall served as a courtroom because of its accessibility by way of cascading stairs flanking the two-story, outdoor North Portal. But the hall's acoustics did not lend themselves to judicial debate. The space then went through a series of ever more inglorious uses until a reform government in the early 1950s, seeking the most efficient use of city hall, had the city's architect, George I. Lovatt, insert two floors of offices into Conversation Hall. Mr. Lovatt, like William B. Powell before him, managed to preserve the room as he changed it. He designed the two floors of offices to be self-supporting, holding their block walls five inches away from the carved sandstone, gently wedging their steel beams with wooden blocks against the granite pilasters, and boxing in the central chandelier untouched. Lovatt used the new construction to protect Conversation Hall from further abuse—a sensitivity to historic fabric that is all the more



Conversation Hall stands one floor above grade within Philadelphia City Hall's 500-foot-high masonry bearing wall tower, designed by John McArthur, Jr. in 1873 (opposite below). The building's North Portal gives access to the hall from Broad Street. Originally five and a half stories tall and capped with a dome, Conversation Hall was shortened to two stories in 1895 after structural problems appeared in the tower. The restored room (below) shows to full effect its sandstone walls, polished granite pilasters, mosaic tile floor, and ornamental plaster ceiling with aluminum leaf.

remarkable for having occurred in one of the most historically insensitive times.

From 1955 to 1981, Conversation Hall remained intact, but covered up and largely forgotten. Then in 1981, spurred by a local reporter who remembered an ornate room in city hall, a nonprofit group calling themselves the Friends of Conversation Hall hired Hymen Myers, a preservation architect and director of the Vitetta Group's Studio Four, to study the feasibility of restoring the space in time for the 300th anniversary of Philadelphia's founding. Myers recalls his excitement in discovering the hall intact behind its protective block walls. "I placed a painting over the hole in the wall and immediately got the mayor to come have a look."

With $709,000, raised by the Friends of Conversation Hall and the Philadelphia Historic Preservation Corporation from local corporations and foundations, the Vitetta Group had six months to complete the restoration for the city's anniversary celebration. Myers attributes their meeting the deadline under budget to their avoidance of public hearings and public bidding procedures. The architects, for example, sought bids from two general contractors with ample restoration experience, who got prices from a specified list of experienced subcontractors.

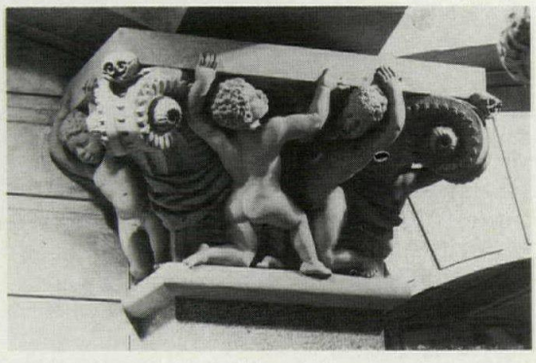
Demolishing the 1955 offices demanded as much care as their erection; they came down block by block. Workers then vacuumed and scrubbed the walls, using poultices on Alexander Milne Calder's carved busts. The ceiling received a fresh coat of paint prior to its regilding, while the mosaic tile floor, trenched in the 1960s for the installation of lighting for the floor below, was matched in pattern and color with epoxy paint.

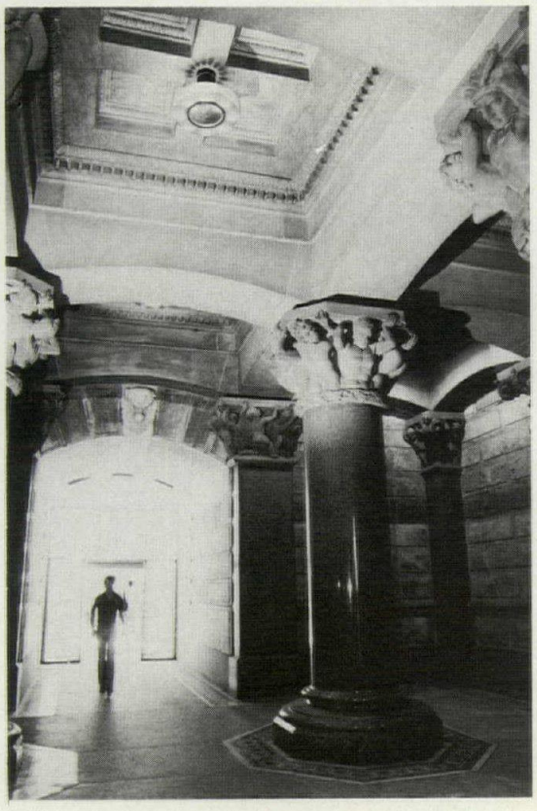
The central brass and bronze chandelier came down for cleaning and rewiring, for inverting its milk glass globes to better light the floor, and for placing spotlights within its crown to light the ceiling and stone busts. Uplighting in the barrel vaults was concealed behind metal strips at the top of the crown moldings, painted to match the adjacent sandstone. Myers placed the mechanical equipment in rated enclosures within two former coat closets, using two brass transom grilles (that he found in an antique store and that matched the originals) for supply air and having one door leaf into each closet kept permanently ajar (instead of placing louvers in the doors) for return air.

The North Portal also underwent restoration. Being outside and publicly accessible, the portal's stone had a heavy coating of urban grime and graffiti that was removed with chemical cleaners. The portal's cast-iron ceiling was repainted its original rust red color after Myers had two globelike chandeliers, hung in the 1950s, replaced with concealed lighting. He also had new bronze railings fabricated to match the original and had the bronze capitals of the six freestanding columns in the North Portal cleaned and polished.

Myers does not balk at using substitute materials to achieve an original effect, arguing persuasively that 19th-Century architects did that all the time—painting wood to look like marble or plaster to look like wood. Thus he had missing granite bosses on the column bases and missing pieces on the marble statue of Washington replaced with fiberglass colored to match. And match it does, for much less than the cost of granite or marble.

Powell's alteration, Lovatt's preservation, and Myers' restoration of Conversation Hall bears little criticism. Would that all such work were so carefully done. What demands our critical attention is the insensitivity of some government bureaucracies, whose need for space can overwhelm the architectural treasures in their possession, and of government bidding procedures that, in the name of saving public monies, award restoration work to the lowest bidders, frequently destroying what the public would give anything to save. Fortunately, for us, and for the people of Philadelphia, Conversation Hall was spared either fate. [Thomas Fisher]





The North Portal's huge scale (opposite) conveys its function as the city hall's front door. Cascading stairs lead up to Conversation Hall, giving the public a close-up view of the refabricated bronze railings and the repainted cast-iron ceiling.

Data

Project: *restoration of Conversation Hall and the North Portal, Philadelphia City Hall, Philadelphia, Pa.*
Original architect: *John McArthur, Jr.*
Restoration architects: *Vitetta Group/Studio Four, Philadelphia, Pa. (Hymen Myers, restoration architect in charge; A. Craig Morrison, restoration services manager; James Garrison, survey coordinator; Alma Alabilikian, interior designer).*
Client: *Friends of Conversation Hall, Mary Carroll, president.*
Program: *demolition of existing offices and the restoration of Conversation Hall and the adjoining North Portal for use as a public reception area.*
Structural system: *masonry bearing walls.*
Major materials: *existing stone walls, plaster ceiling, and restored chandelier. Mahogany doors and frames, lighting fixtures, and door hardware fabricated to match original (see Building materials, p. 160).*
Mechanical system: *forced air heating and cooling system using existing steam and chilled water lines.*
Consultants: *Raymond Grenald Associates; Lee Waldron, designer in charge (lighting).*
Contractor: *J.S. Cornell & Sons, General Contractors.*
Costs: *$605,000 excluding fees.*
Photography: *Tom Crane, except p. 95 by Joe Ciaglia.*

The one-story section of the North Portal (left) has gray marble walls and polished granite columns with carved cherub capitals and elephant head keystones. The freedom of that 1870s ornament contrasts with the restrained 1890s Classicism of Conversation Hall directly above.

Florida Historic Capitol
Tallahassee

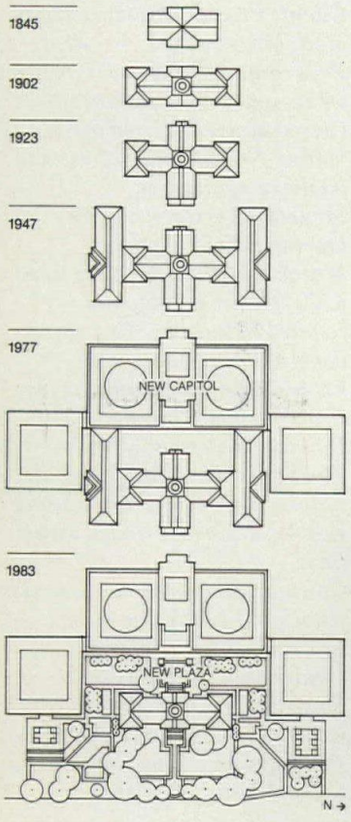
Grande dame

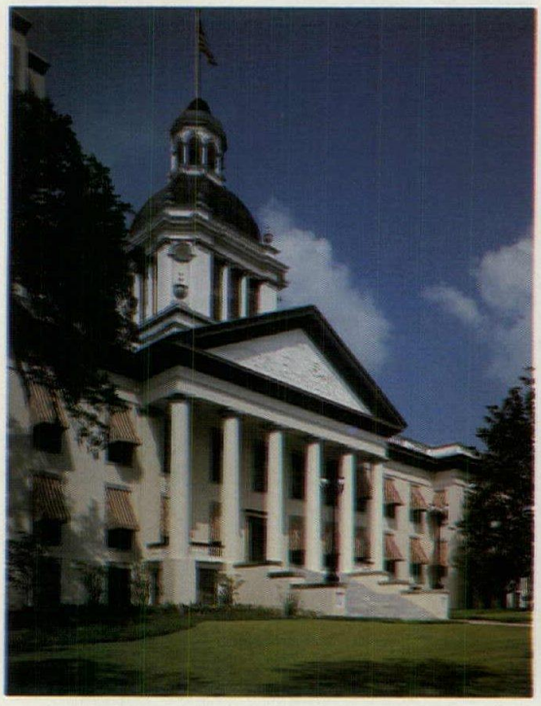
Once slated for demolition, Florida's Old Capitol has been restored to its former glory, under the watchful eye of Shepard Associates.

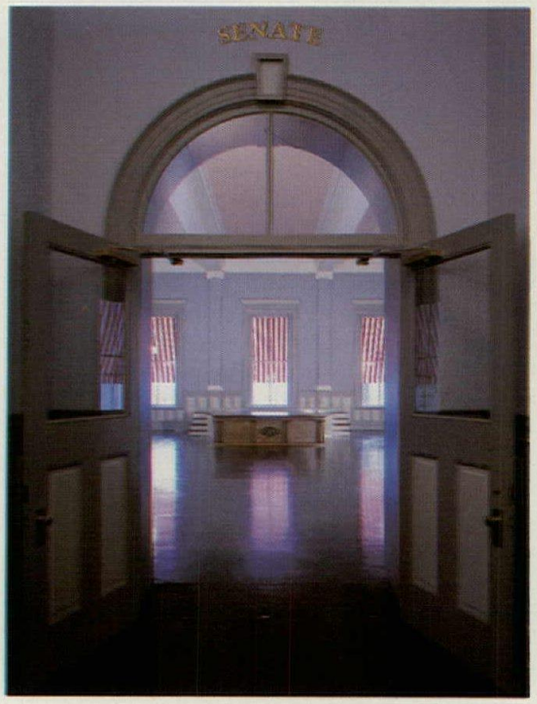
The dedication of Florida's restored Historic Capitol in Tallahassee last fall represented a victory not only for preservationists but for those who, to borrow Robert Venturi's memorable phrases, prefer "both-and" to "either-or." Now used as a museum of Florida state history, the white stucco building with its gray trim and red-striped awnings sits, in the words of Herschel E. Shepard, president of Shepard Associates, the Jacksonville firm responsible for the restoration, like "a jewel" worn by its ultra-Modern successor, the new Capitol, a 22-story tower designed by Edward Durrell Stone Associates and completed in 1977. For the old Capitol, however, it was a long road to breakfast at Tiffany's.

The original Capitol, designed by Alabama architect Cary Butt, was built in 1845 for $55,000. A major expansion, designed by South Carolina architect Franklin Pierce Milburn (later known for his railroad stations throughout the South), added north and south wings, more monumental east and west porticos, and a large dome, as well as a large rotunda stair, a central boiler system, and electric light. Subsequent expansions added east and west wings and extended porticos (c.1922), a north wing (1936), and a south wing (1947); these expansions destroyed the 1902 porticos, covered the dome, and gutted the interior, as an ever-growing state government ran out of office space. When the new Capitol was approved in the 1970s, demolition of the old building (to make way for a reflecting pool) seemed so certain that the new building was constructed just inches away from the old. But preservationists rallied to the cause, and after examining several conservation proposals, the State Legislature voted in 1978 to appropriate $7.1 million for the restoration of the Capitol to its 1902 configuration. The 1902 version of the building was chosen because it was the first modern expansion of the original Capitol, the last to house all three branches of government, the first to bear the familiar dome, and practically speaking, its reduced size gave both old and new buildings more breathing space and adequate fire access.

Restoration of the 1902 Capitol encompassed four phases. Phase I consisted of three parts: the complete field architectural and historical documentation of the existing building prior to restoration, carried out by the architects; historical research and documentation by the Historic Tallahassee Preservation Board; and archaeological research by the Division of Archives, History and Records Management. The Preservation Board and the Division of Archives, agencies of the Florida Department of State, sought out documents, furnishings, materials, photographs, and other clues to the Capitol's actual appearance in 1902. It was not an easy job.



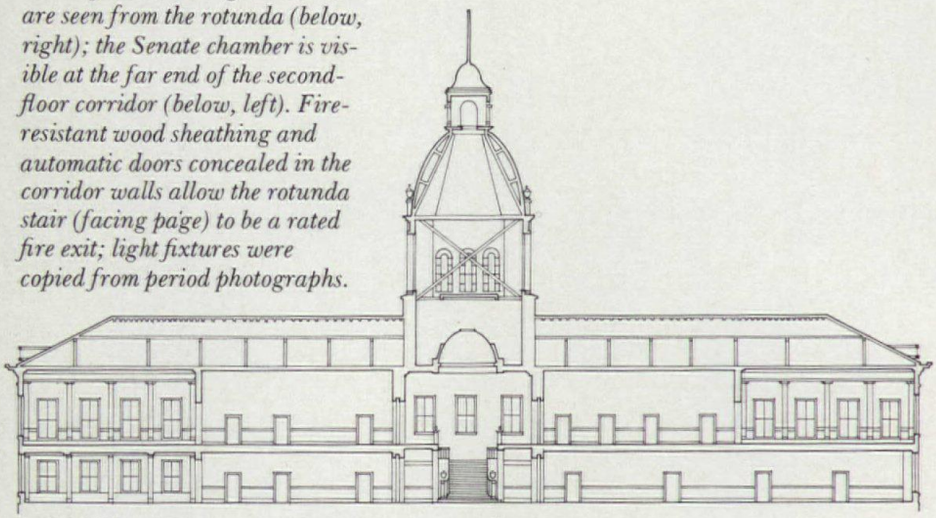




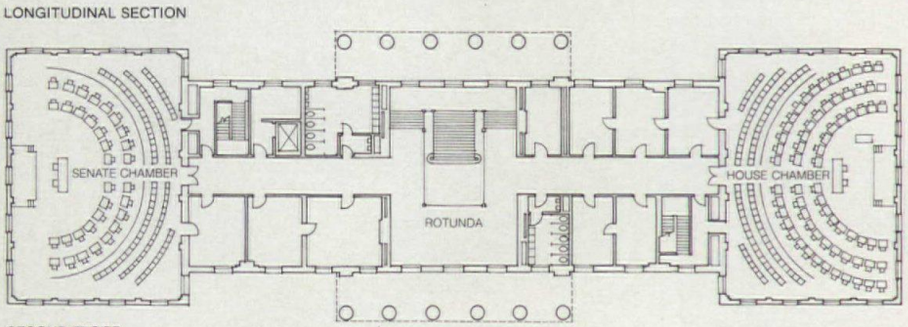
Schematic drawings (above) illustrate the various additions to the original 1845 Capitol, the layout of the new Capitol, the selective demolition required to restore the old Capitol to its 1902 configuration, and new site work. The Old Capitol's east portico (near right) bears its original zinc pediment; the Senate chamber (far right) will be furnished with both original and reproduction pieces.

Florida Historic Capitol

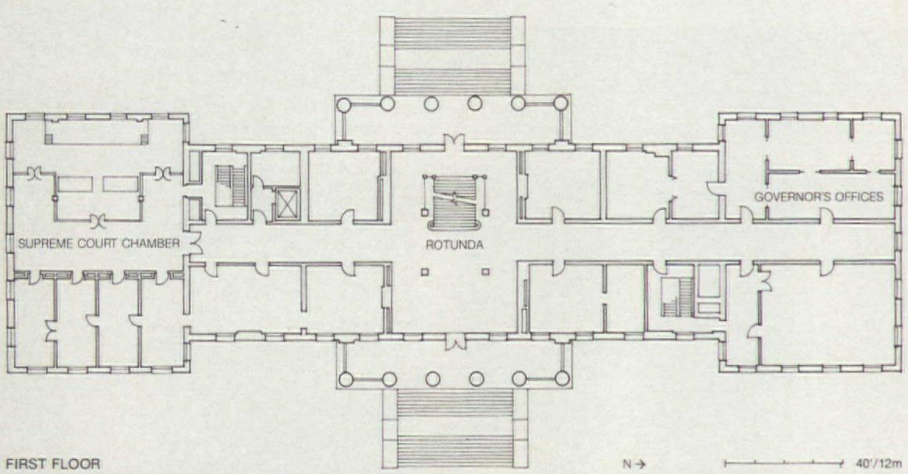
The cupola and art-glass dome are seen from the rotunda (below, right); the Senate chamber is visible at the far end of the second-floor corridor (below, left). Fire-resistant wood sheathing and automatic doors concealed in the corridor walls allow the rotunda stair (facing page) to be a rated fire exit; light fixtures were copied from period photographs.



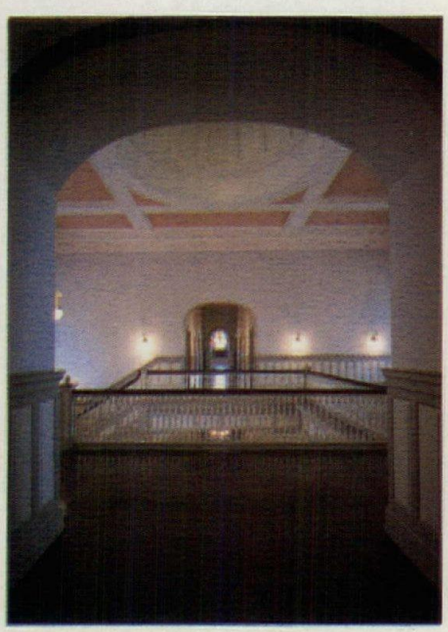
LONGITUDINAL SECTION

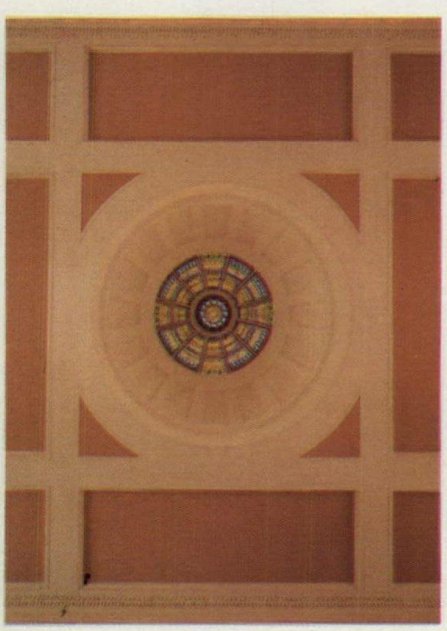


SECOND FLOOR



FIRST FLOOR





Milburn's drawings—save for a blueprint of the east pediment—were never found, and major architectural elements such as the rotunda stair had to be recreated from photographs. Shepard Associates made the first measured drawings of the building since 1902, and recorded every layer of finish ever applied—a process that took 10 months. Consultants included experts on historic paint color, preservation technology, and interior restoration. And on more than one occasion, the architectural and historical teams arrived, independently, at the same discoveries, such as when the paint color consultant found the colors of the Governor's office to be just as they were described in a speech by (then) Governor Jennings. Phase II included selective interior demolition and salvage, while Phase III involved the demolition of the 1922 west, 1936 north, and 1947 south wings. The demolition of the 1922 east wing and complete restoration of the 1902 building completed Phase IV. Ultimately, 80 percent of the building was razed.

While the selective demolition opened up a lot of space between the two buildings, the old Capitol remained a physical and visual impediment to the main (east) entrance of the new one. New pedestrian plazas at the north and south ends of the old building direct visitors to the new Capitol, where another plaza focuses attention on its entrance. The east and west 1902 porticos, demolished in 1922, were reconstructed; the granite steps, stone copings, and zinc pediment depicting the State Seal on the east portico are original (they were recycled in the 1922 expansion); cast concrete and copper replicas of the copings and pediment adorn the west portico.

Inside the building, the reconstructed rotunda stair rises majestically under an art glass dome, which was recreated on the basis of a heap of colored glass found in a wall during demolition, and lead canes that allowed researchers to replicate the original dome's radius and curvature. On the first floor, the Supreme Court's courtroom and the Governor's office will be refurnished with original and reproduction pieces, as will the House and Senate chambers on the second floor. Milburn's quietly patriotic color scheme of pale blue, terra cotta, and gray has been recreated throughout. The tall, graceful windows, crucial for ventilation in the sweltering summers before air conditioning came along, are still shaded by striped awnings, as they were in 1902; now, the awnings save 30 percent annually on cooling loads. Modern ductwork is gracefully concealed in ceiling coffers.

The project won the architects a 1983 Honor Award from the Florida Association of the AIA, and the state was given an award for outstanding architecture in the preservation field by the Florida Trust for Historic Preservation. When you look at the elegant old building, and then try to picture a reflecting pool in its place—well, why spoil your day even thinking about it? [Pilar Viladas]

Data

Project: *Florida Historic Capitol, Tallahassee, Fla.*

Original architect: *Cary Butt. 1902 expansion by Franklin P. Milburn.*

Architect: *Shepard Associates, Architects & Planners, Inc., Jacksonville, Fla. (Herschel E. Shepard, FAIA, architect in charge; Kenneth R. Smith, AIA, project manager; Catherine D. Lee, project documentation; Henry J. Link, project inspector; John P. Nelson, Manarcha Kunzendorf; Min Ja Bates Burns).*

Client: *State of Florida Department of General Services, in conjunction with the Florida Department of State.*

Program: *restoration of the Historic Capitol to its 1902 configuration, for use primarily as museum space (15,564 sq ft), with adaptive use office space (6040 sq ft) on the ground floor.*

Consultants: *Richard P. Clarson & Associates, civil engineers; T.Z. Chastain, P.E., structural; Dr. William Seale, interior restoration; F. Blair Reeves, FAIA, preservation; Frank S. Welsh, historic paint color; Phillip S. Wisley, preservation.*

General contractor: *Jack Culpepper Construction Co., Inc., restoration general contractor; Winchester Construction Co. Inc., demolition general contractor and selective demolition/salvage contractor, in conjunction with Albritton-Williams, Inc.*

Costs: *$4,561,450 for restoration and demolition; $98.09 per sq ft.*

Photography: *Steven Brooke.*

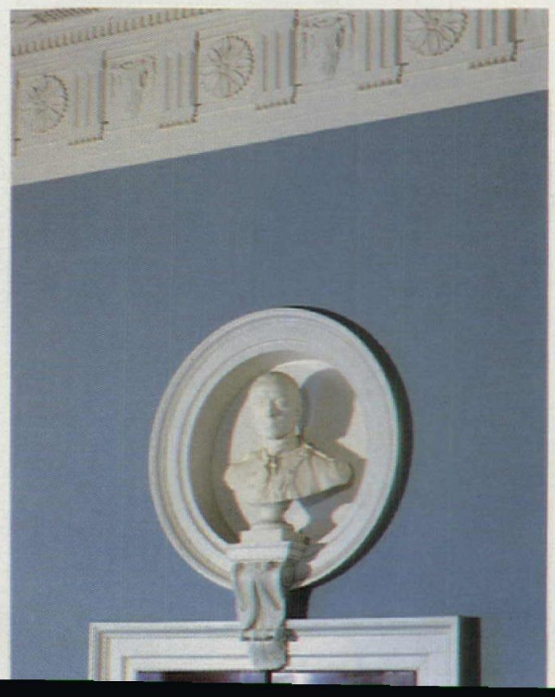
Interior design:
State Department
Reception Rooms
Washington, D.C.

The new Federalism

Over time, these diplomatic reception rooms have been transformed from Marriott Modern to 18th C. American.

Many are the legends that surround curator Clement Conger and his creation, the State Department Reception Rooms. Tales are still told on the collectors' circuit of his acquisition of Benjamin West's "Signing of the Treaty of Paris, 1782," the famous unfinished painting whose reluctant donor brought the original to Washington to be copied for the State Department collection—and went home with the copy. (The original now hangs above a fireplace in the John Quincy Adams State Reception Room.) Equally familiar are the anecdotes of yearly visits from donors in need of a quick tax deduction, who shop among pieces labeled "available for donation" (a curatorial euphemism coined by Conger).

Richard Cheek



The Thomas Jefferson Room (right, top) is modeled on Monticello. Both the entablature and the rhomboid-pattern mahogany flooring are derived from Jefferson's designs. The room is symmetrical about the fireplace; a statue of Jefferson occupies the niche exactly opposite the doors to the terrace. A bust of John Paul Jones (bottom) is inset above the doorway.

Steadily over the course of 20 years, Conger, who is also the curator of the White House, has built up a collection of Americana rivaling that of any museum in the country. Significantly, the collection has been acquired entirely through loans and gifts, totaling some $25 million to date. While open to the public on scheduled tours, the rooms are really designed for diplomacy: The suite, situated on the eighth floor of the State Department building, is often all a visiting dignitary ever sees of American cultural history, its artifacts and architecture.

Acquiring the pieces posed one set of problems; providing a suitable setting for them proved another. Of all the tall tales surrounding the collection and its history, none rival the real and evident contrast between the reception rooms and the building that houses them. The 1961 State Department building is a classic of its era, a piece of unadulterated GSA motel moderne. The original reception rooms, used by the President, Vice President, Chief Justice, and Cabinet officials for functions, featured 7′-6″ ceilings, floor-to-ceiling, plate-glass windows, acoustical tile, wall-to-wall carpeting, and "electric" colored furniture. Of these office-style interiors, only the Benjamin Franklin State Dining Room retains its 1960s appearance. The rest of the eighth floor diplomatic reception rooms have been "redesigned" to recreate the "Golden Age" (1740–1825) of American interiors.

Conger was assisted in this task by two architects, Edward Vason Jones and Walter M. Macomber, who have donated their time gratis. Jones, who died in 1980, and his successor Macomber are of a generation that predates the Modern movement; their separate practices and their work at the State Department signify the continuity of a Classical, American tradition, long overshadowed by the International Style. The nuances of their separate styles may not be easily spotted by diplomats and other visitors unschooled in Classical architecture, but to Macomber, who says he can date a building in the dark by feeling the molding, the differences are quite literally tangible. Jones, who also served as architectural consultant to the White House and to the Metropolitan Museum of Art's American Wing, worked in the more robust Philadelphia style; Macomber, whose long career has included positions at Williamsburg where he served as resident architect from

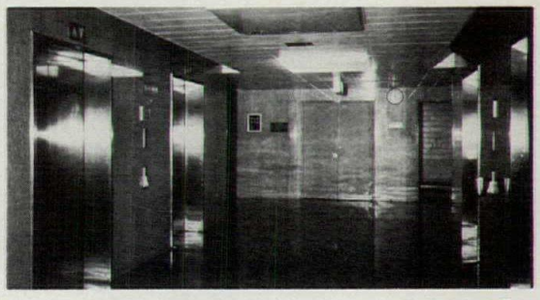
The rhythm of the new window wall, with its deep-set fireplace and windows, was determined by two existing structural columns that projected three feet into the room. They have been replaced by paired supports flanking a working fireplace that contains an extra flue for a future fireplace in the Office of the Secretary of State, one floor below. The mantelpiece came from an Early 19th-Century house near Boston, the King of Prussia marble hearth and facing from fireplaces in the Rectory of St. Peter's Church in Philadelphia.

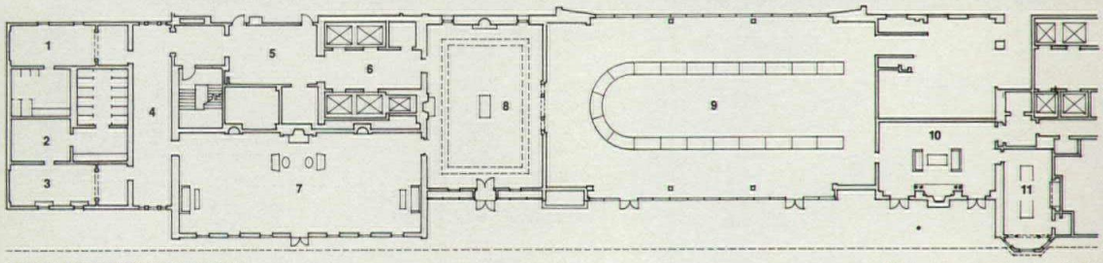
Richard Cheek

1928 to 1935 and at Mount Vernon where he served for 37 years as architectural consultant, works in the Virginia style.

Jones lived to complete the Gallery (opened 1969), the Adams (1972) and Jefferson (1974) rooms, the elevator lobby (1979, renamed in his honor), and the Martha Washington Ladies' Lounge (1980–81). In addition, the William Thurston Gentlemen's Lounge (1981), the Henry Clay dining room (1982), and the Van Buren reception rooms (in progress) were all completed according to his designs by Macomber. The Madison and Monroe rooms, which opened in August, are the first entirely of Macomber's design.

Both architects had to work within constraints imposed not only by the existing building but by the collection itself. In the Monroe room, two 16-inch structural columns set three feet from the window wall could not be relocated, but they were replaced by paired Corinthian columns, which frame a new working fireplace. The Madison dining room, used by the Secretary of State and his deputies, was organized to accommodate serving requirements. The end bay, which protrudes out onto the terrace, expands available circulation space around the





DIPLOMATIC RECEPTION ROOMS

1 Walter Thurston Gentlemen's Lounge
2 Dolly Madison Powder Room
3 Martha Washington Ladies Lounge
4 Gallery
5 Entrance Hall
6 Edward Vason Jones Memorial Hall
7 John Quincy Adams State Drawing Room
8 Thomas Jefferson State Reception Room
9 Benjamin Franklin State Dining Room
10 James Monroe Reception Room
11 James Madison State Dining Room

The Madison Room's bay window (left) breaks through the original plate glass window wall and projects five feet onto the terrace. A second 3'-6" x 10'-6" recess accommodates the Salem breakfront. The Franklin Room (below left), soon to be remodeled, is the last of the 1960s interiors. The elevator lobby (below right, and right) is shown before and after redesign. A plan of the suite (bottom left) shows the sequence of rooms.

table, and a niche, set into existing kitchen and serving facilities behind the dining room, houses a breakfront that had previously projected into the room and hampered movement.

The 90-year-old Macomber will retire upon the completion of the Martin Van Buren rooms, a series of staff dining and reception rooms not open to the public. (The Madison and Monroe rooms are also not open to the public, but the remaining rooms can be seen by appointment.) His successor will face perhaps the most challenging task of all: redesigning the Franklin room. Like the Adams room, the Franklin room suffers from extremely awkward proportions, and the expense of raising the roof to correct them may prove prohibitive. Nine architects, all classicists, are currently short-listed in a limited competition for the Franklin commission, which was organized by Conger with the assistance of Henry Hope Reed.

When the Franklin room is complete (planned for spring of 1985), Conger plans to tackle the seventh-floor suites of the Secretary of State and his deputy, whose rooms, although furnished in period pieces, retain their Modern decor. Then he hopes to spruce up the roof terrace, enhancing the spectacular views of the Lincoln Memorial and the Potomac. Meanwhile, other institutions, including the Supreme Court, Blair House, and the White House, have begun to borrow from the State Department's collection to furnish their own interiors. And so the peripatetic Mr. Conger continues to collect, daily reaffirming his claim to the title of "Grand Acquisitor." [Daralice D. Boles]

Data

Project: *Diplomatic Reception Rooms, U.S. Department of State, Washington, D.C.*

Original architects: *Graham, Anderson, Probst & White and Harley-Ellington with A.R. Clas.*

Interior architects: *Edward Vason Jones, Albany, Ga. (1965–1980); Walter M. Macomber, Sarasota, Fla. (1981–present).*

Client: *Fine Arts Committee, State Dept.; Clement Conger, chairman.*

Program: *redesign and furnish suite on top floor of State Dept. building used for diplomatic functions, following the precedents of 18th-Century American design.*

Consultants: *Odolph Blaylock, master carpenter; George Peoples, master plasterer and carpenter; David Flaharty, sculptor; Robert Jackson, faux bois and faux marbre painting; Tengo Un Amigo, painting.*

Contractors: *Bracey Lumber Co., Thomasville, Ga.; Gardiner & Gardiner, Crofton, Md.; Richard A. Brooks, construction superintendent.*

Major materials: *plaster, mahogany flooring and paneling; oil-based paint.*

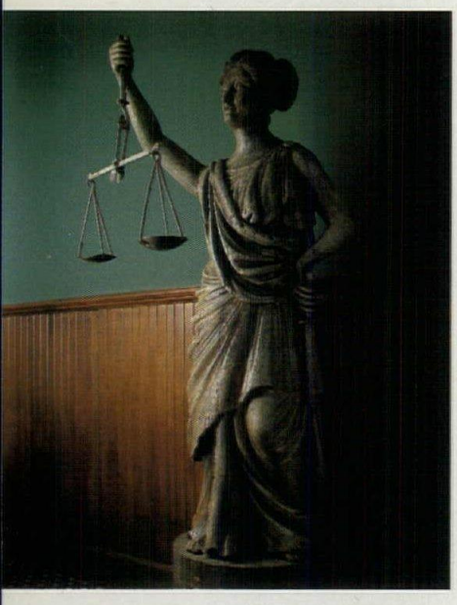
Costs: *$2.4 million architectural; $25 million total Americana project (to date).*

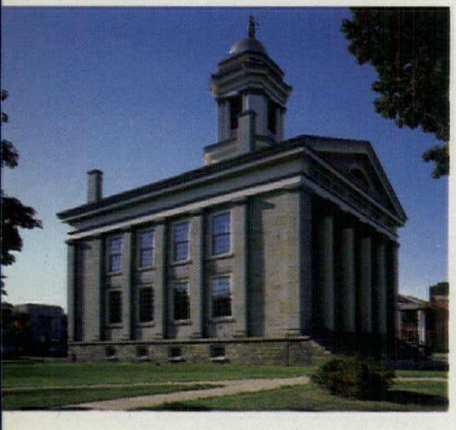
Photography: *Diplomatic Reception Rooms, U.S. Dept. of State.*

Chenango County Courthouse
Norwich, N.Y.

Doing Justice

Restoration work by Mendel-Mesick-Cohen-Waite Architects does justice to the folkloric spirit of a small but grand courthouse.





Justice—in the form of a wood-colored plastic statue with a steel armature that acts as a lightning rod—holds her scales high atop the gilt (real gold) cupola of the Chenango County Courthouse in upstate New York. The seemingly odd mixture of materials—from ersatz to super-practical to precious—reveals an eclectic approach to preservation that remains faithful to the spirit of the courthouse's 19th-Century builders.

The courthouse stands on the town green of Norwich (population 10,000), located within rolling farm countryside far from any major city and scarcely affected by modern suburbanization or tourism. During the century and a half since it was built, the courthouse has retained its original function. Its architectural form, on the other hand, has been somewhat modified over the years, but only in the 20th Century have these modifications lacked quality and sympathy with the original structure. Fortunately, these later expedient changes did little irreversible harm; and in 1977, when architects Mendel-Mesick-Cohen-Waite were called in, they were able to return the courthouse to a state congruent with the original spirit. At the same time, they upgraded the building to conform to contemporary standards for safety, comfort, energy conservation, and access for the disabled, and they added 50 percent of usable floor area by adapting the basement.

The spirit of the law

"In restoring the Chenango County Courthouse," say architects Jack Waite and Jim Cohen of Mendel-Mesick-Cohen-Waite, "it was important always to keep in mind the basic folkloric nature of the building." While the Greek Revival style lends monumentality to the rather small structure, it was never a "high style" building. Built in the 1830s most likely by local workmen following pattern books such as Asher Benjamin's *Practice of Architecture, The Country Builder's Assistant,* and *American Builder's Companion,* it has many obviously naïve features: Its columns are particularly stocky; the building's entasis is exaggerated (causing one uninformed engineer to declare at first sight that the walls were "bulging" and therefore structurally unsound, and to recommend its demolition); the original 12 over 12 windows were the kind of carryover from the earlier Federal style that would have been avoided on a high-style Greek Revival piece; the wood statue Justice atop the cupola was not created by an artist, but was ordered from a company that produced ships' figureheads; and the original black-and-white checkered floor on the ground floor was of oilcloth.

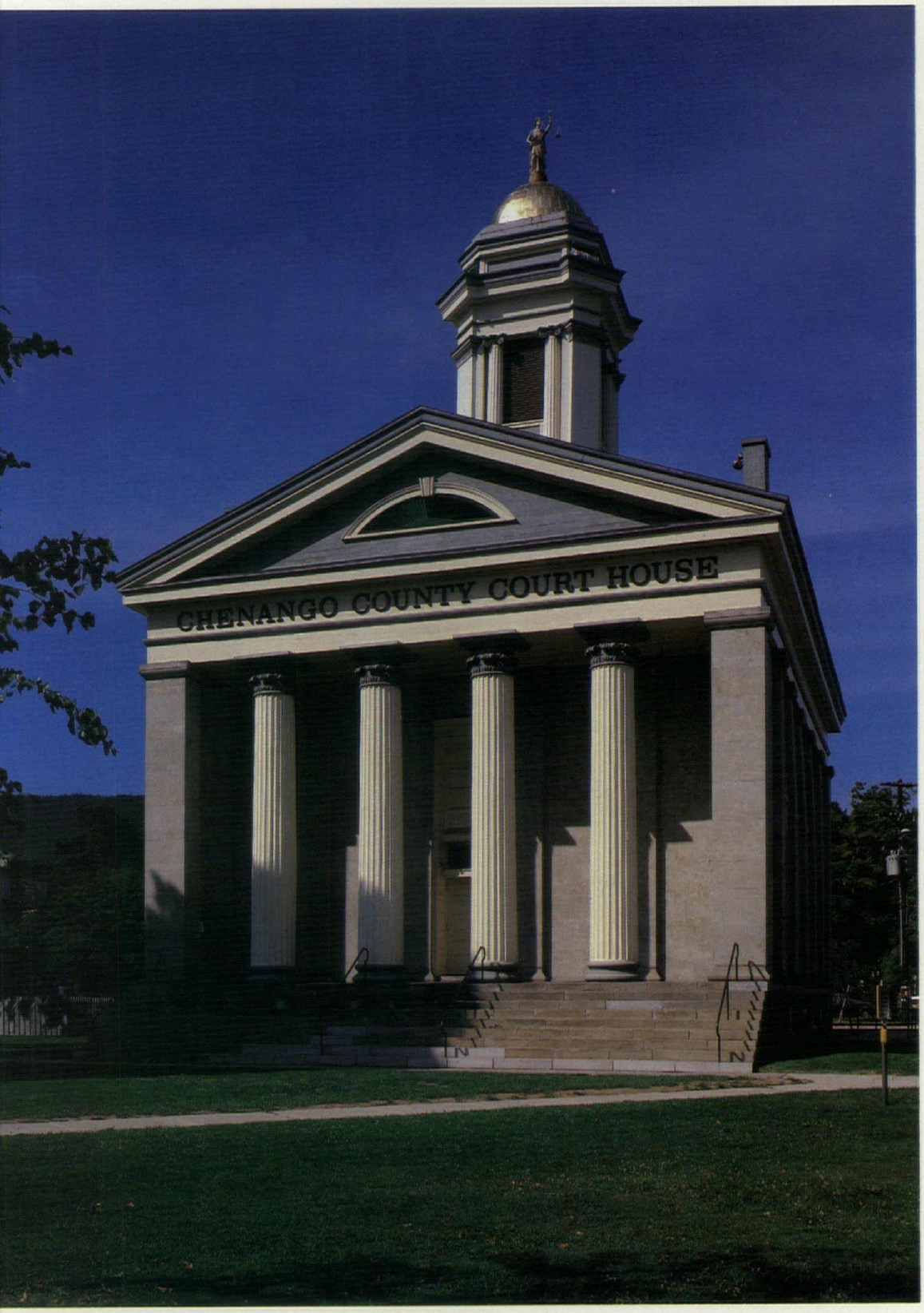
In replacing the latter two items, for example, a certain amount of soul-searching was necessary to arrive at materials appropriate to the original spirit. In the case of the oilcloth, traces of which were found under layers of materials subsequently added, more durable floor coverings were considered—wood, which was used in other courthouses of the period in the area, and black-and-white marble replicating the original pattern. Finally, however, a checkerboard of vinyl was used, which reproduces the acoustical and textural qualities of the oilcloth and, like the oilcloth, is a "common" material which will require future replacements.

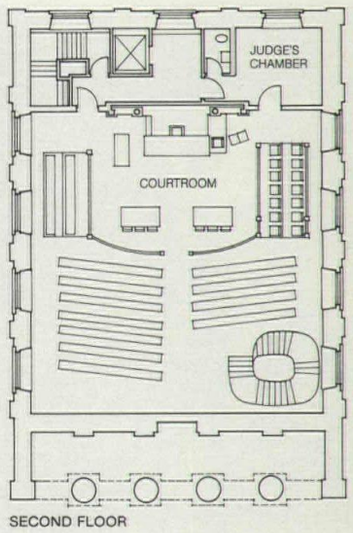
Restraint was necessary, as well, in the replacement of the wood statue Justice, which had been damaged by lightning and awkwardly repaired. Because of the figure's vulnerable position atop the cupola, it was decided not to reuse wood. To reflect the cherished position the courthouse now holds in their hearts, the townspeople wished to have Justice recast in bronze; but the architects felt that this material was in a completely different class from the rest of the building. They recommended redoing Justice in reinforced polyester—a kind of modern-day equivalent to ordering a ship's figurehead rather than commissioning a sculpture—and their recommendation prevailed.

The many letters of the law

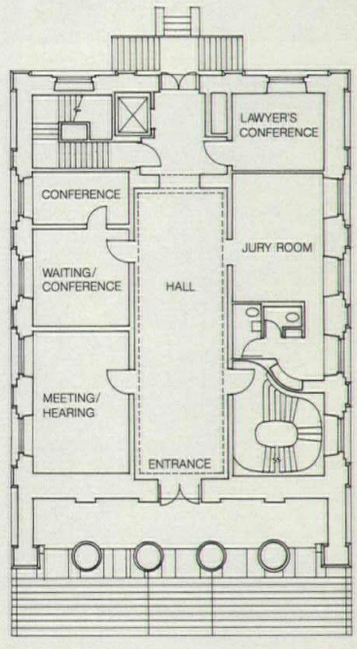
While the architects remained faithful to the spirit of the original building, they felt that the many remodelings over the years necessitated an eclectic approach to style. In the case of the courtroom, located on the upper floor, there was almost no question that a style later than the original should be followed. In the 1890s, the second floor was completely redone in brilliant greens, deep red, gilt, and dark oak. Even the orientation of the courtroom was reversed 180 degrees, so that the judge's chair was no longer at the east end but at the west, and the main stairs were no longer centrally situated at the west end opposite the front entry, but were relocated in the southeast corner next to the door. Mendel-Mesick-Cohen-Waite found no traces of

Chenango County Courthouse, standing on Norwich's well-treed town green still surrounded by several 19th- and early 20th-Century buildings, has been restored, on the exterior, to its mid-19th Century state. The original stucco fluting on its columns has been redone; the original 12/12 wood windows have been replicated, now in double glazing; the entrance door has been replaced following the original composition; limestone treads, where changed, have been reinstalled (and still have to weather to match the original steps); historic paint colors were restored on all woodwork; the four original chimneys were rebuilt, and now act as ventilators; and a new plastic statue of Justice, molded from the original wood one, which now is displayed in the courtroom, opposite page, stands atop the restored cupola. Lettering was added by the client.





SECOND FLOOR



FIRST FLOOR N→ 10'/3m

The interior shows a more eclectic approach. The upper-story courtroom (opposite page), which was completely rebuilt in the 1890s, has been restored to its richly colorful state of that time. The first-floor hallway (top above) and offices follow the subdued color scheme of the 1830s, with the original black-and-white oilcloth reproduced in vinyl. The new curvilinear main staircase (above) is modern.

the original 1830s room, but even if its probable state could have been reconstructed, they felt that it would have been a shame to destroy the glorious Victorian space—or the remnants of that glory, for the 20th Century had treated it badly.

The architects were able to make happy choices in the retention and reconstruction of 19th-Century features, but almost all of the 20th-Century modifications had been dismal. Most astounding were the additions of suspended ceilings that not only hid the remarkable, ornate tin ceilings, but also, in their latest configuration (for three layers were discovered), cut off the upper four feet of the windows. The added ceilings were removed, missing and damaged areas of the tin ceiling reproduced in polyester, and the 19th-Century colors, as ascertained by paint seriation analyses conducted in the architects' office, were reapplied—brilliant 1890s colors in the courtroom on the upper floor, and a muted 1860s palette of creams in the offices and hallway on the lower floor, which had not undergone major Victorianization.

Another early 20th-Century alteration unsympathetic with the basic architecture of the courthouse were windows vertically divided into two. The architects now have had the original 12 over 12 configuration replicated, using double glazing for energy conservation.

All mod cons

Bringing the building up to contemporary standards of safety and convenience required a new set of changes, which were executed in such a way as to harm the basic building fabric as little as possible, and with the aim of being minimally obtrusive, visually. The main staircase to the second story, built next to the front entry in the 1890s, had insufficient headroom; a second means of egress and an elevator for access for the disabled were necessary as well. The main staircase was completely rebuilt within the 1890s volume, using a curved configuration to achieve sufficient clearance. A variance allowed the entire courtroom to be treated as part of the escape system so that no stair enclosure would violate the integrity of the otherwise symmetrical space. The oak bannister and minimal metal balustrades are intentionally unobtrusive, but such fastidious design courtesy resulted in design timidity: They are too skimpy for the 19th-Century architecture and unintentionally appear, in combination with the curved stair form, to be an inappropriate throwback to the 1950s. The secondary stairs and elevator are neatly tucked into the diagonally opposite corner.

New lighting is provided in the hallway and courtroom by reproductions of 1890s brass gas chandeliers of a type found in the building. In the ground-floor offices, suspended fluorescent fixtures provide the necessary lighting level. While they do not mar or obscure the tin ceilings as recessed or surface-mounted fixtures would have done, they are bulky and interfere with the view of the windows as one enters the rooms. Perhaps some preferable solution, such as a slimmer model, could have been found for this difficult problem.

For heating and air conditioning, a new two-pipe fan coil system has been installed, the units easily recessed into existing walls. A new mechanical ventilation system uses existing mechanical chases, four chimneys rebuilt as they had originally existed, and the building's 19th-Century sheet-metal roof ventilator. New washrooms, piping, and mechanical rooms have unobtrusively been added. A totally new electrical system has been installed. Insulation has been added to the basement walls and roof, and the windows double-glazed, as mentioned, and weatherstripped for energy conservation. To provide access for the handicapped, a ramp has been built that leads to a reactivated door to the reclaimed lower level.

The process of the law

After World War II, the dreary state of the courthouse led to recommendation for its demolition, but public opinion remained on the side of its retention. Similarly, in 1967, when a consulting engineer reported on its deteriorated roof structure and its dangerously "bowing" (as he thought) walls, private citizens again opposed a proposal to destroy it and replace it by adding a story to the nearby 1960s county office building. An ad hoc committee of merchants, together with the county historian and planner, was then formed. It became particularly active by the mid-1970s, with the participation of the county judges, local supreme court justice, sheriff, and the particularly effective chairman of the Board of Supervisors, William Craine.

In 1977, Mendel-Mesick-Cohen-Waite Architects were called in, and by the end of that year the restoration of the courthouse began, using funding provided under the National Historic Preservation Act grant program from the U.S. Department of the Interior through the New York State Historic Preservation Office, and the Local Public Works grant program of the Economic Development Administration of the U.S. Department of Commerce. A historic structures report was funded by a matching National Historic Preservation Act survey and planning grant. The county raised the majority of the funds necessary, together with federal revenue-sharing funds and some private donations, and by 1981, the restoration was complete. Throughout, the courthouse committee remained active participants in the design process, and they are justifiably proud of the results. For $84 per square foot, comparable to new construction, they have a civic building far grander and richer than what they were likely to have expected in a modern replacement. And the neighboring counties not only envy them, they are also following suit: In nearby Cooperstown, for example, the Otsego County Courthouse is now being restored. Preservation success begets respect for existing architectural fabric.

[Susan Doubilet]

Data

Project: *Chenango County Courthouse, Norwich, N.Y.*

Restoration architects: *Mendel-Mesick-Cohen-Waite Architects, Albany, N.Y. (John G. Waite, James A. Cohen, partners in charge; team: Douglas G. Bucher, Charles B. Tonetti, Michael Glynn, Ted W. Mallin).*

Client: *Chenango County.*

Site: *West Square (originally "green" of Norwich) in the center of the town.*

Program: *lower level—hearing rooms, grand jury room, mechanical room, public toilets, corridor/exhibition area. First floor—jury room, meeting/hearing room, conference rooms. Second floor—court room, judge's chambers.*

Structural system: *original masonry bearing walls with wood floor joists.*

Mechanical system: *gas-fired boiler, fan-coil units.*

Major materials: *original dressed limestone from local quarries. Interior: new partitions, gypsum board. First-story flooring: vinyl. New steel stairs. Nylon Wilton "historical" carpet for stairs and courtroom (see Building materials, p. 160).*

Consultants: *structural—Gordon Hyatt of Eckerlin, Klepper, Hahn & Hyatt Consulting Engineers; mechanical—Robert D. Krouner, Consulting Engineer; statue restoration—Faye T. Wrubel, Cooperstown Conservation Program, State University of New York at Oneonta; replica statue—William Huebbe.*

General contractor: *Homer C. Gow & Sons.*

Costs: *$879,757; $83.79 per sq ft (1980), including site work, interior finishes, and fees.*

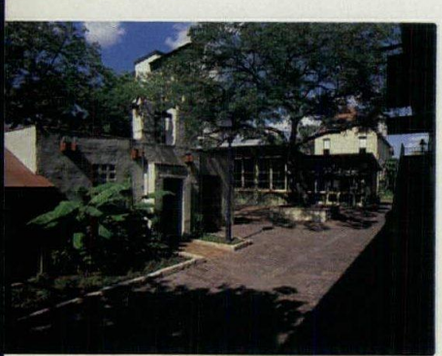
Photography: *Patricia Layman Bazelon.*

La Villita
San Antonio

Little town

After surviving a stormy and colorful past, a fine in-town pocket is brought into a new life by a joint venture called La Villita Associated Architects.

Holding out against bigger and bigger buildings, La Villita invites only pedestrians into its refuge of plazas and people-scaled spaces. Plaza Juarez portal (facing page, top), with new paving, opens into the plaza, scene of many festive events (facing page, bottom).



Over the course of years, decades, and centuries, neighborhoods change inevitably, some in a steady progression upward or downward in quality, and some on a seesaw course. La Villita, the "little town" in San Antonio, has been on a seesaw since the year 1500. The ride hasn't been smooth.

In the beginning of recorded or semi-documented history—around 1500—the area was occupied by Cohuiltecan Indians. In 1536, Spanish explorers led by Cabeza de Vaca appeared; but it wasn't until 1718 that Don Martin de Alaron founded the first Spanish outpost nearby, and Mission Indians settled at La Villita. Between 1722 and 1813, intermarriage changed the population mix, and local revolts against Spanish rule gained strength. Retribution by Spanish leaders against several unsuccessful challenges had, by 1813, virtually depopulated La Villita.

In 1819, however, floods plagued San Antonio, and aristocrats from across the river sought the higher ground of La Villita for rebuilding their homes. Still, Texas wanted self-rule, and The Battle of San Antonio and the fall of the Alamo in 1836 again depopulated La Villita. Not to be suppressed, the area came back, and with the influx of French, German, and Polish residents came church, opera, and school facilities. By the end of the Civil War in 1865, La Villita seemed ready for a peaceful existence.

But 1868 saw a severe storm which damaged many aged Spanish buildings, and a cholera epidemic and bouts with smallpox in the winter tore at the population. By 1900, residents, crowded by ever taller buildings and paved streets, began to move out and leave La Villita on the decline again. The following 30 years, according to historical consultant Anne Marcia Watson, saw a considerable increase in the development of commercial, industrial, and rooming house activity. By 1934, "small adobe houses disappeared in a maze of sheetmetal sheds," Watson notes.

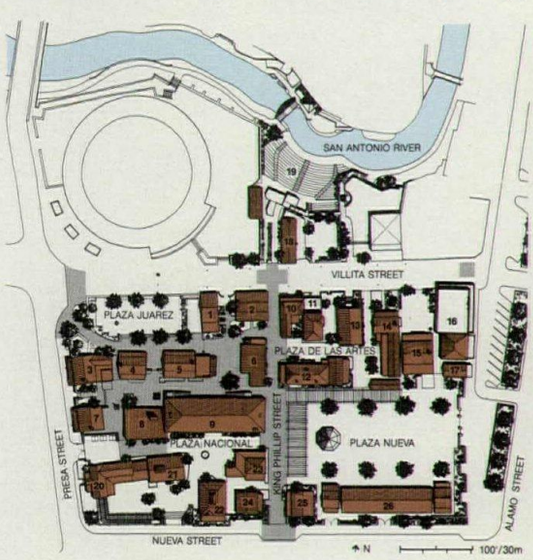
In June of 1934, newly elected Mayor Maury Maverick set in motion the first restoration of La Villita, having obtained funds from the National Youth Administration (N.Y.A.) to add to city support. By October of that year, work began. N.Y.A. selected the late O'Neil Ford as the consulting architect, working with architect Blanding Stone and other artists and superintendents. By May 1941, six houses were completed.

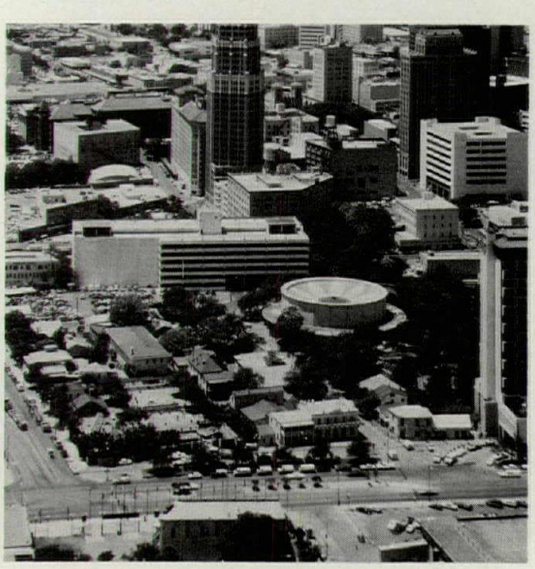
La Villita expanded its role as a center of community events and saw the city acquisition of additional property in the 1940s through the 1960s. In 1969, the area was designated a historic district of the city. In 1974, five structures owned by the Joykist Candy Company were purchased, adding 25 percent to La Villita's area; in 1975, it was extended south.

But functional problems and activity conflicts began to have an impact on the district. Vehicular traffic posed problems for pedestrian circulation, and frequent public gatherings and festivities clashed with commercial activity because of a lack of circulation options. Wiring, plumbing, and mechanical functions had become outmoded and ad hoc.

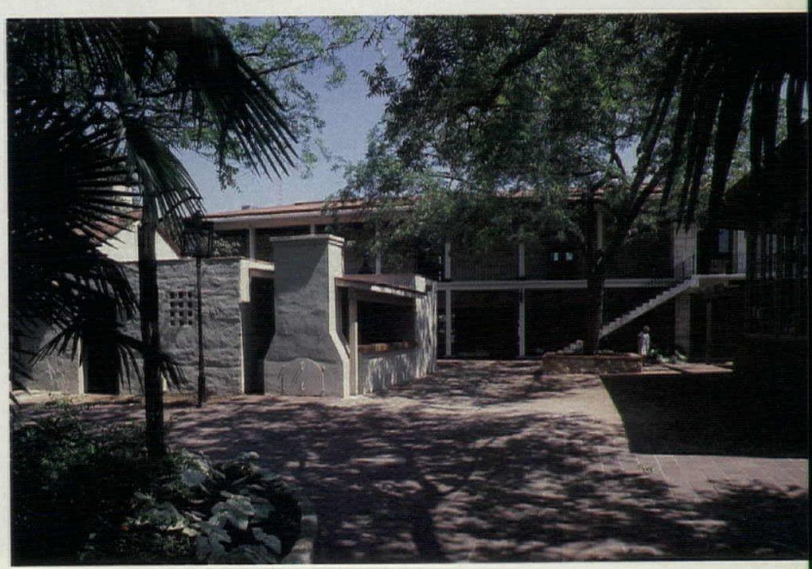
Word arrived in San Antonio that the Economic Development Administration had ap-

1 Kirchner House
2 Lozano & Lopez House
3 Canada House
4 Caxias House
5 San Martin House
6 Kitchen
7 Guadalupe House
8 Weaving Building
9 Bolivar Hall
10 502 Villita St.
11 504 Villita St.
12 115 King Phillip St.
13 La Villita Church
14 Florian House
15 La Casita
16 McAllister Building
17 Barber Shop
18 Cos House
19 Arneson Theatre
20 Dosch & Rishe House
21 Peters Workshop
22 Shafer House
23 Esqueda House
24 De Luna House
25 Palisado House
26 Open-air Pavilion



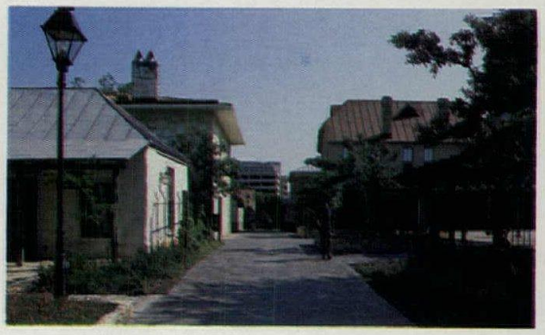



LA VILLITA
PLAZA
JUAREZ
LA VILLITA



La Villita

Before the recent restoration, the vehicular streets had become drab (bottom left), with no color scheme, above-ground electrical supply, and asphalt paving everywhere. With the addition of new pavers, underground electrical lines, landscaping, paint, and newly restored or refurbished wood details, the district regained its sense of unity. Shady trellis structures line the Plaza Nueva, the largest of the gathering places (below top, and facing page), serving as boundaries and definers of circulation options.



proved a $1.7 million grant in 1980; local funds added $600,000, and work was begun. The city was astute in its return to O'Neil Ford, by then a living legend. La Villita Associated Architects, comprising the architectural firms of Saldana, Williams & Schubert and Ford, Powell & Carson, was formed to undertake the re-restoration of La Villita. Ford is quoted as saying, "Very few people have the chance to complete a project once and then have the opportunity, over 40 years later, to go back and correct their mistakes."

It was not so much mistakes that needed correction, however, as the ravages of time, transportation, and habitation. Restoration activity commenced on 20 buildings, and took in the full spectrum of trades from major carpentry to roofing to wiring and painting. In some instances, porches or other embellishments, which had disappeared or fallen into disrepair, were restored. A comprehensive color scheme was established, and signage recommendations developed.

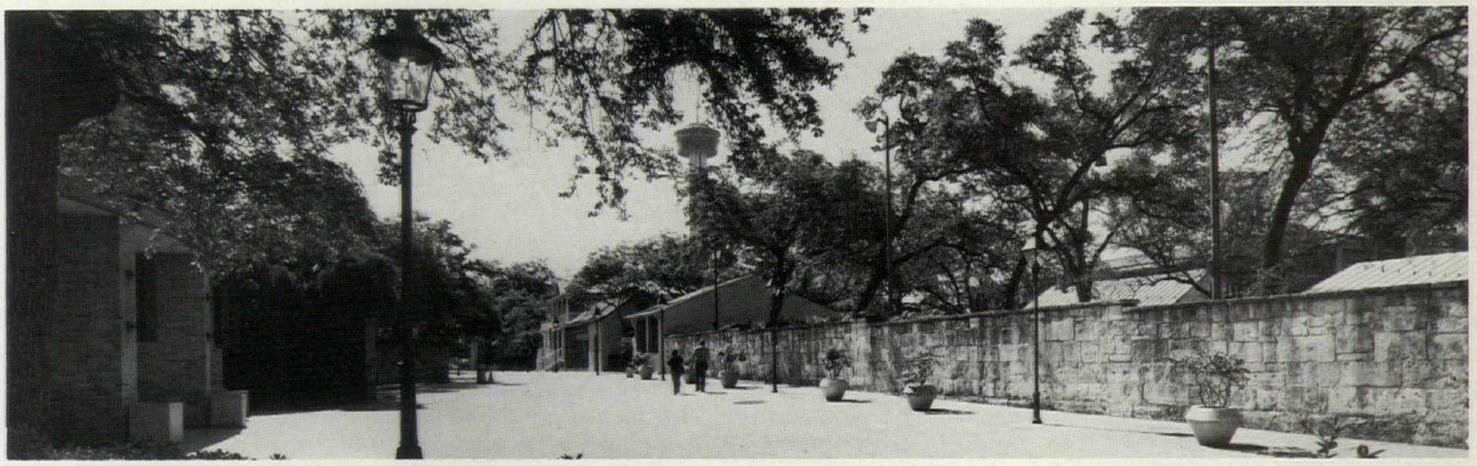
What does not show is as important as what does; utility lines were buried, and window air conditioners were eliminated by piping in city-chilled water. Also, vehicular traffic


OFFICE

Details such as the wood porch (opposite) were often recreated the way the architects felt was appropriate to the particular building. The Little Church of La Villita fronts on the quiet Paseo de La Villita (bottom); only from some viewpoints do glimpses of the higher city remind a visitor of things like the Tower of the Americas, a leftover from the Hemisfair (top, background).

Data

Project: *La Villita, San Antonio, Texas.*
Architects: *La Villita Associated Architects: Saldana, Williams & Schubert; Ford, Powell & Carson, Inc., San Antonio.*
Client: *City of San Antonio.*
Site: *5¾ acres bordered by Alamo Street, Nueve Street, Presa Street, and the San Antonio River.*
Program: *restoration on buildings, paving, utilities, and functional operations as a cultural and retail area.*
Consultants: *Williams & Schneider, structural; Lizcano Consulting Engineers, Inc., mechanical; Landscape Architecture & Planning Department, Ford, Carson & Powell, landscape.*
General contractor: *Scott & Jennison.*
Costs: *$2 million.*
Photography: *Rick Gardner.*



has been virtually eliminated, with only emergency access and a few early morning delivery hours. Level changes and ramps assured handicapped access, and two unassuming new structures were provided for restrooms and concessions.

New lighting was added in the likeness of the old, and extensive landscaping and planting was undertaken. In addition to the removal of vehicular traffic, pedestrian traffic flow was altered so that major events can be underway in the large open plazas—as they often are—without disrupting retail traffic to the many shops and restaurants. New paving in the walkways and streets is highlighted by Saltillo tile pavers and pavers from San Luis Potosi, Mexico.

What has resulted from so much behind-the-scenes labor is a very special place that looks so natural La Villita Associated Architects' role could go unnoticed by the public. It might have looked this way for centuries—but it didn't. It is neither totally Spanish in character nor any other style, yet the overall feeling is a unity, almost a repose.

If there is any problem with La Villita, it lies in an ironic juxtaposition, a near miss. The famous and rich Paseo del Rio comes literally to the doorstep at the end of King Phillip Street, where it leads to the open air Arneson Theatre. The stream of strollers along that beautiful stretch of the San Antonio River walk is most often unaware that an experience like La Villita is there. They often just look approvingly at the theater and turn around.

The final elusive design solution would be to attract these bystanders into the village, alleviating some of the merchants' complaints of low retail traffic. Still, San Antonio can boast of one more landmark to complement the Paseo and The Alamo—and a beautiful one. [Jim Murphy]

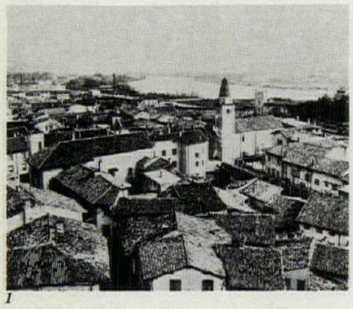
Rebuilding Friuli

Paolo Portoghesi
translated from the Italian by Meg Shore

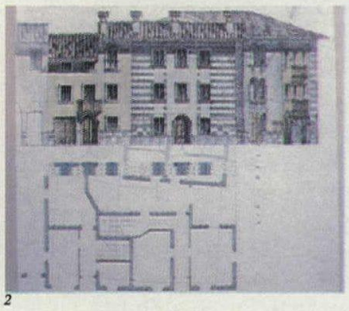
Earthquakes shattered the Friuli region of Northeast Italy in 1968, and parts are now being rebuilt by Roberto Pirzio-Biroli in close association with the inhabitants, their memories and their desires.

"Housing transformations: The houses are to be transformed and placed in order; and this will be easily accomplished, for these houses are first built in parts, above the piazzas, and then pieced together with lumber on their established site. Fountains are to be built in each piazza. The local inhabitants can live in parts of these new houses, when there is no courtyard. Polluted water will not flow back into the local river, for it will be cycled out through underground canals, with four mills at the entrance and four at the exit; thus the water above from Romolontino will be drained out. . . . Each mill is to have numerous sluice gates which can open up to increase the volume; and so the water will be cleaned to the very bottom. And the mobile animal cages which I specified for Frigòli are to be made."—Leonardo da Vinci

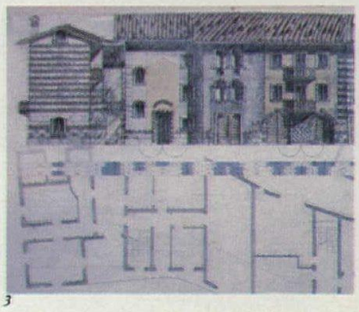
By Frigòli, Leonardo meant Friuli, the region in Northern Italy (Figs. *1*, and *5* on facing page) where the projects shown here are being built. This text, taken from his *Framenti di Architettura,* concluding with a description of a small urban center with a piazza and fountains and an unpolluted river, specifically refers to Friuli, where Leonardo had designed such a project. And Friuli, the region of Italy at the border between the Italian, German, and Slavic worlds, is where architect Roberto Pirzio-Biroli lives and works.



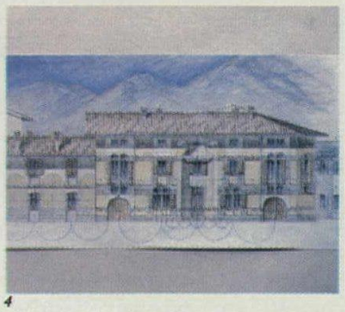
1



2



3



4

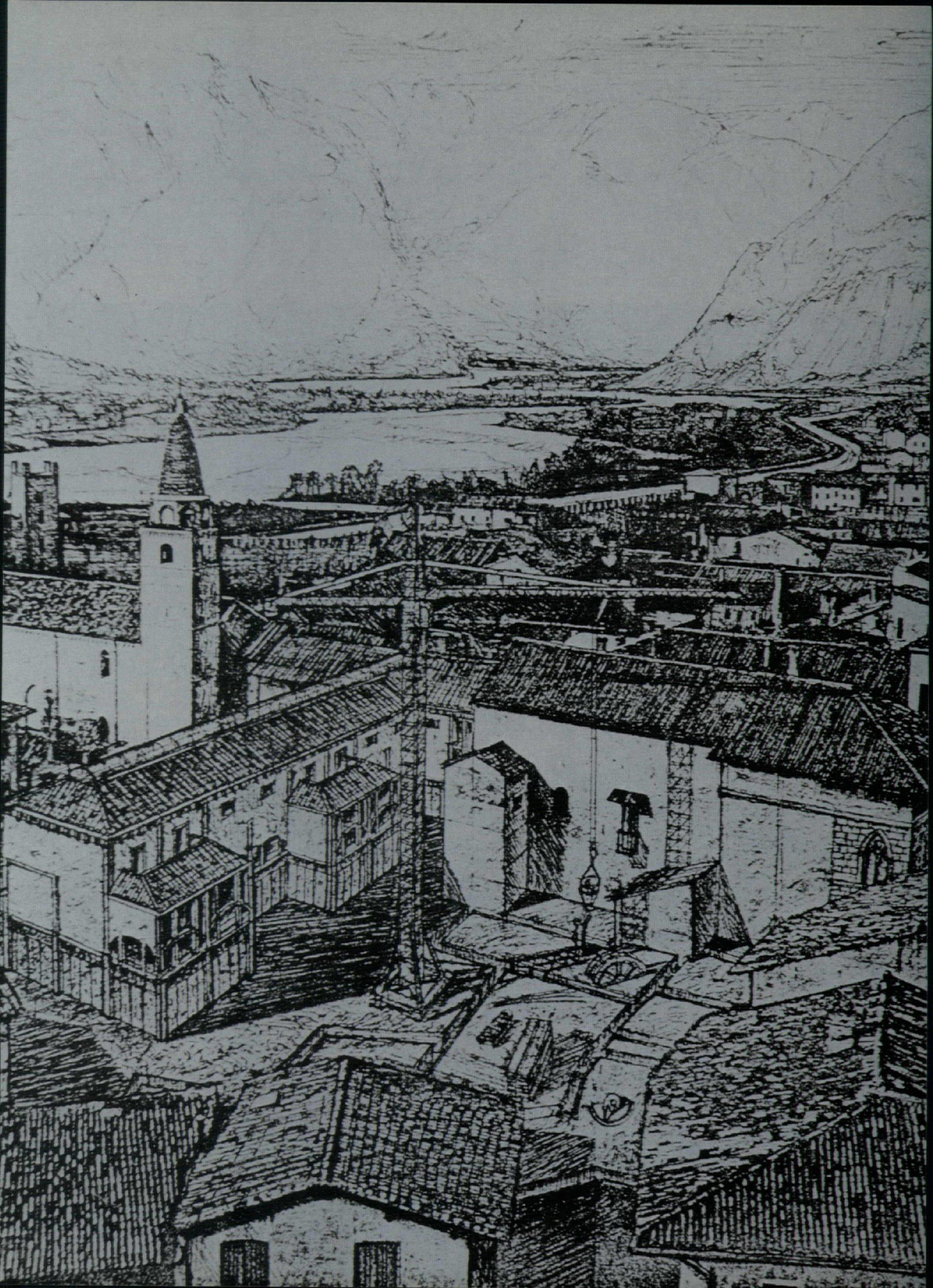
Aerial view of Venzone before earthquake in 1968 (1), and the design for its reconstruction (facing page), showing the municipal offices.
House types of Resiutta, derived from characteristics common to the region before the earthquake (2–4).

Leonardo's simple words describe how it is possible to create an environment from architectural fragments, using local resources to build a small, pleasant, residential center. Similarly, for many years now, Pirzio-Biroli has been concerned with the quality of housing in the small towns of that same region. He works in local design studios, in small historic centers of 500–1000 inhabitants—immersed in the life, the ethnic-linguistic culture, the unique natural ethnic-geographic environment of the Friuli-Venezia-Giulia region that is his native home. For centuries this area has been a crossroads for the Austro-German, Slavic, Croat, Romansh, and Venetian cultures of the adjoining regions. This is also the site of a special experiment—the first attempt to establish a European center, superseding national boundaries, from a commercial and cultural point of view, where there is direct contact among the bordering regions that belong to separate countries.

What we are dealing with, then, is a specific experience, a reevaluation of the history of the established sites of the region. Pirzio-Biroli often works in public, not only in local studios, alongside artisans with the local inhabitants around his drafting table, but also often outside in the piazza. He uses this method to instill in the client/users an interest in the development of his designs. These drawings (Figs. *2, 3, 4*) serve to construct and to investigate origins, the primitive causes behind the immutable meaning of archetypes, of types of preexisting architecture. The drawings do not represent houses that exist or that existed in the past, but rather reflect only the *type* deduced from the maximum sum of common characteristics present in the established social structure. This structure is part of a microregion tucked within the European macroregion extending from the Rhine to the Oder, from the Baltic Sea to the Gulf of Trieste. The working methodology reawakens the memory and the consciousness of the inhabitants, along with the personality and diversity of domestic groupings and the traditions, inventions, and rituals of the arts of building and decorating 17th- and 18th-Century houses.

This is a rediscovery of local building methods, an observation of and emphasis on existing architecture, bringing to light its reality through design, word, and representation. There is a continuous reinterpretation and critical grappling with "site," beginning with

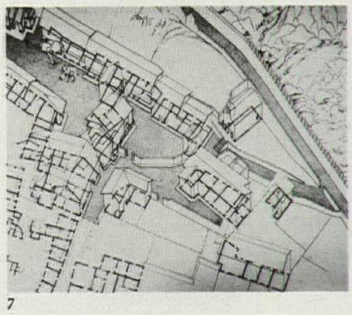
5



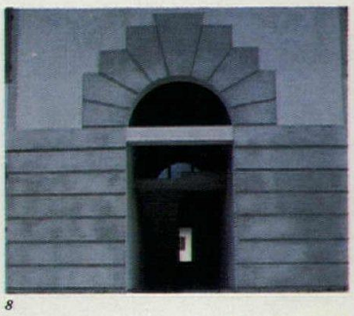
what is there (Fig. 7)—with existing built structures. These preexisting elements can also be studied as models for future urbanization, as one understands their possibilities, their meaning, the limits assigned them by history, and the innovations that can be introduced while still respecting their quality and durability and their historical continuity with a specific, particular culture.

Pirzio-Biroli successfully develops this arduous task of engaging not only the inhabitants (Fig. 6), but the local contractors as well. He allows the local people to participate in the construction of the houses he has designed, working on supporting masonry structures for technical facilities and actively collaborating in the finishings of the buildings. In this way he has found an appropriate use for the people's enthusiasm and for their involvement in the enrichment of their environment. For example, the handmade quality of the entranceway in Resiutta (Fig. 8) sets it apart from the surrounding area. For the populace, this working method clearly represents a true revival of the craft of the architect who is engaged both at the drafting table and on the construction site, as if in an artisan studio, or even an industrial plant where, today, invention and fine, elegant designs for elaborating and differentiating systems of prefabricated construction are completely lacking. This working method is also a critique of the homologous city of the International Style, a critique capable of being translated in works, into manuals which revive the entire historical arsenal of building techniques and the types of architecture often directly derived from them.

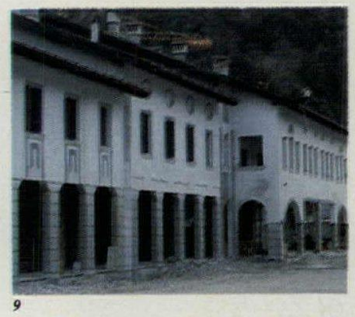
With today's technology, with the availability of machinery and the most advanced building processes, it is possible to build rapidly and economically, using local materials without bias—stone, concrete, wood, brick, iron—reintroducing the arts of decoration, painting, and sculpture into construction. The only thing missing is a more intense relationship between culture and work, between the historical processes of construction and industry. In terms of standard housing, the myth of economy—product of the quantity/rapidity/functionality trilogy—has proven to be a miserable failure, including the experience of rebuilding the earthquake devastated areas of Italy like Friuli. Pirzio-Biroli interprets this task of rebuilding a specific and authentic craft with both humility and heroism. He interprets the culture of the region surrounding the site, taking what appears to say nothing much at all and rebuilding its dignity. This dignity of the architectural work exists even at the most simple level—a fountain, a pavilion, a gate, an entrance road, a street with houses that face each other as if they were people and not abstract, anonymous, and arbitrary little boxes. In other words, he rebuilds the dignity of "work." His familiarity with the cultural context, his refinement of techniques for formalizing image through elements of construction, his knowledge of how to gather the positive meanings inherent in a specific culture allow him to learn and to teach the art of composition, to define "style" within the technical and building arts. (Fig. 9)



7



8

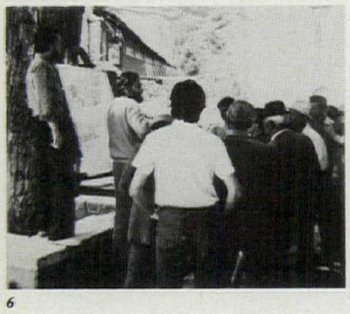


9

Not only his designing in "styles," but also his method for designing unbroken housing areas (Fig. 10), rather than a plan for a repeatable building type, is viewed with diffidence by major planners and by the practitioners of monofunctional "zoning." They insist on producing standardized elements for public housing, post offices, and municipal buildings, independent from the sites for which they are destined. The construction industry and the architects of mass-produced housing also view with suspicion Pirzio-Biroli's dialogue with the users, his invitation to them to participate and to experience in person the culture of the project, to redesign the cultural relationships of the neighborhood, consolidating their position within the established history of small urban centers. Yet both these activities—design methodology and interaction with the client—are firmly rooted in history and have produced considerable qualitative results. For specialists, design participation is often called advocacy planning, while designing in a particular style is sometimes referred to as a "nostalgia for the vernacular"—rather schematic and reductive definitions.

De re aedificatoria, completed and published by Leon Battista Alberti in 1450, comes to the conclusion that man is by nature a builder, indeed that he is human to the extent that he is an architect, and that this "innate rational spirit"—an attribute of beauty—guarantees the presence of a shared "value" within a given neighborhood, whatever its condition, which is the basis for communication, exchange, and the harmonious ordering of architectural sociability. Pirzio-Biroli has decided to live this social reality, this exchange, on a day-to-day basis, concentrating on interventions that reconstruct the lacerated pieces

Frequent planning sessions with local citizens (6) are conducted by architect Pirzio-Biroli (second from left).
Rebuilding of continuous housing in Santa Margherita Osoppo (7) begins with careful consideration of what remains.
New housing in Resiutta is based on crafts revival (8), and on regional characteristics (9).



6

of the urban fabric (Fig. *10*), and that annex new products to preexisting buildings. He might, for example, compose a courtyard from the low-income houses that form a street or a piazza. He also introduces small interventions like enclosing walls in stone, built to recall the city of Isfahan. Isfahan, as an example of a new and more balanced model of development, is still capable of entering into the dialectic between "modern" and "progressive" (in the most perverse sense of the word). In fact, it is a marvelous city of the future that refuses to recognize the language of "zoning"; its inhabitants work where they live, do their shopping where they work, pray and play and socialize where they work.

The small towns of Friuli, in both the mountains and the plains, wait patiently, offering this possibility, guaranteeing the defense, the maintenance, and the development of local resources, both natural and manmade. This is a region where the people show an autonomous capacity for defining the type of single-family dwelling adapted to their specific culture and needs and to the availability of local materials.

The Friulians, who emigrated by the thousands to the Americas, have carried their arts and crafts with them around the world; now they would like to offer to these foreign lands their typical native products. And among these is an unmistakable architectural style which Pirzio-Biroli has shown how to revive in his work.

For years he has understood the meaning of the lesson of Tessenow, of the link with the Classical tradition expressed by protorationalism. In fact, he has sought with curiosity to rediscover the building methods rooted in the local culture and customs. He has observed how the Modern movement and the consumer society that sustains it have at this point lost that spontaneous capacity to bring together with instinctive certainty the harmonious relationships needed for the creation of hospitable, visually pleasing buildings which have significance beyond the merely functional or typological. He is convinced of the hereditary value of compositional harmonies, the congruent relationships between formal orders and building orders as contained in the "living encyclopedia" of existing works. These can be seen, indifferently, in preexisting architectural models (Fig. *11*)—huts, watchtowers of ancient castles, warehouses, votive chapels, residences, noble or public buildings, stables and haylofts, factories, and public buildings. In terms of lineage, he is drawn to architectural archetypes rather than to the mere function of a building type. When invited to reweave the building fabric of small urban centers with interventions of partial substitution, juxtaposition, integration, completion, and new buildings, he applies his research and surveys of the architectural types that animate the region, including the types of original settlements that characterized it. He does this not because of a philological obsession, but because for him the ancient perimeters that mark the various forms of occupation of the land—an imaginary architecture of a living archeology—constitute the defining outlines and the geometrical coordinates of the plans and the spaces to be built. He also thus avoids being hampered by imposed geometrical schemes and dysfunctions produced by abstract principles of rationalization.

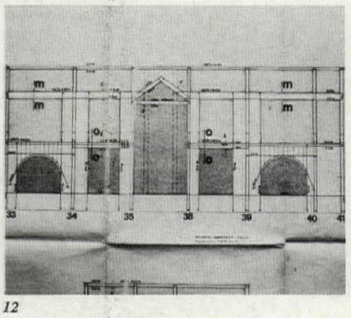
Even in the plans for the individual houses, there appear relationships of scale which dictate principles of congruence, of symmetry, of potential balance between two elements along a central axis (for example, an entranceway or a mullioned window), or of possible bilateral symmetries useful in the composition of elevations. Throughout the architectural rhythm of the building façades there simultaneously appear asymmetries, compositional rules, possible transgressions, and accidental occurrences. The proportional principles of Renaissance treatises, useful working tools, are not always applicable; but he finds sufficient material for the design of architectural orders adapted to this scale of intervention through the free architectural interpretation of the structural organicism of the elements that have become models for the regional building history—trusses, cornices and entablatures, moldings in stucco, plaster, and stone.

Abstract mathematical measures enter into dialogue with those which are directly socially defined, as in the projects realized in the small town center of Resiutta, along the road leading to Austria and Hungary (Figs. *12, 13*). The manner in which the space is distributed within and without these houses is derived from simple plans and from new aggregational harmonies, the fruit of a complex redesign of the borders, perimeters, walled courtyards which reflect the habits and attitudes that spontaneously structure the environment. The rooms are square and rectangular (the rectangle a third of the square, or as long as its diagonal); other spaces are

New construction in Resiutta does not always follow what previously existed, but takes advantage of situation to reorder some housing aggregations and their site (10); sometimes, the housing is based on earlier existing models (11), and on preferred geometric proportions (12, 13).


10


11


12


13

oblique, following along the walled perimeter of the determined site. There are rooms of passage, screened galleries overlooking the arched street built in the local traditional style, protruding galleries in wood or with small columns, showing a Venetian influence (Fig. *9*). These also suggest the spatial passages in 18th- or 19th-Century villas so common in Friuli, or the corridors leading from streets to interior courts typical of the houses in small towns in the Friuli mountains.

The openings and windows that characterize the façades are like features of a face which never reveal its structure but look out onto the street, indicating the presence of man (Fig. *2*). Decorative elements common to several contiguous houses, built according to architectural schemes, give a stylistic unity while pointing out diversity. The architect's respect for different languages, for diversity, finds unity in the desire for a common language capable of uniting the environment where these separate buildings are located. In Resiutta, along a street formed by the piazzas, Pirzio-Biroli has built houses in brick and poured concrete, decorated with plaster, cement, and local oxidized sands.

In his rebuilding of the medieval center of Venzone (Fig. *5*), he realized on a single construction site the municipal offices (Figs. *14, 15, 16*) and another building in stone, using reinforced concrete sheathed in slabs of granular stone cut from a nearby mountain. These two interventions illustrate the phenomenon of the recontextualization of architecture, that is, the dialogic relationship between new buildings and the history of the site and of the surrounding community. The compositional method at times relies on ambiguity and irony, on the historical or the vernacular references which appealed to popular taste of the preconsumer society.

Schinkel seem to meet in new form, seen from the point of view of a thread that passes through the history of the regional architectural culture, in direct and age-old dialogue with regions of other nations.

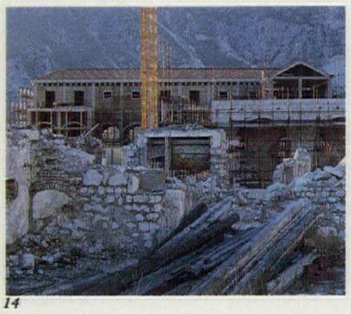
This is, after all, a land of castles made from the Roman ruins of Aquileia and the architectural remains of the Goths, the Lombards, and the Slavs, filtered through the more authentic expressions of local ethos. It is a land of spontaneous architecture that forms a bridge to Eastern Europe—to the Vienna Secession of Wagner, Olbrich, and Hoffmann; to Joseph Plecnik of Ljubljana; to the Late 19th-Century Friulian architects yet to be discovered. While Pirzio-Biroli frequently uses Viollet-le-Duc's dictionaries of architecture in his compositional and building rules, in the municipal offices of the fortified citadel of Venzone his skillful use of the pilaster strips of the major order and the serial rhythm of the large thermal windows of the minor order are more reminiscent of Palladio and Schinkel, and show the influence of the cultural area described above.

And so Venzone is the first Italian city to have a "Post-Modern movement" town hall—certainly not because it has been inspired by the more up-to-date and ephemeral fashions of New York, but rather because it clarifies the intentions of an emerging Post-Industrial and Neo-Renaissance culture, of an informational society freed from the myths of the avant-garde. Pirzio-Biroli's relationship with Vienna is also revealed through the now nearly forgotten words of Adolf Loos, calling for a new creative relationship with craft and for a technical/stylistic self-sufficiency regarding production. Meanwhile, the large Classical paternal villa built by Provino Valle, father of the architect Gino Valle of Udine, lying in the shadow of a medieval tower from 983 A.D., next to a votive chapel and to two 18th-Century granaries and carriage houses, is the setting that defined Pirzio-Biroli's first ideas about building a symbology of site . . . leading up to his current, ongoing research into a reconciliation between forms and processes. □

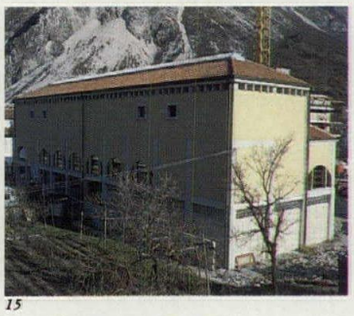
Credits

Project: *City Hall, Venzone, Italy.*
Architects: *Studio Architetto Roberto Pirzio-Biroli (Maddalena Pandolfi, Anna Pian, assistants); Technical office of Venzone.*
Client: *Communal Administration of Venzone.*
Site: *center of historic district.*
Program: *city hall with technical office, police, office for historic center, meeting hall.*
Consultants: *Pietro D'Orlando, engineering.*
General contractor: *Impressa Rizzi.*
Finance: *Friuli-Venezia-Giulia Region, UNICO National, American-Italian Federation of Louisiana.*

Project: *housing, Resiutta.*
Architect: *Studio Architetto Roberto Pirzio-Biroli (Maddalena Pandolfi, Anna Pian, assistants).*
Client: *Cooperative for rebuilding Resiutta.*
Site: *at the entrance of a valley in the mountains near Austria.*
Program: *aggregated one-family housing.*
Consultants: *Girbione, and Andrazza, Favero, Favotto, engineering; Pitteri-Tondo, surveying.*
General contractor: *Impressa Fabris.*
Photography: *Paola Gennaro, Roberto Pirzio-Biroli.*



14



15

16

In the reconstruction of the medieval center of Venzone (14–16), the municipal offices illustrate the relationship between new buildings, the history of the site, and the surrounding area.

Pirzio-Biroli is certainly one of the architects of whom Jencks writes: "The primitives of a new sensibility who are populating the world," Post-Modern and Post-Industrial. The difference with him lies perhaps in the cultural debate wherein this activity occurs—a debate that engages the northern edge of the Adriatic, the architecture of the Venetian lagoons and mainland, the stable working communities of the Adriatic Alps, the city of Trieste with its traces of the influence of the Archduchess Maria Teresa of Austria, the architectural schools of Graz, Vienna, Bavaria, and Central Europe. This is an architectural itinerary where the cultures of Palladio and

Paolo Portoghesi *is an Italian architect, the author of many books including* Baroque Rome, *and president of the Venice Biennale.*

Meg Shore, *a freelance translator who contributes to* Art Forum, *translated Portoghesi's* After Modern Architecture *(Rizzoli, 1982).*

CUSTOM!

DesignTex prints, weaves, dyes and designs to your order.
At DesignTex, we understand the quality of individuality—the perfection of unique design in color, texture, workability. It's our business. And if our comprehensive collections of upholsteries, wall coverings and draperies seem not to fulfill your exact dream, call us. DesignTex Custom Services will make your interior design dreams a reality.

Du Pont TEFLON® soil & stain repeller

DesignTex
DesignTex
DesignTex
DesignTex

ATLANTA, BOSTON, CHICAGO, DALLAS, DENVER, HOUSTON, KANSAS CITY, LOS ANGELES, MIAMI, NEW YORK, SAN FRANCISCO, SEATTLE, WASHINGTON, D.C.

Circle No. 327 on Reader Service Card

COOKSON DOORS ROLL

Grand scale. San Francisco's Moscone Center inspires these words whenever it's discussed.

With the world's largest column-free exhibition space—275,000 sq. ft.—the Center is a shining example of imaginative design and engineering on a "grand scale."

The Cookson Company is proud to have been chosen to supply all the rolling door and grille products in this unique project. The designers chose Cookson quality for their showcase of innovative engineering.

Cookson supplied 51 computer-controlled fire doors, eight rolling grilles, and five enormous rolling service doors. With Moscone Center's busy, year-round convention schedule, Cookson's doors get a lot of heavy use. And, they hold up.

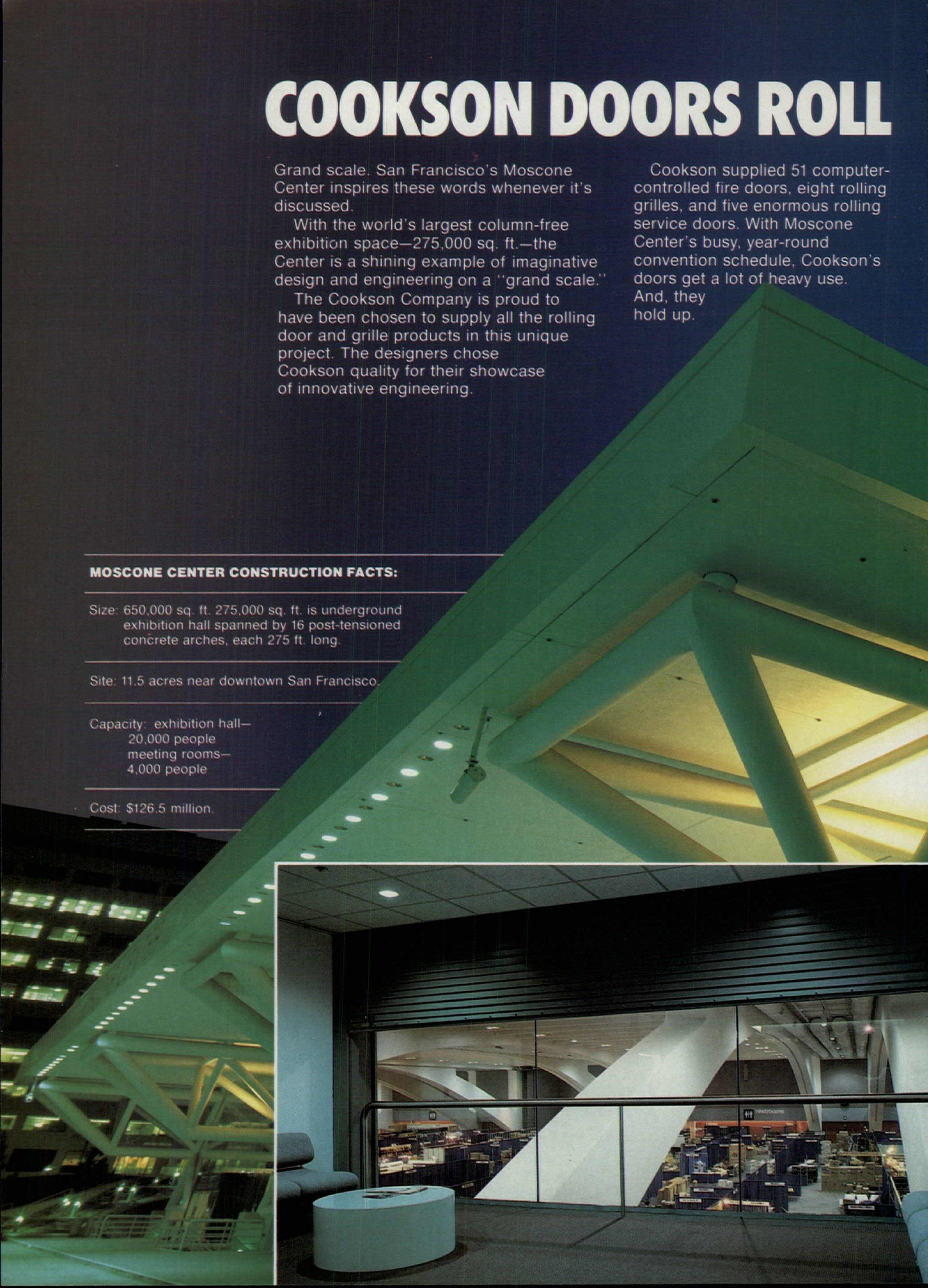
MOSCONE CENTER CONSTRUCTION FACTS:

Size: 650,000 sq. ft. 275,000 sq. ft. is underground exhibition hall spanned by 16 post-tensioned concrete arches, each 275 ft. long.

Site: 11.5 acres near downtown San Francisco.

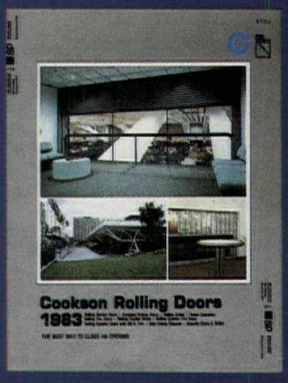
Capacity: exhibition hall—20,000 people
meeting rooms—4,000 people

Cost: $126.5 million.



AT MOSCONE CENTER

All the advantages of rolling doors and grilles—security, no overhead rails, durability, easy repair—are yours with Cookson products. Plus, Cookson adds extra quality touches like a factory-applied corrosion-resistant coating that gives 71% greater protection than galvanizing alone.



Cookson ships its products fully assembled and its professional engineering department is ready to help you at all times.

Cookson has manufacturing plants coast-to-coast to serve architects and builders everywhere. For projects large or small, Cookson is the architect's quality choice, and has been for forty years.

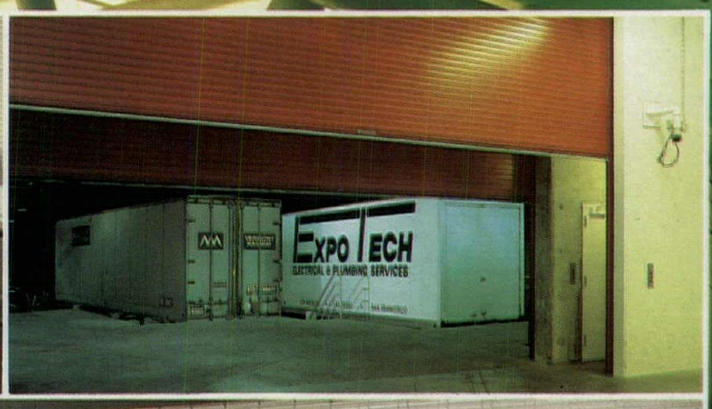
SEND FOR YOUR FREE CATALOG

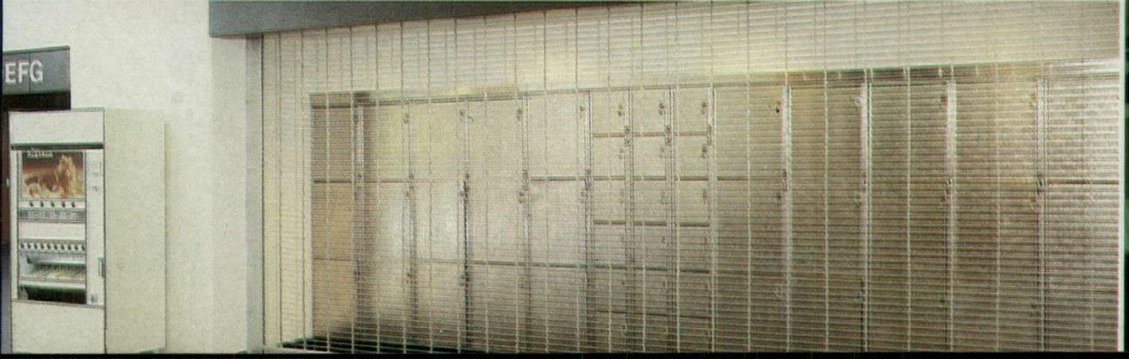
Cookson's 28-page catalog is in Sweet's (8.7Co) or send for your free copy. Call Sweet's Buyline for nearest distributor.

COOKSON
COOKSON ROLLING DOORS

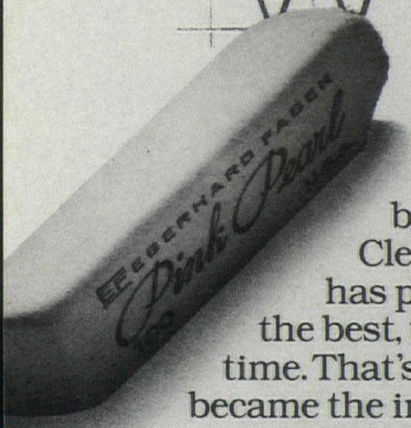
700 Pennsylvania Avenue, San Francisco CA 94107. 415/826-4422
800 Tulip Drive, Gastonia NC 28052. 704/866-9146

Circle No. 321 on Reader Service Card





HOW MANY TIMES CAN YOUR VELLUM GET AWAY WITH THIS?



For the draftsman, the more erasable a drafting paper, the better. For fifty years, Clearprint 1000H vellum has proven itself the best, time after time. That's how 1000H became the industry standard—and only Clearprint makes it.

But erasability isn't all our drafting paper offers. It's made from 100% new cotton fiber so it doesn't crack or discolor with age. And it's remarkably transparent with a consistency of texture that is unexcelled.

To guarantee these characteristics, our proprietary process is checked by 38 individual quality control measures. These steps are of utmost importance because they insure the highest performance in both manual drafting and computer aided design applications.

1983 is our 50th anniversary and nothing would make us happier than for you to know that all Clearprint products—including the popular 1020—are made with the same ingredients and controls.

Your vellum has a lot of work to do. Hold it to the light. When you see the Clearprint watermark, you'll know it's up to the job.

MAKING PAPER WORK.

CLEARPRINT®

Please send us your catalog of samples and suggested price lists.

We use drafting paper for: _____

Name _____

Title _____

Firm Name _____

Address _____

City _____

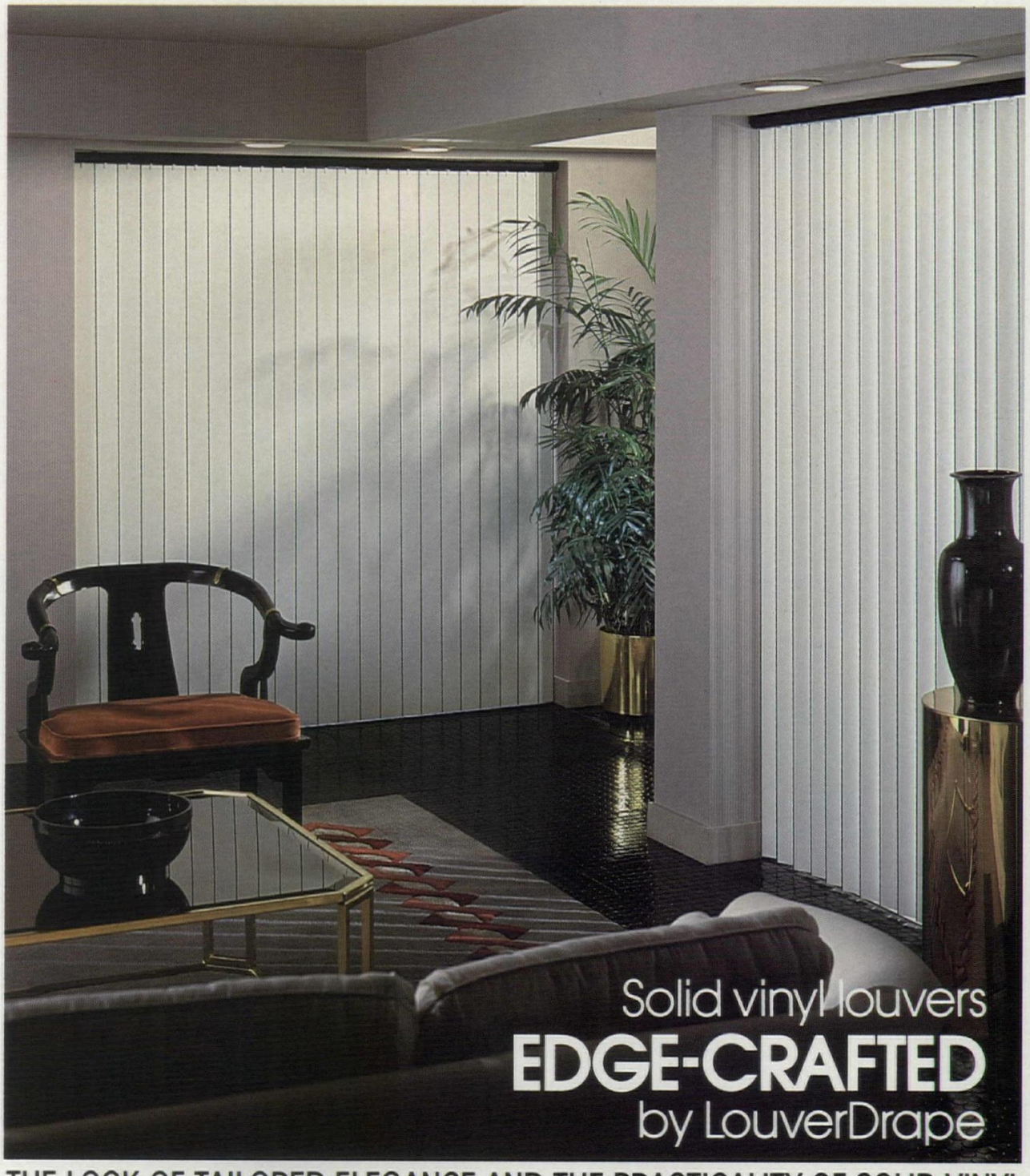
State _____ *Zip* _____

P.O. Box 8703, Emeryville, California 94662

PA-84

Circle **No. 314** on Reader Service Card

TM Reg. U.S. Pat. & TM Off. by Eberhard Faber Inc.



THE LOOK OF TAILORED ELEGANCE AND THE PRACTICALITY OF SOLID VINYL

Solid vinyl louvers, EdgeCrafted® by LouverDrape® are an exciting new vertical blind idea. EdgeCrafting® in complementary colors gives the louvers an accented quality that provides a neatly tailored and boldly decorative look. A look vividly different from plain, single color, solid vinyl louvers.

The EdgeCrafted® accent color is inlaid by LouverDrape,® a permanent part of the louver. Not laminated or painted on, the accent edge is an integral part of the louver formed during the extrusion process.

Solid vinyl louvers, EdgeCrafted® by LouverDrape® retain the energy efficient advantages on plain LouverDrape solid vinyl louvers. They are extremely effective in rejecting solar heat at the window in the summer and effective reducing the heat loss in winter. And because they are vertical, they collect no more dust than a wall.

ALWAYS INSIST ON 100% LouverDrape QUALITY

LouverDrape®

SEND FOR OUR FREE 36 PAGE FULL COLOR BROCHURE

LOUVERDRAPE, INC.
1100 COLORADO AVE., DEPT. 9X
SANTA MONICA, CA 90401

Circle **No. 358** on Reader Service Card

Now Collins & Aikman working for them.

HERCULES

Hercules Incorporated.
3169 Holcomb Bridge Rd., Norcross, GA 30071

Circle No. 343 on Reader Service Card

has executive material Herculon Nouvelle.

Collins & Aikman introduces a new line of approved carpets that makes a specifier's work a little easier.

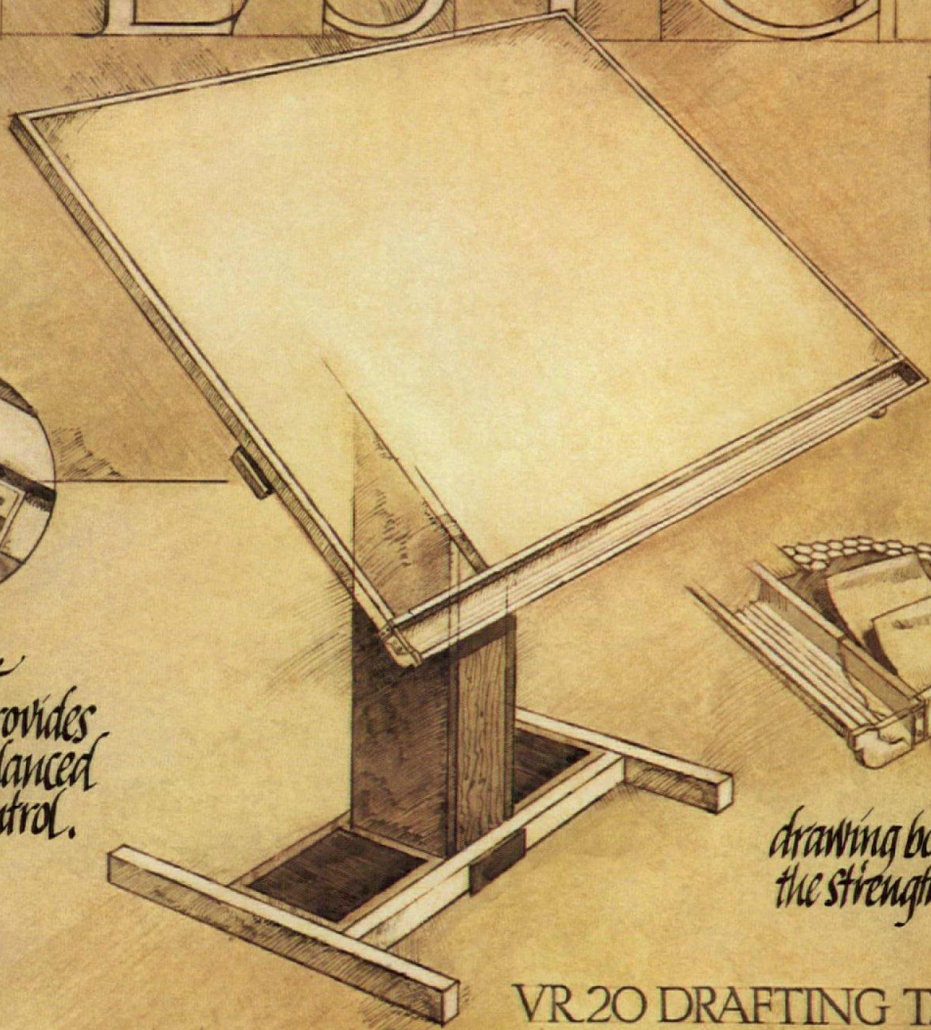
Because Herculon Nouvelle™ a new line of carpet yarns, not only offers strong performance at a low price, but it also offers beauty. Long-lasting beauty.

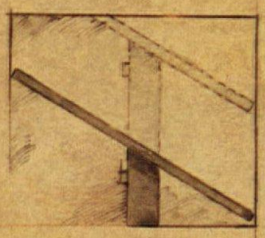
Herculon Nouvelle was developed to provide specifiers with carpets that combine performance and appearance. It offers new contemporary lusters, new deniers and a larger variety of color combinations. And that means exceptional quality and more versatile styling. Approved carpets of Herculon Nouvelle even come with a ten-year limited warranty on static and wear.

Herculon Nouvelle gives you all you expect from an outstanding contract carpet yarn, including a great price. In fact, you won't find a better value anywhere in the carpet industry. Contact Hercules, and put our executive material to work for you today.

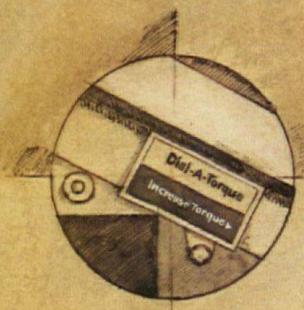
HERCULON Nouvelle™

DESIGN





Power height adjustment delivers 20" of vertical travel.

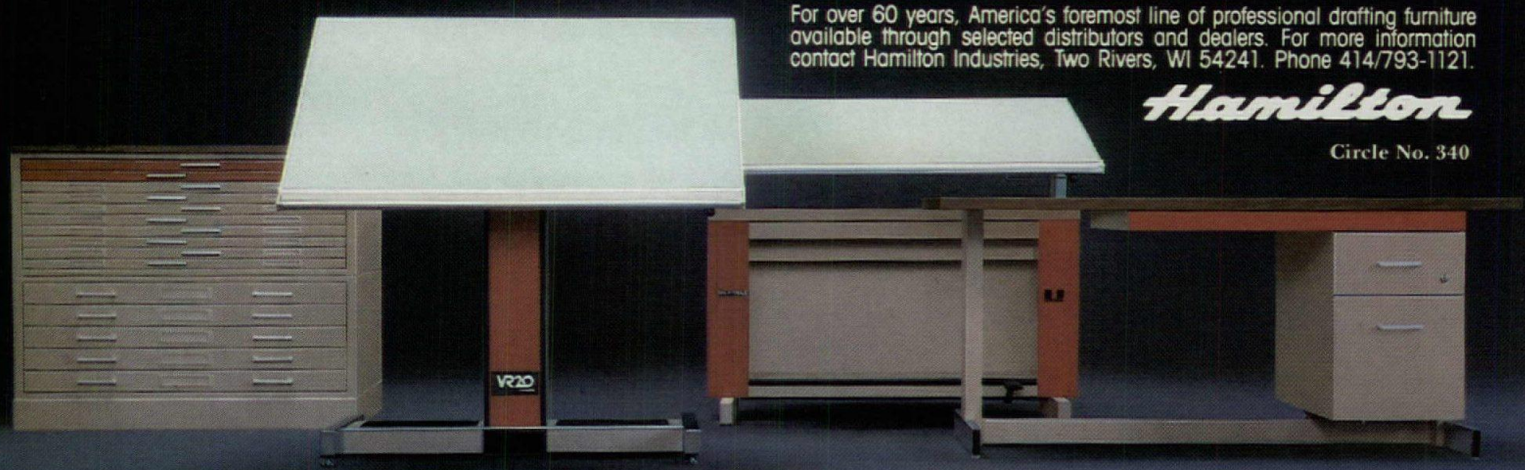


Dial-A-Torque mechanism provides fully counterbalanced board angle control.

Exclusive Stratasteel drawing board combines the strength of steel, wood, and vinyl.

VR.20 DRAFTING TABLE

HAMILTON



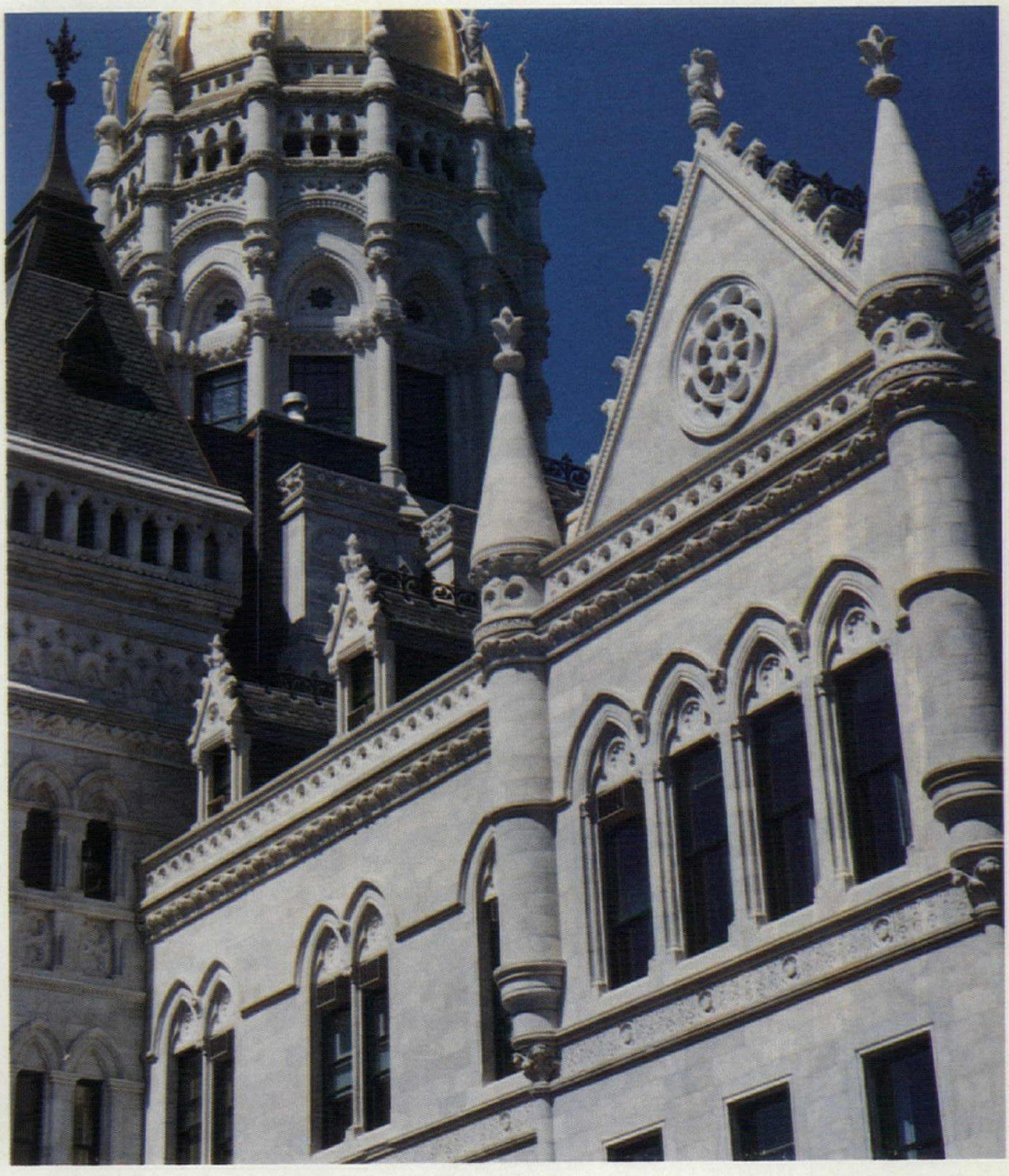
For over 60 years, America's foremost line of professional drafting furniture available through selected distributors and dealers. For more information contact Hamilton Industries, Two Rivers, WI 54241. Phone 414/793-1121.

Hamilton

Circle No. 340

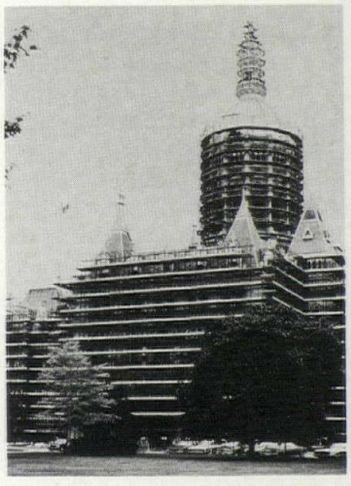
Getting the dirt on masonry

Properly cleaning masonry is no easy task, for it takes knowing not only how best to clean, but why you should and should not clean a building.

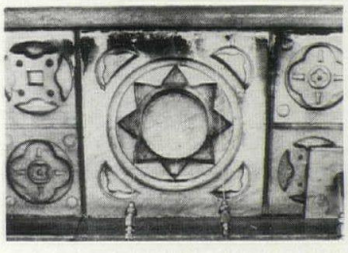


Dominick Ruggiero

The cleaning of the Connecticut State Capitol's marble exterior (right and below) involved low-pressure water washing using hoses attached to the scaffolding; little manual scrubbing of the stone was required. Powdery marble was consolidated with an aqueous solution of barium hydroxide and urea.



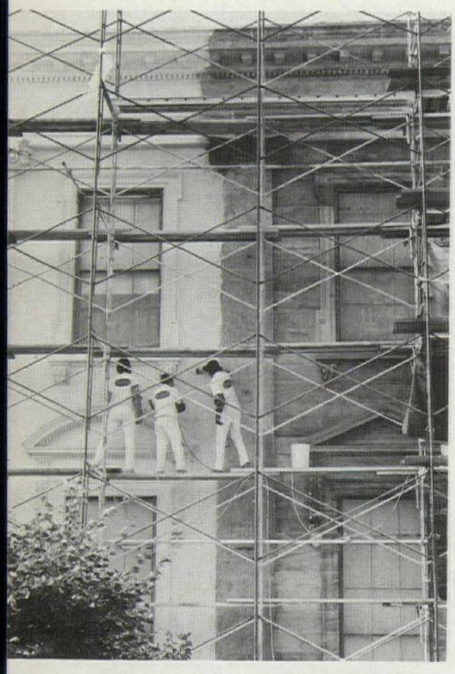
David Cimino



David Cimino

This country has long had a fetish for cleanliness. In the heyday of urban renewal, that fetish led to the demolition of many sound but dirty buildings. While economic necessity now forces us to look beneath the grime to judge the real condition of buildings, the value of a rehabilitated structure—what tenants it can attract, what rent it can support—still rests, to a surprising degree, on its surface cleanliness. We often assume that a building undergoing rehabilitation will be cleaned. Many times, we also assume that the end justifies the means—that as long as the building gets clean, it matters little what method we use. Both assumptions need reexamining, for however noble our intentions in cleaning a building, we can so damage its masonry exterior through improper cleaning methods that the building would have been better left alone.

One of the first questions you must ask when rehabilitating any masonry building is:



Photos: Tom Rudder

The recent removal of paint on the White House (above) involved the use of a solvent stripper on the modern paint layers, and two alkaline strippers on the earlier oil-base paints. The residue was removed with a high-pressure, hot water rinse (190 F, 2500 psi, 3 to 4 gpm) and collected by wet-vacuums. The stone's variegated appearance typifies that often found under original paint coats.

why clean? While cleaning a building can alter its public image, restore its original appearance, and prevent the entrapment of water behind surface crusts, not all buildings should be cleaned. For example, many 18th- and 19th-Century brick buildings have poor quality masonry that originally had a protective surface coating. They will deteriorate rapidly once that coating is removed. And many older buildings have been repaired, repointed, or added to over the years, so that the removal of camouflaging paint or dirt can make them look like patchwork.

The decision to clean demands a careful study of the type and condition of the masonry (Is it acid-sensitive limestone, marble, or calcareous sandstone? Does the masonry have a surface glaze or polish or show signs of deterioration, requiring very gentle cleaning?); the adherence of the soil (Is the grime loosely adhered, removed by simply scrubbing, or is it chemically bonded to the masonry's surface?); and the type and function of any paint coat (Is the coating original or recent? Was it applied to protect or disguise the substrate? Has it become so thick that it, too, is trapping water within the wall?). The decision to clean also demands weighing the visual results of cleaning against its cost. Holabird & Root, for example, decided not to clean the Marquette Building during its recent rehabilitation because doing so would have exposed previous repairs without appreciably changing the appearance of the dark brown brick and terra cotta.

If you decide to clean, you then must address the far more complex question of what method to use. Every cleaning method requires extensive testing for, as Hymen Myers with the Vitetta Group points out, "the same product behaves differently on each building." The testing of various cleaning methods, which most contractors will do free or on a time and materials basis with unfamiliar methods, should occur during a project's schematic design phase to allow enough time to observe any discoloration or advanced weathering. Also, test in an inconspicuous location in case some damage does occur. The goal of any testing procedure is to find the gentlest means possible, one that cleans the building without abrading or burning the masonry's surface.

Water washing

Probably the gentlest cleaning method involves scrubbing the masonry with bristle brushes and a solution containing about one or two tablespoons of trisodium phosphate in a gallon of water. (Many modern detergents can deposit harmful soluble salts in the wall.) That method uses low-cost materials and semiskilled labor, although it has the disadvantages of being relatively slow and of attacking mainly loosely adhered surface deposits.

Removing gypsum crusts on calcareous stone or grime that has chemically bonded to the masonry may require more prolonged water washing techniques. One of the most effective methods involves alternately wetting and drying the masonry with water draining from perforated hoses along the building's cornice or spraying from low-pressure, wide-angle nozzles. While easily accomplished and relatively low cost, that method uses a great deal of water which, if allowed to penetrate open mortar joints, can damage interior finishes or, if done too early or too late in the year, can freeze in the wall.

A method that uses less water involves placing mesh filters over the hose nozzles and soaking the wall in a fine mist or fog. While gentle in its effect, that wet fog technique has the disadvantage of taking a lot of time and requiring a covered scaffold in order to contain the fog.

Whether draining, spraying, or misting water onto a masonry surface, the timing of the wet and dry cycles is critical in softening the embedded soil. John Ashurst, a research architect at the Directorate of Ancient Monuments and Historic Buildings in England, has found that, by placing time clocks on the hoses, many masonry buildings will come clean by fogging them for 10 seconds followed by four minutes of drying. At the other extreme, D.C. Cimino, architect of the recently cleaned Connecticut State Capitol, found that spraying the building's marble for eight hours every day proved effective. When water washing a building, you also must test the pH of the local water, since most softened city water is slightly acidic. When cleaning acid-sensitive masonry, that water must be treated if it is not to etch the surface.

Steam cleaning presents fewer hazards to the masonry than to the operators exposed to the high temperature steam. And since steam cleaning is little more effective than cold water washing, steam cleaning has had a decrease in use in recent years except for the removal of heavily incrusted grime within ornamental areas or of greasy or sticky substances.

The effectiveness of washing with water under pressure depends upon the quality of the masonry and the amount of pressure used. On hard stone or well-fired brick, water under moderate pressure (400–650 pounds per square inch), in moderate amounts (3–4 gallons per minute), coming through a fan jet nozzle across the surface of the masonry will remove all but the most embedded soil without damage. John Waite with Mendel, Mesick, Cohen, Waite Architects, goes so far as to examine the masonry surface under a microscope before and after a pressure water test to check for damage.

To clean a wall more thoroughly, some contractors advocate using high-pressure (1200–2500 psi) water washing, either alone or as a rinse after chemical cleaning. They argue that by reducing the amount of water to a few gallons per minute, high pressure methods will remove dirt without damaging the substrate. For the hardest of stones, that may be true. The problem, though, is controlling the operators. To remove a particularly tough stain or to speed up the cleaning process, they can easily increase the pressure, increase the amount of water, or concentrate

the spray on one area for too long. Given the difficulty of field control, it is best to avoid high-pressure water washing altogether.

Chemical cleaning

The chemical cleaning of masonry encompasses an array of solutions and application methods that can be custom formulated to clean a specific pollutant or substrate. Most acid cleaners have a hydrofluoric base, and most alkali cleaners a sodium or potassium hydroxide base. Chemical cleaners have the advantage of reducing the amount of water that can enter a wall and minimizing the chances of abrading the masonry surface. When properly formulated and used, they can provide one of the fastest and most complete methods of cleaning masonry. They have their disadvantages, however. Chemical cleaning solutions present hazards to operators, passers-by, and adjacent wildlife and vegetation. They also can severely damage masonry if too strong or left on for too long a time—burning or etching the surface, depositing residual salts that can spall the masonry, or leaving behind difficult stains. With chemical cleaners, adequate testing by experienced contractors is essential. So is the prewetting and rinsing of a surface to minimize the masonry's absorption of the chemicals.

Of the acids sometimes used to clean masonry, sulfuric acid, even in dilute form, is too strong; hydrochloric or muriatic acid can deposit potentially damaging chloride salts; phosphoric acid tends to bleach masonry; while the weak acetic or carbonic acids work mainly to dissolve limestone crusts. Hydrofluoric acid in a 5 percent dilute solution has proven most effective in cleaning rough-textured granite, sandstone, and brick without leaving behind salt deposits. However, it will etch polished stone surfaces; calcareous material such as limestone, marble, or lime-based mortar and stucco, as well as glass, paint, and metal. Hydrofluoric acid also destroys human nerves, bones, and lung tissue when breathed in or absorbed through the skin and can defoliate the area around a building. For those reasons, ammonium bifluoride, a less hazardous acid-producing material, has begun to replace hydrofluoric acid as a cleaning agent. Meanwhile manufacturers, according to Ken Boyer with ProSoCo, have increased their production of biodegradable organic cleaners and decreased the acidity of some products by as much as 30 percent.

Caustic sodium or potassium hydroxide cleaners will attack organic pollutants on acid-sensitive limestone, marble, brick, and mortar. Because of the extreme alkalinity of those chemicals, most manufacturers recommend neutralizing a cleaned surface with a mild acid rinse prior to a water rinse. The mild acid also will remove any inorganic pollutants still on the masonry's surface. Manufacturers add inhibitors to these caustic chemicals to prevent their oxidizing the metallic elements in brick or stone and recommend, especially with sodium hydroxide, that it be sufficiently diluted to prevent its

Developed by Dr. Alan H. Spry, Senior Consultant with the Australian Mineral Development Laboratories, this guide (below) helps in choosing a cleaning method (Is) that does not exceed the masonry's resistance to damage (Ir). A method's ability to clean (Ic) should be as high as the tenacity of the soil (It), but should not exceed the index of severity (Is).

Selection of a Cleaning Method

(I_S must not exceed I_R; I_C should be as high as I_T but not exceed I_S)

I_R I_S Index	Masonry Material (I_R)	Cleaning Method (I_S)
0	Lime mortar, limewash, old & soft Limestone or plaster, soft Lime mortar, hard Paint, old, soft Brick, underfired, sandstock Cement render, stucco, old Weathered sandstone or bluestone, soft	Light radiation Dry brushing Laser Water misting Very low pressure water washing Organic solvents, paint stripper Steam cleaning
2	Concrete, old, soft Composition mortar Sandstone, moderately hard Brick, moderately burnt Paint, old, hard Cement-rich mortar, concrete Limewash, hard	Manual scrubbing, cold water Manual scrubbing, hot water & detergent Low pressure water jetting Mechanical scrubbing Chemical (HF, NH_4F_2, alkali)
4	Marble, soft Brick, well-burnt Limestone, hard Marble, hard	Soft, abrasive sand blasting Medium pressure water jetting
6	Sandstone, hard Slate, hard and sound	Manual abrasion (carborundum block) Manual wire brushing High pressure water jetting Very high pressure water jetting Wet sand blasting
8	Bluestone (blocky argillite), hard Bluestone (basalt) Clinker brick Granite Quartzite	Needle gun Dry sand blasting Blow lamp Manual redressing Dry mechanical grinding Mechanical redressing (pneumatic chisel)
10		

I_T I_C Index	Soiling (I_T)	Cleaning Method (I_C)
0	Loose dust Climbing plants, moss Fungi, algae Lichen Loose flaking paint Salt efflorescence	Light radiation Dry brushing Laser Blow lamp Very low pressure water washing
2	Salt staining Old limewash Hard limewash, distemper Oil, grease, foodstains Soft urban grime	Steam cleaning Organic solvents Low pressure water washing Manual scrubbing, detergent in water Water misting Needle gun Soft, abrasive sand blasting
4	Bird droppings Metallic stains Plaster Soft decayed stone Soft gypsum crusts Tar Old hard paint	Medium pressure water jetting Mechanical scrubbing Paint stripper Manual abrasion (carborundum block) Manual wire brushing Chemical (HF, NH_4F_2, alkali) High pressure water jetting
6	Damaged stone Soft cement droppings Moderate urban grime Hard, black gypsum crusts	Dry mechanical grinding Very high pressure water jetting
8	Modern plastic paints Hard cement droppings Heavily pigmented old paints Hard urban grime	Dry sand blasting Wet sand blasting Redressing
10		

Principles of Cleaning Masonry Buildings, Dr. Alan Spry. Reprinted courtesy of the Australian Council of National Trusts

Technics: Cleaning masonry

The solutions and poultices listed (below) combine the recommendations of Dr. Alan Spry and Theodore Prudon of the Ehrenkrantz Group. For repointing the narrow joints of the carved brick in Harvard's Sever Hall (below top), conservator Morgan Phillips has developed an experimental grout with fly ash as an aggregate that is injected with nozzles. Sandblasted brick (below middle) loses its hard outer crust, deteriorating rapidly through freeze/thaw action on its pock-marked inner core. A test of chemical and abrasive cleaning (below bottom) shows how properly formulated chemicals retained the crispness and detail of the left baluster, lost on the abrasive-cleaned baluster on the right.

Nature of Stain
Treatment Methods

Asphalt, bitumen, tar and brown stains under soot

1 If thick, freeze with ice or dry ice, chip off. Wash with petrol, benzene.
2 Liquid or poultice; kerosene, carbon tetrachloride, trichloroethylene, toluene or benzol.
3 Benzene + ammonia + methanol; 1:1:1.
4 Carbon tetrachloride (9 parts) + benzene (1 part) + detergent (1/10th part).

Stains left after removal of mould, lichen, moss or bacteria

1 Trisodium phosphate and laundry bleach.
2 Household bleach.
3 Bleaching powder (calcium hypochlorite).
4 Dilute ammonia.
5 Formalin (40 per cent solution of formaldehyde).
6 Oxalic acid (5 per cent plus household bleach).
7 Citric acid (15 per cent).
8 Proprietary acidic rust-removing concrete cleaner.
9 Brush on sodium nitrate solution (15 per cent) cover with a layer of sodium dithionite crystals covered by a poultice of whiting and water. Wash.
10 Proprietary fungicide.

Grease, oil, food stains, hand marks

1 If wet, cover with dry clay absorbent or Portland cement. Dry, brush and wash with hot water and detergent or solvent.
2 Scrape, scrub with hot water and detergent, TSP or scouring compound.
3 Application of a solvent as a liquid (with scrubbing) or as a poultice. Follow by a scrub with hot water and detergent. Solvents include benzene, white spirit, kerosene, petrol, carbon tetrachloride, proprietary dry cleaning agents, di-, tri-, or tetrachloroethylene.
4 Proprietary alkaline degreasing agent.
5 Poultice of trisodium phosphate (1 part), sodium perborate (1 part), talc (3 parts) in a hot soft soap solution in water.

Bronze stains

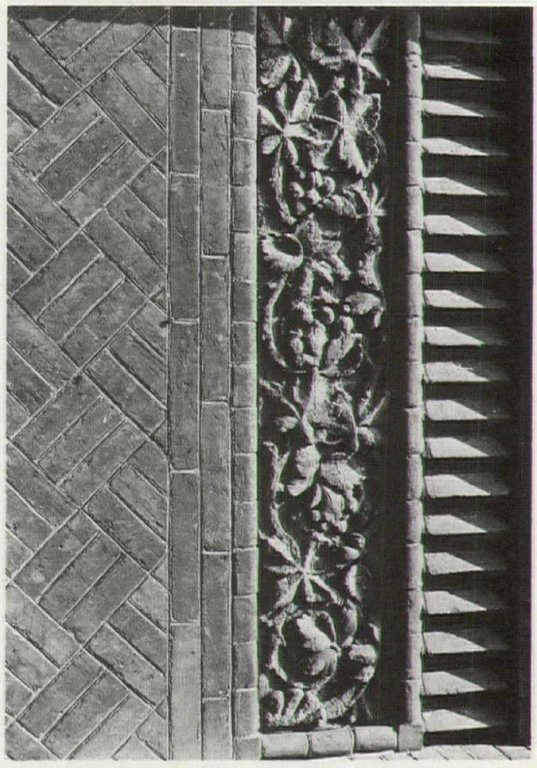
1 Ammonium or aluminum chloride with some liquid ammonia in water, thickened with talc.

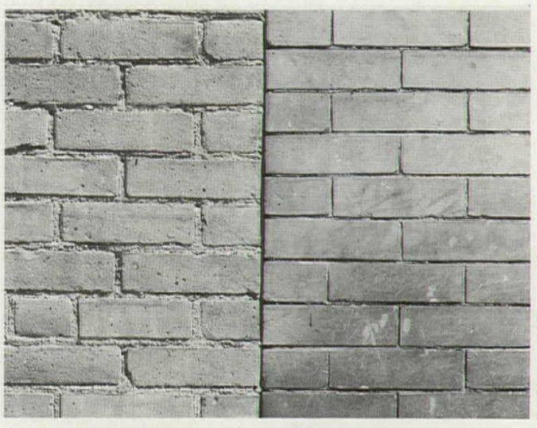
Rust stains

1 Light staining: brush on solution of 1 part oxalic acid in 10 parts water with small amount of ammonium bifluoride.
2 Deep staining: poultice of 1 part sodium or ammonium citrate, 7 parts glycerine, 6 parts warm water mixed with Fuller's Earth.

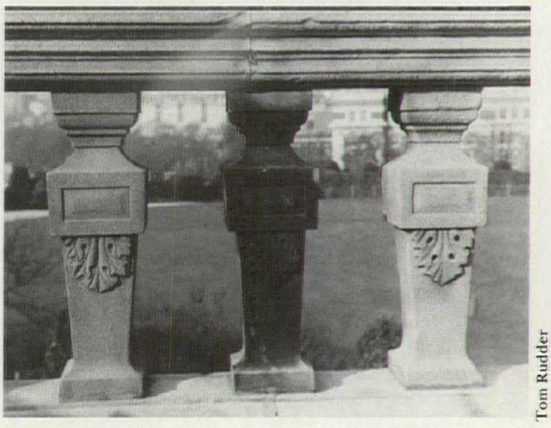
Copper stains

1 Ammonia or ammonium chloride + ammonia, as liquid or poultice
2 Formic acid (10 per cent)
3 Caustic soda + detergent + sodium boroglucamate + sodium ethylene diamine
4 Hydrofluoric acid (0.2 per cent applied only for a few minutes)
5 Sulphamic (amidosulphuric) acid, 10 per cent aqueous. Acid treatment may be neutralised with alkali before intensive final washing.





Ct. Historical Commission



Tom Rudder

burning the masonry surface or depositing soluble salts.

Be it an acid or alkaline cleaner, workers should wear protective clothing and masks, plant life should be covered, the residue should be collected and properly disposed of, and the scaffolding should be shrouded to prevent the wind from spraying passers-by. When a hydrofluoric acid solution is used, all glass and metal surfaces should be covered with polyethylene and a water-resistant tape or coated with a liquid vinyl provided by the manufacturer.

Poultices

With stains limited in area, poultices provide an inexpensive alternative to chemical cleaners. Poultices combine solvents or cleaning agents with water and an inert filler such as talc, chalk or Fuller's Earth to form a paste-like material. The paste is applied to the pre-wet masonry stain in a ¼-inch layer, covered with polyvinyl taped to the wall, and left to stand until the solvent draws the stain into the filler or the water in the paste evaporates. The poultice is then brushed away and reapplied, if the stain persists, or the masonry is rinsed with water to remove any residual chemicals.

Paint removal

Paint removal is not the same as cleaning masonry, since many buildings originally had, and thus should retain, their paint coat. Removing paint should occur only if the existing coating is too thick to accept a new coat of paint or if the coating is not original and not functioning to either disguise or protect a poor quality masonry underneath.

There are three common methods of removing paint from masonry. Mechanical removal, other than by hand-scraping loose paint, should be avoided because of the potential surface damage frequently caused by wire brushing, power sanding, or grit blasting. But more on that later. Removing paint thermally, with a heat gun that operates between 500 and 750 F and blisters the paint prior to hand scraping, is recommended by the National Park Service because that method rarely damages the masonry's surface. (Propane torches, operating between 3200 and 3800 F, not only damage the masonry; they can vaporize the lead in paint.) The Park Service acknowledges, though, that thermal methods offer only a first step in the removal of paint for, as Mary Oehrlein with the Ehrenkrantz Group puts it, "heat and hand scraping never gets into the corners. You end up having to use chemicals if you want to remove all of the paint."

Chemical paint strippers contain either organic solvents such as methylene chloride, or alkaline materials such as potassium hydroxide. The solvent-based strippers are more expensive, but tend to be more effective on modern epoxy, acrylic, or urethane coatings. The water-soluble variety often leave a gummy residue that requires the application of a second solvent to remove.

Alkaline paint strippers, especially those containing lye or caustic soda, have had a

long history, although their use has decreased because of the damaging salts they can introduce into a wall. Alkaline strippers, however, are generally less expensive than solvent strippers and they often work better on older, slightly acidic oil-based paints.

As with chemical cleaners, the use of chemical paint strippers requires that workers wear protective clothing, that plants be covered, that scaffolding be shrouded, and that the chemical residue be disposed of according to local environmental ordinances.

Abrasive cleaning

For all of the damage careless chemical cleaning can do to a building, its hazards pale in comparison to the abrasive cleaning of masonry. Anne Grimmer, author of the Department of the Interior's Preservation Brief on abrasive cleaning, laments that "sandblasting has become a generic term for cleaning masonry. Such an abrasive method is fine when cleaning cast iron or heavy machinery, but it is probably the worst thing you can do to masonry."

Abrasive cleaning appeals because it is a relatively fast and inexpensive process, using a variety of equipment, from electric rotary wheels, wire brushes, and belt sanders to air compressors capable of blasting a wall with everything from sand or volcanic ash to crushed walnuts, rice husks, corn cobs, or coconut shells. That grit comes out of the compressor's nozzle dry or combined with water to form a wet slurry. But like high-pressure water washing, every abrasive cleaning method eludes precise enough control in the field. With brick, abrasive cleaning can erode the hard outer surface, exposing the brick's soft, inner core to the elements. The brick, thus exposed, will slowly crumble through cycles of freezing and thawing until it must be replaced or covered with stucco. Masonry sealers only increase a brick's deterioration by trapping liquid water and soluble salts behind the masonry's surface.

Abrasive cleaning methods bring similar results with other materials—removing the glazed surface of terra cotta, the finish coat of stucco, and the quarry crust on sandstone, limestone, and marble. Those methods also erode mortar joints, open cracks in the masonry, obliterate tooling marks on stone, create health hazards, cause disposal problems, and virtually guarantee the loss of any tax benefits that might accrue to a historic building undergoing rehabilitation. Don't be tempted by the low first cost of abrasive cleaning. It has too many hidden, long-term costs to make it even worth considering.

The high-tech future

The cleaning of masonry buildings may change dramatically in the not too distant future. Scientists have developed infrared lasers that burn off surface soil and are working on ultraviolet lasers that remove organic coatings through a photochemical reaction. Meanwhile, art conservators have begun using pencil-thin guns and small glass beads to clean metal objects, ultrasonic waves to scrub objects submerged in a detergent bath, low-wattage ultraviolet lamps to remove moss and algae from objects, and high-energy flash lamps whose short bursts of light turn surface soil to dust. All of these techniques are expensive, and time-consuming, and remain, as yet, impractical in cleaning an object as large as a building. But as Ken Desson and Martin Weaver with Heritage Canada said in a recent article, technology such as the lasers may make it "possible to reach and clean most parts of a building's façade without ever leaving the ground."

Repointing

Masonry cleaning usually uncovers joints needing repointing. The most common repointing error is in the use of Portland cement mortar that is much harder than the lime mortars in most 18th- and 19th-Century buildings. Often the cement joints will crack, or they will spall the masonry's surface.

To match older mortars better, Robert Mack and James Askins, in their book *The Repointing of Historic Masonry Buildings,* recommend using ASTM C 207, Type S Hydrated Lime and ASTM C 144 Sand in a 1:2 to 1:3 mix. The addition of a nonstaining white Portland cement (ASTM C 150, Type II with no more than .6 percent alkali and .15 percent water-soluble alkali) in an amount no more than 20 percent of the lime content will increase strength but not hardness. Have the old joints raked (to a depth 2½ times the joint width) with hand chisels to prevent damaging the masonry, and have the new mortar (set in ¼-inch layers in the prewet joints) tooled back from the masonry's face to prevent joints that are too wide with easily chipped feather edges.

How clean is clean?

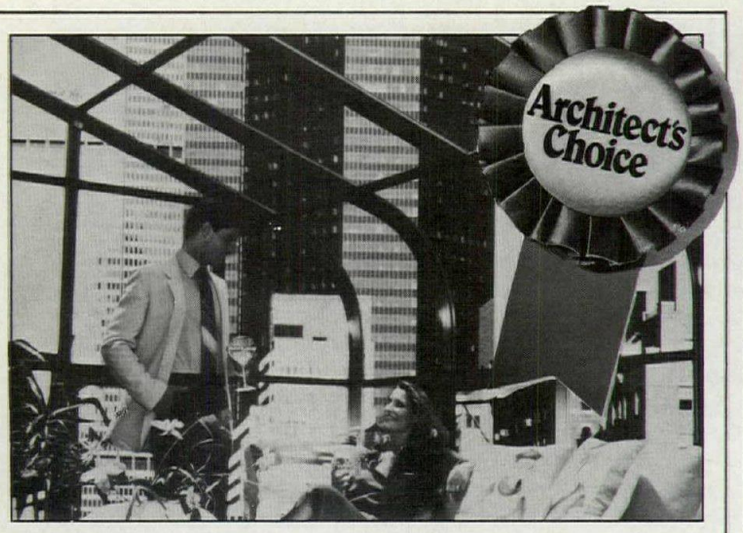
The success of a cleaning method or of a repointing mix may depend as much on our expectations as on any physical properties of the masonry itself. If we expect an old building to look as it did the day it opened, we will certainly damage the building in the process of cleaning it. If, on the other hand, we can accept a building's patina—accept, as Ruskin did, that almost every old building is "improved by all its signs of age"—we can, with some knowledge and almost equal certainty, select the proper method or materials. The crucial question, given our fetish for cleanliness, may not be how to clean so much as how clean is clean? [Thomas Fisher]

Acknowledgments

We would like to thank the following people for their contribution to this article: Ron Biffinger, Rudco; Ken Boyer, ProSoCo; D.C. Cimino; Lo-Yi Chan, Marjorie Hoog, Prentice & Chan, Ohlhausen; James Diedrich, Diedrich Chemicals; Anne Grimmer, National Park Service; Walker Johnson, Holabird & Root; Mary Oehrlein, Theodore Prudon, Ehrenkrantz Group; Morgan Phillips, Society for the Preservation of New England Antiquities; Tom Rudder, Ramco; Jack Tedyzh, American Building Restoration; Jacob Schneider, Glen-Gery; Jack Waite, Mendel, Mesick, Cohen, Waite; John Vinci.

Further reading

The National Park Service's *Preservation Briefs #1, 2 & 6,* are excellent overviews of masonry cleaning and repointing methods, and are available from the U.S. Government Printing Office, Washington, D.C. 20402 or from the Park Service's Regional Offices. Limited copies of *Exterior Cleaning of Historic Masonry Buildings* by Norman Weiss are available from Technical Preservation Services, Preservation Assistance Division, National Park Service, Washington, D.C. 20240. One of the best magazines to cover that and related subjects is *Technology and Conservation,* 1 Emerson Place, Boston, Mass. 02114.

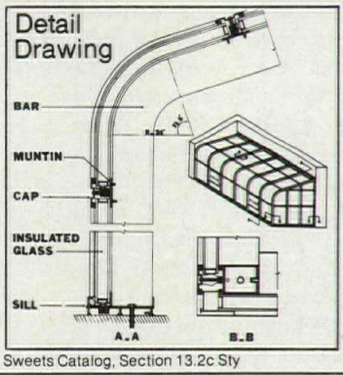


SUN SYSTEM Prefabricated Solar Greenhouses are designed for fast, smooth installations in residential and commercial applications. The only 100% Therm-ally Broken passive solar greenhouse on the market.

For our new 24 page color catalog and price list write to:

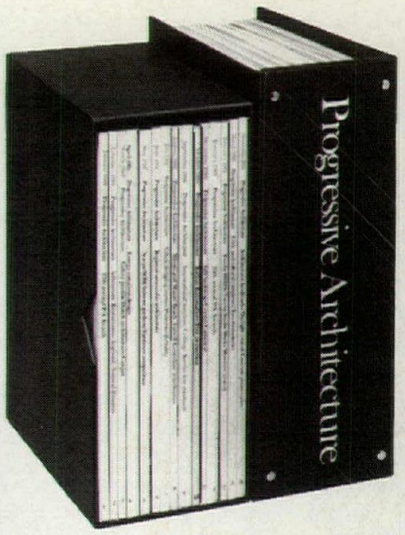
SUN SYSTEM™
PREFABRICATED
SOLAR GREENHOUSES

60M Vanderbilt Motor Parkway
Commack, New York 11725
or call toll free 1-800-645-4506
in NY 516-543-7766
Dealer Inquiries Invited



Sweets Catalog, Section 13.2c Sty

Circle **No. 389** on Reader Service Card



Now—Two Ways To Save and Organize Your Copies of P/A.

Protect your P/A issues from soil and damage. Choose either the attractive library case or the all new binder. Both are custom-designed in blue simulated leather with the magazine's logo handsomely embossed in white.

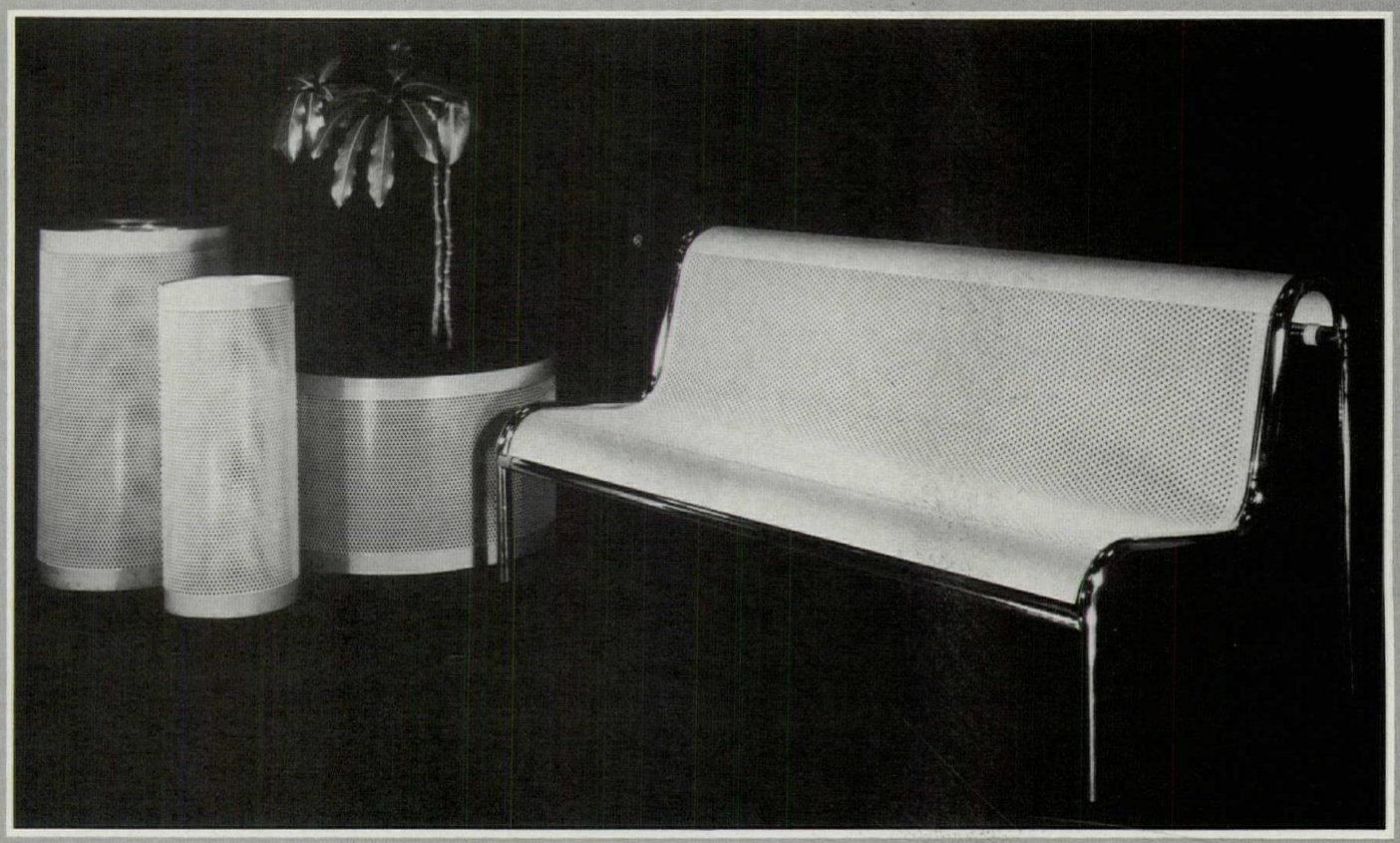
Jesse Jones Box Corporation
P.O. Box 5120, Dept P/A
Philadelphia, Pa. 19141

My check or money order for $_____ is enclosed.
P/A Cases: ___ 1 for $5.95 ___ 3 for $17.00 ___ 6 for $30.00
P/A Binders: ___ 1 for $7.50 ___ 3 for $21.75 ___ 6 for $42.00

Name_____
Company_____
Street_____
City_____ State_____ Zip_____

Check must accompany all orders.
Add $2.50 per item for orders outside U.S.A.
Allow 3-4 weeks delivery.

CANTERBURY INTERNATIONAL 1984



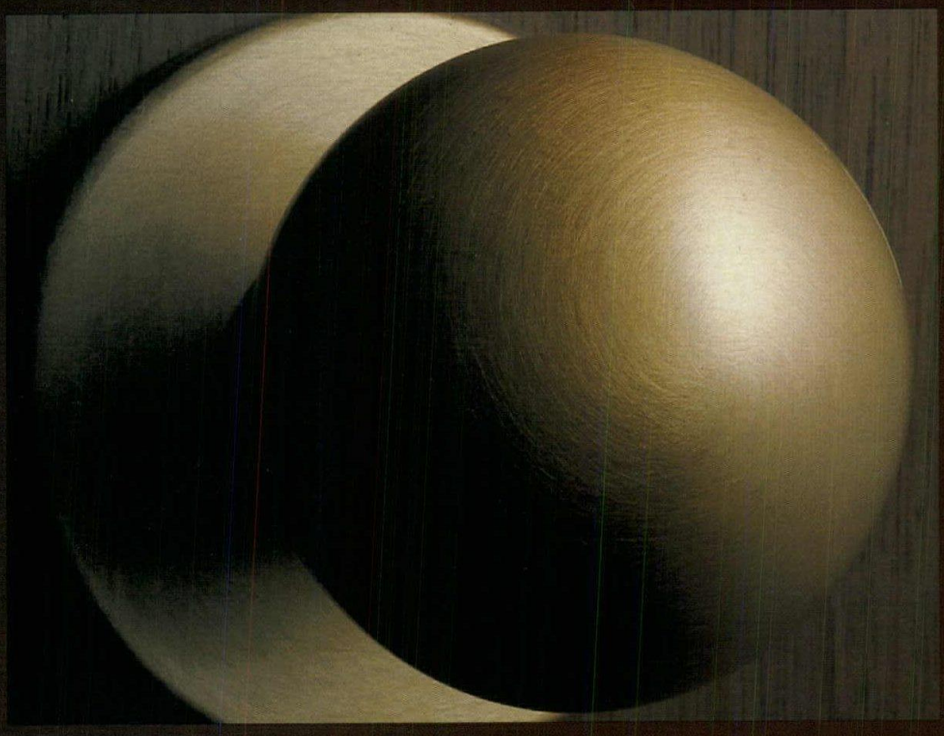
Silhouette Group — Available in benches, planters, trash receptacles and ash urns.

CANTERBURY INTERNATIONAL

a division of Canterbury Designs, Inc.
P.O. Box 5730 • Dept. PA-11 • Sherman Oaks, CA 91413 • (213) 936-7111

Circle **No. 313**

Sargent Mortise Locks:
7700 Line • 8100 Line

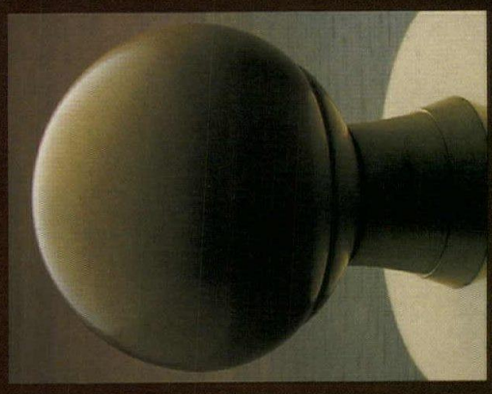


At Sargent, attention to design comes naturally.

Beauty joins form and function in nature to create perfection. So it is with Sargent, where designers work closely with craftsmen to please the eye and provide the protection, performance and durability you demand.

Proof: Sargent Mortise Locks enhance both the design and security of any door. Small wonder they've been the first choice of generations of architects (and specifiers) for aesthetics and peace-of-mind.

Look to Sargent, where attention to design is second nature.



SARGENT

Division of Kidde Inc.

KIDDE

Sargent, New Haven, Connecticut 06511
Sargent (Canada)

Circle No. 379 on Reader Service Card

Specifier's holiday

Walter Rosenfeld

When not busy preparing project manuals, what can the specifier do to provide additional income for the architect's practice?

The master specification is up to date. All the bids are in. Everything else is in preliminary design. What's a specifier to do? There's always literature to read or research to pursue, but how can he earn money for the architectural practice when there are no project manuals to be done for a while? Here are a few suggestions.

Since specification writing itself is a marketable skill, he can start by seeking other clients to write for. The architect's consultants (acoustical, equipment, or landscape, for example) may need help in preparing written documents for their clients on other projects. Or, architects in other firms might welcome an experienced specifier's aid in meeting their short schedules. Building owners, especially institutions, often need specifications done for their own in-house work. Even manufacturers preparing model documents for architects to use are potential clients for the available specifier's talents.

A second area for fee-producing effort is the review of specifications prepared by other writers. Here the clients are institutions, agencies, building owners, and other architects. The review can be for completeness and consistency, to discover any errors, or to check the quality of materials specified and the methods of application for appropriateness to the building type and budget. Evaluation of the strategy proposed for the bidding procedures and their compliance with public bidding regulations are additional services that take advantage of the specifier's special familiarity with the legal aspects of project manuals.

Moving into the field, the specifier is usually well qualified to visit completed buildings on behalf of owners, architects, agencies, or manufacturers to examine the in-place performance of building materials and assemblies. If failures are discovered, the specifier is usually able to recommend corrective measures, or at least indicate the direction of further investigations. His hard-earned knowledge of what materials are appropriate for each use and how they should be installed is basic to this type of investigation, which often leads to reports and recommendations to the client as to future policy on the use of questioned or failed materials.

If a connection with a manufacturer can be established, either directly or through an architectural representative, the specifier can offer his services to review proposed or published product literature from the "buyer's" point of view. The specifier's critical study of the sales approach and presentation, as well as the completeness of essential information, offers the manufacturer valuable "feedback" and useful knowledge about how his material is being received.

Beyond reviewing literature and inspecting products in use, the specifier with extensive experience can offer to evaluate materials proposed for use in large quantities by owners, agencies, institutions, or even manufacturers. Although not generally a laboratory technician, the specifier knows how to evaluate test data, make investigations of users' experiences with such products, and report results with recommendations to concerned clients.

If none of the above approaches prove fruitful, the specifier is still well prepared to talk to technical groups and to teach about materials and methods of construction in technical schools and adult education courses. Many specifiers have served as guest faculty in architectural schools across the country, earning fees, but at the same time broadening their contacts and familiarizing others not only with their subject matter, but also with themselves and the practices they represent. A related activity producing modest income is the writing of technical and semitechnical articles for trade, industry, and professional magazines whose readers have an active interest in subjects the specifier knows well.

These general groups of income-producing activities use the many construction-related skills the specifier has acquired in the normal course of his work. Few of them can be activated instantly without advance preparation and client development. All return dividends well beyond the actual fees earned in public awareness of the specifier's role and the contribution he makes to the successful practice of architecture. This may in fact be the most valuable reward the specifier receives from such efforts even though the architect will certainly appreciate the additional money.

And if all else fails, there is still one more way in which most specifiers can help their architectural practices: putting in a few weeks on the drawing boards not only produces an obvious economic benefit, but can also help keep the specifier in touch with the other side of the profession—the graphic part on which his usual work continues to depend. □

Walter Rosenfeld, *AIA, CSI, is Managing Director for Professional and Technical Services at The Architects Collaborative in Cambridge, Mass.*

There's a towering difference at Elwin G. Smith

50 years' experience in the manufacture and erection of advanced mid-rise curtainwall systems

SMITH Curtainwall Systems have been on the rise for more than fifty years. In that time, these low and mid-rise systems have proved to be structurally sound, thermally efficient building envelopes, noted for their design excellence.

And now high tech high-rise curtainwall systems from Smith

Now reaching new highs in architectural excellence, SMITH's Curtainwall Systems provide a choice of five standard THERM-A-FRAME insulating window extrusion systems plus custom-designed and curved windows for special design effects in high-rise structures. SMITH's Single Source Responsibility Concept assures modern, economical construction of the complete curtainwall building envelope.

ELWIN G. SMITH INTERNATIONAL

cyclops CORPORATION

100 WALLS STREET, PITTSBURGH, PA 15202 | (412) 761-7474
KINGSWICK HOUSE, SUNNINGHILL,
BERKSHIRE, ENGLAND SL5 7BJ | (990) 23491
AL-HOWAISH – ELWIN G. SMITH CO. LTD., P.O. BOX 11181,
JEDDAH, SAUDI ARABIA 21453 | 637-8000

Circle **No. 384** on Reader Service Card

Resolving contract disputes

Norman Coplan

Whether disputes between the contractor and the owner are resolved by the architect or by arbitration depends on the nature of the claim.

The General Conditions of the Contract of Construction issued by the American Institute of Architects provides that "all claims, disputes and other matters in question between the Contractor and Owner arising out of or relating to the contract documents or the breach thereof . . . shall be decided by arbitration." It also provides that certain claims, disputes, and questions must first be submitted to the architect for determination before either party can seek recourse through arbitration. There is uncertainty, however, as to the type and nature of a claim or dispute that may be directly resolved by arbitration, and the type of claim or dispute that must be submitted initially to the architect for decision as a condition precedent to arbitration.

In the case of *County of Rockland* v. *Primiano Construction Co., Inc.* (51 N.Y.2d 1), the New York Court of Appeals was called upon to interpret the General Conditions in a claim by a general contractor for damages arising from delays allegedly caused by the owner. The owner sought to "stay" an arbitration proceeding instituted by the contractor for damages resulting from delay, on the ground that the contractor had not first submitted his claim to the architect for consideration and decision. The Court pointed out that there were two operative paragraphs in the General Conditions that required analysis. One provision provides that "claims, disputes and other matters in question between the Contractor and the Owner relating to the execution or progress of the work or the interpretation of the Contract Documents shall be referred initially to the Architect for decision." The other provision is the arbitration clause contained in the agreement, which provides that all claims and disputes between the owner and contractor are to be determined by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association. The threshold inquiry of the Court, therefore, was to determine the relationship between these two provisions and specifically to determine whether a claim by the contractor for delay damages requires an initial determination by the architect before the arbitration procedure is available.

The Court concluded that although it was not clear beyond all argument, the proper interpretation of the General Conditions was that a claim for delay damage did not require an initial submission to the architect. The Court said:

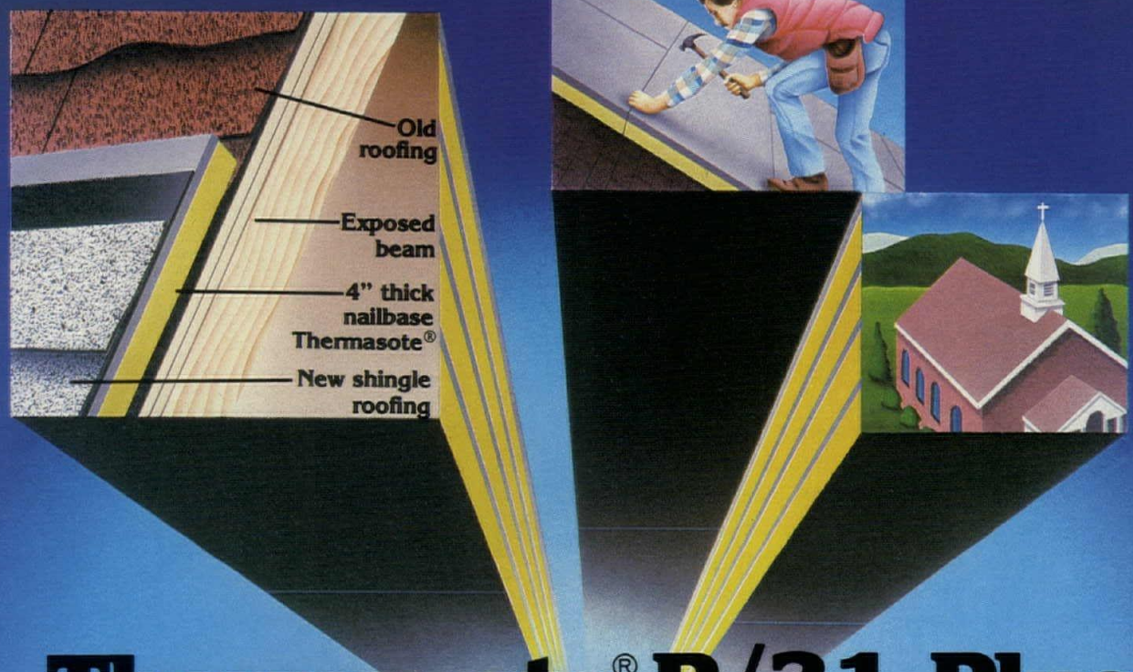
"Examination of the provisions of article 2 of the General Conditions prescribing the duties of the architect discloses that the primary focus of his responsibilities is to 'provide general Administration of the Construction Contract.' He is described as the 'Owner's representative during construction and until final payment.' . . . The architect is assured of 'access to the Work whenever it is in preparation and progress.' . . . He is obligated to make periodic visits to the construction site and 'to determine in general if the Work is proceeding in accordance with the Contract Documents.' . . . 'The duties, responsibilities and limitations of authority of the Architect as the Owner's representative during construction . . . will not be modified or extended without written consent of the Owner, the Contractor and the Architect.' . . . It appears from these and other provisions of article 2, in which, of course, subparagraph 2.2.7 is to be found, that the authority of the architect is centered on the operational phases of construction. Consistent with this perspective, claims, disputes and other matters in question between the Contractor and the Owner which must first be referred to the Architect are those 'relating to the execution or progress of the Work.' "

The Court concluded that a claim for delay damages asserted after substantial completion did not fall within the scope of the provision that called for initial determination by the architect of claims relating to the execution or progress of the work. The Court stated, in part:

"Claims asserted after substantial completion of the work do not fall within the scope of subparagraph 2.2.7. The present claim of Primiano (contractor) for delay damages, asserted some two years after substantial completion of the project and occupation of the building comes within this latter classification, outside the compass of subparagraph 2.2.7. Therefore, reference to the architect was not a condition precedent to submission to arbitration."

The Court further pointed out that it could have been contended that since the architect is the interpreter of the construction contract documents, the question of whether the construction contract requires a contractor's delay claim to be submitted to the architect for determination as a condition precedent to arbitration should have been determined initially by the architect and not the court. Although conceding that the interpretation of the construction documents falls initially within the province of the architect, the Court concluded that such function on the part of the architect should be held to relate only to the substantive provisions of the documents of which the architect might be expected to have special competence. To hold, said the Court, that the clause extended as well to interpretation of the provisions relating to arbitration would be to accord to the architect initial authority to determine whether parties had made a valid agreement to arbitrate, and if so, its scope and whether it had been complied with. "At least in the absence of explicit language employed by the parties demanding this result," said the Court, "such a bootstrap argument should be rejected." □

Norman Coplan, *Hon. AIA, is a member of the law firm Bernstein, Weiss, Coplan, Weinstein & Lake, New York.*



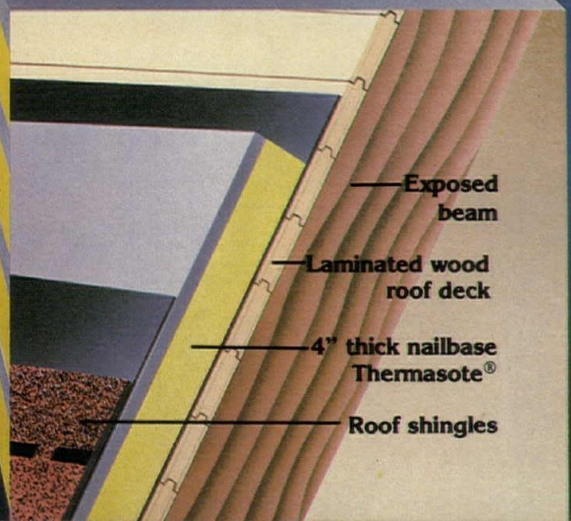
Thermasote® R/31 Plus* Nailbase Roof Insulation System

- Lightweight, versatile, super-insulating nailbase panels
- No asbestos/no urea formaldehyde additives
- Retrofit: apply Thermasote® over old roofs
- New construction: apply Thermasote® over any roof deck

For full details, call (609) 883-3300, or write
Homasote Company
P.O. Box 7240
West Trenton, NJ 08628-0240

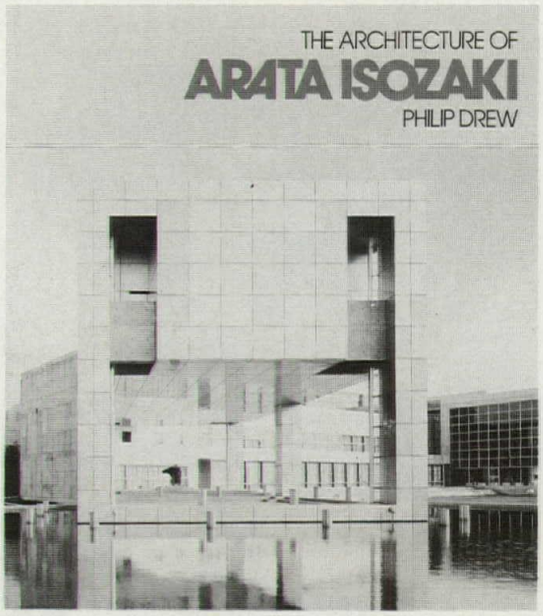
ENERGY SAVER

*The system combines 4" Thermasote® (R-24), 2⅛" Homasote Easy-Ply® Roof Deck (R-6) and finish roofing.



The twain meet

Books



The Architecture of Arata Isozaki, *by Philip Drew. New York, Harper & Row, Icon Editions, 1982. 206 pp., illus., $35.*

Reviewed by William C. Miller, Associate Professor, Department of Architecture, Kansas State University, Manhattan.

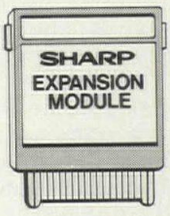
In the modern era, Japan's absorption of Western architectural ideas has always been tempered by its own building traditions and cultural values. Since the opening of Japan, a tension persists in its architecture between Eastern spirit and Western knowledge. In the Late 19th Century, concern focused upon the fusion of Western eclecticism and construction techniques with traditional Japanese planning arrangements. During the early phases of the Modern movement, Japan's influence upon the west was of particular import; traditional Japanese architecture informed the work of such divergent personalities as Wright, Gropius, Bruno Taut, and Antonin Raymond. Although a modest Modern movement existed by the 1930s, there was a general ambivalence toward Western architectural sensibilities before World War II. In post-war Japan, architects looked beyond their cultural milieu for conceptual and expressive sources and paradigms, which often resulted in mirroring Western developments and technological advances.

Le Corbusier's architecture was of paramount influence in the immediate post-war period. The work of Kunio Maekawa, Kenzo Tange, and their contemporaries, which incorporated traditional modes of Japanese expression with Corbusian *beton brut* aesthetics, is exemplary of the period. The assimilation of Western assertiveness was manifested in a heavy, aggressive, elemental formalism which was, simultaneously, Japanese in attitude, reference, and detail association. Maekawa's Harumi Apartment Block and Tokyo Festival Hall, and Tange's Kurashiki City Hall and Nichinan Cultural Center represent this Japanese "Brutalism." Metabolism, with its exaggerated plug-in, clip-on, megastructure imagery, combined this fixation on elemental expression with a predilection for utopian large-scale urban visions prevalent in the

[*Books continued on page 140*]

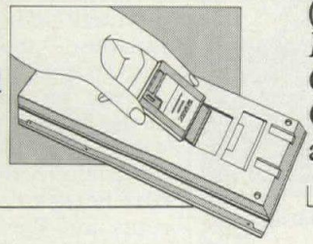
ANOTHER TECHNOLOGICAL BREAKTHROUGH FROM SHARP.

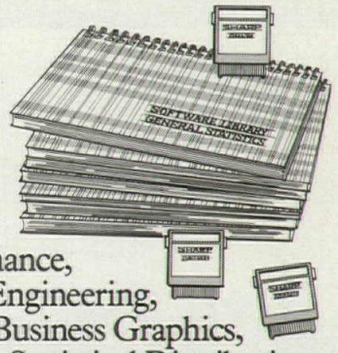
THE HAND-HELD COMPUTER WITH POWERFUL CONNECTIONS.



24K
(8K + 16K)

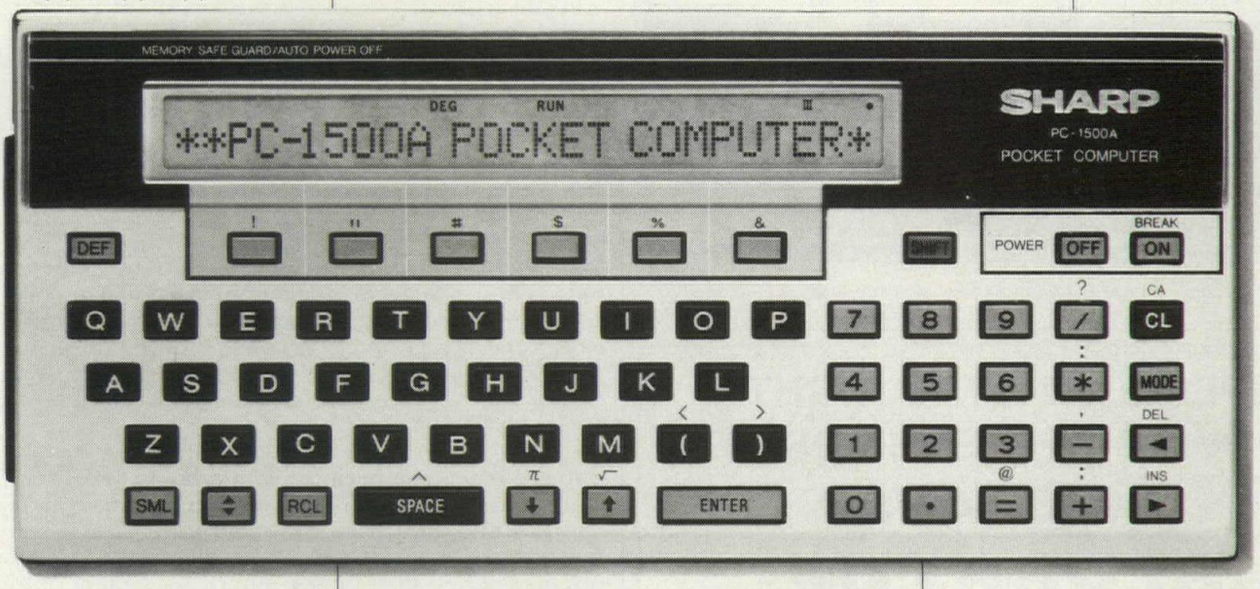
Now you can take 24K with you wherever you go—thanks to the new Sharp PC-1500A. It's the 8K hand-held computer that expands to a powerful portable 24K computer system when the optional 16K memory module is added. And because it's programmable in Basic, the most popular computer language, it gives you the power and capabilities to handle most scientific, engineering and management uses.

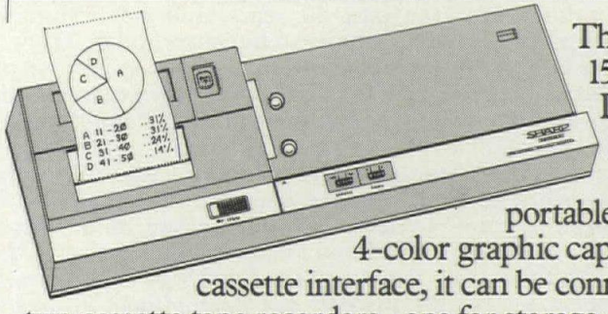




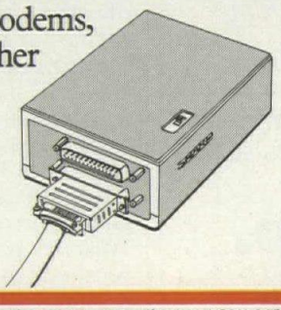
The PC-1500A also has a complete library of plug-in software programs including: Sharpcalc (Spreadsheet), Finance, Math, Electrical Engineering, Circuit Analysis, Business Graphics, General Statistics, Statistical Distribution and Graphics Development.

195(W) x 25.5(H) x 86(D) mm





The optional CE-150 Color Graphic Printer/Cassette Interface not only gives the system portable printing but also 4-color graphic capabilities. And as a cassette interface, it can be connected with up to two cassette tape recorders—one for storage and one for recall. The CE-158's RS-232C Interface allows communication links to a wide variety of peripherals such as modems, bar-code readers, data bases, as well as other micro, mini or mainframe computers.



Perhaps the only feature of our portable computer system that won't overpower you is its price. It's not only less than you'd expect, it's probably hundreds of dollars less. So before you spend a lot of money and get a lot less computer, call toll-free for more information, dial (800)-447-4700.

Watch for our TV commercial to learn more about the latest advance in computer technology from Sharp. We replaced a half-million transistors and diodes with one tiny "chip."

SHARP

FROM SHARP MINDS COME SHARP PRODUCTS

Sharp Electronics Corp., 10 Sharp Plaza, Paramus, NJ 07652. Call for information on custom applications: (201) 265-5600, ext. 4361.

Circle **No. 382** on Reader Service Card

Books continued from page 138

early 1960s. But Metabolism was more lyrical, monumental, and biologically metaphoric than Western megastructure counterparts. Eastern developments began to veer away from concurrent Western developments at this point; attention was again directed toward the poetic and symbolic qualities of traditional Japanese architecture with its perceptual subtlety and formal ambiguity. Moving away from the overt tangibility of technological expression, recent "New Wave Japanese Architecture" concentrates on a more metaphysical, symbolic, and formal corpus of concerns.

Japanese architecture continues the dialogue between Western thought and technology and Eastern tradition and philosophic attitudes, but now in a more metaphorical and referential manner. In the process of acquiring the "power" of Western technique, emphasis has evolved from a focus on Japanese plan, to Japanese expression, to a current interest in Japanese symbolism. A dialectic between the poetic, symbolic, and geometrically disciplined architecture of Japan and the current historically referenced, classically based sensibilities of the West is witnessed in the work of Arata Isozaki, Tadao Ando, Hiroshi Hara, Toyo Ito, Atelier Zo, and their contemporaries. In the work of these architects, a conversation occurs between traditional Japanese spatial and ordering concepts and Western architectural heritage and precedent.

Arata Isozaki's career is a microcosm of post-war Japanese architectural development, with its concomitant east-west dialectic. His earliest work is representative of the major trends prevailing during the 1960s. First, the Oita Medical Hall and Oita Prefectural Library encapsulate the notion of particularized and exaggerated elemental expression fused with Corb's *beton brut* imagery. Second, Isozaki's Joint Core Project and "City in the Air" theoretical studies demonstrate his interest in Metabolist ideas. A transition period occurred in the early 1970s, as is witnessed by his designs of a branch bank and the headquarters for the Fukuoka Mutual Bank in Oita. These works become more referential and associative in their formal composition and image. Last, Isozaki's current work reflects a more personal exploration of form and meaning. While this involves a reinterpretation of Japanese tradition, it also embraces influences from Western Neo-Classicism and early Modernism.

Although Isozaki's individual works have been featured in numerous western periodicals and books on current Japanese architecture (i.e., Robin Boyd's *New Directions in Japanese Architecture* and the I.A.U.S. monograph *A New Wave of Japanese Architecture*), Philip Drew's *The Architecture of Arata Isozaki* represents the first major book-length assessment of his architecture in English. In tracing the development of Isozaki's ideas and buildings over the past 20 years, and establishing his leadership position in Japanese architecture today, Drew divides the book into two parts: the first section is an interpretive analysis of Isozaki's works and ideas; the second section presents a photographic portfolio of his major buildings and projects.

Drew interprets Isozaki's work as being based upon Mannerist sensibilities, which he presents not as "a theory in the form of a testable hypothesis," but rather demonstrated through a kinship of associated ideas. Arnold Hauser's *Mannerism: The Crisis of the Renaissance and the Origin of Modern Art,* and Robert Venturi's *Complexity and Contradiction in Architecture* provide the analytic framework. Drew assesses Isozaki's Mannerist posture in terms of his conceptual sources, systems of order and expression, and concern for and pursuit of form. For the author, "Mannerism is considerably more than the expression of the tension between classicism and the anti-classical; it is typified by inorganic anti-classical aesthetics, a revolt against simplification and the principles of multiplicity, duality, fragmentation of form and space, tendency to spatial depth, and suppression of depth in architectural façades." The potentialities of Isozaki's Mannerist tendencies are enlarged through his knowledge and use of both Eastern and Western precedent. For here is where the two histories are recalled, their ideas blended and juxtaposed, and where the design dialogue between the two worlds occurs. Furthermore, Drew states, "Consciousness of 'style' is accompanied by ar-

[*Books continued on page 142*]

Ful-O-Mite IDF*
the exterior insulation system from H.B. Fuller that sets new performance standards.

Ful-O-Mite IDF is the most beautiful way we know to beat the heat of summer and the chill of winter.

Ful-O-Mite IDF has the strength to withstand impact, while having the flexibility to accommodate building movement without cracking. Ful-O-Mite IDF meets fire code requirements. The system stands up to airborne pollutants and salt spray. Tested by independent laboratories, under the most rigorous conditions, Ful-O-Mite IDF surpassed the leading competitive exterior insulation decorative finishes for strength and durability.

Ful-O-Mite IDF gives a building a beautiful appearance while providing long-lasting durability. This exterior insulation system forms a solid barrier against weather's worst: keeping winter's freezing temperatures and summer's scorching heat outside, where they belong. A difference made obvious in occupant comfort and reduced utility bills.

How does H.B. Fuller do it?

We are the only company to develop a latex polymer raw material specifically designed for our own product. In our finish coat, this latex promotes a tougher, harder cure, increasing its resistance to weather.

At H.B. Fuller, developing our own resins is just part of our commitment to providing our customers quality, consistency and compatibility within the bonding system.

The primer coat of Ful-O-Mite IDF by H.B. Fuller has extremely *fast grab power.* You can eliminate the need for a baseboard when installing the foam. Embedding the reinforcing fiberglass mesh is a lot easier too! The finish coat has a longer open time, and offers freeze/thaw stability in the pail and in its cured state. You're assured a quality product at the job site.

If you'd like to get the facts on Ful-O-Mite IDF, write to: H.B. Fuller, Attn: Ful-O-Mite IDF, Department M, 315 South Hicks Road, Palatine, IL 60067 or call (800) 323-7407 or if in Illinois, call (312) 358-9500 and request a free copy of the test results.

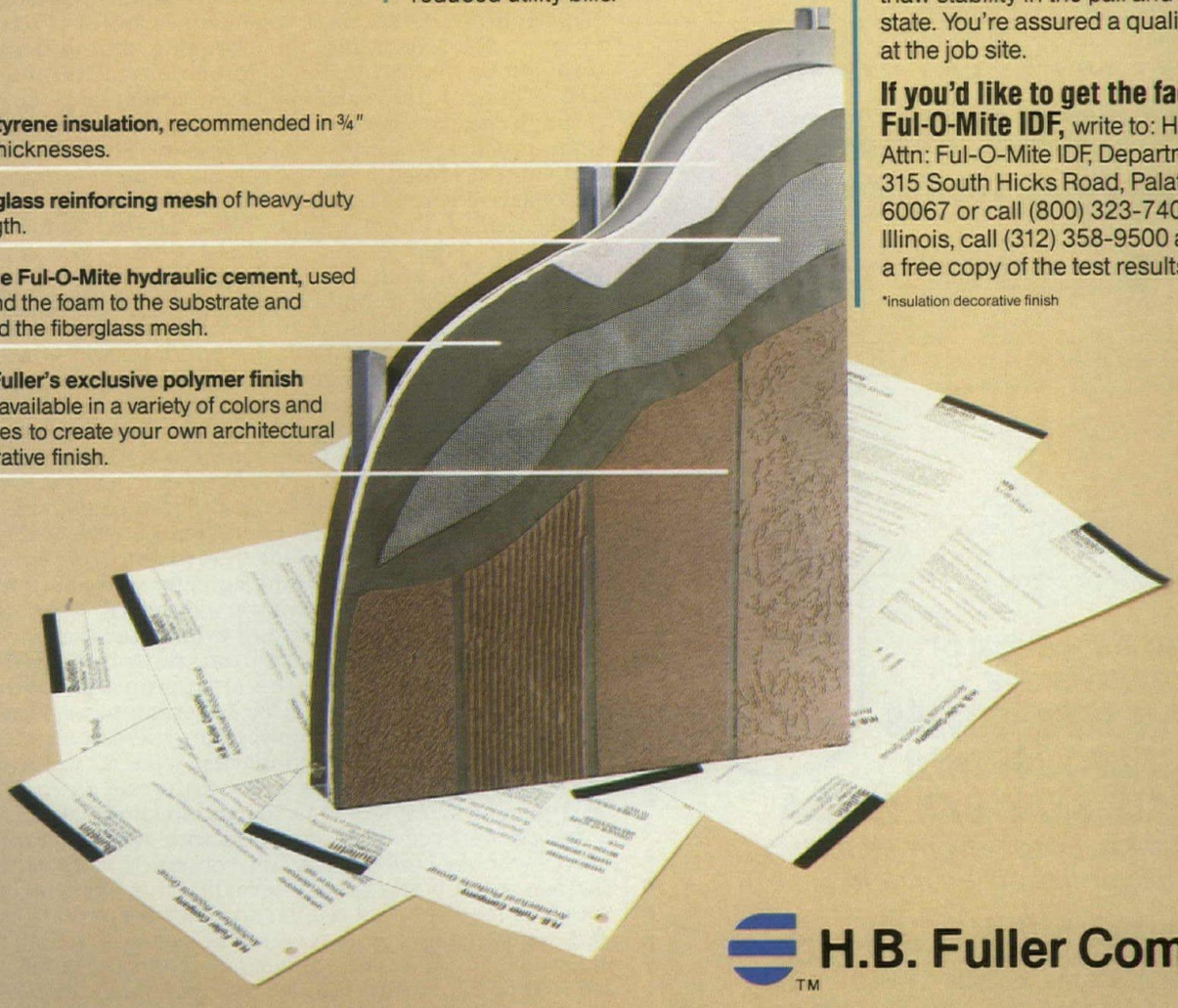
*insulation decorative finish

Polystyrene insulation, recommended in ¾" to 4" thicknesses.

Fiberglass reinforcing mesh of heavy-duty strength.

Unique Ful-O-Mite hydraulic cement, used to bond the foam to the substrate and embed the fiberglass mesh.

H.B. Fuller's exclusive polymer finish coat, available in a variety of colors and textures to create your own architectural decorative finish.



H.B. Fuller Company™

Circle **No. 338** on Reader Service Card

Books continued from page 140

tificiality and isolation from nature, formalisation of artistic expression and eclecticism. Consequently, Mannerism draws its inspiration from other styles." Stylistically, Eastern and Western sensibilities provide vivid and contrasting models for architectural resolution, yet they exist as necessary counterparts of each other's image. Resolved in different manners in the two distinct phases of his career, Isozaki's work stands in an appropriate tension synthesizing these two sensibilities.

The work of Isozaki's "First Manner," or the initial decade of his practice as defined by Drew, is characteristic of post-war attempts to reconcile Japanese expression with Western assertiveness. In Isozaki's case, this is witnessed in the recurring use of the archetypal Japanese form of "heavenly column" (*ten-shu*), coupled with a preference for trabeated megaskeletal, cubic, and semicylindrical forms. The Japanese sense of place, or *ma*, is defined by the presence of columns rather than walls. Found at both the organizational and elemental levels of his architecture—as seen in the Oita Library, Oita Medical Hall, Iwata Girls' High School, and the "City in the Air" studies—Isozaki's columns are often enlarged to become "sculptured space-enfolding elements." Column, cube, cylinder, and megaskeletal form articulate and express the particular exigencies of the building program; once assembled, they become exploded, larger-than-life pieces reassembled in mannered, overscaled elemental compositions. These elementalist geometric constructs receive further amplification through an assertive corporeal tectonic. Isozaki's transitional works, designs for several Fukuoka Mutual Bank buildings, continue these qualities, yet become more referential in their imagery and exploratory in their material usages.

The "Second Manner," exemplified in Isozaki's later work, represents an " 'individualism' and architectural purism" manifested through the use of primary geometric forms which make specific reference to the architecture of Claude-Nicholas Ledoux and Étienne-Louis Boullée, among others. Explicit historic references began appearing in Isozaki's work in the 1970s, denoting the changing attitudes occurring throughout the architectural community at the time. Continued use of the cube, but now assembled repetitiously through additive compositional techniques—the Katsuyama Country Club, Kitakyushu Art Museum, Shukosha Building, and Gunma Museum being exemplars—demonstrates precedents derived from Ledoux, Robert Morris, and Adolf Loos. In the Fujimi Country Club, Yano House, Kitakyushu Library, and Japan-Europe Cultural Center, the continuous semicylindrical vaults comprising the major spatial and formal order allude to both Boullée and Louis Kahn. In other works of this period, these two primary geometries often collide, fragmenting the overall composition. Additional images appear and recur throughout these works: facial images, undulating curves representing sensuous female profiles, overscaled elements, eroded geometries, and ephemeralized surfaces allude to Mannerist tendencies. Yet, these works, given their Western predilections, are Japanese in spirit, character, and quality. It is to Isozaki's credit that in combining the two sensibilities he is neither sentimental nor literal. Several of his recent projects indicate a shift towards incorporating an increasing number of historical fragments and allusions, reminiscent of numerous contemporary architects' work, while retaining the primacy of cubic and cylindrical geometries.

Two considerations emerge from this volume. First, while the rubric of Mannerism seems an appropriate construct for interpreting Isozaki's work, Drew overemphasizes the notion of Mannerism being the appropriate synonym for classifying current architectural developments. This is, unfortunately, similar to Charles Jencks's desire to create catchwords for instantaneously categorizing the architectural "now." Second is Isozaki's current preoccupation with style; style as a goal unto itself. As Drew insightfully observes, this "reflects the changes in taste of a small international intellectual elite," in which "There is a real danger that this somewhat restrictive and exclusive *avant-garde* feeding off itself will in time become incestuous and sterile, alienated from the real world." Isozaki's work, as this volume aptly demonstrates, stands as a testament to his creative genius, and also to this current dilemma. □

Your explicit specifications. Elkay's impeccable qualifications.

Whether you choose a floor, wall, barrier-free, or any of Elkay's many water cooler styles, you can be assured of durability, simple lines and timeless design. So, it will be as attractive in years to come as it is today.

And an Elkay water cooler is finely engineered to meet today's requirements for energy conservation and cost efficiency. Plus impressive design features like a multi-level, non-splash basin; Flexi-Guard™ safety bubbler and non-pressurized cooling tank.

Whatever your plans call for, there's a full line of Elkay water coolers ready to do the job.

Elkay dependability. Reflected in everything we do.

ELKAY®

For more water cooler information, please write:
Elkay Manufacturing Co., 2222 Camden Court, Oak Brook, IL 60521.

Circle No. 332 on Reader Service Card

Products and literature

The following items are related to the Technics article about cleaning masonry, p. 127.

Masonry cleaning literature

Diagnostic tools catalog covers moisture meters, temperature/humidity recorders, and optical tapemeasures. Also listed are books on building maintenance, preservation, conservation, and rehabilitation. PRG.
Circle 200 on reader service card

'Make Old Buildings Look Like New,' a four-page brochure, describes Sure Klean® restoration products: cleaners, restorers, graffiti remover and control, interior stone cleaner, marble poultice, and paint stripper. Illustrations show results that were obtained on several old buildings. ProSoCo, Inc.
Circle 201 on reader service card

'Restoring America's Landmarks' brochure explains the use of paint remover and masonry restorer in building restoration. Illustrations compare chemical cleaning with sandblasting. Photos of buildings before and after cleaning are included. Diedrich Chemicals, Restoration Technologies.
Circle 202 on reader service card

HydroClean™ restoration and cleaning systems are formulated for specific cleaning tasks: brick, granite, sandstone, and masonry; limestone and marble; paint and rust remover, etc. Data sheets explain how the products are to be used and on what surfaces. Hydrochemical Techniques, Inc.
Circle 203 on reader service card

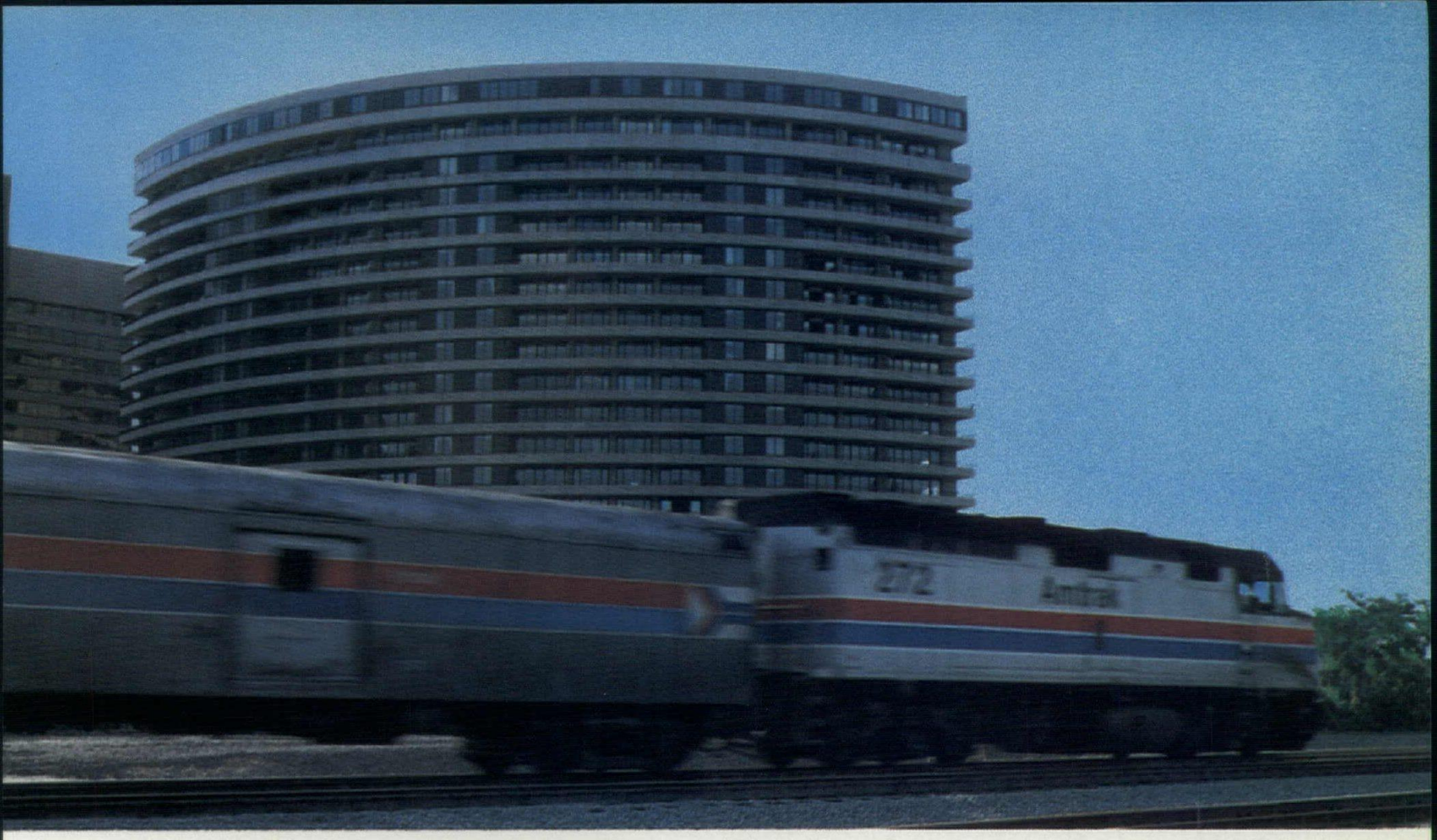
Restoration/preservation chemicals described in a 12-page brochure include Old 800 multilayer paint remover, Old 801 masonry cleaner/restorer, and Old 200 Hydro-Seal waterproofing. Buildings treated with the chemicals are shown in before and after color photos. Data and specifications are provided for each product. American Building Restoration Chemicals, Inc.
Circle 204 on reader service card

Northco masonry cleaner for exterior masonry quickly removes normal dirt, soot, carbon, fungus, and stains that have accumulated. A product sheet explains its use and advises precautions to be taken. North Coast Chemical Co.
Circle 205 on reader service card

Other products

SCP, the classic ornamental luminaire designed by Gerald Allen and Kent Bloomer for New York's Central Park, is now available for street, park, restoration projects, and similar locations. Lighting is by high intensity discharge metal halide, high-pressure sodium, or mercury lamp. Light output is directed downward in a cone that illuminates a broad circular area around the lamppost. It will fit a variety of decorative posts and has a polycarbonate globe that meets stringent impact tests. Sentry Electric Corp.
Circle 101 on reader service card

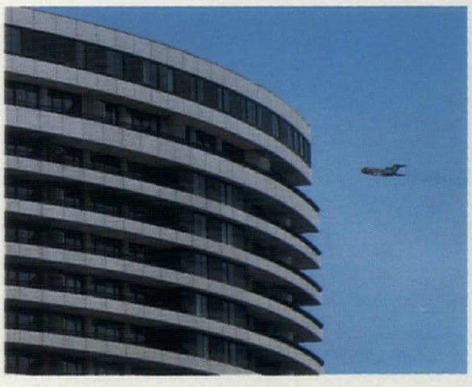
The XL3 Fire Protection System responds automatically to customer-specified programmed sequences. In
[*Products continued on page 146*]



Washington D.C.'s Crystal City residential and commercial complex was designed by Weihe, Black, Jeffries, Strassman & Dove of Washington D.C., and is managed by Charles E. Smith Building Corporation

How Laminated Glass handles noisy neighbors at Crystal City.

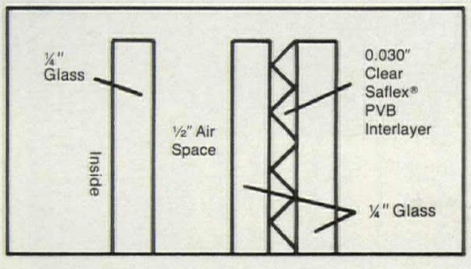
To keep noisy neighbors like cars, trains—and 150 jet takeoffs from nearby Washington D.C. National Airport—from disturbing Crystal City tenants, laminated glass with a Saflex® polyvinyl butyral



interlayer by Monsanto was the ideal, cost-efficient solution.

The Saflex interlayer is only 0.030-inch thick—but it is the key sound-reducing component, thanks to its acoustical damping characteristics. In fact, laminated glass alone stops noise more effectively than monolithic or air-spaced glass. And using laminated glass in an insulated, air-spaced configuration, further improves acoustical and thermal performance.

Tests identified peak dBA levels of 76-79 at Crystal City. Design criteria called for an STC performance of 37-40. The final configuration for 55,000 sq. ft. of windows is detailed in the illustration:



And laminated glass was more cost-efficient than other sound control glass configurations. According to J. Scott Ogden, vice president of Charles E. Smith Building Corporation, "We found that laminated glass was the most cost-effective way to solve the sound problem. We got the best design at an economical cost and solved the problem without overkill."

So, while the jets and trains haul people all over the world, Crystal City tenants can enjoy a peaceful, quiet world of their own.

If you need to quiet noisy neighbors too, write us for a list of suppliers. Monsanto Polymer Products Company, Dept. 804, 800 N. Lindbergh Blvd., St. Louis, Missouri 63167.

SAFLEX®

PLASTIC INTERLAYER BY Monsanto

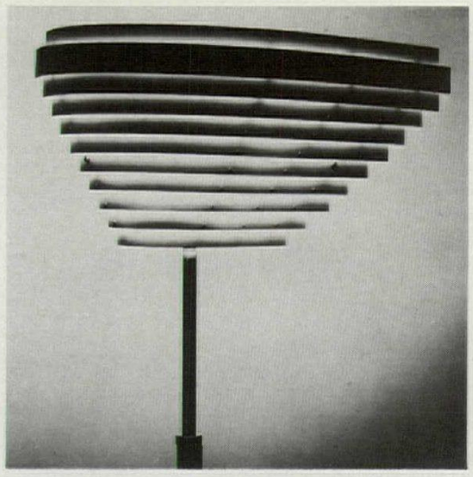
Circle **No. 364** on Reader Service Card

Products continued from page 144

the event of a fire, a word description gives the precise location of each detector that sends in an alarm. The XL3 continuously monitors functions, zones, and detectors, minimizing false alarms by cross-checking. An optional printer documents alarms, troubles, or system performance. Pyrotronics, Div. of Baker Industries, Inc.
Circle 102 on reader service card

Humanetics™ computer furniture has four adjustments to increase comfort and decrease fatigue. Keyboard and VDT surfaces can be raised or lowered simultaneously. The keyboard surface also can be adjusted up or down independently and has a six-inch adjustment in or out. The VDT surface tilts ±10 percent to reduce glare. Humanetics furniture has work surfaces large enough to accommodate most terminals, microcomputers, and accessories and can be combined with TAB 300 Series data tables, printer stands, connecting wedges, and related accessories. TAB Products Co.
Circle 103 on reader service card

Contact exposure unit DL3000S has a large printing area capability for handling AO sheets. It is equipped with a 3000W halogen lamp and has a switch for full or half power, which allows the use of a range of contact-speed materials. It has reprography, cartography, and graphics applications. Agfa-Gevaert, Inc., Graphics Systems Div.
Circle 104 on reader service card



Lighting produced from Alvar Aalto designs, recently exhibited at the Cooper-Hewitt Museum in New York, is now available with American wiring. Louvered metal shades provide both direct and ambient lighting. The floor lamp shown, with white painted iron globe and black leather-covered base, is one of those being offered from the collection of floor and ceiling lamps designed in the period from 1932 to 1959. Lighting Associates, Inc.
Circle 105 on reader service card

A chairlift platform with optional seat, supported by parallel tubes, can be installed to negotiate straight, curved, or spiral staircases and corners. It can be used indoors or outdoors and provides stair transport for the handicapped at considerably less than the cost of installing an elevator. Each floor has a wall-mounted control panel with a key-operated switch, power-on lamp, platform call button, assistance button, and emergency stop. Garaventa (Canada) Ltd.
Circle 106 on reader service card

Thermo-Bar® insulative sheathing for tile roof underlayment protects against heat penetration. It also is water and weather resistant and acts as a secondary water barrier in the event that a tile is broken. The material is a less expensive and lighter weight alternative for plywood and felt. Standard sheets, 48″ x 100″, are easily trimmed or cut with a knife. Mead Paperboard Products.
Circle 107 on reader service card

Figuration modular lounge chairs, settees, and sofas, combined with four Articulator table surfaces, provide variable seating arrangements. The components can be used to define space, organize interiors, and control traffic, as well as provide comfortable seating. Herringbones, tweeds, solids, and stripes provide over 550 upholstery fabric choices. Table surfaces are offered in eight standard plastic laminates with edges lacquered to match. The Worden Company.
Circle 108 on reader service card

Expanded polystyrene (EPS) insulation for roofs has an R-value of 3.92 per inch at a mean temperature of 75 F, 4.25 at a

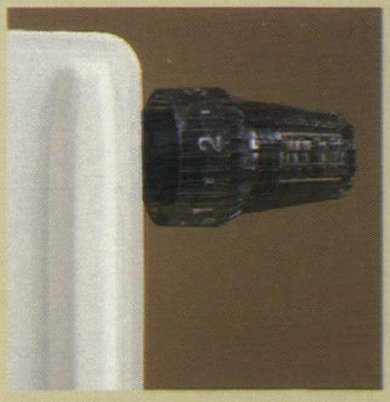
[*Products continued on page 153*]

Suddenly... everything else seems old heat.

THERMOPANEL! A complete pre-assembled radiation and valve system featuring an exclusive self-contained thermostat.

A breakthrough from Sweden, giving new aesthetics to form— new energy consciousness to function— new flexibility to design!

It's the future, and it's beautiful...offering advantages welcomed by every thoughtful architect. Faithful to the Swedish tradition of excellence, Thermopanel introduces a new standard of hydronic radiation quality. Its economy of installation (saves a full day of labor) plus its aesthetic refinements and high performance characteristics will influence heat planning for years to come.

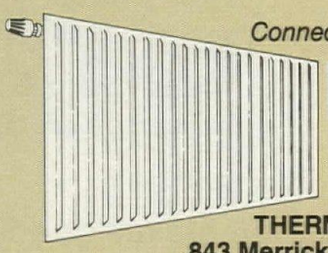


Delivers high output... smaller and fewer Thermopanel units outperform conventional types. Used as 'modulars', they combine easily to meet any heating requirement—and provide a ready solution to difficult space challenges.

Each one its own zone...the non-electric thermostat (accurate to ½°) allows every area to be individually regulated for comfort and energy savings of 20% to 30%!

Enduring trouble-free operation... silently, without soiling walls. Performance, versatility, a clean streamlined profile, everything to make Thermopanel ideal for a broad diversity of architectural concepts and projects—homes to apartment and office buildings to industrial structures. In every way, the superior choice an architect can be proud to specify!

Thermopanel is 11 7/8" high, comes in nine lengths from 15 3/4" to 110 1/4" in both single and double widths: a total of 18 sizes, providing a wide range of capacities.



Connect with tomorrow...today!

TCI

THERMAL CONCEPTS, INC.
843 Merrick Road • Baldwin, N.Y. 11510
(516) 379-6955 • Telex #968965
Rep Inquiries Invited

Circle **No. 394** on Reader Service Card

What do these top construction industry logos have in common?

This one.

CPMC

Construction Products Manufacturers Council

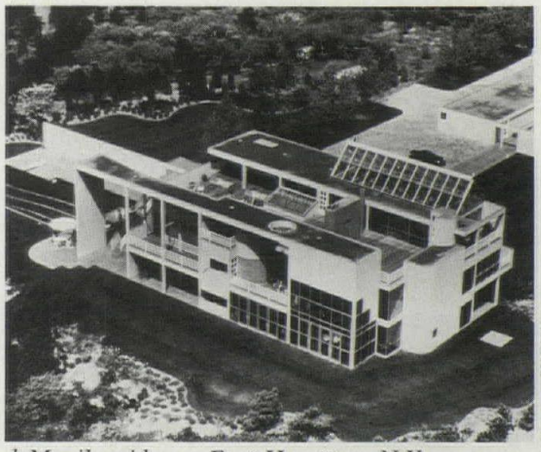
The nation's forum of quality construction products manufacturers.

It makes good business sense to join.

For more information, call The Construction Products Manufacturers Council, 1600 Wilson Boulevard, Arlington, Virginia 22209, 703/522-0613

Circle **No. 323** on Reader Service Card

Coming next month



Norman McGrath

deMenil residence, East Hampton, N.Y., Gwathmey Siegel & Associates.

deMenil House, East Hampton, N.Y. Such houses used to be called cottages, but that hardly seems appropriate for Gwathmey Siegel's latest opus—a large weekend residence on a private dune facing the Atlantic—a 1982 P/A Award.

Elementary School, Middlebury, Conn. Tai Soo Kim/Hartford Design Group's school for 500 not only works well, but exhibits unusual architectural quality for its type.

Television Centre, London. The Terry Farrell Partnership's latest work, which includes reuse of an old garage on Regent's Canal, is the brightest spot in a less-than-glamorous area.

Tifereth Israel Synagogue, Des Moines, Iowa. Charles Herbert & Associates' ingenious refurbishing brings exciting sparkle to a 50-year-old interior.

Precursor: Arthur Brown, Jr. Any visitor to San Francisco has marveled over its glorious City Hall. Richard Guy Wilson writes of it and other major works of Brown, who has been too long ignored.

Technics: Stuccolike finishes. P/A's technical editor describes how acrylics and glass fibers have increased the durability of stucco and spawned an industry of exterior insulation systems.

P/A in January is devoted to the 9 awards and 20 citations of the 31st P/A Awards, which veered from the highly ornamented work of recent years—and from the Eastern states.

P/A in December: Design & Technics

CRITERIA: ULTIMATE PERFORMANCE

TCS

Architects have become increasingly aware that a metal roof can become a welcome departure from the commonplace and an important aspect of contemporary expression.

When that departure is created by TCS, terne-coated stainless steel, as exemplified by the beautiful, new headquarters of Square D Company in Palatine, Illinois, this exciting new material permits the visually significant roof to become an important basic component of design.

TCS is unique among roofing materials. It has inherent adaptability to form and function, is maintenance free, and weathers to a predictable, warm gray. May we send you substantiating evidence?

Call us toll-free 800-624-6906

FOLLANSBEE

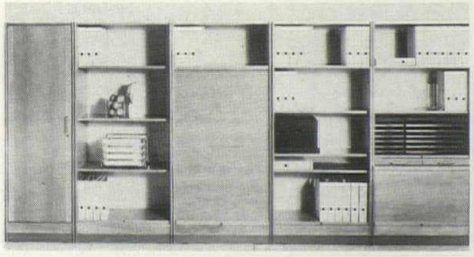
FOLLANSBEE STEEL CORPORATION
FOLLANSBEE, WEST VIRGINIA

Headquarters Building, Square D Company, Palatine, Illinois
Architects: Loebl, Schlossman & Hackl, Chicago, Illinois
Roofer: E. W. Olson, Chicago, Illinois

Circle No. 334 on Reader Service Card

Products continued from page 146

mean temperature of 40 F, a value that does not decrease over a period of several years. It is water insoluble and moisture has little effect on its insulation value. The material has excellent compressive and flexural strengths and can be supplied in several densities and thicknesses. It can be used for new roofs, reroofing, single-ply roofs, and BUR. ARCO Chemical Co.
Circle 109 on reader service card

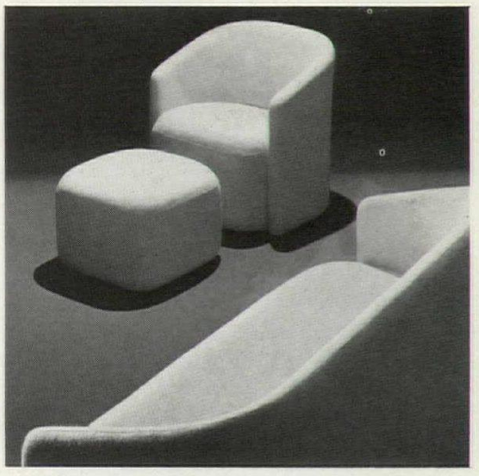


Office furniture, imported from Sweden for the contract market, includes secretarial and executive desks, armchairs, stacking chairs, wardrobes, cabinets, tables, and bookshelves. Shown are a beech veneer wardrobe, open bookcases, a storage cabinet with lockable tambour front, and a floor cabinet. Items from the new Workbench Contract Division will be supplied direct to architects, designers, and specifiers. Workbench Contract Division.
Circle 110 on reader service card

Window Showcase™ combines the insulating features of Window Quilt and a decorative fabric that is easily replaced. The interior covering is held in place at the top with clips on the shade roller and at the bottom with hook-and-loop tape to provide a smooth surface. Suitable fabrics include drapery-weight cotton, vinylized fabric, canvas, sailcloth, and twill. The insulating quilt consists of five layers: a reflective air-tight vapor barrier, two layers of polyester batting, and outer layers of washable polyester-rayon blend. A four-way seal around the window reduces air infiltration. Appropriate Technology Corp.
Circle 111 on reader service card

Softwall System panels for open office plans are available in several heights, from 30 to 68 inches, and widths from 24 to 60 inches. With coverings in a choice of fabrics and colors, they have acoustical or semiacoustical properties. Panel options include bronze acrylic, woodgrain laminates, and curved corner panels. Wall- or panel-mounted cantilevered work surfaces, desks, freestanding pedestals with drawers, open bookshelves, and closed cabinets adapt workstations to individual needs. Magna Design.
Circle 112 on reader service card

Rufon® nonwoven roofing fabrics of polypropylene or polyester fibers are used as fiber mats for cold-applied systems, slip sheets, and stone separator mats. Tailored for roofing applications, they are strong, durable, flexible at low temperatures, lightweight, resistant to rot and mildew, and will not separate or delaminate. Phillips Fibers Corp., Textile Nonwoven Fabrics Marketing.
Circle 113 on reader service card

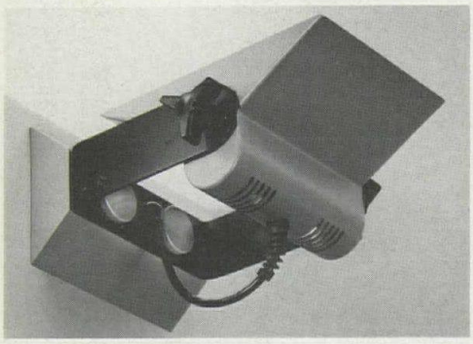


Ovid seating, based on the ottoman, also includes a 66-inch-wide sofa and a 30-inch-wide chair. Frames are of double-doweled and glued kiln-dried ash. The designer is Lisa Sewell. Scope Furniture, Ltd.
Circle 114 on reader service card

Operator's stool 882A added to the 800 series seating is designed to be used with elevated work surfaces. It has an adjustable footring, standard gas lift, and
[*Products continued on page 154*]

Products continued from page 153

four-way back adjustment, all lever or button activated. Optional armrests can be field attached. Finishes are epoxy or chromium. Curtis Products Ltd.
Circle 115 on reader service card



Techlinea uplight wall bracket, designed by Gary Cross, has a rotating hood equipped with an energy-saving halogen lighting element. The 8⅛" x 6" fixture projects 10½ inches and mounts on an outlet box. Painted metal colors are all black, black with white, black with blue, or black with red hood. Boyd Lighting Company.
Circle 116 on reader service card

ProDraft Winchester-equipped electronic drafting system has a high resolution raster display screen, single-sheet plotter, and menu tablet. All software necessary for system operation, an architectural implementation guide, a complete architectural drafting library, operator's manual, an architectural software package, and system accessories are included. Options include a digitizer, small or large plotter, work station desk, self-paced video training course, software packages for telecommunications, bill of materials, and additional menu overlays. Bausch & Lomb.
Circle 117 on reader service card

Bath cabinets, style LP 703, have pure white lacquered panels with blue-gray inlay in the frame and handles (or, as LP 701, with gold-colored inlay). The lacquered surface is bonded to the substrate to provide a smooth matte finish, free of blemishes. Fixtures are integrated with cabinets to provide a total storage system. Features include a lockable medicine cabinet, laundry basket in base unit, drawer inserts, and swivel cosmetic tray. Poggenpohl USA Corp.
Circle 118 on reader service card

Wireway® in-floor electrical distribution system for new office construction simplifies electrical and communications wiring. It provides a three-channel raceway for power, lighting, electronics, and communication cables by placing a trough section in an open rib of a formed steel floor deck sheet and adding cover plates. Deck sheets, available in several sizes and thicknesses, are shipped in compact, nested bundles. Wire can be laid in while the raceway remains open, or it can be pulled through after cover plates have been placed. Bowman Construction Products.
Circle 119 on reader service card

Norament 925 resilient flooring, molded from 100 percent synthetic rubber, is available in 39 colors, with no minimum order restrictions. With a warranty against premature wear, the flooring is suitable for high-traffic areas. It is slip-resistant, comfortable and quiet underfoot, and resists scuffs, burns, and chemicals. Nora Flooring.
Circle 120 on reader service card

Delta Series task lights in floor and desk models, designed by Peter Sierakowski, use the energy-efficient Norelco PL9W bulb. Lights have a weighted iron and steel base or clamp mounting, a movable heavy-wall steel arm, and a rotating stamped and folded steel shade. The "Nextel" black finish is durable and scratch resistant and does not show dust or fingerprints. Koch & Lowy, Inc.
Circle 121 on reader service card

Contraflam® fire-protecting glass, developed by Saint-Gobain, France, consists of two panes of safety glass with a metal spacer, forming a cavity that is filled with a heat-radiation-absorbing gel. Heat modifies the gel, creating a dense, heat-insulating crust. Applications include partitions, wall assemblies, fire doors, corridors in hospitals, schools, and hotels, and similar installations where the ability to see is desirable
[*Products continued on page 156*]

The preferred roof insulation. Fes-Core™ From Manville.

Presenting Fes-Core, a composite roof insulation with performance characteristics that make it the smart choice for built-up roofing systems.

It's lightweight. Goes on fast. Needs no joint taping. And it is acceptable for use in most loose-laid single-ply roofing systems.

Top and bottom layers are Manville Fesco® Board. The core is polyurethane foam. Fes-Core is available in 3′ x 4′ panels in R-values from 10 to 20 and C-values from .10 to .05.

Fes-Core is superior in several ways. The top layer of perlite board provides an excellent surface for bonding roofing felts. The bottom layer of perlite board qualifies Fes-Core for use in Factory Mutual Class I construction.

Excellent adhesion, fire resistance, thermal efficiency, superior compressive strength and dimensional stability — all these make Fes-Core the ideal substrate. A product roofers can use with confidence. With the assurance of lasting roof protection and fewer problems.

For details, consult Sweet's. Fes-Core is produced and marketed by Manville Building Materials Corporation, P.O. Box 5108, Denver, CO 80217.

Manville

Circle No. 359 on Reader Service Card

Products continued from page 154

without sacrificing fire safety. Euroglass Glasrep Corp.
Circle 122 on reader service card

Glasprotex™ door made with Contraflam® meets UBC Standard 43.2 for one-hour fire rating. O'Keeffe's, Inc.
Circle 124 on reader service card

Designer125 fiberglass shingles have a UL wind resistance label and UL Class A fire rating. The random, six-tab design provides flexibility and the appearance of wood shakes or slate. A Seal-O-Matic® shingle stripe of self-sealing adhesive is activated by the sun's heat to seal shingle tabs against wind damage. Designer125 is available in five colors. It is approved for application with staples. Johns-Manville.
Circle 125 on reader service card

Other literature

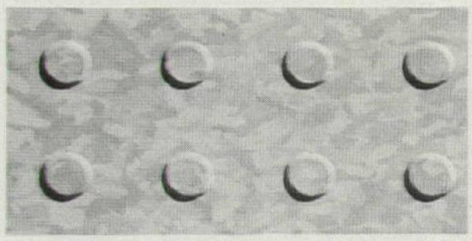
Fire-rated afterset inserts for floor penetrations in D900 Series cellular deck assembly eliminate or reduce the amount of spray-on fireproofing required. The advantages of these inserts over preset inserts and the steps required for afterset installation are explained in a six-page color brochure. Typical specification for fire-rated afterset fitting and insert is included. Raceway Components, Inc.
Circle 206 on reader service card

Skylighting systems, engineered, manufactured, and installed, are offered in almost unlimited design for commercial buildings. A portfolio of detail sheets that illustrate several skylights are keyed to drawings showing installation methods. E.L. Burns Company, Inc.
Circle 207 on reader service card

Graphics 3, using Object™ computer software database, allows design, engineering, and specification writing to be integrated. Stored data can have any combination of graphic or nongraphic attributes so that all design decisions are based on the same information. The system operates on Digital Equipment Corporation's VAX-11 computers, whether a basic two-workstation system or mainframe size supporting eight workstations. A brochure with a four-page fold-out chart explains how the system integrates with the architect's work flow. Tricad.
Circle 208 on reader service card

Programmable Load Control design manual GEA-11237 describes a microprocessor-based system of cost-effective energy management for medium-sized and large buildings. The 22-page brochure includes a diagram of the system and explains features, benefits, and options available. General Electric Energy Management Systems.
Circle 209 on reader service card

Ceramic wall and floor tiles catalog offers 20 pages of room settings and ideas for using ceramic tiles. Bird, fish, floral, and geometric designs are coordinated with solid color tiles. Although tiles in the four-color brochure are primarily for residential use, there are glazed floor tiles for exterior use or commercial applications. Sphinx Tiles, USA, Ltd.
Circle 210 on reader service card



Commercial and industrial floorcovering of asbestos-free vinyl composition tile, sheet vinyl, and polyvinyl chloride is shown in color in a 24-page catalog. Technical data are provided for each type of flooring, which includes grades suitable for shopping malls, lounge areas, hospitals, gymnasiums, nonslip applications, and heavy-traffic areas. For acoustical installations, Quiet-Cor® underlayment helps to deaden sound. Tarkett, Inc.
Circle 211 on reader service card

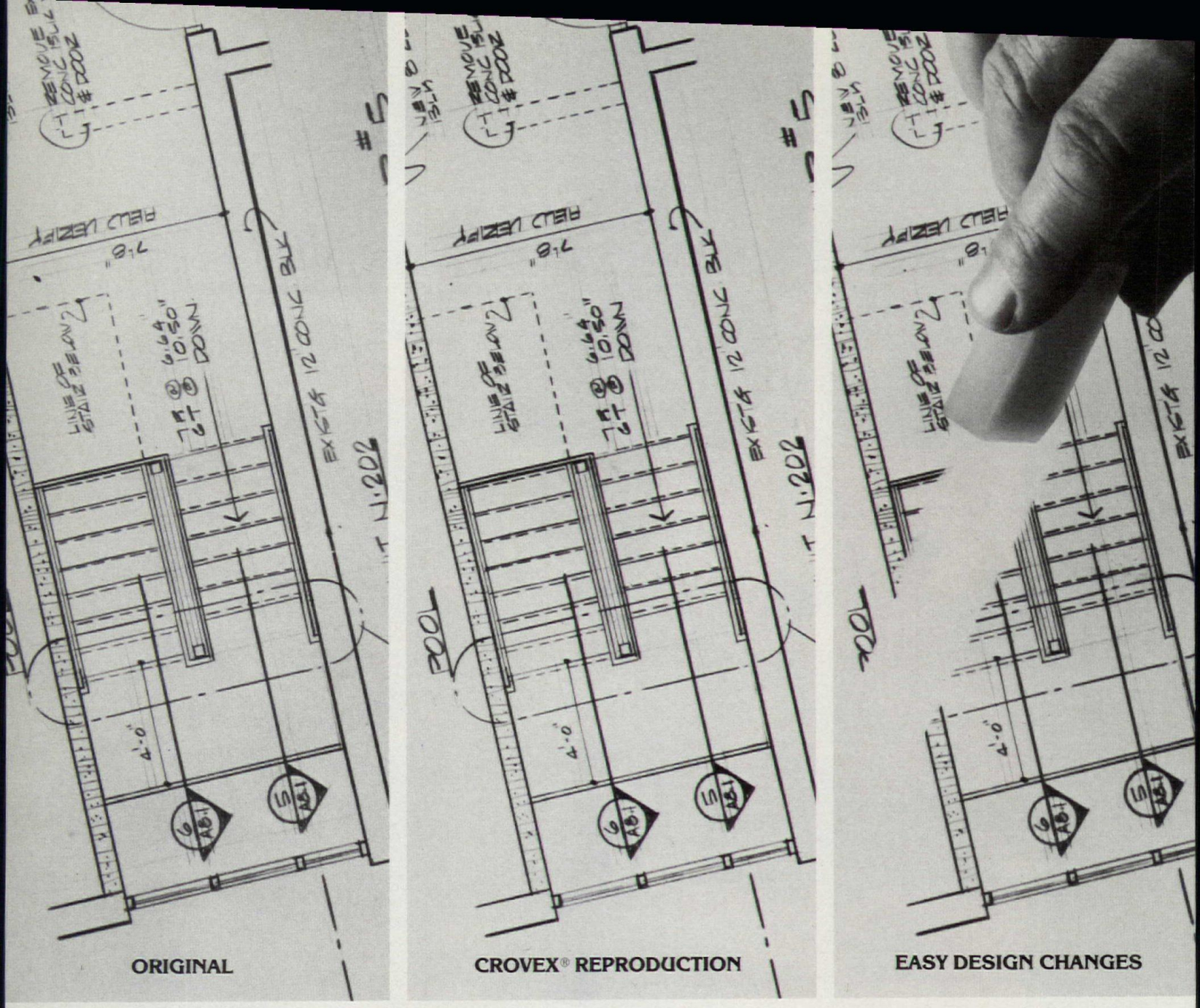
CT-B Series packaged amplifiers, with 100-watt or 60-watt output, have integrated circuits and silicon transistors and diodes. Designed for churches, auditoriums, arenas, and similar installations, the amplifier has four balanced, low-impedance, transformer-isolated
[*Literature continued on page 159*]

This is Nevamar.

The Vogue Collection. Imagine a fantastic color collection, bubbling with originality. Twenty contemporary solid color laminates, selected by designers for immediate impact...with more to come as preferences change. Stocked in bright and bold Glossies or standard Textured finish. All you imagine...is Vogue. For samples, call 1-800-638-4380. Nevamar Corporation, Odenton, Maryland 21113

NEVAMAR™
DECORATIVE LAMINATES

Circle No. 366 on Reader Service Card



ORIGINAL

CROVEX® REPRODUCTION

EASY DESIGN CHANGES

Make fast, easy design changes on the films that give you sharp, clean copies from any original.

They're CROVEX® wash-off films from Du Pont.

You get sharp, **durable** reproductions from any original, plus the advantage of moist-erasability with Du Pont CROVEX wash-off films. You can make information and design changes easily with ink or pencil, saving time and money. And your copies last.

Whether your original is brand-new or old and soiled, CROVEX wash-off films will hold the fine-line detail, providing you with the highest-quality reproduction. The films have matched drafting surfaces on one or both sides to accept pencil or ink.

The next time you have a reproduction request, specify CROVEX wash-off films. There is a complete system of Du Pont films and chemicals available to your reproduction specialist to meet your needs. The film types include:

M1DF and M2DF Drafting Films for original ink or pencil drawings.

Improved CROVEX HR Projection Matte High-Resolution Film for reproductions (using pin registration techniques) on camera enlargement or reduction.

CROVEX CM Contact Matte Film for positive contact reproductions from film or paper negatives.

CROVEX DC Contact Duplicating Film for same-size reproductions directly from originals, with no intermediate or negative step.

For more information, call your local Du Pont Technical Representative. Or write: Du Pont Company, Room X40059, Wilmington, DE 19898.

Industrial Systems Division

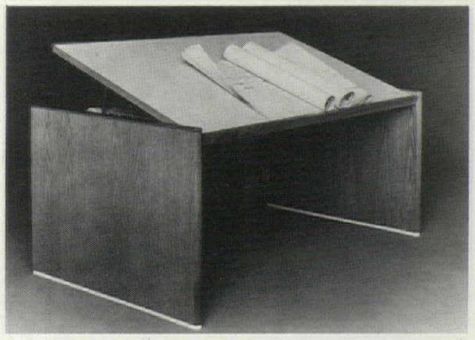
Circle **No. 328** on Reader Service Card

DU PONT

REG. U.S. PAT. & TM. OFF.

Literature continued from page 156

microphone inputs. A built-in acoustic equalizer has ten slide controls with filters set at preferred ISO center frequencies for ±12 dB boost or cut. An electronic compressor that maintains constant output levels eliminates sudden surges in background music and compensates for poor microphone technique. Bogen Div., Lear Siegler, Inc.
Circle 212 on reader service card



Drafting furniture constructed from white oak, aluminum, and welded steel is shown in a 22-page catalog. Wood surfaces have a tough, semigloss alkyd finish, and metal surfaces are finished with heat-fused polyester resin powders. Items include tilt-top drawing desk that elevates to a 55-degree angle, two-drawer storage cabinet, six-drawer plan file, tables, chairs, and wire accessory basket. John Harms & Co.
Circle 213 on reader service card

PC GlassBlock™ masonry units brochure provides installation specifications for standard, Thinline Series, and solid glass units, for both exterior and interior panels. The eight-page brochure covers unit specifications, mortar, expansion strips, panel reinforcing, panel anchors, asphalt emulsion, packing, and caulking. Pittsburgh Corning Corp.
Circle 214 on reader service card

High-density mobile storage and filing systems brochure offers solutions to storage space problems. Included in the 30-page brochure are discussions about planning and arrangement, floor load conditions, safety and security, architectural constraints, design details, and housing configurations. The Computerized Space Efficiency Audit,™ a planning service, provides an analysis of space utilization. The brochure also has color photographs, charts, drawings, and case histories. Spacesaver Corp.
Circle 215 on reader service card

Desk accessories in aluminum, brass, bronze, and melamine in several colors are offered in a catalog that includes descriptions, photos, and prices in the Radius One®, Radius Two®, Rectilinear, and Traditional groups. There are ashtrays, letter trays, bookends, consoles accommodating several items such as calendar, memo tray, correspondence tray, and pen bases, as well as desk pads and clocks. Smith Metal Arts.
Circle 216 on reader service card

Automated daylighting brochure explains a system of louvers and electronic controls that provides daylighting, cuts glare, and reduces cooling loads on buildings. The louvers are activated by sensors to move in response to the sun's position, thermostat readings, and changing light conditions. Automatic controls can be overridden by manual controls. On cold nights, the louvers can be closed for added insulation. The Moore Company.
Circle 217 on reader service card

Interior acoustical products for ceilings, walls, and baffles are described in a 16-page brochure. Color photographs show installations ranging from elegant fabric ceilings to budget wall treatments. Several solutions to sound absorption requirements are included. Decoustics.
Circle 218 on reader service card

Shower, dressing room, and toilet partitions are described and illustrated in a 12-page color catalog. Toilet partitions are stainless steel, galvanized steel with baked enamel finish, or plastic laminate in a choice of colors. The catalog illustrates wheelchair layouts and shows and describes accessories and hardware. Outline specifications and detail drawings are included. General Partitions Corp.
Circle 219 on reader service card

Xorel™ fabric wallcoverings brochure provides production information and fabric samples. The wallcoverings are made with light-refractive yarns for luster and can be produced with the same or different colored warps and fillings in various textures. The three patterns shown in the brochure are
[*Literature continued on page 160*]

Literature continued from page 159

Alpha, Delta, and Gamma, available in 30 colorways. Results are provided for tests on stain resistance, strength, acoustics, color fastness, flame retardance, toxicity, and hospital-related properties. Carnegie Fabrics, Inc.
Circle 220 on reader service card

Modular storage components and work surfaces are shown in several settings in a portfolio of color photographs and descriptions. Areas of use are hospital patient rooms, examination rooms, laboratories, offices, and school classrooms. The rail system for mounting cabinets and cabinet construction are explained and illustrated. Monitor, Div. of The L.J. Kelley Company.
Circle 221 on reader service card

FM 62 Series electromagnetic locks are the subject of a brochure that lists specifications, suggested uses, features, and benefits, and provides an accessories list. The lock has 1200 pounds of holding force and a built-in door status sensing device that can immediately identify door misalignment. Doors can be locked on both sides, yet FM 62 Series assures safe egress in an emergency. Rixson-Firemark Division.
Circle 222 on reader service card

The Nienkämper furniture collection shown in a 32-page color brochure includes European-designed classics of the past two decades. In the group are the Taliesin tables by Thomas Lamb, available in cherry, mahogany, and ash, from coffee table sizes to boardroom tables. Nienkämper.
Circle 223 on reader service card

'Carpet Selection for Health Care Facilities' is a new brochure about carpet for hospitals primarily of Zeftron 500™ ZX nylon, a solution-dyed, antimicrobial, soil-hiding yarn. Charts included are a guide to carpet selection and directions for removing stains. Advantages listed for use of carpet in health care facilities are noise suppression, thermal insulation, and bacteria control. Carpets are classified by performance and matched to areas where they will give the best service. Badische Corp.
Circle 224 on reader service card

Building materials

Major materials suppliers for buildings that are featured this month as they were furnished to P/A by the architects.

Philadelphia City Hall, Conversation Hall and North Portal restoration, Philadelphia, Pa. (p. 92). *Architects: Vitetta Group / Studio Four, Philadelphia.* Stone restoration: Culberston Co., ProSoCo cleaning products. Plaster ceiling repair: Felber Studios. Ceiling repainting: Emmanuel Utti. Chandelier restoration: Harvey Stern. New chandelier: Bergen Art Metal Co. Velvet drapes: Reinhart Design Center, Design-Tex fabric. Hardware replacement: Kirsch Company.

Chenango County Courthouse, Norwich, N.Y. (p. 104). *Architects: Mendel-Mesick-Cohen-Waite Architects, Albany, N.Y.* Windows, entrance door, oak handrail: Knox Millwork Corporation. Tin ceiling restoration: Gene Mundell. Gypsum board: U.S. Gypsum. Polysulfide sealants: Sonneborn. Fiberglass blanket insulation: Owens-Corning. Paints: interior—Glidden alkyd; exterior—Benjamin Moore alkyd. Brass hinges: Stanley. Brass locksets: Schlage, Baldwin. Closers: LCN. Panic exit hardware: Von Duprin. Paging system: Executone. Detection and fire alarm systems: Pyrotronics. Furniture refinishing: Chenango County Workshop. Emergency lighting: Lightalarms, Electronic Corporation. Elevator: Otis. New metal pan stairs: McGregor Architectural Iron Company, Titchner Iron Works. Exterior spotlighting: Stonco. Historical reproduction brass lighting fixtures: Nowell's Incorporated. Suspended fluorescent fixtures: Litecontrol Corporation. Recessed incandescent fixtures: Prescolite, Lightolier. Lavatories, water closets, and fittings: Kohler Company. Flush valves: Sloan Valve Company. Metal toilet stalls: All American Metal Corporation. Stainless steel washroom accessories: American Dispenser. Water fountain: Elkay Company. Electric temperature control: Honeywell, Incorporated. Wilton "historical" carpet: Bloomsburg Carpet. Cut pile nylon carpet: Trinity Carpet. Wood slat venetian blinds: Nanik. Restoration of statue of Justice: Faye T. Wrubel, Cooperstown Graduate Program in Conservation of Historic and Artistic Works, State University of New York at Oneonta. Reinforced polyester replica statue: William Huebbe.

"Practicality"

His buildings seem now timeless. By attention to all detail he achieved the design mastery he sought. And time has proven the superb, enduring, practicality of what he created.

The lesson was well taught. Rixson door pivots in Frank Lloyd Wright buildings provide more than obvious aesthetic advantages. Their mechanical superiority has, unnoticed, better protected countless doors and frames from the ravages of the years. There is no better means of door hanging than the Rixson pivot.*

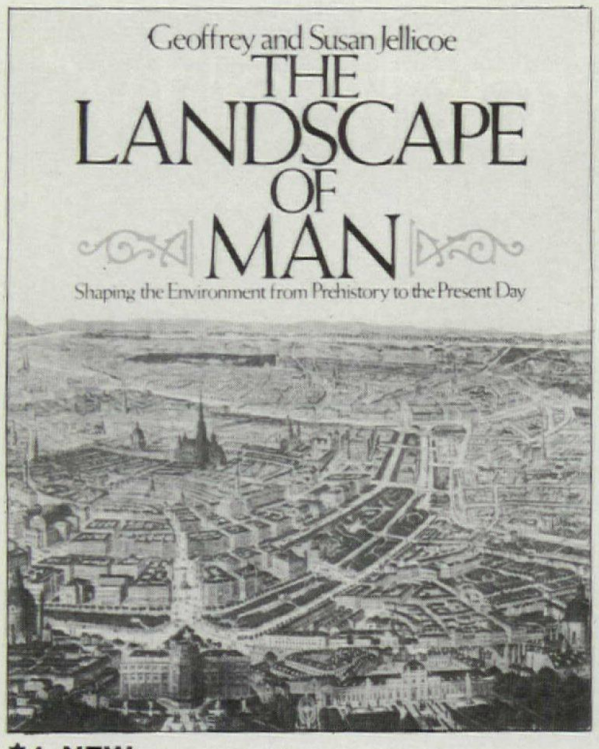
*Additional information, on request.

RIXSON-FIREMARK

9100 West Belmont Avenue, Franklin Park, Illinois 60131
and Rexdale, Ontario— 312/671-5670

Circle No. 376 on Reader Service Card

A DIVISION OF
CONRAC
CORPORATION



★1 NEW

Illustrated with over 700 photographs and line drawings, **The Landscape of Man** is an essential text and reference for students and professional landscape architects, architects, planners and designers.

Progressive Architecture BOOK STORE

Each book has been selected for its usefulness to you in your professional practice. **Prices slightly higher in Canada. Foreign orders must be accompanied by payment.** It is not necessary to send payment with the order. Circle appropriate numbers on the Reader Service Cards in the back of this issue, add your name and address and mail. Local sales tax **must** be included with payment. Prices subject to change.
For faster service, send the card in an envelope to:

Marie Patrignelli
Progressive Architecture
600 Summer Street
PO Box 1361
Stamford, Ct. 06904

P/A Back issues

A limited supply of the following issues of P/A are available at $7.00 per Copy. **Check MUST accompany order!** Connecticut Residents Add 7½% Sales Tax.

October . . . . . .Kohn Pedersen Fox/Medical technology
September. . . . .Interiors: The New Modernism
August . . . . . .Museums/Roofing
July . . . . . Folger Library/Italian Rationalism/Acid rain
June. . . . . .Craftsmanship
May . . . . . .New Japanese architecture/Furniture competition

NEW★

1 The Landscape of Man

By Geoffrey and Susan Jellicoe
383 pp., illus....$19.95
Softcover

For twenty-six different cultures the authors summarize the social and intellectual background, describing how it was expressed in terms of landscape. The history of landscape architecture and the progress of landscape design are thoroughly and intelligently discussed. History, philosophy and religion are consulted in order to explain fully "the landscape of man".
Circle B601 under Books.

NEW★

2 Mitchell's Movement Control in the Fabric of Buildings

by Philip Rainger
216 pp., illus. . . . $46.50

Guidance is given on the design and constructional precautions which can be taken to prevent movements. These precautions are treated under the headings of the prevention and methods of accommodating these in the structure allowing free movement to take place.
Circle B602 under Books.

3 Structural Systems

By Henry J. Cowan and Forrest Wilson
256 pp., illus. . . . $24.95

This is a comprehensive guide to preliminary structural design using a minimum of mathematics and numerous illustrations to describe structural forms and their mathematics. It has a strong emphasis on graphic presentation and is an instant-access reference to structural design. Full consideration is given to the internal and external forces that a building must withstand, and the interaction of structural and environmental design.
Circle B603 under Books.

4 Architecture: Form, Space and Order

By Francis D.K. Ching.
294 pp., illus. . . . $22.50

Written to foster understanding of design concepts, this rich source of architectural prototype demonstrates how to extract the fundamental principles of form and space from the environment, whether in the architectural one views or inhabits, in architectural visualization, in drawing, or in actual design.
Circle B604 under Books.

5 Affordable Houses Designed by Architects

Edited by Jeremy Robinson,
168 pp., illus. . . $34.95

This lavishly illustrated volume shatters the myth that architect-designed houses are more costly than developer-built houses. The superb photographs, floor plans, drawings, and details of interiors and exteriors present a wealth of ideas on how to construct beautiful and unique houses within limited budgets.
Circle B605 under Books.

NEW★

6 Earth-Sheltered Habitat History, Architecture and Urban Design

By Gideon S. Golany, Ph.D.
240 pp., illus. . . . $21.95

This book explains the energy-saving advantages that earth enveloped shelters offer for heating or cooling, weather-proofing, comfort, benefits of lower land and maintenance cost, durability, privacy and maintenance safeguards against noise, strong wind, and pollution. It discusses all types of potential land uses belowground.
Circle B606 under Books.

7 Design and Planning of Swimming Pools

By John Dawes,
276 pp., illus. . . . $49.95

A comprehensive manual that describes the essential characteristics and consequent design requirements of every type of pool imaginable. Also deals in great detail with more technical matters, such as structural problems and how to solve them, finishes, filtration, circulation and water treatment, heating and ventilating.
Circle B607 under Books.

8 Architectural Rendering: The Techniques of Contemporary Presentation

By Albert O. Halse, 326 pp., illus., 2nd edition, 1972 . . . $59.50

This completely up-dated revision of the most widely used guide to architectural rendering covers all working phases from pencil strokes to finished product — and shows how to obtain the desired mood, perspective, light and color effects, select proper equipment and work in different media.
Circle B608 under Books.

9 Cities For People

By Ronald Wiedenhoeft
224 pp., illus. . . . $22.95

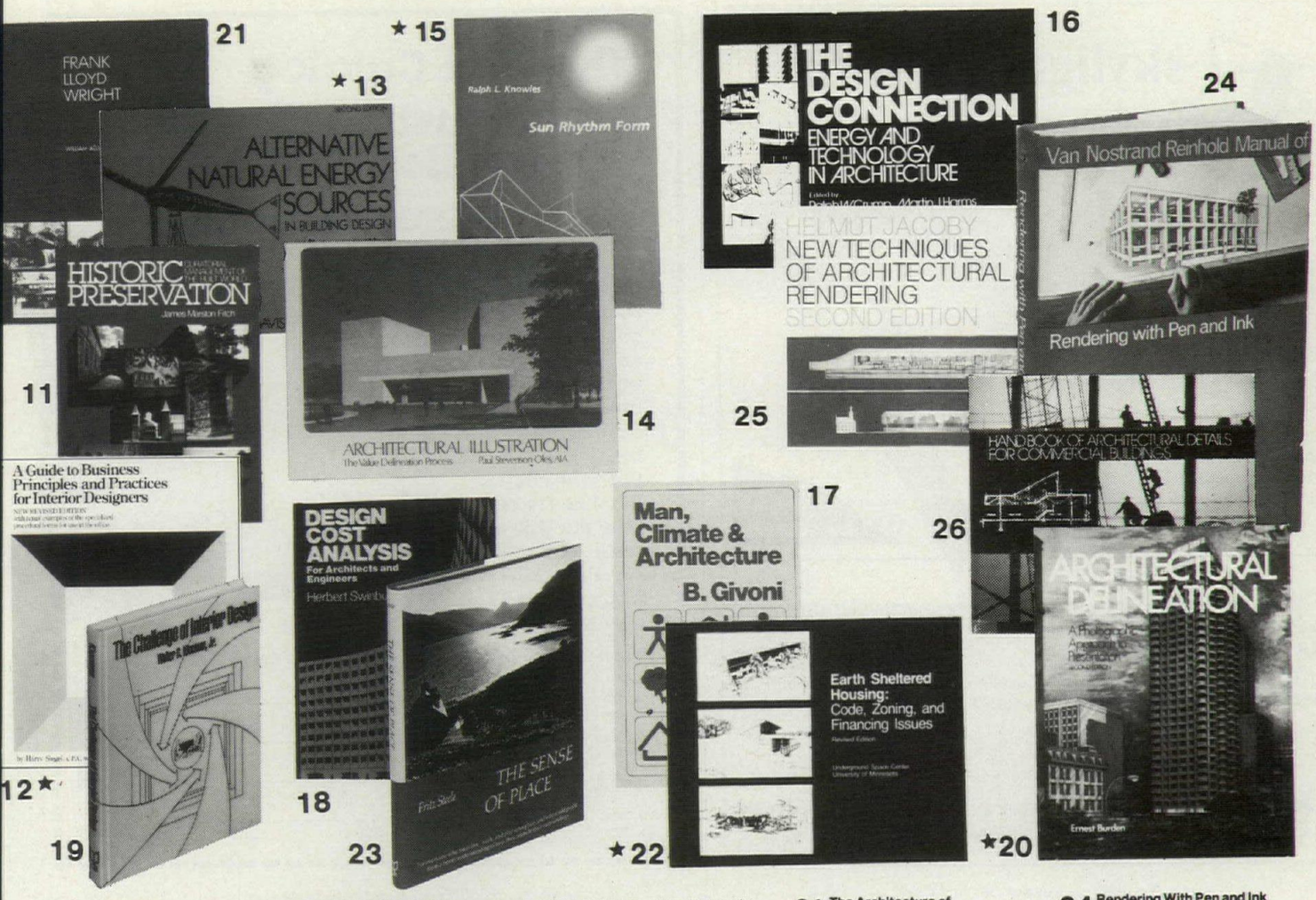
This book is a thoughtful analysis of the dehumanization of cities and the urban blight that results. It demonstrates how we can reverse this trend, making cities more responsive to human needs and improving their economic viability. It offers a number of economically sound steps that have proven effective in revitalizing cities all over the world.
Circle B609 under Books.

NEW★

10 The Architect's Responsibilities in The Project Delivery Process

By H. L. Murvin, AIA
Illus. . . . 2nd Edition, $23.95

A manual providing an educational tool which develops and presents in an orderly way the project delivery process of a representative architectural project. An invaluable study guide for architectural license exam candidates and students.
Circle B610 under Books.



11 Historic Preservation: Curatorial Management of the Built World

By James Marston Fitch
433 pp., illus. . . . $37.95

This book thoroughly covers historic preservation — it includes full chapters on the economic sense of retrieval and recycling, regeneration of historic urban cores, cosmetic consequences of intervention, quantification, analysis, and classification. Sections on historic preservation in socialist and third-world countries are included.
Circle B611 under Books.

NEW★

12 A Guide to Business Principles and Practices for Interior Designers

By Harry Siegel and Alan Siegel
192 pp., illus. . . . $22.50

This book is thoroughly updated to reflect current practices and procedures of operating a business. It discusses how to establish an interior design practice, how to carry through a job and charge for it and the special requirements of non-residential work. It examines forms, techniques, and special factors including actual examples of the specialized procedural forms used in the design office.
Circle B612 under Books.

NEW★

13 Alternative Natural Energy Sources in Building Design

By A. J. Davis and R. P. Schubert
287 pp., illus. . . . $17.95

Basic design criteria about energy conservation, solar energy, wind energy, and methane-gas energy is updated in this edition. Alternative solutions and applications are described for each problem and diagrams, tables and formulas are supplied. This book is the perfect introduction to the complex subject of energy.
Circle B613 under Books.

14 Architectural Illustration The Value Delineation Process

by Paul Stevenson Oles,
288 pp., illus. . . . $34.50

In this copiously illustrated, clearly organized explanation of his value delineation system, the author presents a detailed description of the process which has resulted in these award-winning delineations that show realistically how a designed structure will appear when built.
Circle B614 under Books.

NEW★

15 Sun Rhythm Form

By Ralph L. Knowles
289 pp., illus. . . . $29.95

This book is concerned with the total solar environment and ways that architects and planners can let more sunshine in through sensitive design. The "solar envelope" concept is explained. Graphic techniques are presented that enable architects and urban planners to derive solar envelopes for their own projects.
Circle B615 under Books.

16 The Design Connection

Edited by Ralph W. Crump
and Martin J. Harms
184 pp., illus $19.95

This book probes the relationship of formal architectural design to both building technology and human values. Locational, climatic, cultural, and historical viewpoints are all considered in depth. It bridges the gap between architectural theory and practice.
Circle B616 under Books.

17 Man, Climate & Architecture

By B. Givoni
483 pp., illus. $14.95

This book deals with the physiological, physical and architectural aspects of the relationship and interaction between these three elements to interior and exterior building design. It is divided into five parts, including climatic elements and solar radiation on building design.
Circle B617 under Books.

18 Design Cost Analysis for Architects & Engineers

By Herbert Swinburne,
317 pp., illus. . . . $27.50

This first-of-its-kind book shows architects and engineers how to analyze and estimate the costs of building construction during the design stage when the potential for controlling costs is greatest.
Circle B618 under Books.

19 The Challenge of Interior Design

By Walter B. Kleeman, Jr.
338 pp., illus. . . . $19.95

This book is a flagship text in the growing field of ergonomics. It shows how you can incorporate anthropology and gerontology into the design of any space or building. It shows how behavior is influenced by design, enabling you to induce a feeling of well-being for the recipients of your next project.
Circle B619 under Books.

NEW★

20 Architectural Delineation, A Photographic Approach to Presentation

By Ernest Burden
280 pp., illus. . . . $39.50

This masterful guide thoroughly updates the author's innovative method for using photographic techniques in delineation. He discusses a valuable new application of the photo-layout technique. Rendering projects shown in the original edition have been replaced by up-to-date projects and 16 pages of full color projects have been added.
Circle B620 under Books.

21 The Architecture of Frank Lloyd Wright A Complete Catalog Second Edition

By William Allin Storrer,
456 pp., illus. . . . $22.50

This second edition, which documents all of the buildings designed by Wright, replaced a number of photographs with new ones that show the buildings to better effect, changed some copy in the text, and incorporated factual information that has come to light since the original publication in 1974.
Circle B621 under Books.

NEW★

22 Earth Sheltered Housing: Code, Zoning, and Financing Issues

By Underground Space Center,
University of Minnesota
143 pp., illus. . . . $14.95

This is an updated version of a U.S. Dept. of Housing and Urban Devpt. study revealing the extent of earth sheltered housing restraints and how government action can ease them and encourage such structures. Constraints by restrictive building codes and zoning ordinances are detailed. The major issues of concern to code and zoning officials are clarified.
Circle B622 under Books.

23 The Sense of Place

By Fritz Steele
240 pp., illus. . . . $21.50

This book is about our sense of place — the way it affects our lives, and the way in which we create our own sense of place. It is a unique look at the interaction between the features of settings and the features of the people who use them and how we could profit from a better understanding of how we relate to our surroundings.
Circle B623 under Books

24 Rendering With Pen and Ink

By Robert W. Gill,
368 pp., illus. . . . $14.95

This paper-back edition is a copiously illustrated guide to the techniques and methods of rendering, including sections on perspective, projection, shadow, reflections, and how to draw cars, ships, aircraft, trees, and human figures. The author also describes the very wide range of instruments and equipment currently in use.
Circle B624 under Books.

25 New Techniques of Architectural Rendering

By Helmut Jacoby
167 pp., illus $24.95

This book contains a broad, international selection of architectural drawings that represent the most outstanding modern contributions to the field. Mr. Jacoby has given consideration to examples that interpret architectural designs in detail, for the layman as well as the specialist.
Circle B625 under Books.

26 Handbook of Architectural Details for Commercial Buildings

By Joseph DeChiara
506 pp., illus. . . . $44.50

This Handbook illustrates and examines the full range of architectural details currently used for commercial buildings. Part I features plans, elevations, and sections for office buildings, banks, retail stores, theaters, and more. Part II concentrates on architectural details. Practicality and realism are stressed.
Circle B626 under Books

"18 years' service and still counting. That's the performance record of single-ply roofing of Hypalon.®"

—John Breitenstein, Du Pont

"Single-ply roofing membranes of Du Pont HYPALON synthetic rubber have been weathering everything under the sun for the past 18 years," says John Breitenstein, Programs Manager. "That's because HYPALON is a high-performance rubber with durability benefits that meet the most demanding roof requirements."

A single-ply membrane of HYPALON is installed quickly and easily. Since it is thermoplastic when put down, seams are as strong and reliable as the membrane. The membrane gradually cures in place to produce an integral, tough, strong elastomeric roofing surface.

Roofing membranes of HYPALON also offer:

- Reflective white color for energy efficiency.
- Resistance to flame propagation.
- Excellent resistance to oils, chemicals and pollutants.
- Excellent resistance to ozone and UV rays.
- Serviceability over a temperature range from −40°C (−40°F) to 93°C (200°F).
- Colorability for a range of aesthetic designs.

Specify HYPALON—made only by Du Pont*—for durable, low-maintenance roofing membranes. Call toll free, 800-441-7111, ext. 45, for further information. Or for free literature, write: Du Pont Company, Room X-40097, Wilmington, DE 19898.

*Du Pont manufactures HYPALON, not single-ply roofing membranes or systems.

DU PONT
REG U.S. PAT. & TM. OFF.

Circle **No. 331** on Reader Service Card

ANNOUNCING

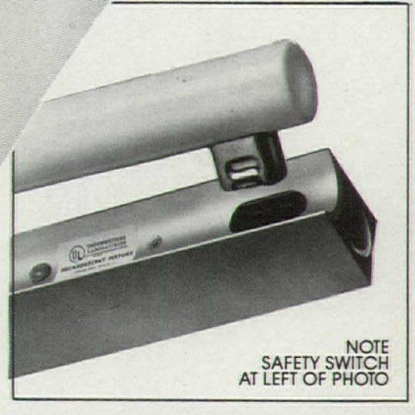
ALINEA™

NEW TECH BREAKTHROUGH

INCANDESCENT TUBULAR LIGHT

AT LAST ALINEA™

ALINEA is an Art Deco concept brought to futuristic perfection by American ingenuity. • ALINEA gives the soft, warm light (2800K) that is possible only from an incandescent —with the sleek, streamlined appearance of a fluorescent. Plus: there are no visible plugs or wiring. • ALINEA is lighting made beautiful. Not surprisingly, ALINEA is now being designed into the most elegant homes, condos, offices, hotels and conference rooms. • ALINEA comes in two lengths—20″ and 40″—and can actually be installed in a continuous end-to-end band of light. (Some TV stage sets have already incorporated this idea.) • The metal holder is in silver, gold, black and colors. Call or write for spec sheet. • Remember, ALINEA is made in USA and is UL listed. Never before available. • Demanding clients love ALINEA.



NOTE SAFETY SWITCH AT LEFT OF PHOTO

THE ONE AND ONLY SOURCE

AAMSCO

Phone: (212) 353-4644

170-09 33rd Avenue • Flushing, N.Y. 11358

Circle **No. 305** on Reader Service Card

The Fourth Annual

International Furniture Competition

sponsored by

Progressive Architecture

with winning projects to be displayed at major industry events

Progressive Architecture announces the fourth annual competition recognizing outstanding furniture and lighting design proposals, not yet being marketed by any manufacturer as of entry deadline, January 26, 1984. The competition is intended to give the design professions a forum to express ideas about the next generation of furniture design, at a time when architects and designers are increasingly custom-designing furniture for their projects and manufacturers are increasingly open to fresh ideas. The competition is specifically aimed at furniture intended for use, but the design need not be constrained by existing production or marketing practices. Entries may be based on either fabricated pieces or project drawings. Designers are encouraged to consider the aesthetic and ideological implications for furniture design implied by the current concerns within architecture and other design disciplines.

Winning projects will be published in the May 1984 P/A and they will be displayed at major industry events during the year. Winners will be honored in New York City at an awards dinner in early March attended by press, designers, and industry manufacturers.

In addition to the exposure afforded the submissions, the competition will encourage further discourse between the entrants and respected furniture producers. Any ongoing discussions will, of course, be up to the individual designers and manufacturers, but benefit to both is anticipated.

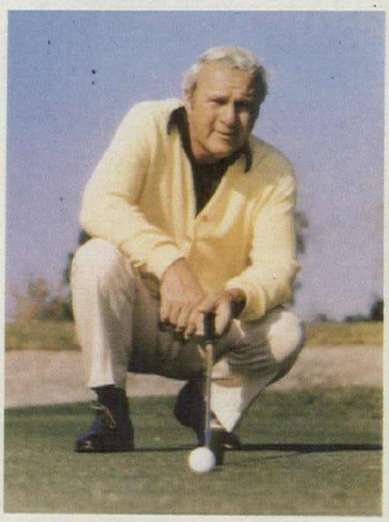
The jury for this competition:
Andrew Batey, partner, Batey & Mack, San Francisco, architect and furniture designer.
Cini Boeri, architect, interior designer and furniture designer, Milan, Italy.
Charles Gwathmey, partner, Gwathmey Siegel & Associates, New York, architect and furniture designer.
Michael McCoy, co-chairman, Design Department, Cranbrook Academy of Art, Bloomfield Hills, MI; partner in graphic, furniture, exhibition and interior design firm of McCoy & McCoy.
David Rowland, industrial designer, New York; winner of the Gran Prix Triennale de Milano.

Submissions are invited in all categories including chairs, seating systems, sofas, tables, desks, work stations, storage systems, lighting, beds, and miscellaneous furniture pieces.

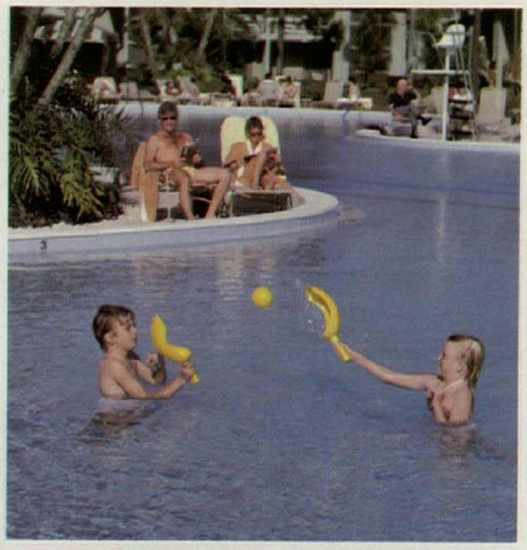
Judging will take place in New York City during the month of February. Designations of **first award, award,** and **citation** may be made by the invited jury, based on overall excellence and advances in the art.

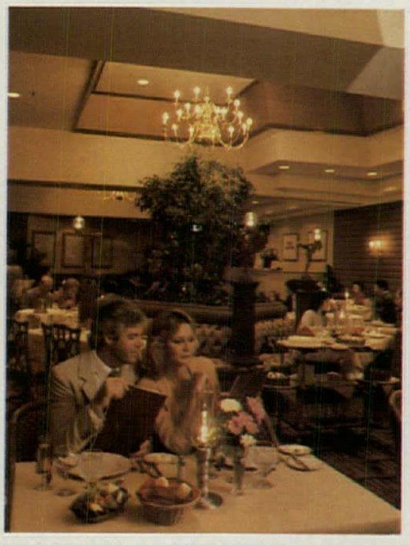
Eligibility
1 Architects, interior designers, industrial designers, and design students from all

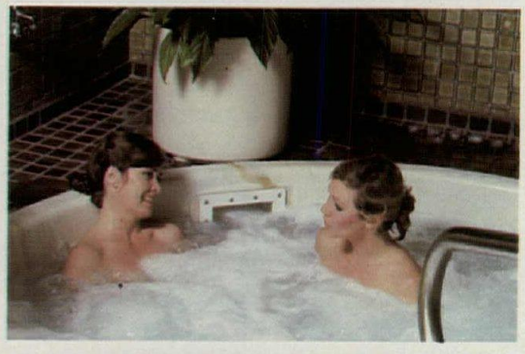
(Continued on page 170)



RECREATION ACTIVITIES







RELAX IN STYLE

SELECT SADDLEBROOK

"It's the trifles that make perfection, and perfection is no trifle."
—Michelangelo

THE WALKING VILLAGE

A RESORT YOU'LL ENJOY...EVERY STEP OF THE WAY

Saddlebrook is an ideal meeting facility set in one of Florida's most unique resorts. Just 25 minutes north of Tampa International Airport, Saddlebrook offers 330 acres of seclusion among tall stands of cypress and pine. The pace is leisurely at the very thoughtfully designed Walking Village. Everything is just steps away...no trams are needed.

Planning was meticulous, with the end result a marvel of convenience...and privacy. (In fact, it's not unusual to find a celebrity enjoying the seclusion.) Focal point is a water recreation facility appropriately named the Superpool, which holds more than a half-million gallons of water. A full 270 feet long, it's probably the largest swimming pool in the southeast.

At one end of the Superpool is the Centre Club, where the Cypress Dining Room, Polo Lounge, the Gift Shoppe, the Pegasus Ballroom and the Jockey Club Spa are all under one roof...along with conference facilities for up to 700. Built primarily of glass and natural wood, with accents of fine marble and gleaming brass, it overlooks the golf courses and introduces the visitor to some of the most delightful dining on the Gulf Coast.

The Cypress Dining Room is a gracious setting for extraordinary cuisine and a Sunday celebration that has been called "The Quintessential Brunch...Best in the Bay" by *Tampa Magazine*. Tucked away by itself is an intimate dining retreat called The Gourmet Room where an impressive French "haute cuisine" is served. For drinks, dancing and lively conversation as well as quiet conversation, there is the tri-level Polo Lounge. At the other end of the Superpool is The Little Club, a sophisticated dining room and lounge with tropical decor and intimate atmosphere.

Saddlebrook has the facilities to accommodate meetings on any scale. The Pegasus Ballroom will entertain large gatherings, or can be quickly divided into as many as ten separate meeting rooms. Four additional breakout rooms facilitate private meetings and dining. Individual suites create the ideal setting for small, self-contained conferences. Terraces and patios allow attendees to savor the abundant tropical atmosphere. A special 7200 sq. ft. tent is available for festive outdoor events. Naturally, a complete audiovisual staff is on hand with all state-of-the-art equipment. In all, Saddlebrook is a superior meeting site, with its uniquely convenient Walking Village, top-notch facilities and a thoroughly professional staff to guarantee success.

Rated by readers of *Florida Golf Week* as among the finest in the state, the 27 holes of Arnold Palmer and Dean Refram designed golf courses will challenge any golfer, regardless of handicap. Spruce up your game at the putting green and driving range or with lessons and clinics.

Saddlebrook is headquarters for the United States Professional Tennis Association, so the Tennis Complex is just as well planned as the golf courses. Adjacent to The Little Club, it includes eleven Har-Tru courts (five lighted) and four Laykold courts interspersed with awning-covered islands and water fountains.

The Jockey Club Spa offers a complete physical fitness center with separate facilities for men and women: heated whirlpools, saunas, steam rooms, massage rooms, private showers and lockers, a barber/beauty salon and the Unicorn Health Bar.

Elegance is the keynote to Saddlebrook accommodations. Guests stay in luxurious one-, two-, or three-bedroom condominium suites, each one privately owned and thoughtfully managed in the owner's absence by a team of professionals. There's a basket of personal toiletries in the bath, and a sampler of coffee and tea in the kitchen, along with every electrical appliance imaginable, including a blender. Decor and furnishings are lavish, right to the original art and brass accessories. Color-coordinated bed linen is ironed to silky softness, and beds are always triple-sheeted. In addition, a terry robe is provided each guest for trips to and from the pool.

Saddlebrook's Walking Village design has produced a meeting resort that is unsurpassed in luxury, unequaled in convenience and is totally unique in professionalism, character and charm.

Write or call toll free for information on a conference, a vacation (package plans available year-round) or a second home.

Condominium suites are available for individual ownership. Call or write C&A Investments, Inc. at Saddlebrook Resorts, Inc. Offer not valid in states where prohibited by law.

Saddlebrook

The Golf and Tennis Resort

P.O. Box 7046, Wesley Chapel (Tampa), Florida 34249 800-237-7519 U.S.; in Florida 800-282-4654 or 813-973-1111

25 miles north of Tampa International Airport

For vacationing information, Circle No. 426
For meeting information, Circle No. 427

(Continued from page 167)

countries may enter one or more submissions.
2 Design must be original. If found to be substantially identical to any existing product design, entry will receive no recognition.
3 Designer may be under contract to or in negotiation with a manufacturer for this design, but design must not be available in the marketplace as of entry deadline.

Publication agreement
4 If the submission should win, the entrant agrees to make available further information, original drawings or model photographs as necessary, for publication in the May 1984 P/A and exhibition at major industry events.
5 P/A retains the rights to first publication of winning designs and exhibition of all entries. Designer retains rights to design.
6 P/A assumes no obligation for designer's rights. Concerned designers are advised to document their work (date and authorship) and seek counsel on pertinent copyright and patent protections.

Submission requirements
7 SUBMISSIONS WILL NOT BE RETURNED UNDER ANY CIRCUMSTANCES. Do not use original drawings or transparencies unless they are sent with the understanding that they will not be returned. P/A will not accept submissions with outstanding custom duties or postal charges.
8 Drawing(s) and/or model photo(s) of the design should be mounted *on one side only* of one 20″ x 30″ foamcore board presented horizontally. **ANY ENTRY NOT FOLLOWING THIS FORMAT WILL BE DISQUALIFIED.**
9 There are no limits to the number of illustrations mounted on the board, but all must be visible at once (no overlays to fold back). No actual models will be accepted. Only one design per board.
10 Each submission must include a 5″ x 7″ index card mounted on the front side of the board with the following information typed on it: intended dimensions of the piece of furniture, color(s), materials, components, brief description of important features, design assumptions, and intentions. This information is to be presented in English.
11 Each submission must be accompanied by an entry form, to be found on this page. Reproductions of this form are acceptable. All sections must be filled out (by typewriter, please). Insert entire form into unsealed envelope taped to the back of the submission board. P/A will seal stub of entry form in envelope before judging.
12 For purposes of jury procedures only, projects are to be assigned by the entrant to a category on the entry form. Please identify each entry as one of the following: Chair, Seating System, Sofa, Table, Desk, Work Station, Storage System, Lighting, Bed. If necessary, the category *"Miscellaneous"* may be designated.
13 Entry fee of $35 must accompany each submission, inserted into unsealed envelope containing entry form (see 11 above). Make check or money order (no cash) payable to *Progressive Architecture.*
14 To maintain anonymity, no identification of the entrant may appear on any part of the submission, except on entry form. Designer should attach list of collaborators to be credited if necessary.
15 Packages can contain more than one entry; total number of boards must be indicated on front of package.
16 Deadline for sending entries is January 26, 1984. First class mail or other prompt methods of delivery are acceptable. Entries must show postmark or other evidence of being en route by midnight, January 26. Hand-delivered entries must be received at street address shown here by 5 p.m., January 26.
Address entries:
International Furniture Competition
Progressive Architecture
600 Summer Street
P.O. Box 1361
Stamford, CT 06904

Entry form: International Furniture Competition

Please fill out all parts and submit, intact, with each entry (see paragraph 11 of instructions). Use typewriter, please. Copies of this form may be used.

Entrant:
Address:

Entrant phone number (day):
(evening):
Category:

Entrant:
Address:

Designer(s) responsible for this submission (identify individual roles if appropriate):

I confirm that the attached entry meets eligibility requirements (paragraph 1–3) and that stipulations of publication agreement (paragraphs 4–6 will be met. I verify that the submission is entirely the work of those listed on this form (or an attached list as necessary).

Signature _____

Name (typed) _____

Furniture Competition
Progressive Architecture
P.O. Box 1361, 600 Summer Street,
Stamford, CT 06904

(Receipt)
Your submission has been received and assigned number:

Entrant:
Address:

Entrant:
Address:

Job mart

Situations Open

ARCHITECT EXHIBIT DESIGNER

N.Y. Zoological Society seeks experienced architect/exhibit designer to work in the design dept of the Bronx Zoo. Send resume & salary history to: Mr. A. Monaco, Personnel Office

NY ZOO, Bronx, N.Y. 10460

Equal opportunity employer M/F/H

Architectural Illustrator

We are looking for a talented illustrator to join with us in serving our architect clientele with presentation art. Applicant must be capable of producing entire renderings and/or sketches in an accepted media on a professional level. Position will lead to direct contact with our clients in a decision-making capacity. The artistic environment, salary and benefits package make this position truly rewarding. Send resume and 35mm slides or photos to: Richard Howard, Howard Associates, Inc., 5800 Monroe St., Box 403, Sylvania, OH 43560.

Faculty Positions: The University of Arkansas School of Architecture seeks candidates for visiting faculty positions in architecture and landscape architecture for Spring, 1984 and tenure-track assistant professor positions in architecture and landscape architecture for 84–85 academic year. Specialists in computers, energy, building construction, and architectural management are sought. Tenure-track applicants must have professional master's degree and professional registration. Strong research interest is desirable. Design capability is essential. Deadline for receipt of resumes for visiting positions is 1 December 1983; for tenure track positions, 15 February 1984. Send letter of interest, resume, and three references to C.M. Smart, Jr., Dean, School of Architecture, VWH 209, University of Arkansas, Fayetteville, AR 72701. The University of Arkansas is an Equal Opportunity/Affirmative Action Employer.

CAMPUS ARCHITECT/ CONSTRUCTION MANAGER

Wesleyan University

Responsible for the development and implementation of a variety of institutional projects including adaptive reuse and renovation of historic structures on a campus which includes 93 buildings on 125 acres. Registered architect with 5 years experience including at least 2 years responsibility for project management. Competitive salary commensurate with experience; excellent fringe benefits. Forward detailed resume and letter describing relevant experience to:

Wesleyan University
Personnel Office-JN 46
Middletown, CT 06457

An Equal Opportunity, Affirmative Action Employer M/F

Reps Wanted To Call On Architects for top national firm committed to innovative designs in acoustical markets. Only qualified reps, who handle architectural lines need apply. Candidates will sell a proven winner—a cost efficient complete noise reduction system in great demand in the contract, institutional, hospitality and health-care markets. Selected territories available, please respond stating lines carried and territories covered. Write: Sound-Ab-Sorb, Mr. Val Agnello, 66–26 Metropolitan Ave., Middle Village, New York 11379.

Senior Architect/Assistant Department Manager—Progressive Florida full service firm seeks registered architect with management and heavy design experience to serve as Assistant Department Manager of company's architectural department. Ability to secure Florida registration and minimum 15 years experience with 5 years in management required. Please send slide portfolio and resume to Gee & Jenson Engineers-Architects-Planners, Inc., 2090 Palm Beach Lakes Boulevard, West Palm Beach, Florida 33409, Attention: Personnel Department. Equal Opportunity Employer.

Construction Program Management Correctional Facilities

A leading capital expenditure management firm is expanding to provide management services on a major correctional capital outlay program for the State of California. Individuals selected must be willing to meet the pace of a dynamic, growth oriented firm in return for competitive salary, excellent benefits and professional growth. The firm's professional staff must accept time commitment required to satisfy client's and firm's needs.

Correctional Master Planner:
Minimum 5 years experience working in Planning of Correctional Facilities & Systems. Candidate must have experience in complex, large scale projects, preferably prisons. Individual must be capable of assuming top management responsibility and work well with government agencies. Demonstrated planning experience is essential.

Project Manager — Liaison between the owner, CM and A/E firms:
Minimum 5 years experience as owner's representative on large corporate or institutional capital outlay programs. Must have knowledge of site selection, programming, construction, and ability to manage pre-design, design, construction and start up phases on several projects.

Rosser Kitchell is an Equal Opportunity, Affirmative Action Employer.

Send Resume To: Personnel Director
Rosser Kitchell
1107 Ninth Street
Sacramento, CA 95814

UNIVERSITY OF PETROLEUM AND MINERALS
DHAHRAN — SAUDI ARABIA

The Architectural Engineering Program in the College of Environmental Design is seeking applications for faculty position in the following areas of specialization. Positions are available starting 1 September 1984.

BUILDING MATERIALS, COST ESTIMATING AND SPECIALIZATION WRITING

First degree in Architecture/Civil Engineering/Building with five or more years of teaching and/or research experience after Masters degree. Candidates with extensive professional experience will be preferred.

BUILDING SERVICES

First degree in Architecture/Engineering with five or more years of teaching/research/professional experience after Masters Degree. Ph.D. will be preferred.

Language of instruction is English.

Minimum regular contract for two years, renewable. Competitive salaries and allowances. Air conditioned and furnished housing provided. Free air transportation to and from Dhahran each year. Attractive Educational Assistance Grants for school age dependent children. All earned income without Saudi taxes. Ten months duty each year with two months vacation with salary. There is also possibility of selection for the University's on-going Summer Program with good additional compensation.

Apply before 30 January 1984 with complete resume on academic, professional and personal data, list of references, publications and research details, and with copies of transcripts and degrees, including home and office addresses and telephone numbers to:

University of Petroleum & Minerals
Houston Office (Dept. 129)
5718 Westheimer, Suite 1550
Houston, TX 77057

UNIVERSITY OF PETROLEUM & MINERALS
DHAHRAN — SAUDI ARABIA
COLLEGE OF ENVIRONMENTAL DESIGN

ARCHITECTURE AND CITY PLANNING

The Architecture and City Planning Programs are seeking applications for faculty positions beginning the Fall of 1984.

Applicants should possess at least a Masters Degree in their area of specialization and have professional and academic experience.

Positions are available in the following areas:

- Architectural Design Studios
- City Planning Studios with emphasis on Physical Design
- Architectural History and Theory
- Planning Theory, Transportation and Infrastructure Systems
- Teaching/Research position in Computer Graphics

Language of instruction is English.

Minimum regular contract for two years, renewable. Competitive salaries and allowances. Air conditioned and furnished housing provided. Free air transportation to and from Dhahran each year. Attractive Educational Assistance Grants for school age dependent children. All earned income without Saudi taxes. Ten months duty each year with two months vacation with salary. There is also possibility of selection for the University's on-going Summer Program with good additional compensation.

Apply before 30 January 1984 with complete resume on academic, professional and personal data, list of references, publications and research details, and with copies of transcripts and degrees, including home and office addresses and telephone numbers to:

University of Petroleum & Minerals
Houston Office (Dept. 126)
5718 Westheimer, Suite 1550
Houston, TX 77057

Dean, College of Architecture and Design—Kansas State University. Nominations are invited for the position of Dean of the College of Architecture and Design which is comprised of 69 resident faculty and approximately 950 students in Departments of Architecture, Interior Architecture, Landscape Architecture, Pre-Design Professions and Regional and Community Planning. The position will be available on July 1, 1984. Responsibilities—The Dean is the chief academic officer of the College and reports to the University Provost. The Dean is responsible for faculty development and for the ongoing supervision and enhancement of College teaching, research and service programs. The Dean represents the College to various professional and service groups outside the University. Qualifications—Graduate degree in one of the fields offered by the College. Proven experience in academic administration, in teaching, and publication or peer-reviewed professional achievement. Professional registration or certification preferred. Applications (including detailed resume and at least three references) and nominations should be sent to: Dr. John Keller, Chair, Faculty Search Committee, % Office of the Provost, Anderson Hall, Kansas State University, Manhattan, KS 66506. Job description available upon request. Review of candidates will begin January 15, 1984. Kansas State University is an Equal Opportunity/Affirmative Action Employer.

The School of Architecture and Environmental Design at Kent State University invites applications and nominations for the position of Director of the School. This is a tenure-track position at the rank of Professor. The School is one of ten schools in the College of Fine and Professional Arts and has a total enrollment of 500 undergraduate and graduate students with a faculty of seventeen. The School offers a four-year non-professional degree, a five-year professional Bachelor of Architecture degree, and a six year Master of Architecture program. The later two degrees are fully accredited by the National Architectural Accrediting Board. Candidates should have suitable, professional and educational credentials with abilities in administration, teaching, research, and practice. Twelve month contract; salary commensurate with qualifications and experience. Kent State University is an equal Opportunity/Affirmative Action Employer. Application deadline is December 9, 1983. Please forward a current resume, transcript, at least three letters of recommendation, and examples of professional work and/or research to: Dr. Walter Watson, Chairman, Architecture Search Committee, School of Music, Kent State University, Kent, Ohio 44242. For further information, contact Dr. Walter Watson at 216/672-2172.

Texas Tech University, Division of Architecture: For undergraduate and graduate programs, tenure acquiring, rank and salary open. Application deadline March 1, 1984. Design Studio Instructor and Lecturer, terminal degree and prior teaching required, registration, research effectiveness and/or scholarly/creative accomplishments preferred. Special consideration given to expertise and graduate level instructional capabilities in areas of: construction management or building systems and technologies. Please request resume format from Search Committee, Texas Tech University, P.O. Box 4140, Lubbock, TX 79409.

Position Vacancy—Assistant or Associate Professor in Interior Design, tenure track position. Experience and working knowledge of public space design, planning and programming, design history, graphic communication and basic knowledge of computer application in design. Direct inquiries to Roger Kramer, School of Home Economics, University of Arizona, Tucson, Arizona 85721 (602) 621-1295. Equal Employment Opportunity/Affirmative Action Employer.

The University of Maryland School of Architecture is seeking applicants for an entry level position in architectural design leading to a tenured appointment. Candidates must possess a terminal degree in their discipline. In addition to design studio, candidates must be qualified to teach classes or seminars in a related discipline such as landscape architecture, urban design, graphics, etc. Send curriculum vitae and the names of three references to: Prof. William Bechhoefer, Chairman, Search Committee, School of Architecture, University of Maryland, College Park, Md. 20742. The University is an Equal Opportunity, Affirmative Action, employer.

Services

Hemsher Associates, an energy management, controls and instrumentation consulting firm. Seeking position as a member of the Architect's design team for commercial building projects where comfort, energy-efficiency and quality environmental control is a high priority. Includes computer-based Facilities Management Systems and smoke control. 3025 Washington Rd., McMurray, Pa. 15317, (412) 941-3080.

RitaSue Siegel Agency™, a recruiting service for consultants, businesses and institutions for excellent architects, interior, graphic and industrial designers, marketing and sales support people. Confidential. Nationwide, international. 60 W 55 St, N.Y.C. 10019, 212 586 4750.

Notice

Please address all correspondence to box numbered advertisements as follows:

Progressive Architecture
% Box
600 Summer Street
Stamford, Connecticut 06904

Advertising Rates
Non-display style: $125 per column inch. Seven lines per inch. Seven words per line. Maximum 4 inches. Column width approximately 2¼". No charge for use of box number. Situations Wanted advertisements: $60 per column inch. Noncommissionable.

Statement of Ownership, Management and Circulation of PROGRESSIVE ARCHITECTURE (ISSN 0033-0752) (USPS 485-890). Published monthly at 1111 Chester Avenue, Cleveland, Ohio 44114 (Cuyahoga County), for October 1, 1983, compliance.

The publisher of PROGRESSIVE ARCHITECTURE is Peter J. Moore; the editor is John Morris Dixon; and the managing editor is Barbara McCarthy. They are located at 600 Summer Street, Stamford, Connecticut 06904.

PROGRESSIVE ARCHITECTURE is owned by Penton/IPC, Inc., 1111 Chester Avenue, Cleveland, Ohio 44114, a wholly owned subsidiary of Pittway Corporation, 333 Skokie Blvd., North Brook, Illinois 60062.

The known bondholders, mortgagees, and other security holders owning 1% or more of total bonds, mortgages, or other securities are: none.

EXTENT AND NATURE OF CIRCULATION	AVERAGE NO. COPIES EACH ISSUE DURING PRECEDING 12 MONTHS	ACTUAL NO. COPIES OF SINGLE ISSUE PUBLISHED NEAREST TO FILING DATE
A. TOTAL NO. COPIES (*Net Press Run*)	77,204	77,777
B. PAID CIRCULATION 1. SALES THROUGH DEALERS AND CARRIERS, STREET VENDORS AND COUNTER SALES	317	293
2. MAIL SUBSCRIPTION/OR REQUESTED COPIES	67,860	66,548
C. TOTAL PAID CIRCULATION (*Sum of 10B1 and 10B2*)	68,177	66,841
D. FREE DISTRIBUTION BY MAIL CARRIER OR OTHER MEANS SAMPLES COMPLIMENTARY, AND OTHER FREE COPIES	5,398	5,971
E. TOTAL DISTRIBUTION (*Sum of C and D*)	73,575	72,812
F. COPIES NOT DISTRIBUTED 1. OFFICE USE, LEFT OVER, UNACCOUNTED, SPOILED AFTER PRINTING	3,629	4,965
2. RETURN FROM NEWS AGENTS	0	0
G. TOTAL (*Sum of E, F1 and 2—should equal net press run shown in A*)	77,204	77,777

SUBSCRIPTION INFORMATION: Send all subscription orders, payments, and changes of address to Progressive Architecture, P.O. Box 95759, Cleveland, OH 44101. When filing change of address, give former as well as new address and zip codes, and include recent address label if possible. Allow two months for change. Publisher reserves right to refuse unqualified subscriptions. Professionals include architectural and architectural-engineering firm personnel and architects, designers, engineers, and draftsmen employed in allied fields.

SUBSCRIPTION RATES	Professional 1 Yr	Professional 2 Yrs	Professional 3 Yrs	Non-Professional 1 Year	Single Copy
U.S. & Possessions	$25.	$ 45.	$70.	$45.	$7.
Canada	33.	53.	85.	60.	8.
All Other Countries	60.	115.	—	85.	9.

I certify that the statements made by me above are correct and complete.

Sal F. Marino, President, Penton/IPC, Inc.

Advertisers

Advertising Sales Offices

Stamford, Connecticut 06904:
600 Summer Street
P.O. Box 1361 *203-348-7531*

Peter J. Moore
Publisher
James J. Hoverman
Associate Publisher

Charles B. Selden,
National Sales Manager
Francis X. Roberts, James J. O'Brien, Donald J. Roberts, *District Managers*

Chicago, Illinois 60601:
2 Illinois Center Bldg
Suite 1300 *312-861-0880*

James L. Hobbins, John M. Brannigan,
District Managers

Cleveland, Ohio 44113:
1111 Chester Ave *216-696-7000*
John F. Kelly, *Western Sales Manager*

Richard A. Strachan
Special Markets Representative

Los Angeles, CA 91436:
16255 Ventura Blvd, Suite 301
213-990-9000
Philip W. Muller, *District Manager*
Alan F. Herr, *District Manager*

Atlanta, Georgia 30326:
3400 Peachtree Road, NE-Suite 811
Lennox Tower *404-237-5528*
Anthony C. Marmon, *District Manager*
Harmon L. Proctor,
Regional Vice President

Houston, Texas 77401
5555 West Loop South, Suite 505
713-664-5981
Calvin Clausel, *Director*
Southwest Operations

United Kingdom
Reading, RG10 OQE, England
Wood Cottage, Shurlock Row
0734-343302
Cables:
TEKPUB, Reading
Malcolm M. Thiele
Managing Director, U.K.

Tokyo, Japan 101
3-1 Kanda Tacho 2-chome,
Chiyoda-ku
03-252-2721
Genzo Uchida, *President*

Paris, France
Continental Europe
18 rue Gounod, 92210
St. Cloud, France *602-24-79*
Yvonne Melcher, *Manager*