You can give your projects a unique advantage with Azrock. Our exclusive Vinylcraft II line offers a perfect way to enhance any new or existing commercial interior. Just like all our Vinylcraft tiles, our Dover Slate is individually handcrafted. Get the look and texture of natural slate in five colors which can withstand heavy commercial traffic. All at a price designed to keep your job within budget. Vinylcraft can be combined with other Azrock tiles to create a custom floor that is uniquely your own. So when you’re looking for a way to complement your interiors, look to Vinylcraft II.

Add a unique look to your interiors with Vinylcraft.

Covering America's Floors

Circle No. 324 on Reader Service Card
Etched Brass, Etched Pewter, Polished Brass, Polished Chrome. A unique and versatile line of durable metal laminates.

Scratch resistant, stain proof and easily tooled. Lunstead Metals have been specified worldwide in restaurants, banks, hotels and residences. The applications are up to your imagination. Available on ten day quick-ship delivery.

For the Lunstead representative nearest you, contact Lunstead Designs, Inc. 8655 S. 208 St. Kent, WA 98031 206 872-8835 Telex 32 0195

Circle No. 594
With the advent of Du Pont certified ANTRON PRECEDENT, commercial carpets enter a new age. Take on a luxurious dimension. And lead brilliantly longer lives.

ANTRON PRECEDENT virtually doubles the life span of commercial carpets. And the quality of that life is far superior to any other. ANTRON PRECEDENT carpets have a rich beauty that defies heavy traffic. Their resistance to soil and stain is unrivaled. Their texture retention is unsurpassed. They're carpets that look newer longer and reduce maintenance cost.

It's a performance that's light years ahead of other carpets, and only Du Pont could create it. What goes into ANTRON PRECEDENT is revolutionary fiber engineering, TEFLOW® Low Surface Energy technology and stringent construction.
Du Pont introduces Antron Precedent with performance that will eclipse all other carpets.

It's your assurance that it's met the toughest specifications in the business. Those of Du Pont for ANTRON PRECEDENT.

Call today for more information and a list of quality licensed mills. (800) 448-9835. New certified ANTRON PRECEDENT... only from Du Pont. It's nothing short of out of this world.
From Apples To Zebra

Let your imagination run wild. With American Olean ceramic mosaics, you can create anything under the sun with the broadest, most beautiful mosaics line in the industry.

Choose from scores of innovative new colors, shapes, sizes and textures. Count on us for total availability—our new mosaics plant in Jackson, Tennessee will bring you an additional 10 million square feet of material each year. And be confident that we'll cover you from A to Z with quality installation materials, superior personal service plus a top-notch mural design and color coordination service from our own design specialists.

For catalogs on ceramic mosaics and other tile products, write American Olean Tile Company, 3234 Cannon Avenue, Lansdale, PA 19446-0271; or call us at (215) 855-1111.
Simply Trendway... Performs in Open and Private Office Environments.

Think about it — an office furniture system that performs equally well in open and private office environments. Trendway has.

Trendway’s Space Management System (SMS) is a highly functional office interior system, affording the latest in system panels, work surfaces, filing and storage, electronic and electrical support — a versatile system with many options in aesthetics and performance.

And with SMS you can expand your options. SMS furniture componentry works equally well with system panels, or Trendway’s “T” Series, movable, floor-to-ceiling partitions — without adaptive hardware. So, separately or together, you can make open or private offices perform...simply.

Thinking Trendway? Write: Trendway Corporation, P.O. Box 1110, Holland, MI 49423.

Circle No. 430 on Reader Service Card
ColorCore is... Edges.

From every angle ColorCore brand surfacing material is spectacular. Elegant and cost effective, it is the most technically advanced surfacing material. Solid color to the core, it provides the flexibility and solidity associated with monolithic materials. It can be routed, beveled, contoured, angled, sandblasted or inlaid. And now with five new custom edge treatments available from our nationwide network of fabricators, design options are simply limitless. All 94 ColorCore colors are there for the choosing. And specifying is as easy as turning this page.

ColorCore® brand surfacing material
By Formica Corporation
ColorCore is...Edges.

The Self Edge, the Rounded Edge, and the Pinstripe Edge are ColorCore components of the handsome cabinet shown in detail on the other side of this page. For more information about all ColorCore products, ask your dealer or contact Formica Corporation, Information Center, Stanford Road, Piscataway, New Jersey 08854.

ColorCore® brand surfacing material
By Formica Corporation

All five ColorCore custom edge treatments are available from our nationwide network of fabricators.

1. The Self Edge offers color contrast, complement, or continuity to the top surface.
2. The Rounded Edge creates a graceful contour.
3. The Pinstripe Edge makes a dynamic contemporary statement.
4. The Wood Chamfer Edge is the finishing touch to coordinate with wood cabinetry or furniture.
5. The Wood Ogee Edge offers elegance plus a gentle, classic shape.
THE CHOICE IS YOURS...

- Three Profiles
- 12", 18", or 24" Widths
- 26, 24, or 22 Gauge Galvalume™ Steel
- Kynar 500® or Siliconized Polyester
- 19 Colors

Specify MBCI’s Concealed Fastener Preformed Metal Roofing and Fascia

Traditional Series

For MBCI’s Complete Product Line See Swert’s 7.4/Meb and 7.2/Mbc

Circle No. 399 on Reader Service Card
Stone Lions in Venice

This year for the first time, the architecture section of the Venice Biennale bestowed awards—but not just any award. The 13 Stone Lions presented during the opening on July 20th of the Third International Exhibition of Architecture were individually carved plaques based on a design by Aldo Rossi, director of the architecture section of the Biennale and president of the international awards jury, which included Claudio d'Amato, Gianfranco Caniggia, Sandro Benedetti, Gino Valle, and Gugliemo de Angelis d'Osat of Italy, Bernard Huet of France, Werner Oechslin of Switzerland, Rob Krier of Austria, and Rafael Moneo and Diane Ghirardo of the U.S.A.

The jury must not have had an easy time of it. Submissions for the exhibition were open to anyone, and could be in any medium of any shape or size. Designs could be submitted for any of ten projects, all of which are in or near Venice and are historical in nature, which thus directed all efforts toward restoration, reuse, or reconstruction. Of the 1500 schemes submitted, 550 were selected for exhibition in the central pavilion of the Biennale grounds, and for publication in the massive, two-volume catalog accompanying the show.

The five Stone Lions awarded to U.S. firms or individuals went to Venturi Rauch & Scott Brown for the Academia Bridge, Raimund Abraham for Ca'Vembrer dei Leoni (the unfinished mid-18th Century palazzo that now houses the Peggy Guggenheim museum), Peter Eisenman for the 14th Century Castles of Romeo and Juliet, Laura Foster Nicholson for the mid-18th Century Villa Farsetti northeast of Padua, Daniel Liebeskind for the piazzas of Palmanova (a 16th Century fortified new town).

The surprise of the exhibit, as noted by Aldo Rossi during the opening awards ceremony, was the veritable sea of ideas submitted for the reconstruction of the Academia Bridge, which accounted for over one-third of all the propositions in the show. The weakened wooden structure, built as a tem-
obvious in the boxy outer "masonry house," is subtly expressed in the tall and slender inner "glass house," with a void carved out of its lower nine stories.

The restraint of its symbolism as well as its coloring (a natural reddish tone, like the typical Frankfurt stone) distinguishes this tower from the more romantic work of the Miami firm Arquitectonica, which it at first glance resembles. So does the Surrealistic effect of its contradictory scales—on the one hand the giant portals, on the other the small-scale surface grid (two-foot squares for the glazing, and one-foot squares, laid up in 4 x 4 or 4 x 5 modules, for the prefabricated concrete panels faced in ground stone).

A new downtown for Phoenix

When the AIA staged its national convention in Phoenix last year, much time and talk was spent on the subject of Phoenix itself. The ninth largest city in the country, said the architects, had no identifiable downtown but suffered from a citywide case of suburban sprawl. Phoenix took these and other criticisms to heart. No fewer than three design competitions are underway or anticipated: one a closed competition for the Arizona Historical Society (results due the end of this month), a second for a fine arts complex at Arizona State University, and the third, and most important, for the Phoenix Municipal Government Center.

Twelve downtown blocks have been designated the site for this new civic center, which will ultimately include a new City Council Building, City Court, Water Building, and office building for fire, criminal justice, and other municipal departments. Four of the nine designers who submitted masterplan proposals for the civic center in July have advanced to the next and final round in competition. They are Michael Graves with GSAS; Arata Isozaki of Japan with Gruen
ECLIPSE™

A remarkable solar occurrence from LOF Glass.

Get ready.

© 1985 Libbey-Owens-Ford Company
Circle No. 395 on Reader Service Card
TIN CEILINGS
- 24 patterns
- 10 cornice moulding styles
- Fast and easy installation
- Shipped anywhere
- Brochure available. Please send $1.00 for postage and handling.

AA-ABBINGDON AFFILIATES, INC.
Dept. PA 2149 Utica Ave.
Brooklyn, NY 11234 718/258-8333

Circle No. 310 on Reader Service Card

Freedom to get up and down stairways.

The Cheney Liberty™ Wheelchair Lifts enable individuals to ride safely from floor to floor both indoors and out. The Lifts are so versatile they can even go across straight intermediate landings.
- Optional top or bottom overruns
- 500 pound load rating

The Cheney Handi-Lift® Vertical Wheelchair Lift provides safe stairway access and its attractive design complements any surroundings.
- Lifting range of 4 to 12 feet
- Indoor and outdoor applications
- 500 pound load rating

Where a restrictive access is required, you'll find the Handi-Enclosure™ unsurpassed for safety, good looks, and ease of installation. To find out more about the freedom Cheney Lifts can provide in public buildings or private residences, write Darlene Lewis or call toll free 1-800-782-1222.

Circle No. 348 on Reader Service Card

People Proof. Pet

THE SYLGARD™ TREATMENT.
Heavy traffic, everyday spills, pets and more...they all can lead to offensive carpet odors, and shorten carpet life. That's where the SYLGARD Antimicrobial Treatment comes in. And where you can offer your carpet prospects more value. It's a real selling plus. It provides hygienic carpet freshness by inhibiting the odors and discoloration caused by bacteria, molds and mildew.

And unlike other treatments, the SYLGARD Treatment is permanently bonded to the carpet fiber.
New headquarters for the CCA

The architectural world—especially that segment of it involved in collecting and studying old drawings, photographs, and books—has been aware for some time of the growing importance of the Canadian Centre for Architecture. Established in Montreal in 1979 by architect and Seagram heiress Phyllis Lambert (who is also Chairman of the Board of Directors at the Buell Center for the Study of American Architecture in New York), its collections, ranging from the 15th Century to the present, already comprise 20,000 master drawings and prints, 50,000 books, 30,000 vintage photographs, and an archive of related iconographic and textual material. It has organized exhibitions and publications, including “Photography and Architecture: 1839–1939,” and seminars, but the full range of its planned activities—study programs, lectures, and internships, which are intended to attract scholars and visitors from around the world—will coalesce when its new headquarters are completed.

The four finalists have been asked to prepare more detailed designs for public presentation in Phoenix October 24. The winner will then be awarded the commission to design the City Council Chambers, fire, justice, and municipal building, and supporting parking structures. Already, $24.5 million of the $38 million required for phase one has been approved by Phoenix voters, proving the public support for this ambitious undertaking.

Dowalice D. Boles

The new building, designed by Montreal architect Peter Rose, with Erol Argun as associate and Lambert as consulting architect, broke ground in May of this year and is expected to be completed within three years. The 120,000-square-foot structure, with two below-grade levels for the collection's storage vaults, a public level at grade for exhibition galleries, library reading room, and au-
Why do most architects specify Cookson rolling doors?

Quality features such as SAFETY CONTROLS

Like the governor on Cookson rolling counter fire doors:* For greater safety during automatic closing, the Cookson governor regulates the downward speed of the curtain and controls the closing impact on the sill. Labeled by approved testing laboratories, Cookson rolling counter fire doors are ideal anywhere fire safety is a concern.

*Standard on sizes 8'1" x 4'5" or larger. Available on smaller doors at minimal additional cost.

And the Cookson Firefly® Time Delay Release Device. An electromechanical fail-safe device that connects to a building's smoke detector or fire alarm system. This patented Cookson exclusive prevents false closings during momentary blackouts or fluctuations in electrical power.

At The Cookson Company quality is of prime importance. Cookson's complete line of rolling doors along with rolling grilles, rolling fire doors and counter doors represent the state of the art in design, engineering and manufacturing. With factories on the East Coast and West Coast, Cookson is the preferred name in the rolling door industry.

Write for a free catalog, or see Sweets 8.7/Co.

The Cookson Company
700 Pennsylvania Ave / San Francisco, CA 94107 / Phone (415) 826-4422
800 Tulip Drive / Gastonia, NC 28052 / Phone (704) 866-9145

*ENTRANCE 5 RECEPTION
2 GALLERIES 6 RESTAURANT
3 BOOKSTORE 7 PARK
4 READING ROOM
A ceiling system that takes the heat

Ultraline, the contemporary narrow faced grid system is U.L. approved with a one hour fire-rating. As part of the Designer Systems, this unique ceiling provides assembly flexibility and design freedom for an entire job. There is no need to change from the clean, flush look of an Ultraline ceiling in fire-rated areas. Chicago Metallic's Ultraline System has the distinction of being the first narrow face grid to achieve a fire-rating.

Designed for use with special reveal-edge panels, Ultraline exposes only a narrow 3/16" face with a 1/4" center regres reveal surface. The unique features of the grid include mitered intersections and a center regres that is available in both white and black. These features offer aesthetic appeal as well as functional versatility. A custom designed T-bolt easily slips into the regres at any intersection allowing for the attachment of partitions, projection screens, hanging graphics and track lighting at any desired location along the grid.

Give your next interior a spark of excitement with an Ultraline ceiling system from Chicago Metallic.

For more information, see Sweets 9.2 or call us today.
A Sign of Value

Best Western
WORLDWIDE LODGING

Make reservations at any Best Western, see your travel agent, or call 1-800-528-1234.
"World's largest chain of independently owned and operated hotels, motor inns, and resorts"

Circle No. 002 on Reader Service Card

P/A News Report

The opening exhibition, to take place in 1988, will present key works from all areas of the collection. A second exhibition that year, Views of Thurloe Lodge, will feature photographs by Carleton Watkins of the Menlo Park, Calif., estate and mansion designed in the 1870s for financier/art patron/politician M.S. Latham. The exhibit will include a selection from the Lodge's original furniture by the Herter Brothers. The exhibition, which will be accompanied by a publication, is being organized with the Metropolitan Museum of Art in New York.

Susan Doublet

Future atrium of IDCNY, Center Two.

IDCNY Opening Next Month

Across the East River from Manhattan, in Long Island City, Queens, the International Design Center, New York, is celebrating its "preview opening" on October 10, concurrent with Designer's Saturday 1985. The IDCNY, a project that many thought would never get off the ground, now seems to be flourishing; 12 of the Center Two tenants will have their showrooms finished in time for the opening, and many others will have products on display in a temporary exhibit set up for the event. Leasing is following an interesting pattern. Larger manufacturers are opening "satellite" spaces at the IDC and retaining their Manhattan showrooms, while smaller companies are moving to Queens lock, stock, and barrel to occupy space in a complex of renovated industrial buildings, with a master plan by I.M. Pei.

IDC's special events for the October 10 opening include an exhibit of works by Italian designers Afra and Tobia Scarpa. The exhibit, sponsored by the Italian clothing store chain Benetton, was organized by the Museum of Contemporary Art in Milan. Charles Gwathmey and Robert Siegel, IDCNY Centers One and Two interior architects, and Massimo Vignelli, creator of IDC graphics and signage, will also present the project. Joanna Wissinger
THE BEAUTY OF NATURAL WOOD... AND LOW MAINTENANCE

No splinters! Julius Blum’s unique CARLSTADT® Acrylic/Wood railing system is finished all the way through. The handrail mouldings and posts are made from carefully selected walnut, oak and ash hardwoods which are fully impregnated with acrylic plastic. This process creates a composite material with the beauty and feel of wood but with substantial resistance to indentation and abrasion.

Of course, our CARLSTADT Acrylic/Wood mouldings are part of the Julius Blum system of handrail components which are carried in stock at all times.

For information about CARLSTADT Acrylic/Wood and our other railing systems, call or write for our Catalog 14.
Introducing DesignerTube™

Standard and custom designed tubes for railings, crowd control, racks and displays.

Almost anything you can do with a tubular product you can do with DesignerTube.

Create your own DesignerTube.
Send us a 12" square sample of your wallpaper, design or logo and we'll turn it into a sturdy DesignerTube sample. Absolutely free.

Call Toll-Free for our illustrated brochure.

Ship'n Out
9 Citrona St., Flushing, NY 11364
800-431-8242 In NYS Call Collect 914/855-5947

Circle No. 417 on Reader Service Card

---

Everything you always wanted to know about what 3M can do for you and your business. Free!

Well, maybe not everything, but an awfully good overview of 3M's success across many fields and how our innovative techniques and technologies can go to work for you. Send Response Card # 1 for your free copy of "IN THE SEARCH FOR NEW AND BETTER IDEAS, 3M HEARS YOU".

© 1985, 3M

Circle No. 001 on Reader Service Card

---

P/A News Report

Henry David's Walden Drive-In

What Henry David Thoreau wrought for $28.12½, the State of Massachusetts has now replicated for something over $7000, with volunteer labor.

On the 168th anniversary of Thoreau's birth, a replica of his famous house in the woods was dedicated by the state's Department of Environmental Management in a sunrise ceremony. The replica was placed not in Walden Pond State Reservation, exactly, but across Route 126 in the parking lot, conveniently visible from the road for those American Transcendentalism buffs who lack either the time or the inclination to trek through the woods to the original site.

Thoreau's original house was "of small dimensions, with a peaked cottage roof, and not much else to be seen, the dirt being raised five feet all around as if it were a compost heap." He paid $4.25 for the basic shanty and moved it to pond-side in small cartloads, losing a few still-serviceable nails to a larcenous bystander in the process. The only new materials he used were timbers and floorboards he cut from the white pine on the land lent to him by Ralph Waldo Emerson. Thoreau's descriptions of the hut and drawings by his sister Sophia guided the design.

Thoreau lived at Walden for two years, two months, and two days. According to Mrs. Thomas McGrath, curator of the Thoreau Lyceum in Concord, a local farmer then bought the house and moved it again. The Lyceum, too, maintains a replica.

Walden Pond itself has become the center of a controversy between those who would maintain it as a sanctuary and those who would see expanded use of the park. The state estimates that 750,000 people visited the park to swim or fish in the pond or hike the trails last year. Mary Sherwood, member of an action committee called Walden Forever Wild, thinks that is too many for the fragile glacial environment to bear: "I've known Walden Pond for 25 years, and I'd say right now it's at its worst."

Melissa Brown

Bridging Museum and Marketplace

Two shows at the Queens Museum in Flushing, N.Y., are teamed together under the title Design 85 (through October 20). The two work together to examine opposing aspects of the current boom in furniture design, examples of which have been popping up
1985 R.S. Reynolds Memorial Award Winner

Kevin Roche, partner in the architectural firm of Kevin Roche John Dinkeloo and Associates in Hamden, Connecticut, is the 29th recipient of the R.S. Reynolds Memorial Award for distinguished architecture using aluminum.

The award, established in 1967 as a memorial to Richard S. Reynolds, Sr., founder of the Reynolds Metals Company, is administered by the American Institute of Architects.

The winning design was of the General Foods Corporation headquarters in Rye, New York.

The award jury, composed of distinguished architects appointed by the AIA, called the winning design a "magnificent solution for a corporate headquarters."

To create a strong, horizontal look, Mr. Roche sheathed the building in 1.1 million square feet of heavy gauge, vinyl coated aluminum siding for his unique design of the General Foods headquarters.

Typically used in residential applications, aluminum siding was selected not only for aesthetics, but also for ease of maintenance and energy efficiency.

Its design flexibility and maintenance-free characteristics combine to allow cost-effective, durable, energy saving, and visually pleasing solutions for nearly unlimited applications.

Reynolds, a pioneer in the development of quality building products, congratulates Kevin Roche and applauds his innovative spirit.
WHAT EVERY ENGINEER SHOULD KNOW ABOUT COMPUTER-AIDED DESIGN & COMPUTER-AIDED MANUFACTURING

This book presents a comprehensive description of the various facets of CAD/CAM, illustrating how each is tied together in an integrated system. Written by a specialist in the field, this authoritative book:
- provides the "big picture" on CAD/CAM, addressing its many advantages and uses while pinpointing areas needing further development,
- explains the functions of each major aspect of the technology,
- describes the interfaces in a CAD/CAM system,
- offers numerous helpful illustrations to facilitate work from the CRT screen,
- highlights practical engineering examples demonstrating the day-to-day utility of CAD/CAM.

It is the functional equivalent of sculpture; his selections are heavily slanted toward designs from department stores (P/A, May 1985, p. 24) to art galleries, cloaked in various guises ranging from pure art to pure commodity.

The purely art part of the Queens program is a show of contemporary furniture and lighting called Material Pleasures: Furniture for a Post-Modern Age. In his catalog essay, guest curator Robert Janigian, Products Editor of Interiors magazine, strives to establish furniture design as an art by describing it as the functional equivalent of sculpture; his selections are heavily slanted toward designs from artists and architects. The few contract pieces, such as Brian Kane's Rubber Chair for Metropolitan, and Paolo Favaretto's Business Seating for Kinetics, look reassuringly normal and comfortable amid the menacing rough-cast concrete surfaces and jagged glass edges of the majority of pieces on display. A limited amount of space makes it difficult to appreciate the show's variety; the lamps suffer particularly in this respect.

On the other side of the coin, The Wool Print: Architect-Designed Printed Wool Textiles has a heavy contract slant. The Wool Bureau, an organization that encourages architects and designers to design fabric patterns, which were then screen printed on wool by Scalamandre (their factory, not coincidentally, is in Queens) and Bellana, two North American textile firms eager to import wool printing technology, currently widely used in Europe, to the U.S. and Canada. Each fabric was then used to cover a chair selected from the product lines of 11 contract manufacturers.

The results are more a marriage of design and commerce than of art and technology, likely to interest an industry audience more than a lay public. The chairs, in fact, debuted at NEOCON.

It's difficult, on the other hand, to imagine anyone of the pieces from Material Pleasures at a trade show. While the artists' works play with showy issues of aesthetics, in the end it all comes down to contract manufacture vs. one-off artworks—apples and oranges.

Joanna Wissinger

Art: Bonetto/Garouste, Rock Table (1983); Industry: designs by Ralph Johnson of Perkins & Will, printed by Bellana on Marden chair (left) and by Karen Johnson of Hammond Beety Babka, printed by Scalamandre on Donghia chair.

Furniture of the 20th Century
Carpets made with ULTRON® 3D fibers give you the right combination of properties—color, texture, luster, and performance—for many years of long-lasting, attractive wear. Take the word of this demanding customer:

"This hallway is heavily travelled by people and equipment. And most carpets wear out here every two years. But this carpet, featuring ULTRON 3D fibers by Monsanto, has been installed for four years. The color is still bright. There are few worn spots."

"We're very pleased with the performance and durability of these ULTRON 3D fibers. It's one of the first fibers to meet the high standards of The Breakers."

Find out more about ULTRON 3D fibers. Call or write Monsanto Company, 320 Interstate North Parkway, Atlanta, GA 30339, (404) 951-7642.

"This carpet with ULTRON 3D fibers is four years old. It has already outlasted other carpets by twice the time."

...John West, Resident Manager, The Breakers
D. Fred Lebensold
1918–1985

Canadian architect Fred Lebensold, well known for his many theaters, died in Kingston, Ontario, in late July. Among the performing arts centers designed by Lebensold, a founding partner and since 1973 head of the Toronto office of Arcop Associates, are: from the 1960s, the National Arts Centre in Ottawa, the Place des Arts in Montreal, and the Confederation Centre Theatre Arts Complex in Charlottetown; from the 1970s, the Onondaga County Civic Center Offices and Theatre Complex, Syracuse; and from the early 1980s, the City Center renovation, New York. Current projects undertaken by Lebensold include the Tampa Bay Performing Arts Center (with associate architects MJSH Inc. of Tampa) under construction in Florida; a performing arts center in Mesa, Arizona, in association with H.N.T.B. of Phoenix; and studies for an opera/ballet complex in Toronto. Says his associate Brian Hall, "In his earlier work...he pioneered a more European space with multiple boxes or tiers, intimate spaces...He will be sorely missed." Susan Doubilet

Measured immensity:
Hoover Dam at Fifty

Fifty years ago this September 30, Franklin D. Roosevelt dedicated the Hoover Dam, a man-made monument to match the Grand Canyon in the scale and heat of its desert Southwest setting. The festivities marking the anniversary of the dam dwell on its engineering accomplishments and the profound—and supposedly equally laudable—changes wrought by the project in the landscape, climate, and agriculture of seven states. Even to present-day visitors, the complex, located 36 miles from Las Vegas, has a sci-fi air, but the skillful manipulation of material and scale that it represents has not received commensurate attention. None of the Bureau of Reclamation’s brochures mentions any designers, so the dam remains an anonymous synthesis of the efforts of construction engineers, surveyors, and politicians. Hoover Dam is possibly the largest manifestation of the naïve ability of American know-how to translate the nation’s vision of manifest destiny into physical form.

The dam was built by six construction companies between 1930 and 1935. A planned community, laid out as a triangle focused on the Bureau of Reclamation Headquarters, was also constructed, as were numerous steel and concrete plants. Controlled irrigation created the wealthy Imperial Valley, with the largest man-made recreational lake in the country (Lake Mead). The dam supplies power for Phoenix, Las Vegas, and Los Angeles. The dam itself, a smooth, 1244-foot arc of 4.4 million cubic yards of concrete stretched between two steep canyon walls, mimics adjacent rock in a sweeping abstraction. The massive vertical buttresses, the leaning gridwork of electrical towers, and the pervasive hum of the generators all impress on the visitor the full depth and weight of the undertaking.

Only inside the dam, however, does the project become comprehensible. Lavishly detailed lobbies and generously curved ramps lead the visitor past soaring sculptures and Art Deco signage. Behind 660 feet of concrete at its bottom lie twin rooms two city blocks long, reached by streamlined elevators and corridors decorated in linoleum set in vaguely Navajo patterns. The turbines glow like detritus from a futuristic world, pulsating light from behind apses of curved laminate.

This visionary quality, intact after fifty years, is not without its own irony. No one today would dare alter the distribution of natural forces on such a scale; nobody would propose a design for such a forced reordering of the landscape which takes such delight in its own power and inhuman immensity.

Aaron Betsky
The author, former editor of CRIT, a national architectural student journal, is a designer in the office of Frank O Gehry & Associates in Los Angeles.
**Pencil Points**

**Palladio**'s Villa Cornaro is for sale. The Renaissance palazzo, recently restored, turned up in the Luxury Homes and Estates section of the New York Times Magazine. The agent: Merrill Lynch of Greenwich, Conn. The asking price: $1.8 million. A real steal.

Norman Foster's scheme for the BBC on Portland Place, London, has been scrapped, and the Langham Hotel will remain standing after all. The BBC switched sites when a large tract in West London became available near the present TV center. Foster will reportedly carry on as consultant for the new project.

And Foster's scheme for a sports center in Frankfurt which he won in competition is apparently going ahead despite long-circulating rumors to the contrary.

A major colloquium to be convened in Paris this November will consider the "grands projets," including the Louvre museum, the Gare d'Orsay, the Parc de la Villette, the Opéra de la Bastille, and other major projects that are reshaping Paris and revitalizing its cultural institutions. Contact: Françoise Divonne, Ville et projets, Association Loi 1901, 9 bis rue Jules César, 75012 Paris; (1) 341-1602.

Joe D. Price has donated his house in Bartlesville, Oklahoma, to the University of Oklahoma for use as an educational center. Designed and built by Bruce Goff in the 1950s and 1960s, Shin'en Kan will house his archives after 1987, when cataloging, underway at Columbia University in New York, is completed.

MIT has established a new Center for Technology, Policy and Industrial Development, devoted to collaborative research in engineering, social science, and environmental management, with specific emphasis on the role of public policy in utilizing appropriate technology.

The National Building Museum opens its new exhibition galleries this fall in the recently renovated Pension Building in Washington, D.C. The first show features architectural drawings for American Federal buildings from the late 18th to the early 20th Century. It's sure to be worth a trip; if only to see the Great Hall, a marvelous 19th-Century space that has no American equal.

The Old Executive Office Building, also recently renovated, is now open to the public. Alfred B. Mullett's 97-year-old Second Empire extravaganza, termed the "greatest monstrosity in America" by President Truman, never looked better. Call (202) 395-5895 for appointments.
Now your firm can afford the best

The dual-screen Interact™ is designed for continuous production work in the architectural office, and features extensive display and dynamics capabilities.

The Professional Interpro 32™ operates not only as a graphics terminal networked to a VAX or Micro II—but also as a standalone workstation running software developed for the IBM PC family and for the UNIX operating system.

For a system to meet the needs of any architectural firm—large or small—look to Intergraph for a solution.

With Intergraph, you can configure a system that best suits your firm now, and that can grow as your need for automation increases. Begin with our new entry-level Micro II™ processor and up to four workstations, then meet any future requirements by adding additional processors and workstations, linking your entire system with our Ethernet network.

The low-cost Intergraph Micro II, offering roughly the same power as a VAX-11/750, measures only 24"x11"x 29", and serves as a standalone system in an office environment.
At Intergraph, we design our systems to carry you through all phases of a project, not just drafting production. Our interactive graphics solutions work in as many different fields as you do, automating the complete range of design and engineering disciplines.

**Design Development and Engineering**

Intergraph offers complete software for mechanical, electrical and plumbing engineers. From schematic layout to analysis to documentation, our system automates each phase of the engineering process.

**Construction Documents**

Our drawing production software—including sections, details, elevations, site plans and engineering drawings—is the most mature in the CAD industry.

**Marketing and Programming**

Your first job is marketing, and Intergraph helps with design visualizations that let your prospects see their projects before construction.

For facility planning, Intergraph offers an extensive array of tools, including the ability to generate multi-building stacking diagrams.

**Facilities Management**

Occupancy information becomes part of the design process with the Intergraph system's ability to combine database management information with graphics.

**Schematic Design**

For schematic design, we combine 3-D modeling with adjacency analysis so your client can preview the proposed design.

Intergraph enables engineers to solve structural analysis problems without having to buy time on a mainframe computer. The new Intergraph RandMicas™ product is interactive software for 2-D and 3-D frame and finite element analysis and design.

For more information, or to schedule a demonstration, contact:

INTERGRAPH

Department PG95
One Madison Industrial Park
Huntsville, Alabama 35807
205/772-2000

Intergraph is a registered trademark of Intergraph Corporation. Interact, Interpro 32, Intergraph RandMicas and Micro II are trademarks of Intergraph Corporation. VAX is a trademark of Digital Equipment Corporation. IBM is a trademark of International Business Machines. UNIX is a trademark of AT&T, Bell Laboratories.
THE EXCELLENCE
OF FIANDRE CERAMIC GRANITE™
(Imitated, never equalled.)

The most precise ceramic tile manufacturing technology ever developed makes this porcelain stoneware 30 percent harder and 1.7 times more abrasion resistant than natural granite from the quarry. Continuous wear and erosion actually increase its beauty and make maintenance easier.

FIANDRE CERAMIC GRANITE™ is for the architectural environment where design demands excellence in every aesthetic and technical quality and where the specifications say, "absolute unchangeability over time".

For your toughest jobs and your best opportunities, only the leader can deliver superior results. Imitation, they say, is the most sincere form of flattery. FIANDRE CERAMIC GRANITE™ is often imitated, but never equalled. Accept no substitutes. If it doesn't say FIANDRE CERAMIC GRANITE™, it isn't the toughest ceramic tile in the world.
Memorials, not Monuments

There is a difference between a monument and a memorial. The former word calls up grand, formal images, weighty symbols of achievements or ideals. The latter is a gentler word, suggesting the preservation of an experience in some way shared.

It is this gentler connotation and more personal communication with the viewer that characterizes a growing number of memorials planned in the post-Vietnam period. Dedicated to experiences too painful and too divisive to bear public acknowledgment until recently, these memorials to Vietnam veterans, to the Holocaust, and to the shootings at Kent State University are most often not official acts of government but grass-roots projects, started by individuals who felt the need for a public focal point for strong, complicated feelings.

The first Vietnam veterans memorial was built not in Washington but in an isolated spot in the Sangre de Cristo mountains of New Mexico. The Disabled American Veterans (DAV) Vietnam Veterans Memorial, near Angel Fire, was founded by Dr. Victor Westphall in memory of his son David, killed in an ambush in 1968. David’s $30,000 life insurance policy provided the seed money for the project, and the Westphall family bore almost all of the costs before the project was adopted by the DAV in 1982.

Designed by Santa Fe architect Ted Luna and dedicated in 1971, the Angel Fire memorial’s sweeping, textured walls lead to a narrow window through which visitors look out across the Moreno Valley (p. 45). Inside the chapel are inscriptions and photographs. A new, underground Visitors’ Center by Albuquerque architect George Montgomery is now nearing completion.

The Westphalls’ perseverance was inspirational to Jan Scruggs, the former infantry corporal who started the Vietnam Veterans Memorial Fund that ultimately sponsored Maya Lin’s design for the Washington, D.C., memorial and the Frederick Hart sculpture which was added later. Though the well-pub-
mmm Metaline.

Metaline Roof Systems™

Circle No. 323 on Reader Service Card
labeled tribulations involved in the D.C. project were resolved through a typical Washingtonian compromise, some veterans felt that artists and architects had somehow preempted their experience.

The organizers of the recent competition for a memorial for Sacramento, made wary by the Washington experience, rejected the idea of a prior review of entries by artists and architects, preferring to involve veterans directly in the selection of a winner. “We knew what we wanted even though we didn’t know how to express it,” said chairman Linda McLenahan, a Vietnam veteran.

The winning design (next page), by Michael Larson (himself a Vietnam veteran) and Thomas Chytrowski, tries to separate past or present politics associated with the war from the personal experience of the soldiers who were there, willingly or not. A circular structure in a triangular plaza, the memorial “is really about a sense of place,” according to Larson. The outside walls of the memorial, built of black-green granite, bear the name, rank, age, hometown, and branch of service of each Californian killed or missing in Vietnam. Inside the outdoor room created by the circular walls stands a flagpole and near it, a statue of the “archetypical Vietnam Veteran,” seated and looking up from a letter. Embedded in the floor is a polished granite map of Vietnam, and bronze bas-reliefs of photographs of everyday life under combat conditions line the walls. Photos of Americans with Vietnamese children had to be depoliticized through the depiction of very young children only; too many veterans remembered buddies killed or wounded received at the hands of Vietnamese who, though only children to their eyes, were nonetheless combatants.

Larson admits to being pleased though somewhat surprised at how warmly the design was received by older veterans, particularly those of World War II. McLenahan sees the central statue as key, the common thread for any combat veteran: “That particular character is someone we can all identify with.”

The architects of New York’s Vietnam Veterans Memorial, too, drew on the experiences of the common soldier. William Britt Fellows and Peter Wormser, winners of a 1981 competition sponsored by a mayoral commission studying New York Vietnam vets, were strongly influenced by Louis Kahn’s design proposal for a Jewish Martyrs’
Memorial for Battery Park. They designed a glass brick wall luminescent at night and inscribed with excerpts from soldiers' letters. "In many cases a memorial is about the war first," commented Wormser. "This is about the veterans, the people who served."

The most monumental of the recent designs, New York's memorial nevertheless also invites interaction. Shoulder-height granite shelves have become repositories for flowers, medals, photographs, letters, and other objects brought by viewers. The letters and newspaper excerpts assembled by the architects and writer Joseph Ferradino constitute a history of the war as told by the warriors and reporters of the time. Unfortunately, the memorial's glass block grid interferes with the legibility of the type. A second flaw is the site, an overworked plaza between two of the blandest office buildings in New York City.

In the shadows of the highly publicized national and big-city memorials, smaller projects have been springing up around the country. Though no central agency is tracking Vietnam veterans memorials, Dr. Westphall's informal count is near 20 and rising. As McClenahan observed, "It has taken years for people to be able to separate our service from their political feelings about it. It's time to say, 'Thank you for your service.'"

Equally unresolved are feelings about another American tragedy, the 1970 shootings at Kent State University. A memorial commissioned by the school and designed by sculptor George Segal was rejected as too violent (it was later installed at Princeton University). This month Kent State will announce a competition for another design, calling for an area of reflection on a wooded knoll near the spot where the National Guardsmen stood and fired. A preliminary call for submissions asks for a design "neither heroic nor accusatory." Kent hopes to fund the project through private contributions and an NEA grant, according to James E. Dalton, director of the university's school of architecture and environmental design.

For West Bloomfield, Mich., British architect James Gardner and Michigan's Leonard Siegal undertook what may be the toughest task of all: a Holocaust Memorial Center. Open since October of 1984, the memorial has already seen an estimated 100,000 visitors. It is the only memorial in the country exclusively dedicated to the Holocaust, though others are planned for New York, Washington, D.C., and Los Angeles, according to Rabbi Charles H. Rosenzweig, founder of the center.

The designers of these and other memorials of the post-Vietnam period have struggled with the issues of an appropriate vocabulary or style, weighing minimalism against representational or figurative art. For the veterans and survivors, though, the need for public gathering places to acknowledge private losses is the overriding concern.

Melissa Brown
The author, former manager of Editorial Programs for Herman Miller, Inc., is an editorial intern at P/A.
You’ll like the look, because there’s less to like.

This is the Centricitee™ ceiling system. Grid so thin it virtually disappears. It’s the only narrow faced, fire-rated grid you can buy. So while there’s a lot to like, there’s also less to like.
If you're serious about computer-aided drafting, you want a system that delivers professional performance, no matter how complex your application.

VersaCAD ADVANCED is well known among personal computer CAD systems for precision and flexibility, able to handle the most detailed drawings when other programs give up.

**Professional power**

Among the features that give you a clear performance edge are unmatched symbol library capability, which lets you easily store and visually retrieve commonly-used drawing parts...ability to work on groups of objects together in any combination for quick drawing revisions...detailed geometric construction and calculation aids...automatic time tracking of your work...and more.

**Easy to learn and use**

Logical program structure under MS-DOS makes operation simple. Commands can be picked off the screen menus or selected with a single letter from the keyboard. And since the program always guides you to the next step, you'll never get lost.

**Failsafe operation**

Your drawing is continuously saved to disk, so if the power fails, it will come right back, ready for you to continue. No other CAD system gives you this peace of mind.

**Integrated productivity**

From the powerful VersaLIST bill of materials and 3D surface modeling options...to database extraction, “Expert Series” symbol libraries, networking and IGES communication utilities, VersaCAD ADVANCED is part of a fully integrated package that means higher productivity for you.

**Training and support**

Complete training materials, including audio and video tapes, help you get top performance out of your system. And our telephone technical staff is ready to answer your questions as you work.

For more information or a comprehensive demo package, call toll-free, 1-800-228-2028, Ext. 85

T&W Systems
7372 Prince Drive
Huntington Beach, CA
92647
Look closely. This is Fineline® slotted ceiling grid. It costs little more than conventional ceiling grid. Not a big difference.

But the look. Now, that's a big difference.
Clear All Heart Redwood. The one wood with natural workability and stability to capture the beauty and craftsmanship of yesterday in designs for tomorrow.
Portfolio

Science city, Rome, Italy. Architect: Paolo Portoghese, in collaboration with R. Franchilli, F. Fiorentini, Rome, Italy. Dedicated to improving the connections between academic research and technological application, this as-yet-hypothetical city of science, presented in competition, would add to a former stockyard complex to house offices, laboratories, and temporary exhibition facilities whose programs would be geared to the general public. Several variations were studied as a means of arriving at a final program; all share the startling entrance façade whose sheer, solid wall is cut back, as if in cross section, to reveal a concave glazed entrance.

Public housing, Sesto San Giovanni, Milan, Italy. Architect: Paolo Portoghese, in collaboration with E. Montone, M. Checchi, G. Cundari, Rome, Italy. Drawing upon vernacular, rather than academic traditions, this social housing project, commissioned in 1981, is one of several in the Lombard region designed by Portoghese. "Neither pre-Modern nor Post-Modern," says Portoghese of his pitched roofs and façade panels, derived from Lombard building techniques.

The building’s base would appear from photographs to be its weakest feature; other housing projects designed by Portoghese in Salerno and Milan, while similar in all other respects of façade and massing, hit the ground more convincingly.

Paolo Portoghese, passionate spokesman for European Post-Modernism, presses his position on all fronts, as author of Beyond Modern Architecture, editor of the quarterly Eupalino, and architect. Shown on these pages are four recent projects.
Cultural Center and Municipal Library, Avezzano, Italy. Architects: Paolo Portoghesi, Vittorio Gigliotti, Rome, Italy. A "temple for the religion of our time, a temple destroyed . . .," this cultural center was designed 15 years ago at a point when, the architects say, historical reference was still considered suspect. They look back on this early work, finally completed last year, with some ambivalence. "If I began again now," writes Portoghesi, "the new project would contain countless signs of definite ties with the city, even if its [location] would . . . exclude physical continuity with the urban fabric." Enamored of the idea of a modern ruin, ready-made, Portoghesi creates his own Colosseum, its central theater supporting a second, outdoor amphitheater on its roof.
THE RIBBON® RACK by brandir

environmental sculpture for bicycle and moped security™

For prices and information contact: BRANDIR INTERNATIONAL, INC.
200 Park Avenue, Suite 303E
New York, NY 10166
212-505-6500

IDSA National Design Award Winner

©Copyright 1984, Brandir International, Inc.
Academy of Fine Arts, Aquila, Italy. Architects: Paolo Portoghesi, G. Encolani, G. Massobrio; P. Pro­p erzi, consultant, in collaboration with G. Bassani, M. Buccella, N. DeAngelis, L. Tunchetta, G. Bucci, F. Benucci, and C. Bruni, Rome, Italy. This prismatic, pentagonal academy bears more than a passing resemblance to the work of Bruno Taut, in particular his Haus des Himmels project. The academy, designed between 1977 and 1979, was partially executed in 1980–1982. (Only the central star was built, with remaining outbuildings cut from the budget.) The separate precincts of painting, sculpture, architecture, graphics, and history are connected by a central hall whose peaked skylight forms a five-pointed star.

**Smaragd**

**FLOORCOVERING**

**THE DIFFERENCE IS OBVIOUS**


When selecting a floorcovering, consider Smaragd sheet vinyl. The difference is obvious.

For complete details and technical information, call or write for our new brochure.

**Forbo**

FORBO NORTH AMERICA
218 W. Orange St., Lancaster, PA 17603. Telephone (800) 233-0475. In PA (717) 291-5874.

Circle No. 366 on Reader Service Card
Designed to withstand the winds of fashion.

Time, the unsympathetic judge, turns a kind eye to great design. For though today's fashion may be tomorrow's folly, true style will endure. Will only grow better.

So it is with the refined grace of this Delta Award Collection faucet in sumptuous Cultured Gold. Finished with a single crystal knob. Delta washerless faucets. They last. And last. And last.

For more information, call your Delta Sales Representative.

We're first because we last.

Also available at a DELTA STUDIO SHOWROOM near you. Call 1-800-426-4330 ©1986 Masco Corp. of IN

Circle No. 354 on Reader Service Card
"INSPIRATION™"
Introducing the only fabric vertical that is everything vinyl should be.

A unique microscopic layer of vaporized aluminum gives you the energy efficiency of aluminum, the beauty of fabric and the economy of vinyl.

In 21 of the most sought-after colors, Levolor Inspiration fabric vanes are pre-formed, eliminating the need for bottom weights. Lightweight, non-distorting and fade-resistant, they are treated with Scotchgard® for easy cleaning. And, like all Levolor fabric blinds, they are fire-retardant. With all of these advantages, Inspiration Verticals are ideal for both commercial and residential applications, yet they cost less than other fabric vertical blinds. For more information and a free sample of the revolutionary fabric, write: Inspiration, Levolor Lorentzen, Inc., 1280 Wall Street West, Lyndhurst, NJ 07071. In Canada, 55 Jutland Road, Toronto, Ontario, M8Z2G6.

© 1985 Levolor Lorentzen, Inc. Scotchgard® is a trademark of 3M.
Circle No. 392 on Reader Service Card
September 7–October 1

September 10–October 25

September 11–October 16
Emilio Bergamini Retrospective. Museum Department, Bloomingdale's, New York.

September 14–October 27
Wendell Castle: Recent Works. Taft Museum, Cincinnati.

September 17–December 8

October 1–January 5
The House and Garden: Tenth Anniversary Exhibition. Nassau County Museum of Fine Art, Roslyn, N.Y.

October 2–December 2

October 11–December 1

October 12–December 8

October 24–December 28

Competitions

September 20
Deadline, International Association of Lighting Designers Third Annual Lighting Design Awards Program. Contact IALD, Marion Green, 30 W. 22nd St., New York, N.Y. 10010 (212) 206-1281.

October 7
Registration deadline, Hawaii Loa College International Design Competition. Contact Michael Robinson, AIA, AICP, Competition Advisor, Hawaii Loa College International Design Competition, 43–145 Kamahameha Hwy., Kaneohe, Oahu, Hawaii 96744.

October 15
Deadline, General Electric Design Award Competition. Contact General Electric Co., Edison Awards, #1410, Nela Park, Cleveland, Ohio 44112.

October 20

October 25
Registration deadline, First Stage of Sesquicentennial Park Design Competition for downtown Houston. Contact Theodore Liebman, AIA, Professional Advisor, % Central Houston Civic Improvement, Inc., 2040 Two Shell Plaza, Houston, Texas 77002.

January 16
Deadline, P/A International Furniture Competition; see p. 231 for details.

Conferences

September 19–24
Milan Furniture Fair/Salone di Mobile. Milan Fairgrounds, Milan, Italy. Contact COSMIT, Corso Magneta, 96, 20121 Milan, Italy.

September 25–26

September 29–October 4
American Concrete Institute Fall Convention. Palmer House Hotel, Chicago. Contact Convention Manager, American Concrete Institute, 22400 West Seven Mile Rd., Detroit, Mich. 48219 (313) 532-2600.

October 1–6

October 15–18
A/E Systems Fall: Automation & Reprographics in Design Firms. Albert Thomas Convention Center, Houston, Texas. Contact A/E Systems Fall, P.O. Box 11318, Newington, Conn. 06111.
You’ll Get Ten Years To Life.

Just for specifying modular carpet systems by Lees.

Lees backs its carpet tiles with performance guarantees that provide ten full years of protection. Against edge ravel. Against delamination. Against cupping, doming, and dishing. Against wear. Against static. It’s the kind of long term insurance you and your clients deserve. But you only get it from Lees.

Ten-year warranties are just one of the advantages that have made Lees the world’s largest supplier of commercial broadloom and modular carpet systems. Now that we’ve become a separate, all-contract company, we’re giving you lots more.

Our hundreds of matching broadloom-and-modular carpet combinations are perfect pairs—in texture and thickness, as well as color and pattern. We’re expanding our field support staff and our product lines. We’ve added hardback carpet tile systems in advanced generation Antron® nylon by DuPont with soil and static protection built in.


Lees Commercial Carpet Company

A Division of Burlington Industries, Inc.
King of Prussia, PA 19406
Andersen treats residents to warmth, beauty and a bird's-eye view.

Welcome to Winslow House, where Andersen® windows overlook the majestic Mississippi and the Minneapolis skyline in breathtaking luxury.

The architects designing this urban redevelopment project knew that by selecting Andersen Perma-Shield® casements and gliding patio doors they were not only selecting better windows, but also a better selling point.

Why? Because Andersen is the best-known name in windows and is recognized for uncompromised quality and value. You share that reputation each time you specify Andersen products.

Andersen Perma-Shield casement windows, for example, are sheathed with the finest vinyl available. So they won't rust or corrode. Won't chip or peel. And they don't need painting.

Made with specially designed hardware, Andersen casements open smoothly to fill interiors with fresh summer breezes. And close snug, tight, shutting out freezing Minnesota winters.

Andersen casements are also styled tall and trim, so they enrich rooms with sunlight that accents these residents' lofty lifestyle.

Andersen Perma-Shield gliding patio doors are also a success. Their wide-open glass area provides a wall-to-wall urban panorama, with smooth operation and energy savings, too. Andersen patio doors glide open on a precision-engineered aluminum track with a stainless steel cap. And close inside the frame, for weathertightness that exceeds industry standards.*

Andersen products include a wealth of other advantages too. Find out more by looking at Sweet's File 8.16/An. or look up your Andersen supplier in the Yellow Pages under "Windows." If you prefer, write the Andersen Corporation, Box 12, Bayport, Minnesota 55003.

* N.W.M.A. 2-80 and 2-73.
A keen eye for detail and a deft hand for expression provide Joseph Voelker of Springfield, Pa., with a mastery of pen-and-ink rendering of his subjects — particularly architectural subjects. Artist Voelker's pen is the Rapidograph® technical pen with tubular nibs that allow the artist to stroke in virtually any direction on the drawing surface, much the same way a pencil is used. This is the great advantage of the Rapidograph® pen over conventional pens, such as the crow quill and fountain pen which, for the most part, cannot be stroked up — against a paper grain.

This versatility of movement in pen-and-ink drawing contributes to faster completion of drawings, which might account for artist Voelker's prolific nature: In addition to his commercial and graphic arts output, he has created a series of fine-art drawings of famous and historical landmarks in and around the environs of Philadelphia, of which these illustrations are only a few.

Rapidograph® renderings present your architectural designs in the clearest light possible . . . good ideas translated into exciting visuals. These drawings by Voelker are examples of precision-clear interpretations which can be presented for any project — a restoration, a conversion, a modern highrise, a neoclassic structure, and so on. Such drawings can have a free-hand abandon or be developed with minuscule refinement to hold details in photographic blowups.

The tubular nib is available in 13 line widths. Just the weight of the pen itself and the handhold to keep the pen erect provide a consistent ink laydown. The designer, drafter or artist has only to guide the pen with an easy, non-fatiguing hold. The patented dry, double-seal cap keeps ink throughout the balanced ink-flow system ready for instant startup, contributing to optimum drawing time. Refillable ink cartridge also helps keep productivity high. The Rapidograph® pen is designed for use with carbon-black India drawing inks that dry waterproof and smear-proof, allowing the artist to enliven drawings with other media, such as colored drawing ink and watercolor washes, or even pastels and colored pencils.

Look for the Koh-I-Noor Rapidograph® on the pen to be sure of the dependability and ease of performance that make the Rapidograph® pen the most widely used technical pen in the United States and Canada.
Single pens and pen sets are available. Ask your dealer or send the coupon for details: Koh-I-Noor Rapidograph Inc., 100 North St., Bloomsbury, NJ 08804 (201) 479-4124. In Canada: 1815 Meyerside Dr., Mississauga, Ont. L5T 1G3 (416) 671-0696.

KOH-I-NOOR
Rapidograph
a Rotring company
Koh-I-Noor Rapidograph, Inc., 100 North St., Bloomsbury, N.J. 08804
In Canada: 1815 Meyerside Dr., Mississauga, Ont. L5T 1G3
Please send complimentary Catalog "E" describing Rapidograph technical pens, Koh-I-Noor inks and other artist materials.
Please send me the names of Koh-I-Noor dealers in my area.

Name (Please print or type)

Company Name (If the following is a business address)

Number and Street, RD and Box, etc.

City State Zip

*RAPIDOGRAPH is a Registered Trademark of Koh-I-Noor Rapidograph, Inc. © 1985
Click builds almost anything.
Click is a brilliant system of inter-connecting parts that builds ingenious design.
Click is inside, outside, temporary, permanent, flexible, versatile and beautiful.
Write or call for our new technical literature and learn more.

Click Systems Inc.
160 East 56th Street, New York, NY 10022 212 371 0370
Click Systems Limited
2600 Matheson Blvd. East, Missisauga, Ontario L4W 4J1 416 624 8844

Sentry Lighting & energy efficiency
Sentry Electric Corporation
185 Buffalo Ave., Freeport, NY 11520 • 516-379-4660

Laminated Glass Corporation
375 E. Church Avenue
Telford, PA 18969
(215) 721-0400 Telex 846-340

Bentlite™
Beauty...

The large BENTLITE™ panels on either side of the escalator enhance its beauty without sacrificing public safety. By bonding two matched pieces of bent glass together with a hi-impact PVB interlayer, we at Laminated Glass Corporation offer a safe approach to innovative glazing design. Available in clear, bronze or grey in single or insulated units. Product brochure available upon request.

Macy's Aventura, Miami, Florida
Glass supplied to H.B.S.A., New York

C.N.I. International, Inc.
Stylish, yes. Expensive, no. Durable without question. That's the beauty of Summitville Tile for your next installation.

It's easy to justify the specification of ceramic tile. Life cost comparisons show ceramic quarry tile costs less and is easier to maintain than other floor coverings.

And Summitville Tiles are versatile. Choose ceramic for floors, walls and entrances. Summitville tiles whisper quiet elegance as a subtle accent or make dramatic statements as a total design.

So, specify Summitville ceramic tile for your next installation. And check Sweet's File 9.18 Sum for our complete mortar and grout line. Using Summitville's setting and grouting products assures you a virtually trouble-free installation.

Summitville
The tile with the special backing.
Summitville Tiles Inc. • Summitville, Ohio 43962

Circle No. 425 on Reader Service Card
Architectural Backgrounds...
HI-TECH

These four new Hi-Tech embossed patterns from Vicrtex have been created specifically for backgrounds in today's contract installations. RIB ARROW and SOUTHPORT complement each other by design and color, LAURALTON and HARVARD SQUARE are architectural geometrics.

Each Vicrtex color is chosen for usefulness and long term appeal, for we believe in offering the best range of colors, not just the biggest. You'll find these four designs in 25 to 33 soft colorways.

But while we lead the industry in original design, texture and color, it's the Vicrtex quality that sets us apart.

Vicrtex is the world's most widely specified commercial wallcovering because of manufacturing methods which insure superiority of strength, cleanability, abrasion resistance and color fastness, qualities that are important long after the sale has been made. And Vicrtex bears the UL Label on every roll, certifying our product is continually tested.

When it comes to service, the shortest distance between your ideas and a successful installation is personal and professional attention. That's why you'll work directly with a member of our trained Vicrtex sales force.

Our commitment to original design, stringent manufacturing standards and personal service has made us the leader in contract wallcoverings. Best of all, it guarantees you satisfaction in every roll.

Write for more information.

VICRTEX

A Division of L.E. Carpenter & Company
Wharton, NJ 07885, (201) 586-2020

Distributed by: VICRTEX DIVISIONS,
New York, Atlanta, Chicago, Dallas,
Los Angeles, San Francisco, Boston,
Minneapolis, Toronto; HOWELLS,
Salt Lake City; OLD WORLD TILES,
Honolulu; WALLCOVERINGS
NORTH, Anchorage; WALL DECOR,
San Juan; TEKTURA, London.
©L.E. CARPENTER AND COMPANY, 1985
The architects wanted a distinctive glazing. An appearance that would set their building apart. But that wasn’t all they wanted. They also needed the glazing to effectively screen solar heat and the damaging effects of UV radiation on draperies, carpeting and upholstery. Tough challenge? Yes, but there was even more. The glazing also had to deliver the safety performance essential in a large, busy hotel.

The answer turned out to be easy. Laminated glass with a Saflex® interlayer.

**When the building is mostly glass, you want the most beautiful glass you can find.**

Beautiful? It was an unusual, distinctive shade of blue. And only one glazing—laminated glass with tinted Saflex interlayer could match the desired color.

**Controlling costs by controlling the sun.**

Add up cooling costs and replacement of sun-faded furnishings, and you've got a sizeable expense.

**Anaheim Hilton Glass Configuration**

- .030" tinted Saflex interlayer
- .062" clear glass
- .012" air space
- .062" clear glass
Glass solved three for the Anaheim Hilton.

Laminated glass not only controls heat gain but screens out the effects of UV radiation as well. The solar performance that laminated glass gives in the insulated configuration at Anaheim Hilton & Towers is shown at right.

<table>
<thead>
<tr>
<th>PERFORMANCE CHARACTERISTICS OF INSULATED CONFIGURATION AT ANAHEIM HILTON</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visible Transmission</td>
</tr>
<tr>
<td>Solar Transmission</td>
</tr>
<tr>
<td>Ultraviolet Transmission</td>
</tr>
<tr>
<td>Shading coefficient</td>
</tr>
<tr>
<td>U-Value</td>
</tr>
<tr>
<td>Heat Gain Reduction versus ½” Monolithic Clear Glass</td>
</tr>
</tbody>
</table>

Glass and safety have to be considered together.

The risk of impact with glass can be high in a hotel like the Anaheim Hilton & Towers which bustles with people on the go. But with laminated glass, the danger of injury from broken glass is minimized. Laminated glass has the unique characteristic of remaining integral if broken because of the adhesion of the glass to the interlayer.

If you have a design challenge for laminated glass or want more information, call 314-694-5450 or write Monsanto Polymer Products Company, 800 N. Lindbergh Blvd., Dept. 804, St. Louis, MO 63167 for a laminated glass brochure.

Laminated Glass. The more challenges you have, the better it works.

Monsanto

SAFLEX®
PLASTIC INTERLAYER

Circle No. 402 on Reader Service Card
Simple, functional architectural design will always withstand the test of time. The same is true for lighting design. Classic interiors deserve classic lighting.

Columbia Parabolumes provide a unique combination of timeless beauty with high performance. These are high efficiency fluorescent luminaires that save energy — yet will light your rooms in no glare comfort for years to come.

Columbia Parabolumes are perfect for open plan designs and for VDT areas. Classic lighting for classic interiors. Parabolumes are always ahead of their time.

For more information on the complete line of Columbia Parabolumes, call your Columbia Representative or contact:

Columbia Lighting, Inc
P.O. Box 2787 • N. 3808 Sullivan Rd • Spokane, WA 99220

CLASSIC LIGHTING FOR CLASSIC INTERIORS
Computers: Project Management Software

Microcomputers bring a substantial benefit to the business of project management. With the proper software, they can reduce the cost and effort of scheduling, replacing the blueprinted bar charts now produced at great cost and at infrequent intervals. It is also possible to manage projects while they are underway (not just as a planning “snapshot” at the project’s outset), and better monitor the productivity of office staff or contractors.

Some project management software does several things at once. First, it makes sense of project task relationships at the outset. Second, as project circumstances change, it lets you know how many creeks you are up and how many paddles you have. Third, and most important, it encourages communication both inside and outside the office. Actual drawings production, and of construction projects. The software also allows the scheduling of activities not directly related to a project such as the production of an office brochure.

Designing good project management software is a difficult task. The software must have a major database component, with the ability to sort, select, and report large amounts of information. With every change in the project, the software also must perform simple but extensive scheduling computations and detect logic flaws in proposed schedules.

The information presented on the computer screen is always a tiny fraction of what you may need to see; the attempts at solving this problem distinguish project management products from one another. Solutions always involve graphics, including GANTT charts (showing the relationship among activities), and in many cases, resource distribution and cash flow charts. If you aren’t comfortable with the way a project management product allows the presentation of information, nearly every product will allow you to transfer the information to spreadsheet or database programs for further manipulation. According to many users, these schedule, resource, and budget-related graphics can be extremely valuable in making presentations that win jobs.

Selecting a Product

There are two considerations to make when selecting a product. The first is technical, and fairly easily defined: the larger your projects, the more technical features you may need. The second consideration, less easily described, is whether you like using the software and whether it fits into the way your office does things.

The product features you need depend upon three considerations. First, what size project do you intend to manage using the software? Second, are you satisfied with just the planning and relationship of activities, or do you want to consider resources and their costs? Third, are you primarily interested in a planning tool or a tool that will help you control the project once underway?

How large a project will you want the software to handle? Products that handle 100 activities may be plenty for controlling office tasks for a $5 million construction project, but you may need to handle 1500 activities to manage the construction of the same job. Limits on project management software are measured by the number of activities per project, resources per activity, and connections among activities. Here products are of two types: those with specific limits, such as Microsoft Project (128 activities per project) and Quicknet (250 activities per project)—this limit is most likely imposed because PSDI, Quicknet’s maker, also offers larger products for mini- and mainframe computers; and those, such as SuperProject, Timeline, and Promis, whose limits are solely dependent on the amount of memory your computer contains. These last three are about equally efficient in their use of random access memory (RAM). If you have 256K of RAM, you will be able to handle about 200 activities per project; if 640K, about 1800 activities.

A feature that helps get around some of these limits (and which is critical if you are attempting to use the software to allocate staff across several different projects) is the product’s ability to handle several related projects. Timeline does this by “summarizing” projects; the Harvard Total Project Manager (no relation to the university) does this by allowing the layering of subprojects beneath the main project. If you are interested in the use of project management software to allocate staff resources, you need to check that products do not overallocate people—if you have five draftspersons, you need to make sure the software won’t automatically schedule in eight to make a deadline without telling you in bright red letters that it has done so. As products go, Timeline is heavily resource-oriented, and is one of the most effective products at automatically smoothing out lumps in staff scheduling and adjusting the project schedule accordingly.

At its most powerful, project management software will work with you throughout the project, allowing ongoing control and true performance measurement. While all products reviewed have some ability in this regard, this function will test both the software and your office most. Developing the information at the outset is one thing; doing the work to keep the plan current is another. Richard Eschenberg of Pacific Architects and Engineers, who is generally satisfied with what the Harvard TPM has done for him in allowing him to plan projects and win jobs,
feels that too much effort is required by the software to keep the plan up to date. To help managers stay current, the Timeline product includes an Alarm Clock feature that, when activated, asks if tasks scheduled for completion at the time the computer has been turned on have in fact been completed. Both Quiknet and Promis are also oriented toward tracking ongoing work. Fortunately, if scheduled tasks have not been completed, these products do not yet ask why.

How important is cost planning and tracking to you? If you simply want rough estimates for planning purposes, SuperProject’s capabilities, which include a single fixed cost and a single variable cost per resource, are likely to be adequate. If you are interested in automatic loading of overhead, tracking overtime and planned rate increases over long-term projects, and substantial flexibility in the timing of costs for cash flow planning, then you will need either Timeline or Promis. In their most current release, Timeline allows unlimited cost categories per resource, as well as percentage loadings of direct and indirect costs.

Beyond technical product features, and into the area of actual usefulness, there are a few critical issues: The first is managing information overload; the second is comprehending the effects of changes; the third is the ease with which a product and project management science can be learned.

The products reviewed all have aggressively attacked the problem of information overload associated with project management. All have color capability. All use graphics as a way of concentrating information about schedules and cash flow. All have extensive reporting capabilities. And all allow substantial selecting and sorting of activities and resources so that, for instance, you can look at just the activities scheduled to finish in May, or just the activities involving two particular consultants. Some products, such as Promis, also allow custom design and assignment of alphanumeric codes to facilitate sorting. Probably none of these products will suit your current operations perfectly. Either you and your office will adjust, or you should look at a product’s ability to export its information to a spreadsheet or database program so that you can remove extraneous codes and perform additional calculations. Quiknet can do this only with difficulty; SuperProject and Timeline have solved this issue well, and will prompt you through the process.

When your project plans must be used by several people in printout form, not having enough control over what the software reports may be fatal. Teresa Taylor, a planner with Higginbottam and Associates, indicates that they stopped using an early version of a product after several weeks of difficulty: “Among other things, we just couldn’t print the few lines of information we needed for our team without getting a big stack of printout along with it.”

When you want to make a change, you want it to be easy to make, and you want to know, as completely as possible, its effects. SuperProject excels in allowing easy, intuitive changes, and it is the only one of two products that allows the simultaneous viewing of PERT and GANTT charts to see the effects of changes. Quiknet, supplied with a mouse and all necessary hardware connections, allows you to construct an unlimited number of “windows” on the screen for the purpose of viewing the effects of changes. Two windows are usually enough, but the fact that Quiknet allows you to choose which two or three is very valuable. Both SuperProject and Quiknet use Macintosh-like pulldown menus that are excellent. Like SuperProject, Timeline will allow you to drive the program using either menus, if you’re just getting started, or commands to move faster as you become experienced.

The actual techniques used by project management software for scheduling are roughly the same: checking for circular connections among groups of tasks, calculating early and late start and finish times, and distributing resources and costs. Make sure you are comfortable with a product’s approach and with the amount of flexibility it gives you in placing a task on your schedule. For instance, the Harvard TPM requires you to join tasks to one another using milestones. SuperProject, while allowing parallel tasks, does not allow the input of a relative lag between two such parallel tasks. Timeline, Quiknet, and Promis all offer considerable flexibility in task placement.

A product’s documentation not only must teach the effective use of the product, but also the science of project management, for it is essential to understand concepts like “negative float” and “early start time” to use any of these products effectively. Most software documentation separates the treatment of project management and product operation. Overall, quality among this group of products is very high, much higher than most spreadsheet products, for instance. Quiknet
the new collection of
J. brochier soieries

at boussac of france

Through your Interior Designer

1. Ariane 8870-550
2. Bellocour 5000-760
3. Boland 8870-570

Showrooms in: Atlanta, Boston, Chicago, Cincinnati, Dallas, Houston, Los Angeles, Miami, New York, Philadelphia, Seattle, Washington, D.C.
P/A Practice

does the best job of explaining graphically how to track a project over time. Harvard TPM, despite some errors in the manual and lower quality visual design than the others, does the best job of integrating project management and the software. SuperProject and Timeline are best at explaining the use of the product itself, with Timeline's Tutorial one of the most entertaining of any micro-computer software package.

Conclusion

A word about the integration of software. Vendors have gone after the broad area of project management, rather than concentrating on any one discipline such as architecture, engineering, or construction. While the more powerful of these products (Timeline and Promis) are so good at job costing that they can be used effectively as estimating tools, integration in this area is still in the future. Since many of these products will use data generated by database, spreadsheet, and word processing programs, however, it's possible that a timesheet job-costing system based on, for example, dBase III or 1-2-3 could be used to update project cost schedules without entering data.

What is the difference between most of the products that sell for less than $850 and Promis, which sells for $3000 and up? Aside from the fact that each Promis purchaser receives two days of training free of charge, the matter appears to come down to project size and complexity. Promis requires 512K of RAM, and a hard disk, but you can have an unlimited number of activities and five levels of subprojects. In addition, all other products can use only one or two project work-week calendars; with Promis you can have a different calendar for each activity. For construction project management, if you want to track each activity very closely, you will probably need a product like Promis or its competitors. For anything less, many of the products reviewed will be adequate. The advance that the 16-bit microcomputer has brought in the amount of information that can be managed by one person is very apparent in these project management products.

Test one of the under-$850 products and see if its relative limitations in detail and flexibility are meaningful for your office.

Allan Ackerman

The author has an architecture degree from Harvard, and has worked as a manager, marketing consultant, and teacher in the area of software applications for architectural and engineering professionals for the past six years. He currently practices in Cambridge, Mass.

Products Reviewed and their Publishers

Quiknet, Project Software & Development, Inc., 20 University Road, Cambridge, Mass. 02138 (617) 661-1444.


SuperProject, Sorcim/IUS, 2195 Fortune Drive, San Jose, Calif. 95131 (408) 924-1727.


Timeline, Breakthrough Software Corp., 505 San Mann Drive, Novato, Calif. 94947 (415) 898-1919.

Promis, Strategic Software Planning, Inc., 222 Third Street, Cambridge, Mass. 02142 (617) 547-0532.

Specifications: The 60 Percent Solution

Architects working with U.S. government agencies are familiar with the requirement that progress sets of documents be submitted for review at significant milestones in the project's development within the architect's office. Commonly 30, 60, and 95 percent completed drawings and specifications are examined by the government's construction officers, and the resulting changes, corrections, and comments are incorporated in the documents as the work continues.

Providing working drawings 30 or 60 percent complete for review is a fairly normal activity in most offices, since an experienced project manager can usually estimate the number of plan and detail drawings required, and good judgment can verify the state of completion of the parts. If the estimate of drawing completeness is slightly off, in most cases no great harm is done. However, payments to the designer are usually tied to these milestones, and the pressure to have the documents or "deliverables" in acceptable condition on time is substantial.

This system, which works fairly well for the drawings, seems to fall apart when applied to the specifications. As specifiers will quickly point out, specifications are seldom begun at the same time as drawings. In fact, it usually makes little sense to start the specific-
CLASSIC PERFORMANCE

SECAR MARMI
Specify Secar Marmi, an exclusive contemporary marble line in the classic Italian tradition.

UNITED CERAMIC TILE
ARCHITECTURAL DESIGN DIVISION
156 Fifth Avenue, Suite 1002, New York, NY 10003
212/691-3600  516/582-3300
Circle No. 433 on Reader Service Card
cations at all until working drawings are about 50 percent complete. The decision-making on a typical job proceeds naturally as the drawings are produced. For architects, of course, drawing is an essential part of the decision-making process. At 30 percent of working drawings, plans and elevations may be done, but little of the detailing, equipment, and materials decisions, on which the specifications so completely depend, have as yet been completed.

To rewrite the same specification section over and over at different stages of the work is to defeat the economy of editing masters by removing unwanted material from a rather extensive catalog, since items deleted in the early stages of the project may well be needed later. Hence the specifier's experience urges waiting until enough information is available before beginning to specify. And while the drawings proceed by location, each area being studied and drawn, the specifications proceed by construction trade. For the specification to be completed, all of the work of each trade or specialty has to be known and described, no matter where in the building it may occur.

As a result, considerable repetition and frustration are generated by the need to have 50 or 60 percent complete specifications, particularly if it means 30 or 60 percent of each section. A true 30 percent complete project manual might have the bidding and contract requirements roughed out, with many dates and place names missing, mechanical, electrical, and other consultants coordinated just for format, and only a very few specification sections completely done. Even the table of contents would be tentative at this stage. At 60 percent, more sections and greater coordination of consultants' work would be evident, but a lot would still be missing that will appear as the final phase of working drawings. Creditable draft specifications project specifier picks up speed to finish simultaneously.

This unhappy conflict between review requirements and work practices, which has existed for many years, now appears to be headed for improvement as architects rely more on automated specifications production and as the federal government begins to recognize and fund the automation of its documentation materials and methods. While it's still quite difficult in some parts of the country to obtain Corps of Engineers guide specifications, for example, in usable electronic form, progress is being made. Charles Carroll reported in The Construction Specifier last November that the Corps of Engineers does plan to provide its Districts and Divisions with its guide specifications on tape, floppy disks, or by direct access to the Huntsville, Ala., data base through telecommunications. These agencies, in turn, may supply their masters in electronic form to architects and engineers at a price based on their costs.

Already the capability of private architectural and engineering firms to provide early progress sections from their own automated master specifications has given them a leg up on the 60 percent complete submission. In fact, creditable draft specifications can be produced by most automated systems as rapidly as design decisions are made for simpler buildings, such as schools or office shells, where equipment and special circumstances do not overly complicate documentation. With automation, refining the document is easier, and previously deleted can be made to reappear in its original form without excessive clerical effort. Last-minute changes are more readily incorporated as well. When the masters used are those officially sanctioned or provided by the government agency and when they can be modified on the architect's own terminal and stored electronically for the next submission, this formerly cumbersome aspect of producing specifications for government clients will indeed have reached the technological level routinely enjoyed today by many practitioners in the private sector.

Perhaps eventually more totally integrated automated systems of drawing and specifying will be available for both governmental and private work. That appears to be the direction events are taking. Until then, however, architects in the public sector can operate a little more easily if they have access to a workable 60 percent solution.

Walter Rosenfeld, AIA, CSI
Now you don't need an enormous copier to make enormous copies.

The name tells the story. The Canon NP-2436 is a large-format professional plain paper copier that makes size-for-size reproductions up to 24" x 36". But that's only part of the story. If oversized documents are a way of life in your business, you owe yourself a serious look at the NP-2436. Why?

The NP-2436 is surprisingly compact—hardly larger, in fact, than many conventional office copiers. It runs on standard 115 Volts AC, and it doesn't require any special ventilation. You can, in other words, put it just about anywhere.

Making copies on the NP-2436 is fast, easy and economical. Just feed your original, and walk away with your copy seconds later. Use the built-in roll-fed paper supply, or use the single-sheet bypass for different paper stock. Either way, you'll never need to use costly coated copy materials. And your copies come out dry, ready to fold or mark up.

Take a close look at the copies. The NP-2436 gives you impressive reproductions—crisp and clear, from edge to edge. It's the kind of quality you just can't get with diazo duplicators.

You should also know that the NP-2436 gives you a choice of copy color: black, brown, or blue. That's versatility not even the most expensive engineering copiers can match.

Finally, take a look at the NP-2436's price. It's more affordable than you might think.

All in all, the NP-2436 is an extremely practical answer to a large variety of oversized copying needs. And it just may be the perfect answer to yours.
Introducing the densest carpet
Karastan has ever woven.

Karastan has woven over 119,000 tufts of yarn into each square yard of this extraordinarily dense new High Spec Series. The yarns used, DuPont ANTRON and ANTRON XL nylon, add static-control and soil-resistance to these outstandingly durable styles.

The rich, understated, coordinated colorings and tailored small scale designs work alone or with each other.

To put it more succinctly, never before has so much style been packed into so little space.

Karastan Rug Mills, a Division of Fieldcrest Mills, Inc.

Karastan

Circle No. 381
An Exciting DOUBLE~HEADER for Construction & Design Professionals

Come and see the best Texas double-header of the season. Plan now to attend.

CMC '85
The Computer Show for Contractors

A/E SYSTEMS Fall
The Computer Show for Designers

1 Let 150 expert vendors in 450 booths show you how to use computer hardware and software designed especially for the construction/design industries to connect with opportunities, field problems, and improve your batting average!

2 Get expert coaching from seasoned pros during an extensive conference program that will help you play to win!

3 Attend the most comprehensive computer show for prime and specialty contractors, architects, engineers and facilities managers.

UNDER ONE ROOF!

Albert Thomas Convention Center
Houston, Texas
October 15-18, 1985

For more information about attending, mail this coupon today.

TELL ME MORE

☐ I would like to attend CMC '85. Please send information.

☐ I would like to attend A/E SYSTEMS Fall. Please send information.

Name ___________________________ Firm ___________________________

Address ___________________________ Phone ___________________________

City ___________________________ State ____________ Zip __________

Mail to: Conference Registrar, 126 Harvard St., Brookline, MA 02146 or call 617-731-1918.

Circle No. 349 on Reader Service Card
Restoration with Flotrac.

What you see is only part of what you get.

Take one look at Restoration Series Three™ solid vinyl siding and you’ll see there’s a lot to appreciate:

A proprietary low-gloss finish that looks just like painted cedar.

A three-inch clapboard exposure that creates a look of classic elegance.

And Restoration is available in seven great colors. (That gives you plenty of design flexibility.)

But what you see is only part of what you get, because Restoration offers much more than distinctive appearance. It’s built with our exclusive Flotrac™ Application System—a design innovation using a rigid aluminum track to simplify installations and assure years of trouble-free performance.

To see all there is to see about Restoration with Flotrac, call us at Wolverine Technologies. A building materials specialist will answer all your questions and arrange to send product and color information.

Our number is 1-800-521-9020. (Or circle our reader service card number.)

Restoration with Flotrac. Traditional beauty. In a new generation of materials.

Wolverine Technologies

Leaders in the science of vinyl building products.
Admittedly, there are other swinging patio doors available. But none of them are made as well as a Marvin Terrace Door.

The wood is Ponderosa pine, chosen for its excellent insulating properties and the way in which it accepts a beautiful stain-and-varnish or paint finish.

Depending on the door size, we use four or five hinges. These hinges cost us more, but they make the door last longer and operate more smoothly.

And instead of wood or aluminum, we make the sill of Lexan®. It never needs maintenance, its insulating properties are 1,400 times that of aluminum, and it's virtually indestructible.

MARVIN SLAMS THE DOOR ON RISING ENERGY COSTS.

The Marvin Terrace Door is one of the most energy efficient patio doors you can buy. Open and close it once, and you'll see why. You almost have the feeling you're operating a refrigerator door.

The foam-filled weather-stripping all but eliminates drafts. In air infiltration tests, our door was found to be one of the best in the industry.

The wood frame is not only more attractive than metal it's still...
the best insulating material that can be used for doors.

Insulating glass is standard. And the new energy-saving Low-E glass is available as an option. It allows light to pass through it, but heat is reflected. So heating and cooling costs are significantly reduced.

OPTIONS. OPTIONS. AND MORE OPTIONS.

In addition to the option of Low-E glass, you can order your Marvin Terrace Door with true divided lites for a look of authenticity in renovated older homes or in certain styles of new homes. And you can add a storm panel for energy efficiency.

For an efficient modern look, you may want to choose solar bronze glazing.

And a Cathedral style is available for a very distinctive look in both new and old architecture.

Unlike some other doors, you also have a choice of hardware. The Marvin Terrace Door is designed with a 2¾ inch backset that will accommodate most any style of lock. You can even order the door unbored. So you can use any lockset you want to match the rest of the hardware in your home.

And since our screen or optional combination storm/screen is placed a reasonable distance from the door itself, the handle doesn't have to be of the small "knuckle-busting" variety.

As for sizes, nobody offers you more to choose from. Our door is available in both 6'8" and 8' heights and a surprising variety of widths.

For more information, send us the coupon, or call 1-800-346-5128 toll-free. In Minnesota, call 1-800-552-1167.

Send to: Marvin Doors Warroad, MN 56763

Circle No. 397 on Reader Service Card
ULTRASTYLE. It's an undeniable fact: Ultrasuede is one of the most beautiful, luxurious fabrics in the world. It is also undeniable that few fabrics can make a conference room, reception area or free office space system as inviting as Ultrasuede can. Ultrasuede, a lasting testimony to a valued tradition: style.
Ultrasuede has a strength and durability that belies its beauty. It’s not just something we say; it’s something we’ve proven. In some of the most rigorous tests in the industry, Ultrasuede has demonstrated its remarkable ability to withstand years of wear. Ultrasuede, a look and feel that passes the ultimate test: time.

<table>
<thead>
<tr>
<th>PERFORMANCE POINT</th>
<th>REQUIREMENTS</th>
<th>MEETS FOLLOWING TEST METHODS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DURABILITY</td>
<td>• ABRASION RESISTANCE</td>
<td>WYZENBEEK TEST ASTM D-3597</td>
</tr>
<tr>
<td></td>
<td>• TEAR STRENGTH</td>
<td>TONGUE TEST ASTM D-3597</td>
</tr>
<tr>
<td></td>
<td>• PILL RESISTANCE</td>
<td>ASTM D-3787</td>
</tr>
<tr>
<td></td>
<td>• TENSILE STRENGTH</td>
<td>ASTM D-1682</td>
</tr>
<tr>
<td>FLAMMABILITY</td>
<td>• FLAME RESISTANT</td>
<td>TUNNEL TEST ASTM-E84 CLASS A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>UFAC TEST CLASS 1</td>
</tr>
<tr>
<td>AIR PERMEABILITY</td>
<td>• COMFORT FACTOR (MORE PERMEABLE THAN LEATHER)</td>
<td>ASTM D-737</td>
</tr>
<tr>
<td>CLEANABILITY</td>
<td>• WASHABLE / DRY CLEANABLE</td>
<td></td>
</tr>
<tr>
<td>COLORFASTNESS</td>
<td>• WILL NOT CROCK</td>
<td>AATCC 8-1977</td>
</tr>
<tr>
<td>DIMENSIONAL STABILITY</td>
<td>• MINIMAL SHRINKAGE &amp; STRETCHING</td>
<td>ASTM D-3597-77</td>
</tr>
</tbody>
</table>

To receive a 16-page, full-color brochure send a $4.00 check to Dept. MM, Springs Industries Inc., 104 W. 40th St, New York, N.Y. 10018. 1-800-526-8893
A consummate draftsman and teacher at the Architectural Association in London, Andrew Holmes is also a graphic designer in his own right, author of the latest version of the London bus map. His plan for Brewer Jones neatly separates administrative and conference functions (to the left of sliding doors, below) from production (right, below). All elements, even back office and storage facilities (right rear) stand free of walls and ceiling. All are Holmes’s design, save the Mario Botta chairs used in conference rooms (left).
Holmes's stylized skyscrapers come in two varieties—knee-high storage units, which support glass desktops (top and facing page), and taller units, which house the bar and library (above left, and facing page, top right). These units can be, and frequently are, rearranged at will; even the drum partitions of the conference rooms (at the end of the tiled axis, above) can be fully or partially demounted. The conference tables (above), lamps (facing page), and coatracks (previous page, top) adopt a second, engineering idiom.


Client: Brewer Jones & Partners.

Program: convert the second floor of a Late Victorian banana warehouse to a 4000-sq-ft graphic studio.

Major materials: medium-density spray-painted fiberboard (storage units); enameled, welded steel rod table legs, lights, and coat racks, with tungsten halogen floodlights and low-voltage lamps; carpeted and tiled floor.

Contractor: Procon Construction Ltd.

Cost: $69,500 including fees; $17.40 per sq ft including furniture and lighting.

Photos: Richard Bryant.
The Third Dimension

April Greiman’s economical conversion of industrial space into her own studio exploits contradictions of flatness vs. depth and reality vs. illusion.

They said it couldn’t last. The naysayers of New Wave graphic design predicted that the neon-colored chaos would soon pass and Helvetica would return triumphant. But April Greiman, the designer most often credited with inventing the kinetic-yet-tropical graphic style (P/A, Sept. 1981, cover and p. 160) that looks the way Los Angeles feels, sees no such demise in the offing. In fact, business is booming.

As the size and scope of the designer’s projects expanded, so did her need for studio space. To accommodate the influx of packaging, advertising, furniture, and interior design projects, Greiman decided to stop working at home and start commuting to a former brewery building in downtown L.A.’s industrial district. There, inside a concrete complex of buildings that have been converted to artists’ studios, Greiman leased a raw space with dramatically long, narrow, and tall (28 feet) proportions, with a single, 18-foot-square window. Collaborating with architect Steven Bardwell on the rough plan and construction details, Greiman set out to make what she calls a “joyous, fluid, and balanced” ten-person work environment, using a resourceful economy of means.

Most of the lively character of the studio comes from light, mobile, multipurpose additions: laminate-clad furniture on wheels; trapezoidal, acoustically useful drafting-area partitions (which Greiman calls “New-Wave Japanese screens”); and changing, Dada-like tableaux of furniture and objects. The main work space is left as open as possible, while the auxiliary areas—camera room, storage, kitchen, etc.—are compressed into a triangular room off the main space, plus a mezzanine-level loft that doubles as a lounge and conference room.

Greiman has applied her fascination with graphic textures to architectural finishes. Movable tables are covered in thin onyx laminate and even thinner onyx-patterned adhesive paper, and some walls are sponge-painted to look like fabrics. Light objects are made from “heavy” materials, while heavy elements are visually lightened. This interest in transitory, ironic surfaces is visible in Greiman’s current experiments in freezing video images, digitalizing them into dotted pictures via computer, and using them in print (she has also been doing the opposite—animating still photos into moving videos).

Although Greiman explains that she “has always been making two-dimensional space three-dimensional,” she never considered moving into interior and furniture design until urged to do so by architect Doug Michels (of Ant Farm fame). Transfixed by one of Greiman’s complex, multilayer posters, Michels suggested that she pursue architecture, since her approach was already architectonic. Now, Greiman studies architecture more closely, especially the “minimal but psychological” work of Arata Isozaki. And Los Angeles architects in turn study April Greiman’s designs, which have been called “extremely intellectual and extremely emotional at the same time.”

Barbara Flanagan

Looking down at the studio space from the mezzanine (facing page, large photo and bottom left), screens divide individual work areas, and Greiman-designed furniture houses tools, supplies, and even a computer. On the mezzanine loft (facing page, bottom right), with its shoji-screen dividers, are a lounge/conference room, kitchen and bathroom.
Designer: April Greiman.
Architect: Bardwell, Case and Gilbert Architects, Los Angeles (Steve Bardwell, principal in charge).
Program: 1900 sq ft of studio space in a converted brewery.
Structural system: drywall on steel studs.
Construction coordinator: Richard Kuhlenschmidt.
Cost: $26,000, excluding fees.
Photos: Jayme Odgers.
Stepping Back

Understatement is the key to Cini Boeri's design for the renovation of Knoll International's downtown Milan showroom.

Among all the breathlessly up-to-the-minute shops that line Milan's fashionable via Montenapoleone, there is at least one oasis of calm. At no. 11, the showroom of Knoll International and its Italian subsidiary Gavina, architect Cini Boeri has, in her characteristic manner, bypassed current stylistic arguments in favor of a cool, minimalist setting for the company's contemporary furniture designs (including some by Boeri herself).

Boeri's design for the interior of the six-story, 19th-Century palazzo (first renovated for Knoll by architect Gae Aulenti in 1971) is a simple one, mainly because the building's landmark status forbids further major alterations. However, the architect's most radical change to the building is in fact on the exterior, and grew from her decision to restore some of the building's original appearance. She removed the 1971 glass street façade and pulled it back behind the arcade of the old stone façade. Thus, the arches now frame views of the showroom interior, a clean, white-walled space with a polished black granite floor, a textile display alcove at the rear, and a cantilevered platform that enshrines classic Knoll pieces.

The other floors are treated even more simply, differentiated mainly by lighting and paint color; mirrors create illusions of greater space. The elevator shaft, clad in a sparkling, dark-gray marble dust, is the "column" that ties the floors together.

This is Cini Boeri's third Knoll showroom (Los Angeles and Paris were both completed in 1976); her fourth, at New York's IDC, will open next year. These days, her conservative, less-is-more approach is unusual even in Italy, one of the few places where Modernism was strong enough to have survived the last decade relatively unscathed. But it fits Knoll's image to a T: it's the kind of style that transcends fashion. Pilar Viladas
The elevator shaft (top left), clad in a dark-gray marble dust, runs from the top floor to the basement (facing page, reflected in the stairwell mirror). Boeri gained more display space on the basement level (above) by relocating some service elements, and "enlarged" the space visually with a mirrored wall (center left), adorned with a graphic design by Nathalie du Pasquier, known for her textile designs for Memphis.

**Project:** Knoll International showroom, Milan, Italy.  
**Architect:** Cini Boeri, Milan, Italy.  
**Program:** six floors (6800 sq ft) of showroom space in a 19th-Century building, and restoration of original façade.  
**Consultants:** Piero Castiglioni, lighting; Pierluigi Cerri, graphics.  
**Photos:** Mario Carriher.
Sense and Sensibility

Two Marcatré showrooms demonstrate King and Miranda’s flair for the timely and the timeless.

The argument used to be technology vs. art. Now it’s high tech vs. high touch. Either way, it’s the same thing: the perceived rift between the technical and aesthetic aspects of design. What we keep forgetting is that to any good designer, the two are not irreconcilable; they’re inseparable, and always have been.

Perry A. King and Santiago Miranda offer numerous cases in point. The two Milan-based designers (King is originally from England, Miranda from Spain), partners for over a decade, have come up with everything from typefaces to chain saws for clients such as Olivetti, Artemide/Flos, and McCollough, with not an item in the lot that isn’t both technically sophisticated and beautiful to look at. In this country, King and Miranda are probably best known for their relatively new and extremely successful light fixture Jill (produced by Artemide/Flos), which combines the grace of the classic glass torchère with the efficiency of a modern halogen lamp. They have also designed office furniture and seating for the Italian manufacturer Marcatré, for whom they have also recently completed the first two in a series of showrooms—one in Rome (on these two pages) and one in Milan (on the following four).

While both are located in historic neighborhoods and contain metaphorical and material references to the past, their formal vocabulary is decidedly Modernist. Not only do these interiors showcase Marcatré’s products for the Modern Office and all its technological innovations, but they also demonstrate the designers’ talent for creating rich, contextually sensitive architecture, which is no less disciplined, for all its luxurious materials, than one of their calculators or power tools. In these settings, art becomes more mysterious, and technology more beautiful, rather than the other way around.

Pilar Viladas

For the showroom in Rome (these pages), architects King and Miranda wanted to create a setting where each piece of office furniture would be seen singly, as a unique object that could compete for attention with other objects and the space itself. The reason? The space was too small for the usual office settings arranged for this kind of merchandising.

In pitting chair against desk, texture against scale, the designers have made brilliant use of metaphor. Triple layers of meaning, often combined within a single element, refer equally to nature, to the distant past, and to communications technology of the future.

Screens have been disposed within the space to create “streets” and to suggest images symbolic of Rome’s ancient walls where, as here, constructive techniques are exposed. The panels are faced with Swiss linoleum to suggest stone, but the real material is reserved for the floors, where polished stone and marble duplicate those of ancient Rome. On another level, the panels are symbolic of the many forms of diffused communication that will be present in the office of the future, the designers report. The panels are cut at one end (facing page) to show thousands of connecting wires, while they are finished at the opposite end with a material to indicate their potential as diffused keyboards.

At the ceiling level, suspended panels with downlights float as dark and ominous clouds surrounded by a perimeter halo of bright blue light. This storm that appears to be on the verge of breaking adds another di-
mension to the space, which the designers intended to be tense and dramatic, and definitely not architectural.

The showroom is on via Margutta, a street near the Piazza del Popolo that is well known for its smart antique shops and design boutiques. Because this old commercial center of Rome is now a historic district, neither the exterior nor the interior of the showroom could be altered, so everything had to be constructed to be demountable.

Project: Marcatré showroom, Rome, Italy.
Designers: King-Miranda Associates, Milan (Perry A. King and Santiago Miranda).
Program: 2100 sq ft of showroom space.
Major materials: steel screen, linoleum, polished stone, white marble, gray beola.
Costs: not available.
Photos: Andrea Zani.
The Milan Marcatré showroom occupies the former stables of a 17th-Century palazzo on the via Manzoni near La Scala. Like the Rome showroom, it was designed as a “jewel box,” treating furniture as objects, rather than as a backdrop for office mock-ups. King and Miranda, working with architect Renata Fusi, solved the problem of uniting a series of small spaces on the building’s two floors and basement by means of a strong directional device. That is the stair (above and facing page), a ribbonlike cascade of white marble that winds around four black-painted steel columns (two of which function as plumbing pipes) at the rear of the building. The stairwell walls are covered with a spatula-applied colored plaster that has a wax finish, and the marble baseboards are traced with an elegant bead molding, of the same black-painted steel as the columns.
The main showroom space (above) recalls the wintry colors of industrial Milan in its materials: a floor of gray beola, a graniteliike stone (also used in the Rome showroom) from Northern Italy; and walls covered with wallpaper designed by King and Miranda that is simply a blow-up of a soft pencil scribble: their "signature," which is both decorative and minimal. Metal screens along the rear wall are of industrial mesh, a material the designers find appropriate to their industrial city. The lighting was custom-designed by King and Miranda to "furnish the ceilings" of the showroom. The fixture, called Ra, is now available as part of Flos's Expanded Line system. It has a low-voltage halogen lamp, converts from indirect to direct (spot) lighting, and also swivels and tilts. Lighting is orchestrated throughout the spaces by means of a complex switching system.
A second-floor view (with King and Miranda’s Air Mail chairs) to the building’s front (below) shows that the designers pulled the front window back from the existing façade (see drawing). Between the two, a light box illuminates four columns identical to those in the stairwell. The basement (facing page) is exhibition space. Its buttress existed; new steel baseboards carve a shadow line in the plaster walls.

**Project:** Marcatré showroom, Milan, Italy.  
**Designers:** King-Miranda As­sociat, Milan (Perry A. King and Santiago Miranda, in association with Arch. Renata Fusi, Milan).  
**Program:** 2700 sq ft of showroom space.  
**Client:** Marcatré S.p.A., Milan.  
**Major materials:** stone, steel, glass.  
**Costs:** not available.  
**Photos:** Andrea Zani.
Separate but Equal

A new wall creates office space and a dramatic entrance alcove (right). The long side of the building faces the street (unusual in a loft building), which results in a wall of windows. The interior partitions (left) align with the long axis, providing an uninterrupted vista and increasing the sense of space.

Careful treatment of materials and some judicious additions create a luminous showroom for two furniture companies.

With this project, Walter Chatham and Juergen Riehm of 1100 Architects faced the challenge of designing a showroom shared by two furniture companies with compatible yet distinct product lines. Furniture of the Twentieth Century markets contemporary pieces and reproductions of Modern classics, while Bieffeplast features contemporary designs manufactured in Italy. In addition, the program called for three separate office spaces, one for each of the furniture companies and the third for GHI, Inc., the marketing agent for both.

The architects' solution to the problem involved keeping as much open area as possible, while at the same time dividing the 4100-square-foot space (one floor of a 1920s loft building) into two halves, separated at midsection by an office/reception area. The remaining office and storage areas are at both ends, concealed behind new walls of painted wallboard. Other materials are simple and somewhat rough, foils for the sophisticated furniture. The existing concrete floor was exposed, cleaned, and tinted with a wax/mineral pigment finish; the plaster walls were patched and painted, and the column bases repaired.

Against this severe yet rich background, the space is organized around a series of visual contrasts: open/closed, clear/opaque, floating/fixed. The most important of these occur at the ends and midsection, where a pair of walls face each other. One, of plywood stained with a solution of wax and gray pigment, "floats" on black metal rails, which also pass through the massive concrete wall opposite. The latter defines the office/reception area, which is otherwise enclosed only by shoulder-high white canvas panels. At the entrance, the elevator/entrance door is framed in an asymmetrical niche, flanked by a tall door of frosted glass framed in black metal. At the opposite end of the space, a semicircular alcove on axis with the entrance serves as a lighting display area.

This collection of paired elements emphasizes the showroom's dual role without making an obvious division. The subtle and serene flow of space thus created enhances the furniture without overwhelming it—which is, after all, the point. Joanna Wissinger

Joanna Wissinger
Progressive Architecture 9:85 121
Project: Furniture of the Twentieth Century and Bieffeplast Showroom, New York.
Client: Furniture of the Twentieth Century.
Program: conversion of 4100-sq-ft floor in 1920s loft building to furniture display space, offices, and storage.

Major materials: gypsum wallboard, concrete, plywood, steel piping (see Building Materials, p. 255).
Costs: withheld at client’s request.
Photos: Mark Darley.
Kevin Walz, an artist-turned-designer uses materials in surprising ways to create interiors with rhythm and texture.

Kevin Walz got into the interiors business by circumstance, not by plan. A former student of painting and sculpture at Pratt Institute, he worked as a painter for five years and became involved in designing interiors only when he and his photographer wife Barbara bought a living/working loft in Manhattan’s Chelsea district.

“I wasn’t interested in architecture,” Walz recalls. When he took on the design of that first project, he pored over how-to books and articles on proportion and design; “I even had to teach myself drafting,” he says.

But after his loft was completed, a neighbor asked him to carry out a similar project for her; then a dinner guest wanted a space designed. Soon he abandoned the series of paintings he was working on to go into design full time, without looking back.

It is his training as an artist that Walz credits for developing his eye for materials and his inclination to use them in surprising ways. “I think I still see from an artist’s point of view,” Walz says. He borrows not from current architecture primarily but from other disciplines: “I took all my inspiration on how to deal with three-dimensional space from sculpture.” Looking to architecture for precedents can easily become “too incestuous,” Walz believes; “I think there’s a phase going on in architecture right now that’s too fearful.”

At present, his company’s workload is split about half and half between residential and commercial jobs. Walz’s forte is using materials where they are unexpected; at the Patisserie Lanciani, he cuts corrugated fiberglass into shapes that suggest clouds and draperies. In a SoHo apartment, bookshelves of brushed steel angles and bronze connections create a forestlike effect.

The search for materials is a constant process: Walz comes across textures or forms that appeal to him and tucks them away, waiting for the right job. “It took me a year to find a client for this tile,” he says, hefting a lava tile of deep iridescence, specified for a Vittorio Ricci shoe boutique on Columbus Avenue.

Walz is drawn to things that are, in his word, “dumb,” the “junky American things that are indigenous to the culture.” The chairs in the Patisserie Lanciani are “bowling-alley” chairs that Walz thinks are “a great form—just a circle, a square, and a triangle connecting them.”

Walz attempts to make both the design and the placement of furnishings conspire to encourage appropriate human interactions. “One thing architects are very bad at is understanding how the furniture works within the space in a human way,” he believes. In the Sahlman residence, the seating arrangement is more natural and less rigid than in most architecturally designed interiors. And at the Fenn, Wright, and Manson clothing company showroom, the furnishings define circular arenas that allow salespeople to be on center stage, the better to hold buyers’ attention.

Walz’s expressed concern for human factors, though, is not always apparent. The chairs in the Sahlman residence, designed to suggest architecture, are not comfortable; armrest angles are awkward, and because of seat and back angles, one feels pushed out of the chair.

But in spaces like the Patisserie Lanciani, Walz’s playful use of materials creates an environment with rhythm and texture, one that says someone has had fun with the design without being self-conscious about it. Melissa Brown

The author, former manager of Editorial Programs for Herman Miller, Inc., is an editorial intern at P/A.
For the Patisserie Lanciani, Walz created an imaginative blend of materials with vigorous rhythms and textures. The result is not cacophonous, though: tonality, form, and fancy make it work. In the front window (above), corrugated fiberglass edged with black rubber forms a draperylike shape. Inside, it is used in cloudlike shapes that, in addition to creating mood, separate the long, rectangular space into areas that suggest booths without producing choppiness. A lighted purple area at the back of the shop picks up confectionary colors in the wall surface and gives the space a sense of finality without a dead-end feeling.

The faintly pebbled pattern of the wall material is picked up fortissimo in the flooring, where the white-marble-aggregate pattern is deliberately busy to hide dropped crumbs at peak hours. The pattern is deepened and elongated in the tabletop and baseboard material, which Walz describes as "old barbershop linoleum." Custom light fixtures (detail, upper left) are sand-blasted steel and plexiglass that has been machine-textured with a rotary saw for a moiré effect.
In the clothing industry, colors, shapes, and even the structure of companies undergo constant change. So Walz deliberately chose neutral colors and functional outlines for the showrooms of Fenn, Wright, and Manson in New York. Half-circle tables of granite aggregate are set opposite curved racks for presenting fashions, creating a circular arena that helps salespeople hold buyers' attention (above).

All projects: Designed by Kevin Walz.
Project: Sahlman residence.
Program: Convert 3000 sq ft in former office building to primary residence for executive and artist.
Major materials: unpainted plaster ceilings, gypsum-board walls. Furnishings: primarily brushed and sand-blasted steel, stained plywood, and stained chipboard.
Consultant: Donald Kaufman, Donald Kaufman Color.
Contractors: Red Rover Builders; Peter Slep (cabinetry); Giza & Sons (welding).
Cost: $57 per sq ft (excluding fees).

Project: Patisserie Lanciani.
Program: 1400-sq-ft store in SoHo to be converted to bakery and café, with kitchen in rear.
Major materials: gypsum board with Zolatone, corrugated fiberglass panels, marble floor, rubber-topped tables.
Consultants: Donald Kaufman, Donald Kaufman Color.
Contractors: The Becker Group Ltd.; Serpentine Studios, Ltd.
Cost: $76 per sq ft.

Project: Fenn, Wright, and Manson showroom.
Program: 15,000 sq ft for offices, design rooms, and showrooms for clothing company.
Major materials: carpet, slate and rubber floorings, glazed paints, Zolatone, teel panels, corrugated fiberglass panels.
Consultants: Donald Kaufman, Donald Kaufman Color; Richard Hsu, graphics.
Contractors: Wanco Construction Co., Inc.; Premier Woodworking Co., Inc.
Cost: $65 per sq ft.
Photos: Andrew Garn.
Architect Henry Hornbostel (1867–1961) produced many distinguished Beaux-Arts designs, including those for Carnegie-Mellon University (whose school of architecture he founded), New York’s Queensboro Bridge, and the master plan for Emory University in Atlanta. Of the last, only a quadrangle of buildings was ever completed, but these Renaissance Revival structures, innovatively clad in a skin of scrap marble culled from Georgia quarries, offer a telling picture of the architect’s campus vision. The buildings, now on the National Register of Historic Places, have undergone various interior alterations over the years. But one, the 1916 former law school, has recently undergone a philosophically sympathetic renovation that, paradoxically, could not have occurred until the last decade. Michael Graves’s design for the reuse of the building, now called Michael C. Carlos Hall, to house a museum, offices, and classrooms, creates an unusual pairing of the work of a distinguished disciple of the Beaux-Arts school and that of one of the more radical interpreters of this school in the late 20th Century.

The university’s program called for the building to accommodate its Museum of Art & Archaeology, and offices and classrooms for the departments of Art History and Anthropology—a lot of program for 26,000 square feet. Graves responded by more or less bisecting the building to distinguish between the public museum and the more private offices and classrooms. This distinction is clearly stated in the building’s lobby, where Graves treats the opposed entrances to museum and department offices as two separate buildings, their façades facing each other across the “street” of the lobby. The museum entrance is a Classical rotunda, while the department entrance is a severe, Egyptian-looking arrangement of massive piers.

The museum entrance leads directly into the largest of the exhibition spaces, or through a hexagonal “hinge” room to the main corridor, off which are located four smaller galleries. The large gallery’s front wall is bowed to make room for the stair, slipped between this wall and the front façade of the building, that leads to the second floor. Graves’s sympathy for traditional Beaux-Arts museum planning—hierarchically sized rooms arranged symmetrically about clear axes—creates a hospitable atmosphere for the ancient Egyptian, Near Eastern, Pre-Columbian, and Oriental artifacts that are permanently displayed on this floor. Interior walls stop short of the 16-foot ceilings; topped by chunky little columns, they increase the amount of perceived space in what is really very little area. Poché, of course, figures prominently in this cause as well: jewellike, tiny rooms are carved out under the stair, in corners, and even out of the external fire-stair tower (one of two that Graves added to the building to gain more interior space). While some critics may see all this as nostalgia on Graves’s part, the net effect of this deliberately “old-fashioned” plan is that the viewer is provided with the intimately scaled space needed to study the objects on display.

The palette of colors used in the project is a sophisticated one, with deep tones of green, blue, and terra cotta, against a background of rich cream, indicating a shift away from Graves’s recent fondness for grayed pastels. Rose and green marble, and beautifully crafted bird’s-eye maple display cases demonstrate how effectively the architect uses luxury materials, but he seems at the same time to be more at ease than ever with frugal ones, the better to allocate extravagance where it counts most; the “thick” interior walls are still gypboard, and the fat columns atop the walls are made of PVC.

On the second floor, the rotating exhibition galleries are, appropriately, much more contemporary and less “archaeological” in feeling, with large, open spaces painted cream and white, and higher levels of daylight from second-floor windows. The other half of the building, the Art History and Anthropology departments, must have been a programmatic headache, and it shows. To gain the required square footage, Graves extended a 1950s mezzanine addition over the law library to make a full second floor. Even so, there seem to be too many rooms in too little space—with the notable exception of the elegant Art History slide library on the second floor.

Graves’s version of Beaux-Arts Classicism, personal and abstract as it is, still appears at times rather miniaturized and ambitious compared with the loose-limbed grace of Hornbostel’s building. But then this was not a test of mimetic skill; it was a happy coincidence of design sympathies. What Graves set out to do—design a small museum the old-fashioned way—he did, and with considerable elegance. How he will apply these principles to the larger scaled contemporary artworks that will be displayed in the Whitney Museum addition (and the temptation to speculate is irresistible) remains to be seen. But, in light of the current crises in museum design, Graves’s quest for an architecture that engages both the object on display and the viewer in a three-way conversation is as admirable as it is timely.
Michael C. Carlos Hall (above), the former law school building, has Hornbostel’s innovative scrap marble exterior. Inside the lobby, Graves treats the entrances to the Museum of Art & Archaeology and the departments of Art History and Anthropology as two separate “buildings.” The museum entrance (top left) is a small rotunda that leads to the first-floor main exhibition space (large photo, above), devoted to the museum’s permanent collection. Fat blue PVC columns top the walls, and artificially illuminated “skylights” also contain light tracks. The first-floor windows along the front façade of the building were blocked to reduce daylight levels in the main gallery and to provide more wall space. A view across the main gallery into one of the small side galleries (bottom left) is taken from the stair to the second floor. Rich materials such as marble, and bird’s-eye maple for the cabinets, create a sense of solidity, and the use of compressed exhibition spaces (far right, tucked under stair) enhances the aura of mystery about the objects on display. The plans of ancient buildings are stenciled on the floor (right), Graves’s homage to Hornbostel’s use of this device at Carnegie-Mellon University.
The curved stair at the front of the museum (right) is slipped between the front exterior and main gallery walls (see plan, next pages), and offers the sole public access to the second-floor exhibition spaces. Daylight from the second-floor windows reaches these galleries through openings in the front screen wall (top photos). The second-floor galleries house rotating exhibitions rather than the permanent collection, and their color scheme is predominantly white, as opposed to the deeper colors of the first-floor galleries.
The centerpiece of the building’s lobby is Hornbostel’s cantilevered oval stair (stairwell, right, with arched rear window). The stair winds upward to a second-floor landing, which Graves has designed as a lounge area (top). The top of the arched front entrance is flanked by Graves-designed armchairs. The oval stair affords access to the second-floor Art History department, but not to the museum areas, which must be reached by the internal museum stair.
Plans illustrate Graves's division of the building into halves: one for the museum; the other for the two departments, with Anthropology on the first floor and Art History on the second. Opposite the lobby entrance to the museum is that of the department offices and classrooms (facing page, top left). Like the museum entrance, it is treated as a "building"; however, this one, as opposed to the Classical rotunda of the museum, is strongly Egyptian in character. The second-floor corridor (facing page, large photo) leads to the Art History classrooms and slide library (facing page, bottom left).
In order to gain more square footage inside the building, Graves added two stair towers to the outside: one to the south, and one to the east (exterior, above). The east tower has a two-story rotunda, the interiors of which (second floor, left) are tiny, jewel-like rooms.

Project: Michael C. Carlos Hall, Museum of Art & Archaeology, Emory University, Atlanta, Ga.
Site: the former Emory University law school building (1916), designed by Palmer, Hornbostel and Jones as part of the university’s original master plan, and now on the National Register of Historic Places.
Program: renovation of the existing three-story, 22,000-sq-ft building to house the university’s Museum of Art & Archaeology, Department of Art History, and Department of Anthropology, including offices and classrooms.
Major materials: concrete block, stucco (exterior towers), drywall, marble, wood, ceramic tile (see Building Materials, p. 255).
Consultants: Jack Lynch and Associates, structural; Newcomb & Boyd, mechanical; Douglas Baker, lighting; David Scott, museum.
General contractor: Cecil Malone Co.
Costs: $2.6 million.
Photos: Steven Brooke.
Roman Baroque

A penthouse in Rome looks as old as baroque, but is almost all brand new.

For over 2000 years, the archaeological remains of Rome have been an active participant in the life of the city. Churches were constructed in the framework of ancient temples, and classical columns often unexpectedly emerge from deep within medieval walls. Each historic period successively added to or reused the architecture of the immediate past, creating a city where many layers and hybrid styles are often visible at once.

A similar attitude toward history characterizes a number of projects by Rome architects Ascarelli, Macciochi, Nicolao, and Parisio. Most recently, in their controversial temporary exhibition structure at the Colosseum (P/A Nov. 1984, p. 29), fragments of
Penthouse renovation

The ancient arena were reconstructed, including a full-height segment of the outer ring in steel, wood, and canvas. The idealized abstraction contrasted sharply with the surrounding ruins, but it helped to explain the original form of the amphitheater.

In this very elegant and mysterious renovation of a penthouse apartment, there is again a disjunction produced between the original 1930s container and the discreet insertion of new elements, which both clarify and blur the distinction between old and new. Stylistic ambiguity is exploited with elements of Classicism, 1920s Modernism, Surrealism, and Baroque ornament, combined with a sleight of hand worthy of Mandrake the Magician, who appears in the architect's axonometric of the space. A cohesiveness of scale and detail unite apparently disparate elements, including a bathroom that rivals those in Pierre Chareau's Maison de Verre in Paris.

This pied-à-terre for an Italian woman living in New York opens onto a terrace overlooking the basilica of Santa Maria Maggiore and the distant Janiculum Hill across the Tiber, traditionally presided over by Janus, the Roman god of the gate. His double profile, facing opposite directions, inside and outside, past and future, is an appropriate symbolic image for many of the themes developed in this project.

Although the windows on the façade of the building were symmetrically arrayed, the apartment had a congested, contorted plan with small rooms and little relationship to the adjoining terrace. The major intention of the renovation was to unify the plan spatially and open the inside to the outdoors. This was initially accomplished by recreating the exterior façade on the interior, reusing the restrained Classical moldings to frame new openings. Within the poché of the thickened wall, in a pocket concealed by a hinged molding cover, are the full-length shutters of the French doors, and sliding canvas and mirrored panels for bringing light in and extending the space through reflection. In the bedroom, a window frames two views side by side, one to the checkerboard paving of the terrace, and the other, a reflection of the in-
Inside, Classical mouldings originally installed in the 1930s have been reused, or where necessary simply cut off or else recreated (left and below). Other elements, such as the Baroque console (facing page, bottom left) which is purposely out of scale and turned in profile, are new.

The pink-orange plaster is mottled throughout; it occurred first as a result of removing wallpaper but was later consciously sought. In the bathroom (facing page, bottom right) mirrors are used extensively to expand space in the small apartment. Throughout the penthouse, other mirrors are used for the same purpose, and also to create as great a relationship between the indoors and outdoors as possible.

**Project:** Penthouse renovation, Rome, Italy.

**Architects:** Studio di Architettura, Rome, Italy (G. Ascarelli, M. Maciocchi, E. Nicolao, D. Parisio, with studio assistants P. Giovannazi, S. Di Stefano).

**Program:** Renovation of a 1020-sq-ft penthouse apartment in a 1930s building.

**Major materials:** stucco, mirrors, black wood, various stone, canvas panels on metal frame.

**Consultants:** Antonio Paolo Nullo, lighting; SANGIORGI, acoustics.

**Photos:** Giovanna Piemonti.

The original boldly patterned tiles in the center of each room were retained to provide a pattern for reflection in the many mirrors and to mark the asymmetry resulting from the new poché of the inside wall. In contrast, the ceiling moldings have been cut and peeled back to reveal a ragged edge in the manner of details uncovered in an archaeological excavation. This attitude applies also to the walls; their pink-orange plaster with white mottling derived from removing the old wallpaper was at first accidental, but then consciously carried out on all painted surfaces. Above 7½ feet, all walls remained; the soffit band defining the original, enclosed spaces of each room. Below this line, large openings were punched through the walls, where chestnut shelving, open framework, and mirrors were added to conceal the means of support.

Elements that appear to be original, such as the Borromini-esque consoles, are in fact new, surrealistically out of scale and rotated from their conventional frontal position.

The esquisitely detailed bathroom is clearly the spatial climax of the apartment. The space is articulated as an undulating membrane of black lacquered steel frames with mirrored or canvas panels that conceal cabinets and shelves. A sink with exposed polished brass pipes and a rotating round mirror stands at the center of the room, surrounded by reflections multiplied in the liquid space of the mirrored walls. Behind the diffused light of the canvas panels, on a raised platform of three steps, is the water-closet.

Opposed to the internalized, rebounding images in the bathroom, is the spatial release of the terrace. There, a console bracket and two marble spheres appear old, as does the massive twelve-sided travertine table. When it rains, the table becomes a taut sheet of water: the dome of St. Peter is inverted, the reflection an echo of the revenge of pagan Janus on the Church of Rome.

Alexander C. Gorlin

The author, an architect at Kohn Pedersen Fox, New York, also teaches at Yale University.
A Gridded Shift

When George Schieferdecker came to design this duplex apartment in the garden and parlor floors of a Manhattan brownstone, he realized that space in the central area was very tight. The common stairs to the upper-level units cut deeply into the apartment, virtually demanding a dog-legged staircase in the duplex. This had to be accommodated, along with the bathrooms and the hallway to the master bedroom, within the brownstone's 15-foot width. To allow expansion where necessary and contraction where possible, Schieferdecker introduced angles of about eight degrees into the planning of the stair, extending this device into the entrance hall upstairs, through the lower level, and into the garden.

Ordinary planning steps, then, led to a sophisticated motif that was further enriched by two other design ideas: the spatial connection between the two levels, and the contrast between the traditional brownstone and the new insertions.

The architect realized the first of these ideas by creating two vertical shafts. One occurs most dramatically as you enter the living room: The stairway opening is enlarged to accentuate the passage from the entry hall. The other occurs as you exit from the living room out to the balcony: The balcony grille is extended into the living room, allowing a glimpse into the dining room below.

The second design idea was achieved both spatially and through detailing. The original brownstone spaces were traditional enclosed rooms. These were retained, their moldings repaired or replaced where necessary. Into this framework were inserted additional walls that contrast deliberately with the traditional vocabulary and have various functions—a wall that forms the entry hall, a sculptural object that separates the stairway from the living room, a screen that divides the kitchen from the dining room. They all allow space to flow through them, and have Modern detailing. They are finished in gray-stained birch plywood scored in a rectangular grid, and where doors are incorporated, the track and roller hardware is left exposed.

The two bathrooms are planned according to the traditional grid, but they are separated from the existing framework by a clerestory of milk white glass. Other details are simply but elegantly executed: the fine steel railings around the stairway shaft, with an off-center Asplund-inspired base; the bookshelves that create a centralized composition around the fireplace, with balanced solids and voids.

Schieferdecker earned his Master of Architecture degree from Columbia University in 1981 and worked for, among others, Jon Michael Schwarting of Design Collaborative. The scored paneling, the neutralized palette, and the shifted grid are reminiscent of that firm's work, an observation that pleases Schieferdecker. But he did not base his design on a theory of virtual space with implications beyond the site. Rather, he responded to the internal conditions: The contorted center had to be relieved, and he achieved this by shifting the grid. His client, whose initial requests included "No angles, please," understood the rationale, and is delighted by the results. Susan Doubilet

Simple needs generate sophisticated motifs in a Manhattan townhouse apartment.

Starck Contrasts

After decades of decline, French design is making a comeback, led by the self-styled enfant terrible Philippe Starck. Shown here: a survey of (relatively!) earlier works and the latest offerings.
Starck portfolio

Starck approaches furniture design with a strong technical and functional bent: His first "product" wasn't furniture, but inflatable housing. When in Paris, the designer holds court in his Café Costes, on the Place des Innocents in the no man's land of sex shops and junk food stands that separates the ever-popular Centre Pompidou from the garish Les Halles mall. Heralded by an ecstatic Parisian press as the first truly new café to open since the beginning of this century, the Café Costes is a witty and engaging variation on a venerable type. Starck's tiny terrazzo-topped tables and chairs of wood, steel, and leather are café-intimate, but the open mezzanine, backlit skylight, and giant, V-shaped stair culminating in a billboard-sized clock (homage to the trusty timepieces in railway cafés, below left) are grander gestures, more night club than café. The designer's penchant for picaresque detail shows up in the ball-supported archway at the head of the stairs (below right), and mezzanine mirrors, angled off the wall to further fracture fragmented views (left). The tripod armchair, coyly titled Pratfall (Mangau, 1981), reappears in President Mitterrand's private library. A hit from its opening night, the Café Costes has quickly acquired the proper patina of use and abuse—cigarette burns, coffee stains, and regular customers—common to Parisian café culture.
Starck served as artistic director for Pierre Cardin before setting out on his own with Starck Products. The table lamp titled Sandy Jesperson (left top) is part of a 1985 collection designed for the French mail-order house Trois Suisses. (Other pieces from that collection are shown on the following pages.)

The triangulated Dr. Sonderbar (1983, GAM International) is fabricated in epoxy-coated steel with perforated steel seat (left middle), Ray Noble (left bottom), designed for Habitat in 1984, is one of three demountable systems, the earlier ones produced by VIA and Disform. All play upon the notion of a single, inclined metal upright with shelves of decreasing depth.

Ray Menta (right top) was designed for a lighting design competition sponsored by the French government and is Starck's reputed favorite from his own portfolio. Pepper Young (right middle), designed for Trois Suisses in 1984, is available in two configurations—100 x 100 cm rectangle and 60 x 60 cm triangle—and multiple materials combining black granite, lacquered steel, and black rubber balls. The metal Washmobile designed for the Franco-Italian firm Sopha (right bottom) is fabricated in epoxy-coated steel and glass.

Most recently, Starck was commissioned to devise new pasta patterns for Panzani (below), his goal to design a noodle that really holds its sauce.
Starck portfolio

The four pieces shown on these pages form the cores of two collections—1984 and 1985—designed by Starck for the mail-order company Trois Suisses. Starck considers his work for the French company proof of the possibilities inherent in mass production: beauty despite "diabolical" constraints.

Shown on this page are Roi Egan Groat, a standing halogen lamp and coatrack (1985, left) and the folding metal chair Mrs. Frick (1985, right). Starck is fascinated with the mechanics of furniture, as reflected in both production and use. Many of his designs are demountable, foldable, and flexible. A series
of folding circular tables, for example, turns the mundane card table into a well-oiled and elegant machine. The earlier Tippy Jackson and Dole Melipone tables were characterized by relatively complex and ingenious leg configurations, but the 1984 Nina Freed (left) for Trois Suisses folds flat in two smooth moves. The 1984 Joe Ship table (right) is composed of a reversible surface with one black and one white face, available in either square (120 cm) or rectangular (72 x 180 cm) configurations. The flexible, lacquered steel table legs accommodate any depth surface up to 5 cm.
Although the designer has no proprietary interest in the disco that bears his name, the Starck Club in downtown Dallas is his biggest venture to date in this country. Furnished with Starck’s own Miss Dorn (1981, Mangau, right) and concrete tables, the upper entrance level is organized as a series of seating areas, separated by muslin curtains (below left), which overlook the dance floor “pit” one flight down (below right). However, the club’s clientele dance wherever they like, even on the stairs, which are wide enough to accommodate both serious dancers and those just passing by. The DJ’s booth, too, departs from the norm; instead of a glassed-in box, it is an open space up front near the entrance, and visible from the floor below. Photos courtesy of the designer, except as noted.
Home of the Brave

In creating a bustling new restaurant catering to those who are young and tired of the disco scene, MGS Architects made a feature out of people and people-watching.

It may not be inaccurate to say that a new lower Manhattan restaurant has joined the wave of renewed patriotism, but it would be inadequate. America, a post-disco, very in, very large, very popular eatery does draw its parti, as well as its extensive menu, straight out of the U.S. treasure chest. It is, therefore, of its age; its approach is neither cynical nor naive, seeking to provide all of the ever-popular pursuits of its young, restless, mostly affluent clientele.

The intended exploration of “an American theme” is the most easily spotted item on the design agenda. At its busy times of day, the dynamics of the restaurant and its patrons demonstrate the rest. This was to be “a big, exciting restaurant, where people are entertained by each other.” It is.

Located in what previously had been a department store with a cast-iron façade on East 18th Street, the restaurant began as a large volume with an equally large (nearly 40’ x 60’) skylight. The floor level is 2’-6’ above the street, making the space quite visible as well as large. While America is certainly not minimal in its interior approach, the architects have restrained the street face admirably. Only a discreet star on a brass pole, white neon stars, and “America” in inlaid brass on the step announce the estab-
Floating free of the back and side walls, the bar island is raised three steps (left) above the seating area. Located under the refurbished—and very large—skylight, the bar becomes the focus of the long progression through the space. Emerging as if from a ghostly fog, a locomotive contrasts with a segment of an Indian sand painting of a serpent's head (center, below), in a more blatant, hard-edged motif.

lishment. While they wished to maintain the cast-iron front, the designers nevertheless would have preferred to have removed horizontal members from the glazed portion. When that proved structurally improbable, they proposed what might be considered an expensive and subtle alternative: a new glass line eight inches behind the original, with sizable sheets of glass. To their delight, the owners agreed.

Faced with an axial space and the obvious central entry location, the architects wanted to devise some way to avoid a flat-footed enter/comprehend sequence. It was their feeling that a space loses its ability to stimuli- late once an observer's comprehension of it is complete. The minimal, skewed entry foyer, looking a bit arbitrary at first glance, is a deceptively simple and effective means to deflect ennui. An English system of glazing, designed for squash courts, allows the vestibule to be expressed as freestanding planes. Since its angle could not be extreme in the width of the space, the oak flooring picks up the angle as well, for reinforcement. Angles are similarly employed in other elements such as the huge bar and the spirited, elongated “flag” of neon overhead.

Flanking the large “pools” of tables divided by a central aisle are two linear, raised
rows of two-person tables along the side walls. These provide “dining as theater,” with eating and conversation in profile, and enhance the see-and-be-seen function of the restaurant. Procession down the aisle is punctuated wryly by stars projected on the floor from downlights in the blue ceiling.

If the murals on the side and back walls are the most obvious of America’s theme aspirations, they are also the most simultaneously haunting and subtle. The Statue of Liberty casts her misty benevolence over the city; an eagle keeps an aerial watch over the land; and out of the back wall roars a “streamliner.” Overlaid on these soft images are segments of hard-edged Indian sand paintings that add mystery.

But the central focus, the end of the trail and the high altar combined, is the enormous pink terrazzo bar, raised on an appropriately spacious platform above the floor; it occupies the place of honor under the reglazed skylight. Green stars, like beauty marks, accent the bar, and mahogany bar rails feature inlaid brass strips. Since the way into a crowded restaurant is inevitably via the bar, America’s elevated version makes an entry into a proper procession. The views are the point of it all, and they are good in all directions. Jim Murphy
Alongside another segment of the sand painting, an ethereal Statue of Liberty looks out over the land, just as tables for two survey the café and provide views of their occupants. To accent the "players," seating and tables on the raised platforms are spare and sculptural, compared with the solid, "down home" chairs and tables below.
A Walk Through the Woods

Wood, as an interior finish, has a greater range of pattern and color than almost any other material. The question is how to detail and specify it.

As buildings have become increasingly immaterial in appearance and synthetic in finish, wood offers welcome relief. It defies abstraction or uniformity—the accidents of its growth, recorded like fingerprints in its grain, preclude sameness. That makes wood a wonderful material to use, but a difficult product to detail and specify, especially as an interior finish, where tolerances are small, and mistakes obvious.

Preventing mistakes demands, first, selecting the right wood. Not subject to structural loads or wide variations in temperature or humidity, wood for use in interiors is selected mainly for its appearance, workability, and cost. While there are over 300 domestic and imported wood species commercially available, only a few strike the proper balance among those three factors at any one time. "Poplar is what we use almost exclusively for painted woodwork," says Steve Brown of Eastern Woodworking. "It costs less than pine and its surface holds paint well." Jack Shively with Algoma Hardwoods notes, "Oak, mahogany, cherry, and walnut are the current favorites for hardwood paneling," while John Stern with Kentucky Wood Floors cites, in addition to the oak and maple, "the increased use of Brazilian and tropical walnut and cherry for flooring—woods three times as hard as oak." While domestic woods, in general, still cost less, many in the industry see imported woods slowly increasing their share of the market.

Having selected the type of wood, next come decisions about the grade of wood, the cut of wood, and for paneling, the arrangement of the veneer. Industry associations such as the Architectural Woodwork Institute and the Western Wood Products Association have standards for the type and amount of defects allowed in various grades of wood—standards that, when referred to in a specification, relieve the specifier of much description. The Architectural Woodwork Institute, for example, classifies wood into premium, custom, and economy grades; the Western Wood Products Association, into select, finish, common, and alternate board grades.

Referring to those standard grades, while necessary when specifying wood, is usually not sufficient. Says Don Wallace of the Western Wood Products Association, "Architects must describe exactly what they want. To specify rough face cedar isn't enough; it should read: band sawn, textured face, Western Red Cedar. Architects also have to be hard-nosed with finish millwork. Since most mills have their own marking system for finish boards, architects must insist that the wood they get visually match the illustration in the grading book that they noted in their specification."

Still, room for error exists. For instance, mills, unless otherwise told, may provide a mix of heartwood from the center of a trunk and sapwood from its perimeter. That may not matter with some species, such as basswood and cottonwood, that have heartwood and sapwood very close in color. But it matters a great deal with species such as redwood that have a dramatic color difference.

Heartwood and sapwood, because of their different density, also expand and contract at different rates. If the two woods abut when aligning or adhering boards, the joint may open or become misaligned as the ambient temperature or humidity changes.

Different Strokes

The sawing of wood requires equally careful consideration. Cutting through a log in one direction, called flatsawing, creates a "cathedral figure" or pointed archlike shape in a board's surface because the annual rings that intersect the surface at less than a 45-degree angle. Cutting through a quartered log on the diagonal, called quartersawing, creates a vertical grain, with the annual rings intersecting the surface at a greater than 45-degree angle. Flat-sawn boards are less expensive, shrink less in thickness, and have smaller knots. Quartersawn boards twist and cup less, shrink less in width, wear more evenly, hold paint better, and have fewer surface checks and splits.

A third method of cutting a log, called rift-sawing, eliminates the horizontal markings in oak boards caused by the pronounced medullary rays that radiate from the trunk's center path. Rift sawing involves cutting the log in a radial pattern. Because that wastes wood and requires more labor to shift the log after cutting each board, rift-sawing costs more than quartersawing, although it produces a more even, vertical grain.

Veneers also come flat or quart sliced, the only difference lying in the thickness of each cut. Rift slicing oak veneer, though, differs substantially from the rift cutting of oak boards; rather than cut the veneer radially,
Technics: Wood as Interior Finish

mills place a quartered log on a rotating lathe and slice off, at about a 15-degree angle, curved pieces of veneer. That eliminates the markings of the medullary rays by having them always intersect the face of the veneer at right angles.

Rotary and half-round slicing constitute the two other methods of cutting veneer. The knife, in the rotary method, peels off the outermost layer of wood as the log rotates on a lathe, creating a veneer with a surface "cathedral figure" somewhat wider than flat-sliced veneer. In half-round slicing, the knife cuts shallow arcs from a halved, rotating log.

That creates a surface figure wider and even more wavy than rotary or flat cutting.

The word "flitch" refers to both the piece of log and the sequence of veneer cut from that log. Veneer suppliers have samples of various flitches from which the designer can choose the desired color and grain characteristics. Kept in sequence as they come off the log, adjacent pieces of veneer will then match when made into paneling. "Select a flitch larger than you need," cautions Charles Gueli of Duro Construction Corporation. "Assume that one third of the veneer will end up as waste because of the trimming and cutting necessary when making paneling."

The Play of Patterns

There are as many ways to arrange and match veneer as there are ways to cut it. The two most common arrangements of veneer within a panel are called a "slip match," where consecutive veneer pieces are placed side by side, or a "book match," where every other piece of veneer is flipped to create a symmetrical grain pattern in the panel. Of the book-match patterns, a "running match" simply alternates the veneer pieces, however much their widths may vary; a "balance match" has the veneer trimmed to equal widths in each panel; and a "center match" has an even number of approximately equal veneers meeting at the center of each panel. Listed in order of increasing cost, those three methods will cost less than the diamond and reverse diamond patterns possible when matching the veneers horizontally as well as vertically.

Matching veneers from panel to panel can occur in one of three ways. The less costly "variable match" uses preformed panels cut on site to fit openings and other interruptions. A "sequence match" uses uniformly wide panels, manufactured for a specific project and arranged with the veneer in sequence. When the first flitch of veneers runs out, panels from a visually compatible flitch continue around a room. The most costly but most precise method, called a "blueprint match," involves the custom fabrication of matched panels to line up with every opening or interruption. To ensure a proper fit, the millworker submits shop drawings with dimensioned and numbered panels for the architects' approval prior to fabrication.

Panel Talk

Since decorative veneers come as thin as 1/16 inch, their substrate and adhesion have a considerable effect on their appearance and performance. Most wood-veneered panels have one of three types of cores. Wood ply cores have, to their advantage, low cost, lightness, thinness, and good screwholding power when using more than seven plies. To their disadvantage, they are difficult to machine.

The primary adhesives used with hardwood veneers is a urea resin, a high-strength adhesive that has only moderate resistance to damp conditions or exceedingly high temperatures. Called a "type II" adhesive, the urea resin becomes a "type I" moisture-resistant adhesive with the addition of melamine resins. The manufacturers of laminated structural timbers use a high-strength casein adhesive in a single bending and gluing operation. Manufacturers use adhesives in the assembly of millwork as much as in paneling and laminated timber. "The use of adhesives for bonding small pieces of wood has become the primary method of joining two pieces of wood because they increase the side grain surface and thus the strength of the joint."

Akin to Kindling

The wood industry also has had to respond to the growing concern with fire safety. In the Steiner Tunnel test, the standard measure of the rate at which flame spreads along a material, red oak has the arbitrarily assigned flame spread of 100. Some woods, such as ponderosa or northern white pine, have unusually high flame spreads of over 200, which means that a flame will travel across their surface over twice as fast as on oak. Most woods, though, have a flame spread between 75 and 200, giving them a Class A code rating; only a few untreated woods—northern spruce, redwood, western red cedar, and Idaho white pine—have a Class B rating with flame spreads below 75.

Most codes, for most use groups, require Class A finishes in vertical exits and Class A or B finishes in exit corridors. Other spaces, except in assembly and institutional buildings, can have Class C finishes. While many codes exempt wood trim or allow up to 10 percent of the surface in any area to have a Class C rating, fire treatment offers the only way of attaining a Class A rating and of using wood finishes to any great extent in exit corridors or in high-risk buildings. Two methods exist for fire treatment. The more common and less effective method involves the application of a fire-retardant paint coating; the more common involves impregnating the wood in a vacuum with water-borne chemicals. The sulfate and chloride salts in fire-retardant chemicals used to hold moisture provide the core retardant chemicals used to hold moisture in its place. Some fire retardants, however, do not adhere to those problems; several companies have come out, recently, with nonhydroscopic, noncorrosive fire retardants.

For decorative woodwork, fire retardants present other problems. Some fire retardants will darken red oak, redwood, and western red cedar, and some prevent extensive cut-
Kiln drying has become the primary method of removing the moisture in wood. Kilns normally operate at temperatures between 110 and 180°F, although higher temperatures may be used for certain types of wood. Kiln drying, however, is more expensive than air drying, and it is not always possible to dry large or irregularly shaped pieces of wood in a kiln. In addition, kiln drying can cause the wood to become brittle and prone to cracking.

Wood, Warm and Dry

Kiln drying

Kiln drying is the process of drying wood in a kiln, which is a controlled environment with high temperature and humidity. Kilns are commonly used for drying hardwoods, such as oak, walnut, and mahogany. Kiln drying is more expensive than air drying, but it is more effective in removing moisture from the wood. Kiln drying is also more controlled, allowing for better control over the drying process.

Finishing

Finishes are applied to wood to protect it, enhance its appearance, and make it easier to clean. Finishes can be divided into two main categories: penetrating finishes and film finishes. Penetrating finishes, such as oil or mineral spirits, penetrate the wood fibers and leave a natural finish. Film finishes, such as varnish or shellac, form a film on the surface of the wood, providing a more durable finish.

Material and Immaterial

Wood, although an ancient building material, has gone in and out of fashion as an interior finish. While this century has produced some of our best wood architecture in the work of Greene and Greene, Bernard Maybeck, Frank Lloyd Wright, or Alvar Aalto, the last 15 years have seen a decline in the expression of wood as an interior finish, despite the fact that the market for wood has grown. The Post-Modern emphasis on symbolic form and the New Wave fascination with the synthetic and artificial has much to do with that decline. As in the past, wood will return to favor. Indeed, there are signs already of a renewed interest in it among classical revivalists and neorationalists alike. Their return to basic forms and materials—a reaction, in part, to the immateriality of so many recent avant-garde buildings—bodes well for wood, for few materials are as basic and few are as material to the making of beautiful interiors.  

Acknowledgments

We would like to thank the following people for their contributions to this article: James Bischoff, Callister Gately & Bischoff; Richard Bing, Architectural Woodwork Institute; William Feist, U.S. Forest Products Laboratory; Criss Grover, Charlene Draheim, California Redwood Association; Larry Frye, Fine Hardwoods/American Walnut Association; Donald Johnson, Frank Hursh; David Kohn, Architect; Joseph Dashiel, Donald Wallace, Western Wood Products Association; Clark McDonald, Hardware/Plywood Manufacturers Association; Steven Brown, Eastern Woodworking; Kenton Russell, Dale W. Cox Architect; Duo Dickinson, Louis Mackall & Partner; Charles Gueli Jr. & Sr., Duro Construction Company; John Blateau; Bart Prince; Pat Lynn, Sandra Wurthman, Peter Lundrum Associates; John McCord, John Stern, Kentucky Wood Floors; James Moran, Koppers; Alice Herrhold, Donald O'Conner; Wood-Metal Industries; Melanie Taylor, Orr & Taylor; Ashley and Arne Bystrom; Michael Richards, Steven Rountree, Osmose; Hyman Myers, Joseph Sorrentino, Vitetta Group/Studio 4.

Progressive Architecture 9:85
Characteristics of Wood

<table>
<thead>
<tr>
<th>Species</th>
<th>Color</th>
<th>Figure</th>
<th>Relative Cost Range</th>
<th>Machining</th>
<th>Resistance to splitting in nailing</th>
<th>Resistance to splitting in screwing</th>
<th>Nail and screw holding ability</th>
<th>Gluing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ash (American, Brown)</td>
<td>White to Medium brown</td>
<td>Open grain</td>
<td>Low-medium</td>
<td>Excellent</td>
<td>Good</td>
<td>Excellent</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td>Birch</td>
<td>White to light brown &amp; white to reddish brown</td>
<td>Many veneer types, some curly grain available</td>
<td>Low</td>
<td>Excellent</td>
<td>Fair</td>
<td>Fair</td>
<td>Excellent</td>
<td>Good</td>
</tr>
<tr>
<td>Butternut</td>
<td>Pale brown to medium brown</td>
<td>Grain similar to walnut but lighter in color, sometimes called white walnut</td>
<td>Medium-high</td>
<td>Good</td>
<td>Fair</td>
<td>Fair</td>
<td>Good</td>
<td>Very Good</td>
</tr>
<tr>
<td>Cherry</td>
<td>Light to dark reddish brown</td>
<td>Plain to rich mottle</td>
<td>Medium-high</td>
<td>Excellent</td>
<td>Fair</td>
<td>Fair</td>
<td>Good</td>
<td>Very Good</td>
</tr>
<tr>
<td>Chestnut</td>
<td>Light medium brown to reddish brown</td>
<td>Available only as wormy chestnut</td>
<td>High</td>
<td>Very Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Excellent</td>
</tr>
<tr>
<td>Elm</td>
<td>Light brownish red</td>
<td>Open grain, strong grain appearance</td>
<td>Medium</td>
<td>Very Good</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Good</td>
<td>Very Good</td>
</tr>
<tr>
<td>Hackberry</td>
<td>Yellowish</td>
<td>Moderate open grain similar to ash &amp; elm</td>
<td>Low-medium</td>
<td>Very Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Excellent</td>
</tr>
<tr>
<td>Hickory</td>
<td>White to cream to light brown</td>
<td>Fairly indistinct grain, but extremely tough and hard</td>
<td>Medium-high</td>
<td>Excellent</td>
<td>Fair</td>
<td>Good</td>
<td>Excellent</td>
<td>Good</td>
</tr>
<tr>
<td>Mahogany (Tropical, American)</td>
<td>Medium to deep reddish brown</td>
<td>Straight to rich mottle</td>
<td>Medium-high</td>
<td>Excellent</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Very Good</td>
</tr>
<tr>
<td>Maple</td>
<td>White to tan</td>
<td>Fine grain plain, special fancy veneers available; birdseye curly and burl.</td>
<td>Low</td>
<td>Very Good</td>
<td>Fair</td>
<td>Fair</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td>Oak (Red)</td>
<td>Pink tan to light reddish brown</td>
<td>Plain to flake, rift cut has fine pin stripe</td>
<td>Low-medium</td>
<td>Excellent</td>
<td>Good</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Good</td>
</tr>
<tr>
<td>Oak (White)</td>
<td>Gray tan to light grayish brown</td>
<td>Plain to flake, rift cut has fine pin stripe</td>
<td>Low-medium</td>
<td>Excellent</td>
<td>Good</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Good</td>
</tr>
<tr>
<td>Pecan</td>
<td>Reddish brown with occurring dark streaks</td>
<td>Close grain (hickory) family</td>
<td>Medium</td>
<td>Excellent</td>
<td>Fair</td>
<td>Good</td>
<td>Excellent</td>
<td>Good</td>
</tr>
<tr>
<td>Pine (Knotty)</td>
<td>Light brown or light red</td>
<td>Decorative softwood with characteristic softwood grain</td>
<td>Low-medium</td>
<td>Good</td>
<td>Fair</td>
<td>Fair</td>
<td>Excellent</td>
<td>Very Good</td>
</tr>
<tr>
<td>Sycamore</td>
<td>Pale reddish brown</td>
<td>Quartered veneer interesting because of flaky grain due to conspicuous rays</td>
<td>Low</td>
<td>Very Good</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Good</td>
</tr>
<tr>
<td>Walnut (American)</td>
<td>Soft gray brown to light chocolate brown</td>
<td>Plain to highly figured; this species produces a greater variety of figure types than any other, approached only by mahogany</td>
<td>Medium-high</td>
<td>Excellent</td>
<td>Fair</td>
<td>Fair</td>
<td>Good</td>
<td>Good</td>
</tr>
</tbody>
</table>

Adapted from information provided by the National Forest Products Laboratory and The Fine Hardwoods/American Walnut Association

The chart (above) compares the appearance, cost, and workability of wood species commonly used for interior woodwork. While these species are but a fraction of the number available, the chart indicates the range of wood's properties. Add to that the various methods of slicing wood (right), and, as woodworkers are fond of saying, the material's possibilities are endless.

Further Reading
Architects Orr and Taylor, in several of their residential projects, have used inexpensive stock moldings to create elaborate Classical wood trim. The adaptation of stock pieces demands considerable ingenuity. Glass bead moldings, for instance, provide the base of Tuscan capitals, and handrails turned on their sides function as Torus moldings at pilaster bases. Frequent offsets and breaks in the moldings (photo top), says Melanie Taylor "emphasize the profiles and increase the play of light and shadow." "Some companies, such as Brosco," explains Robert Orr, "provide architects with profile charts and full size details, which make it easy to build a profile from stock pieces." While Orr and Taylor use Classical detail extensively in their projects, often with different molding profiles in each room, the use of stock moldings and the "interest many carpenters have in doing this kind of work," says Orr, "minimize its impact on the total project costs."

At the opposite end of the scale is the Vitetta Group's design for the new galleries of French art at the National Gallery of Art. Joseph Sorrentino says "We combined moldings found elsewhere in the gallery with profiles commonly used in 19th-Century French architecture. We worked closely with the curators in coming up with the right combination. The wood is premium grade poplar, chosen because of its good working properties and its ability to take abuse. White pine proved to be too soft, losing the profiles' crisp definition, and oak proved to be too hard to work with, requiring the predrilling of holes. Because of the moldings' compound curves, we drew full-size molding profiles from which the mill cut its blades; some profiles demanded several passes of the rotating blades. After each molding was cut, it was sanded to remove any surface imperfections." Sorrentino explains the project's remarkably detailed drawings and specifications with the apt comment that, "especially with wood, the only way to get what you want is to be very specific."
The new Rizzoli Bookstore in New York, by Hardy, Holzman, Pfeiffer & Associates, has new woodwork that matches the reused hand-carved moldings from the old store. The Gueli Organization—the project's woodworkers—photographed, drew, and numbered the wood in the old store. "Taking the woodwork apart," according to Charles Gueli Sr., "required getting behind the paneling in an unobtrusive place and pulling it apart with great care." Once apart, the woodwork was taken to their shop, recut and reassembled, with new wood added to match the older wood where necessary. The reassembled wood was then shipped in sections to the site and put in place. The Classical detail not only eased the matching of new and old wood, hiding joints and separating different kinds of woods. It also allowed the architects to conceal such things as lighting fixtures in dropped soffits or behind shelf fronts.

The Modernist approach to wood detailing is exemplified in Peter A. Lundrum Associates' Thunderbird Bank Headquarters in Phoenix. The Honduras Mahogany used in the project creates a traditional look desired by the bank. At the same time, flush surfaces, minimal joints, and paneled reveals show a decidedly Modernist approach. Of particular interest is the custom designed wall system that, according to project manager Ed Wilson, "is completely modular, interchangeable, and capable of being quickly knocked down and rearranged. We wanted a system that would qualify as furniture because of its better depreciation for tax purposes. The system sits on top of the carpet and was the last item to be installed. To ensure that the custom system fit within site-built partitions, the fabricators, Alexander Woodworking, spray-painted the floors using full-size templates of each unit. The contractor then built his walls according to those painted outlines, resulting, in almost every case, in a perfect fit."
Callister, Gately & Bischof's Howard Lorton showroom, in Denver, reflects another approach to wood detailing. It too is Modern in sensibility, with a minimum of ornament and a frank expression of how the wood goes together and is supported. But it is a more relaxed, informal Modernism than that of the preceding project, with rough-sawn surfaces and large, simple masses of laminated wood. The showroom has several floor levels supported on laminated beams, with a bandsaw resawn finish. Under stairs, the laminated beams are doubly curved. Laminated planks serve as stair treads, floors, and ceilings, creating an overall unity to the project. At the same time, using "the rough structural system ... as the finish," says James Bischoff, "has some economy." While baseboards and handrails, too, use plain flat stock boards, rounded and sanded edges modify the prevailing rough-sawn character of the place. The firm's work represents a West Coast wood tradition that is still very much alive.

This Sun Valley House by Arne Strom (P/A, Jan. 1985, pp. 128-130), also draws from the West Coast tradition in the simplicity and directness in its use of wood. For example, the house's interior walls are made of alternating bands of Redwood and Douglas Fir planks, interior windows are framed in simple flat stock, and the laminated beams and floorboards are left exposed. The detailed treatment of the wood, though, represents a more decorative, Arts and Crafts approach to the material. Arne Strom has incised wood with diagonal lattice patterns, inset it into concrete walls, and alternated species of wood to highlight their color differences. The large timber baseboards and massive pegged timber roof supports even suggest another influence on the design: the tradition of rustic mountain lodges. What all of these examples show is that wood can be almost anything we want it to be.
Technics-Related Products

Red oak interior doors, in six-panel Colonial design, are available in sizes from 11¼" x 6'-8" to 3' x 6'-8", as well as bifold closet doors. Morgan Products, Ltd. Circle 139 on reader service card

AcoustaWood preassembled panels for wall or ceiling applications can be unfinished, lacquered in glossy, semigloss, and matte finishes, or with fire-retardant finish. They are available in several profiles. Standard panels are one foot wide, four, six, and eight feet long. Panels can be attached to ceiling grids with clips, to walls with standard mounting systems. AcoustaWood, Inc. Circle 160 on reader service card

Laminated oak flooring can be supplied in lengths to 50 feet, widths 4 to 16 inches, and thicknesses from ¾ inch to 4 inches. It can be installed on joists, pier-and-beam, crawl spaces, and concrete slabs, with thicker flooring requiring no subflooring. TODCO Wood Products Div., Dallas Corp. Circle 161 on reader service card

Interior wood products, with fire-retardant treatment, are covered in Docu-Spex®, a four-page brochure. It provides a sample specification for products treated with Flame Proof LHC®, which is UL, Factory Mutual, and New York City MEA listed and is approved as conforming with Mil Spec MII-L-19140D. Properties of treated wood, its uses, decorating and finishing, and appropriate metal fasteners are some of the subjects covered. Osmose Wood Preserving Div. Circle 162 on reader service card

Prefinished Safir Oak Plank is a wide laminated plank with a solid grain facing veneer that looks like solid oak. It is installed with the “floating floor” system over a foam underlayment and moisture barrier without nails or mastic. The plank has Swedish finish, a multistain process that eliminates the need for waxing. Harris-Tarkett, Inc. Circle 163 on reader service card

Flame-spread performance of wood products, a four-page brochure, explains code requirements, test methods, and classifications. Table 1 shows flame spread ratings for various wood species of lumber, plywood, hardwood, particleboard, flakeboard, shakes, and shingles. Table 2 shows flame spread ratings of factory finished wood products. National Forest Products Association. Circle 201 on reader service card

Architectural columns of clear heart redwood, which has natural immunity to rot, for exterior use and clear poplar for interior use are shown and described in a 12-page brochure. Bases, caps, and plinths are fiberglass. Installation suggestions and dimensions of caps and columns are included in the brochure, along with ordering information and architect’s specifications. Hartman-Sanders Column Co. Circle 202 on reader service card

‘Wood Mouldings & Ornaments’ brochure shows carved mouldings of hardwoods such as European beech and Ramée and embossed mouldings of hardwoods. They are of random lengths from 3 to 15 feet. Mouldings are illustrated in a 28-page catalog, along with picture frames and several carved and embossed wood ornaments. Bendifx Mouldings, Inc. Circle 203 on reader service card

‘Fine Hardwoods Selectorama’ is a 60-page hardwood selection guide that describes several woods and their countries of origin. A chart shows comparative physical properties, such as strength, stiffness, hardness, shock resistance, bending strength and shrinkage, of several species. Species are also described and illustrations show various ways veneers can be matched. Single copies, at $10, are available from Fine Hardwoods/American Walnut Association, 5603 W. Raymond St., Suite O, Indianapolis, Ind. 46241.

Guide to Finish Selection on doors and hardwood paneling shows in color the tones available on plain-sliced or rift-sliced white oak and red oak, rotary-cut red oak and yellow birch, and quarter-sliced mahogany. Descriptions of each wood species and the effect of slicing direction are also included. Algoma Hardwoods. Circle 205 on reader service card

‘Finishing Concepts, Western Red Cedar’ explains the various stains, bleaches, and paints that can be used for exterior and interior surfaces. The six-page brochure explains the advantages of each type of finish and has color photos of typical applications. Western Red Cedar Lumber Association. Circle 207 on reader service card

Modular paneling, cabinetry, and mouldings of hardwood for interiors are illustrated in a 32-page brochure. Besides the items mentioned, there are fireplace mantels, bars, stairway rails, and ceiling beams. Mouldings are suitable for panel trim, cove, chair rail, baseboard, and casings. Room settings in color show the products in place. For a copy of the catalog, send $2 to Old World Moulding & Finishing, Inc., 115 Allen Blvd., Farmingdale, N.Y. 11735.

‘The White House Collection’ wood flooring brochure illustrates, in color, finished and unfinished parquet and plank flooring. Several wood species are available, used alone or in combination. Color photos show block patterns and installed floors. The 14-page brochure is $2 and can be ordered from Kentucky Wood Floors, Inc., P.O. Box 39276, Louisville, Ky. 40232.

[Continued on page 160]
The versatile outside glazing system from United States Aluminum Corporation

Features Include:

- Glazing Gaskets of Santoprene® Thermoplastic Rubber by Monsanto.
- Thermally Isolated.
- Shear block or screw spline joinery.
- Rigid vinyl internal flashing for intermediate horizontals.
- Framing depth combinations may vary from 1 3/4" x 2 1/2" up to 1 3/4" x 8 3/8" to meet wide range of windload and esthetic conditions.
- Exterior snap-on face members may be different finish than interior sections for esthetics and economy.
- Certified test reports for water, air, and thermal performance.
- Straight in glazing for labor savings.
- Accommodates glazing infills for 1/4", 3/8", and 1" insulated glass.
- Available in clear, bronze or black anodized finish or custom painted to architects specifications.

See us in Sweets 8.1/UM

For complete information, call 1 (800) 527-6440 or write:

United States Aluminum Corporation
Manufacturing Facilities

3663 Bandini Blvd.
Vernon, California 90023
Telephone (213) 268-4230

200 Singleton Drive
Waxahachie, Texas 75165
Telephone (214) 937-9651
or (214) 299-5397 metro

6969 West 73rd Street
Chicago, Illinois 60638
Telephone (312) 458-9070

720 Celriver Road
Rock Hill, South Carolina 29730
Telephone (803) 366-8326

©1985 International Aluminum Corporation
Technics-Related Products

Tambour samples, both conventional and Class A rated flame-retardant, are displayed on a wall chart. They include wood veneers, solid woods, brushed and polished metals, and high-pressure laminates. Custom designs and species are also available. National Products, Inc. Circle 206 on reader service card

‘Where to Buy Hardwood Plywood & Veneer’ is a tabular listing of hardwood plywood manufacturers by name and location, noting species manufactured, specialty items, glue type, and maximum sizes available. A second section lists veneer manufacturers, veneer thickness and length, method of sawing, and species manufactured. The lists include international manufacturers, and adhesive and finish manufacturers.

The directory, which is $2 to nonmembers, can be ordered from the Hardwood Plywood Manufacturers Association, 1825 Michael Farraday Dr., P.O. Box 2789, Reston, Va. 22090.

Fancy cuts red cedar shingles brochure illustrates, in color, interior and exterior applications of western red cedar shingles on walls, ceilings, and roofs. There are nine patterns to use alone or in combination. The four-page brochure includes suggested specifications. Shaker-town Corp. Circle 207 on reader service card

Columns catalog illustrates and describes plain and fluted wood shafts and capitals in several styles, molded of composition, with a wood plug to transmit loads directly to the column. The catalog includes tables of sizes and ordering and installation information. Somerset Door & Column Co. Circle 208 on reader service card

Oak flooring brochure explains the durability of oak, its insulating characteristics, and its use as strips, planks, blocks, and parquet. According to the information provided in the eight-page brochure, there are 20 species of oak and four grades: clear, select, No. 1 common, and No. 2 common. Oak Flooring Institute; Circle 209 on reader service card

Marlite linear wood ceilings are hardboard with Douglas fir, western hemlock (available as Class A fire-rated material), western red cedar, and California redwood look. Planks are 3½” wide, ¼” thick, in random lengths of 6 to 16 feet. The ceilings, which are fastened with a patented clip system, can be applied to new or existing ceiling grids. Masonite Corp. Circle 210 on reader service card

Staircases brochure illustrates, in color, circular, spiral, and straight-run staircases. Standard circular stairs have an 8-foot radius; spiral stairs are 4 feet, 5 feet, 5 feet-4 inches, and 6 feet in diameter. Custom stairs also can be provided. Drawings show circular and spiral stairs, rail profiles, and balusters available. Specifications are included. Arcways, Inc. Circle 211 on reader service card

The Natural Collection of hardwood floors consists of ¾-inch solid oak plank, ¾-inch laminated oak plank, ¼-inch and ¾-inch solid oak parquet, and ¾-inch laminated oak parquet. Parquet series are glued down. Planks, some of which are pegged, can be glued or nailed. Bruce Hardwood Floors. Circle 212 on reader service card

Wood Product Information folder lists publications available, with brief descriptions, and prices where applicable. Categories include those for the home builder and remodeling trade, technical books, product catalogs, and a series providing information for the specifier. Western Wood Products Association. Circle 213 on reader service card

[Continued on page 162]
"I work with wood simply because I know it best, I love it most. I work almost exclusively in laminated wood because it does give you certain advantages in creating forms that have a little bit more uniqueness, perhaps, than non-laminated wood. I arrived at the form for the *Strada* chair without too much difficulty. What followed was refinement.

"At a certain point in the development of a design the concerns widen to include manufacture and marketing. A designer needs a client committed to design, to quality manufacture, and marketing to a high standard. Damore is such a client.

"It's probably true of all furniture—the importance of quality—but it's particularly true of wood furniture. You create a little detail and you want that detail to be executed well and crisply and sharply and it makes all the difference in the world. You look at a piece—the details denote quality or sloppiness. There's nothing in between. Finishes are so critical to a design. I look to Domore for chairs carefully crafted, by people with skills and concern, because *Strada* is my baby." —R. DeF.

Circle No. 360

Robert DeFuccio's *Strada* chair—A love affair with wood.
Technics-Related Products

'Driwood Period Mouldings in Ornamental Wood,' Vol. 1, illustrates mouldings for panels, cornices, pilasters, chair rails, and ceiling panels. The 36-page catalog also shows the mouldings in use in room settings. It provides projection and height dimensions and drawings of moulding profiles. For a copy of Vol. 1, send $3 to Driwood Moulding Company, P.O. Box 1729, Florence, SC 29503-1729.

'Fine Custom Cabinetry' is shown in three brochures: Design Group 42 covers traditional styling wood cabinets, seating, and tables for any room (72 pages); a folder shows drawings of wall and base units, including dimensions, and color photos of the styles offered; and Design Group 84 (20 pages) shows cabinets of generally contemporary styling. The brochure package is available without charge by letterhead request to: Dept AA, Wood-Mode, Wood-Metal Industries, Inc., Kreamer, Snyder County, Pa. 17833.

'Southern Pine Use Guide' presents background information about southern pine production and use, lumber standards, grading, and seasoning. Tables in the 20-page guide describe grades, design values, and grades recommended for specific applications. Suggested specifications are included. Southern Forest Products Association.

Wood moulding directory lists products and services offered by member companies, with addresses, phone numbers, and key personnel. The products and services section provides information about wood species, types of moulding, and other products available. For a copy, send $2.50 to The Wood Moulding & Millwork Producers Association, P.O. Box 25278, Portland, Oreg. 97225.

Redwood landscape guide provides ideas and technical information about redwood decks, shelters, planting, seating, and fences for residential and commercial applications. Included in the eight-page color brochure are tables on deck spans, lumber sizes, charts on redwood finishes, and nailing patterns. The guide is available for $60 from the California Redwood Association, 591 Redwood Highway, Suite 3100, Mill Valley, Calif. 94941.

Lasting Impressions exterior and interior wood and wood-and-glass doors are handcrafted. They are shown in color in a 16-page brochure that includes a specification chart showing available woods and glass and dimensions for exterior and interior doors and side panels. International Wood Products.

'Architectural Woodwork Quality Standards, Guide Specifications and Quality Certification Program' defines architectural woodwork terminology: provides tests against which the quality of work can be measured; provides standards that ensure that competing bidders are on an equal basis; and provides a logical system of reference specifications. The guide is $10, which includes shipping and handling. Prepaid orders should be sent to The Architectural Woodwork Institute, 2310 S. Walter Reed Dr., Airlington, Va. 22206.

Solid oak flooring, shown in a four-page brochure, comes in three different finishes, eleven colors, and with three different backings. A chart compares the three groups and indicates areas of recommended use: residential, light commercial, and heavy traffic. Technical information is provided. Hartco, Tibbals Flooring Company.

Circle 214 on reader service card

Circle 215 on reader service card

Circle 216 on reader service card

FLAT SURFACE TREADS
For typical interior stairs. Puts more rubber in direct contact with shoe soles with no crevices to hold dirt or catch heels.

ABRASIVE STRIP TREADS
Combines the non-slip features of two highly visible 3/4" recessed abrasive strips with the easy maintenance of the flat surface tread.

DIAMOND DESIGN TREADS
Has visual interest in addition to the advantages of resilient, long-wearing rubber. Available in several styles with various nose options.

TARGET™ TREADS
Distinctive raised, circular design provides vast decorating opportunities. Special compound makes Target Treads highly resistant to stains and cigarette scorch. Has an ASTM E84 Flame Spread Rating of 25 or less.

SANDBACKS!!
All rubber stair treads have sanded backs for ease of installation and better adhesion. Available in light commercial, heavy-duty and pan-filled styles—square or round nosed.

For Beauty and Longer Wear
Specify

MOLDED RUBBER STAIR TREADS

Call or write for samples and literature

The R.C.A. Rubber Co.
An Ohio Corporation of Akron, Ohio
1833 East Market St., Akron, Ohio 44305 • Phone: 216-784-1291

Choose from the industry's widest selection.

Circle No. 409 on Reader Service Card

162 Progressive Architecture 9-85
YOU'LL FIND GLIDDEN IN THE MOST EXCITING PLACES.

A wide variety of GLID-GUARD® and ULTRA-HIDE® fade resistant colors accent the high-tech interior of Tampa's new Museum of Science and Industry. The innovative, award-winning structure demonstrates energy conservation techniques to more than 300,000 visitors and students annually.

GLIDDEN HAS COATINGS TO PROTECT AND DECORATE A WORLD OF ENVIRONMENTS.
Silicones, epoxies, vinyls, alkyds, latexes, urethanes, bituminous coatings and mastics.

Come to Glidden for coatings that give you long lasting protection. Write Glidden Information Center, P.O. Box 57, Dublin, Ohio 43017-0057. You'll get the complete technical service backup you need for perfect performance.

 WHEN YOU MAKE A VERY GOOD PAINT, IT SHOWS.

Architects: Rowe Holmes Associates
Construction Manager: C. M. Constructors
Painting Contractor: J. Sourini Painting

Circle No. 369 on Reader Service Card
In restaurants:
Carpets of Antron®
perform with style.

Carpets of ANTRON® are rapidly becoming the order of the day with restaurant owners who want performance and style on their carpet menu. The reason? Specially engineered fibers of ANTRON give unsurpassed durability and built-in soil resistance. And that means easy maintenance—important in a place where scores of bustling waiters juggle hundreds of dishes every day.

What's more, carpets of Du Pont ANTRON give you more styles, colors and textures to choose from. Whether you want an elegantly simple look for a sushi bar or an opulent look for a temple of haute cuisine, you'll find a carpet of ANTRON that will satisfy your design needs.

So look into the performance and style of carpet of ANTRON. It's for restaurant owners who want to coddle their customers, not their carpets.

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

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

Du Pont ANTRON®
America's most specified
carpet fiber.
Take a minute and browse.

Come on into The Book Store. Take a minute to look over these current technical and engineering titles. Indicate the ones you want on the coupon below. Send it with a check or money order and we'll pay postage. Or we'll bill you or your company including postage and handling. Either way, if not completely satisfied, you may return books postage paid for full refund within 15 days.

Browse a little. Maybe you'll find a couple of books to interest you. If order coupon has been clipped, write (mentioning the name of this publication) to: Penton/IPC Education Division • Penton Plaza • 1111 Chester Avenue • Cleveland, Ohio 44114 or call: Toll-free outside Ohio 1-800-321-7003; Ohio customers call collect 216/696-7000

X07 Fundamentals of PERT—PERT is used to manage a wide range of programs from simple to complex. The course covers: The basic methodology of PERT, preparing PERT charts for complex projects, developing time estimates for PERT activities, and finding & manipulating the critical path of a project to save time and money. $16.00

X08 Fundamentals of Long-and Short-Range Planning—This book is a self-study course written in the question-response-feedback style of programmed learning. The course presents detailed expansion of each step in long- and short-range planning: becoming aware of opportunities, establishing objectives, defining all premises, determining alternative courses, evaluating them, selecting a course, formulating derivative plans, implementing the plan. $20.00

X05 Management by Objectives—MBO is a management method structured to emphasize what must be done, rather than how it is to be done, leaving plenty of room for creative thinking about solutions. This book, written in programmed learning format, will show you how to establish objectives, set standards for measuring performance, and conduct measurements to determine progress. $16.00

X29 How to Read a Financial Report—This course will give you a better understanding of basic accounting concepts & show how to use financial statements to assess performance and to measure the financial condition of your own operation through the use of "ratio analysis." $16.00

X36 How to Make Business Investment Decisions—This course will help you understand how the relationship between money and time affects management decisions. The course covers: present value concepts, how to use compound interest tables and equations to calculate the time value of money, how to use computed values to compare alternative business investment plans, and how to make the best decision based on the economic factors involved. $16.00

Mail to: Penton/IPC Education Division Penton Plaza • 1111 Chester Avenue Cleveland, Ohio 44114

Please send me the books as indicated below.

Name __________ Title ______ _
Company
Address
City ______ State ______ Zip ______

Charge my: D MasterCard  o Visa  o American Express
Account No. __________________ Exp. Date __________

QTY. Title
Fundamentals of PERT @ $16.00 each
Fundamentals of Long-and Short-Range Planning @ $20.00 each
How to Read a Financial Report @ $16.00 each
How to Make Business Investment Decisions @ $16.00 each
Management by Objectives @ $16.00 each
Fundamentals of Marketing @ $20.00 each

Signature

Progressive Architecture 9:85
Impeccable form.
The significance of attractive, functional lighting cannot be underestimated. The Integralite Designer Series from JW Lighting is designed with this in mind. Serving not just as illumination, but as part of the overall interior design, these imaginative linear lighting concepts help complete the image and mood of the space.

Whatever environment you seek to create, the Integralite Designer Series' variety of styles and colors reflect an understanding of the importance of lighting design to any setting.

Superior function.
From entryways to executive suites, from corridors to conference areas, energy-efficient Integralite designs fit virtually any lighting need. A variety of extruded aluminum architectural profiles and a complete assortment of connectors, diffusers and mounting arrangements provide maximum design flexibility—ensuring that form is not forgotten.

Call or write today for a free, full-color brochure on the Integralite Designer Series. We think you'll find our approach...enlightening.

1-800-255-9520
1-800-833-8371 (In Texas)

JW LIGHTING, INC.
KIDDE

INTEGRALITE DIVISION
P.O. Box 45919
Houston, Texas 77245

INTEGRALITE
Designer Series

Circle No. 380 on Reader Service Card
Specify Da-Lite

Leading architects choose the leading projection screen

Designers of the Harvard University Science Center, the Gulf Oil Building in Pittsburgh, The National Bank of Detroit's Renaissance Center and the Hyatt Regency Knoxville (above) all have one thing in common. All specified Da-Lite projection screens.

For visual impact...from convention centers to the most elaborate computer age audio visual facility...Da-Lite produces screens in all formats and sizes.

Da-Lite's automatic electric Electrol® screens, recessed in the ceiling and operated by remote control, lower and raise unobtrusively to set the stage for a professional presentation. Built-in rear projection and manual wall and ceiling screens offer additional versatility in perfecting the design concept.

Da-Lite, as the nation's leading projection screen manufacturer, provides complete specifications plus size and viewing angle guidelines, picture surface information, wiring diagrams and vital installation basics. To learn more, start with Sweet's catalog (USA: 11.14a/DA, Canada: 11t/DAL). Then write us for the name of your nearest Da-Lite Audio-Visual Specialist Dealer.

Introducing PANTONE® Colors for people and their environments.

It's the all new 1,000 color PANTONE Professional Color System — Color Guide.

A color specification system especially developed for use in every medium, including fabrics, cosmetics, carpets, paints, plastics and ceramics. It's different from the PANTONE MATCHING SYSTEM, which was specifically designed for the printing, publishing and packaging fields.

To develop the palette, Pantone, Inc. obtained color samples from professionals in fashion, cosmetics, architecture, interiors, textiles and product marketing from all over the world.

This color system represents the state-of-the-art in color selection today.

Each color is designated by a number and a name in six languages. The tear-out chip format makes it easy to attach to designs, plans, renderings, specifications or materials. There is also a fan-out color selector for on-site color checking.

Now your color selections can be communicated accurately by phone or telex with no language problems.

Buy the new PANTONE Professional Color System — Color Guide at your artist material dealer now, or call Pantone at 800-222-1149 (in N.J. 201-935-5500).

This is the color tool you asked for.

Now you just have to ask for it.

Suggested Retail Price $125

PANTONE® Setting standards for the world of color.

Pantone, Inc.
55 Knickerbocker Road, Moonachie, NJ 07074 U.S.A.
800-222-1149 except NJ 201-935-5500

*Pantone, Inc.'s check-standard trademark for color reproduction and color reproduction materials.
†plus shipping and handling

Circle No. 352 on Reader Service Card

Circle No. 406 on Reader Service Card
Brunschwig & Fils
75 Virginia Road, North White Plains, New York 10603 Through architects and interior designers.

Circle No. 335 on Reader Service Card
Four Seasons Quality

Why settle for just any glass room addition when it costs no more to have the Top-of-the-Line from Four Seasons. Exclusive Quality Features such as Pow-R-Flyte cooling system, Pow-R-Trak motorized shades in 48 decorator Window Quilt colors, Curv-Along Mini-Blinds from Levolor and new, revolutionary, Total Comfort Glazing featuring Heat Mirror "44 developed for us by Southwall Technologies to "Let In the Light but Keep Out the Heat." So why look at the world through ordinary small windows when you can add on the Window that comes with its Own Room!!! The FOUR SEASONS GREENHOUSE. Get back to nature and open up your home to air, light, sunshine and that Great Outdoor Feeling. It will change your lifestyle and make your home exciting. A perfect add-on for a kitchen, family room, hot tub or spa enclosure, dining area, commercial enclosure, solar collection or any room that needs more light or space. Send for our FREE Color Catalog for ideas.

Remodeling by Experts

The Four Seasons staff of trained professionals is unsurpassed when it comes to remodeling your home. In fact, no other company even comes close to us with over 300 Nationwide Four Seasons Design & Remodeling Centers. Trained and experienced sales, installation and management personnel help make improving your home or business both pleasant and rewarding. At a Four Seasons Center, you can purchase a D-Y-I Kit or get a complete job including design service, architectural plans, site survey, building permits, coordinating of all trades, complete installation or daily assistance, recommendations, insurance, job completion certificate and certificate of occupancy. You can count on Four Seasons for Professional Workmanship.

For Free Color Catalog with location of nearest Remodeling Center: CALL TOLL FREE 1-800-645-9527 / In NYS 516-694-4400 or write: Four Seasons, 425 Smith St., Farmingdale, NY 11735

COMMERCIAL & RESIDENTIAL ENCLOSURES
Franchise Locations Available ©1985 FSSP

Circle No. 368 on Reader Service Card

GUARANTEED WALL PROTECTION

We guarantee our PERMASNAP COPING COVER SYSTEM against water leakage. Period. The secret is a styrene gutter chair at each joint that quietly carries water away.

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

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

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

Available in Canada

See our catalog (73 H1) in Sweets

Circle No. 374 on Reader Service Card

Design Better Swimming Pools With PARA-FLYTE QUALITY DECK EQUIPMENT

Write for Detailed Literature or See Us in Sweets 13.4b/Kd

KDI Paragon Inc.
SINCE 1956 MFRS. OF DISTINCTIVE POOL EQUIPMENT
P.O. Box 256, 12 Paulding St., Pleasantville, N.Y. 10570 • 914/769-6221

Circle No. 382 on Reader Service Card
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. 415 on Reader Service Card
It happens on October 10: The International Design Center, New York, opens its doors for the very first time. We invite you to join us and celebrate this exciting preview of the world's largest, most prestigious design center.

The preview opening of Center Two—one-half million square feet of showroom space in a spectacular atrium building designed by Gwathmey Siegel & Associates—marks the completion of the first stage of the transformation-in-progress of four unique buildings into a true design center offering two-and-one-half million square feet of unparalleled space for the interior furnishings industry. And this October, IDCNY will be filled with exhibitions, openings, seminars and parties.

At Center Two, you'll see the new showrooms of more major companies than at any other design building in New York City, including those of charter tenants Alma Desk, Fixtures Furniture, Howe Furniture, Myrtle Desk and Tuohy. You'll also see product presentations by Artemide, Brayton, Bright Chair, Domus Italia, Fuller Contract Accessories, Helikon, Hickory Business Furniture, IPI/Innovative Products for Interiors, Kinetics, Knoll International, Metropolitan Furniture, Ron Rezek Lighting + Furniture, and Xception Design.

After you've visited the showrooms, you'll want to see the landmark exhibition "The Work of Afra and Tobia Scarpa, Architects and Designers," sponsored by the Benetton Company. The achievements of this Italian husband-and-wife team over the past 25 years are highlighted in a remarkable exhibit of over 70 pieces. The exhibition, including lighting fixtures, furniture, accessories and architectural designs makes its U.S. debut at IDCNY.
Gwathmey, Siegell & Vignelli at IDSA Seminars

Facilities Management

Express Service

Plus Much More!

Parties, Receptions, Events

The International Design Center, New York
2910 Thompson Avenue
Long Island City, New York 11101

Circle No. 378

IDCNY

The International Design Center, New York Office
199 Third Avenue
New York, New York 10002

212-966-2222

Circle No. 378

The International Design Center, New York Office
2910 Thompson Avenue
Long Island City, New York 11101

Circle No. 378

The International Design Center, New York Office
199 Third Avenue
New York, New York 10002

212-966-2222

Circle No. 378
THE LEE JOFA FURNITURE HAS ARRIVED.

Now there is a beautiful new complement to Lee Jofa fabrics. Lee Jofa furniture. Come with your interior designer to see our elegant collection in Atlanta, Boston, Chicago, Dallas, Denver, High Point, Honolulu, Houston, Los Angeles, Miami, New York, Philadelphia, San Francisco, Seattle, Washington D.C., Toronto and London.

Circle No. 390 on Reader Service Card
Progressive Architecture's Official Guide
MOVING SCULPTURE BY PORSCHE. Soft calf's skin suspended between channels of black ebonized aluminum. From the famed sports car design genius of Alexander Ferdinand Porsche, exclusively through Baker, Knapp & Tubbs showrooms and select Baker Furniture dealers. Write for literature.


Circle No. 329 on Reader Service Card

Baker Knapp & Tubbs
A North American Philips Company
Introduction

The 18th annual Designer’s Saturday takes place this year on October 10, 11, and 12. Fifty-six manufacturers (five more than last year; new members include Fixtures, Hiebert, Kittinger, Myrtle Desk, and Zographos), will open their New York showrooms to designers and architects, providing usually desk-and drawing board-bound professionals with the opportunity to see new products firsthand.

The event begins on Thursday, October 10, with Facilities Management Day. Unlike last year, there is no morning seminar. Instead, there will be one-hour presentations in all the showrooms throughout the day. Sessions begin at 9:00 A.M., 10:30 A.M., 1:30 P.M., and 3:00 P.M. Lunch will be served in the showrooms at 12 noon. The day ends with a cocktail reception, 5:30-7:30 P.M., at the AT&T Building, 550 Madison Avenue at 56th Street. The reception is open to facilities executives and designers with $25 admission tickets (available with coupon and through showrooms).

On Friday, October 11, the evening seminar “Critics’ Choice 1985” takes place at the Great Hall of The Cooper Union, Third Ave. at 7th Street, from 5:30 to 9:00 P.M. Author and editor C. Ray Smith will moderate a panel whose members include Stanley Abercrombie, Editor, Interior Design; Owen Edwards, Design Writer, California; Beverly Russell, Editor-in-Chief, Interiors; Michael Sorkin, Architecture Critic, The Village Voice; and Pilar Viladas, Senior Editor, Progressive Architecture. Admission tickets are $10 with coupon or through showrooms. The panel will be preceded by a multiple-image presentation of projects they have selected, and followed by a cocktail reception, sponsored by the A & D Building.

The evening of Saturday, October 12, Designer’s Saturday finishes off with a grand finale and gala reception at the Metropolitan Museum of Art, Fifth Avenue at 82nd Street, 7:00 to 9:00 P.M. There will be a buffet and bar in The Great Hall, drinks and dancing beside the Temple of Dendur, and refreshments and relaxation in the American Wing Courtyard. In addition, partygoers will have a preview of two new exhibits: Liechtenstein: The Princely Collections, and India!, a show of 14th- to 19th-Century Indian art. The $15 admission tickets are available through all member showrooms, or at the Museum on Saturday night.

- A museum and restaurant roundup and information on airlines and hotels offering Designer’s Saturday discounts appears on p. 9DS.

C. Ray Smith

Owen Edwards
Whether you have clients with extensive and integrated computer networks or with an array of PCs for specialized tasks, Series 9000™ systems furniture can support them. Series 9000's new energy management components have the capability and capacity for handling cables and power wiring for every computer system, every brand, every component and every operator. The result: less clutter, less strain, more productivity.

What's more, when Series 9000 furniture is used with ConCentrx—seating designed for the electronic office, productivity is further enhanced.

See Series 9000 and ConCentrx at your Steelcase Regional Office or, contact your Steelcase Representative. For world-wide product, service or sales information, write Steelcase Inc., P.O. Box 1967, Grand Rapids, MI 49501. Or call toll-free 1-800-447-4700.

Series 9000 from Steelcase
The furniture solution for clients with powerful connections.
Facilities Management Day

Speaker/Firm

Rosemary Worrell, President, Worrell Design

Anthony Gallucci, Manager, Furniture Standards, Dean Witter Reynolds

Michael Pinto, Vice President and Chief Operating Officer, ISD, Inc.

Carolyn Brooks, Vice President, Design, ISD, Inc.

Howard Yarne, Independent Consultant

Nicholas Wallace, Facilities Designer, AMF Bowling Products Division

Ann Kale, Lighting Consultant and Designer, Wheel-Gersztoff Associates

James Nuckolls, President, Luxco Limited

Linda Smith & Lucy Pacelli, Design Specialists, Telecommunications, The Wilke Organization

Ward Bennett, Designer, Brickel Associates

Warren Platner, Principal, Warren Platner Associates Architects

Roger Williams, Microcomputer Systems Analyst, Corry Jamestown

C. Jaye Berger, Attorney

Patty Younts, IBD Color Researcher, Design Consultants, Lexington, Ky.

David Wales, Senior Designer, & Joanne Newbold, Vice President, Walker/Group

Jan Grice, National Director of Design & Planning, Price Waterhouse

Henry deCillia, Principal, Henry deCillia Associates

Stephen Binder, Vice President, Facilities Management, Citibank

Marvin Affrime, President, The Space Design Group

Gere Picasso, Staff Manager, Environmental Design & Resources

Robert Brandt, Director of Programming and Facility Management Services, Haines Lundberg Waehler

Anthony Pedalino, Vice President, Materials & Services, NBC

Massimo Vignelli, President, Vignelli Associates

Judy Swanson & Randolph Gerder, Partners, Kohn Pedersen Fox Conway Associates

John Peter Barie, Partner, Swanke Hayden Connell Architects

Time/Location/Subject

10:30, 1:30 & 3:00

All-Steel

Now Really, Who Are We Designing the Office for Anyway?

9:00 & 10:30

Alma Desk

A Positive Approach to Standards Programs

1:30

Alma Desk

When to Use or Reuse Building Standard Materials

3:00

Alma Desk

Alma Showroom: A Case Study in Design

9:00 & 3:30

American Seating Co.

New Ideas in Facility Planning

10:30 & 3:00

Aronas

Using Human Factors to Boost Revenue

10:30

Artemide

Lighting Design in the Corporate Image

9:00

Atelier International

Task Lighting for CRTs

9:00 & 3:30

Beylerian

“Intelligent” Buildings: How to Tailor Telecommunications Systems to Your Real Needs

10:30

Brickell Associates

The Process and Presentation of Furniture Design in the '80s

10:30

CI Designs

The Environmental Impact of Quality in the Workspace

9:00, 10:30, 1:30 & 3:00

Corry Jamestown

The Impact of the CAD System on Reconfiguration, Inventory Control & Installation

1:30

Dunbar

Looking at Interior Design Contracts from Both Sides of the Fence

10:30 & 1:30

GF Furniture

Vica Color: The Ultimate Sales Tool

10:30

Gunlocke

How to Combat “User Indifference”

1:30

Gunlocke

Can You Maintain Diversity Using a National Furniture Contract?

10:30

Harter

Designing the Integrated Office

10:30 & 1:30

Haworth

Developing Corporate Standards

10:30 & 1:30

Helikon

Furniture Selections for a Major Institution: How, When, Where & Why?

10:30 & 3:00

Hiebert

The Work Environment and How it Affects Productivity

3:00

iil International

Building a Corporate Image: More Than Just a Logo

10:30 & 1:30

Intrex

Facilities Management: Coming Out of the Closet

9:00 & 10:30

ICF

Corporate Identity Programs: Do You Need One?

10:30 & 1:30

JG Furniture

The User-Friendly, High-Tech Office Environment

9:00

Kimball & Arte

How Real Estate Trends Create Architecture
<table>
<thead>
<tr>
<th>Speaker/Firm</th>
<th>Time/Location/Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carl Brosius, Mitchell Cohen, Vice President, Griswold, Heckel &amp; Kelly Associates</td>
<td>10:30 Kimball &amp; Arttec The Smart Building &amp; What It Isn't</td>
</tr>
<tr>
<td>Richard Rosan, President, The Real Estate Board of New York, Inc.</td>
<td>1:30 Kimball &amp; Arttec How Real Estate Trends Affect the Buying Power of the Large Corporation</td>
</tr>
<tr>
<td>Moderator: Raymond Steventon, Vice President, KnollOffice. Panel: Margo Grant, Vice President &amp; Managing Principal, Gensler Associates; Bruce Jahnsen, Staff Vice President, Corporate Facilities, Nabisco</td>
<td>10:30 &amp; 1:30 Knoll International Panel Discussion: Movable Wall vs. Dry Wall</td>
</tr>
<tr>
<td>Franklin Becker, Associate Professor, Department of Design &amp; Environmental Analysis, Cornell</td>
<td>10:30 &amp; 1:30 Krueger The Issue in Office Design is Control: Learn How to Share and Manage It</td>
</tr>
<tr>
<td>Brian Kane, Vice President Design, Metropolitan Furniture</td>
<td>10:30 Metropolitan How Color Affects the Interior Environment</td>
</tr>
<tr>
<td>William Brown, Vice President, Design Principal, and Phillip Olson, Vice President, Office Director, CRS Sirrine</td>
<td>1:30 Metropolitan Are Office Products Designed With You in Mind?</td>
</tr>
<tr>
<td>Neville Lewis, President, Neville Lewis Associates</td>
<td>10:30 &amp; 1:30 Modern Mode Designing Offices for Lawyers &amp; Accountants</td>
</tr>
<tr>
<td>Timmy Walker, President, Walker Associates, Inc.</td>
<td>3:00 Myrtle Desk The Importance of Team Interaction for Successful Projects</td>
</tr>
</tbody>
</table>
Top-notch performance by each section assures acclaim in the work space.

We like to think of our company as a perfect circle made up of 4 sections:
- Design and development of product systems and textiles.
- State of the art engineering, manufacturing, and quality control.
- Planning services based on people needs, building and communication technologies.
- Installation and service.

These basic parts of the whole are interdependent at Sunar Hauserman because only a top-notch performance by each section assures acclaim in the workplace, be it large or small, for our architect, interior designer, facility manager, or business client.

Sunar Hauserman's products are unique: movable full height walls, office systems, furniture, collections, and textiles. The systems are compatible one with another. They are skillfully detailed to work well together but avoid repetitive or unnecessary regimentation.

With their decades of experience in the production of responsive products, Sunar Hauserman is expert in environments which support business goals. The company offers virtually unlimited choice: full height walls, panels, and post/panels. These systems have modular, interchangeable components—worktops, drawers, storage units in a wide selection of material, fabric, and finish. The Sunar Hauserman chair and table collections also reflect the company's commitment to design and—in the case of the chairs—to the painstaking research into how people sit, at work and at their leisure.

These together—with Sunar Hauserman planning and installation services—give new dimension to the phrase integrated interior.

May we add your name to our mailing list?

Sunar Hauserman
5711 Grant Avenue
Cleveland, Ohio 44105

Sunar Hauserman
One Sunshine Avenue
Waterloo, Ontario N2J 4K5

Circle No. 426 on Reader Service Card
Orchestration by Design

userman
MYRTLE DESK COMPANY

New York, IDCNY, The International Design Center, Center Two, Second Floor, (718) 706-6600;
Chicago, 1160-63 Merchandise Mart, (312) 527-2540; Boston, (617) 423-1154; Dallas, (214) 233-8954;
Denver, (303) 296-9533; Los Angeles, (714) 772-6230; Minneapolis, (612) 874-1550; San Francisco,
(415) 861-2654; Seattle, (206) 467-8150; St. Louis, (314) 231-1998; High Point, (919) 885-4021.
MYRTLE DESK COMPANY, PO. BOX 2490, HIGH POINT, NORTH CAROLINA 27261

Circle No. 443 on Reader Service Card
Museums, Restaurants & Travel Information

**Museum Guide**

These listings cover the major museums on Manhattan's East Side, a short walk or ride from the hub of Designer's Saturday action. For those with more time, or out in Queens already at the IDC, the **Queens Museum** has a show of contemporary furniture, Material Pleasures: Furniture for a Postmodern Age. Call (718) 392-5553 for information.

**Cooper-Hewitt Museum**, 2 E. 91st St. (860-6898). The Cooper-Hewitt is the design branch of the Smithsonian, housed in the former Carnegie mansion. The two fall shows focus on photography and glass, with Paris Recorded: Théâtre Bonney Collection featuring photos of the woman who founded the first American press photo service in Europe, and The Modern Spirit: Glass from Finland, combining pieces from the Cooper-Hewitt holdings and the permanent collection of the Finnish Glass Museum, on view in the U.S. for the first time.

**Guggenheim Museum**, 1071 Fifth Ave. at 89th St. (360-3500). The Guggenheim has three shows up at 89th St. (360-3500). The Whitney opens a major design show, High Styles: Twentieth Century American Design, in late September. High Styles is the first comprehensive survey of 20th-Century design in this country, and will cover the history of industrial and decorative arts in a series of domestic and office tableaux arranged chronologically. The architecture firm of Venturi, Rauch and Scott Brown will design the settings.

**The Museum of Modern Art**, Madison Ave. at 75th St. (570-3600). The Whitney opens a major design show, High Styles: Twentieth Century American Design, in late September. High Styles is the first comprehensive survey of 20th-Century design in this country, and will cover the history of industrial and decorative arts in a series of domestic and office tableaux arranged chronologically. The architecture firm of Venturi, Rauch and Scott Brown will design the settings.

**The Museum of Modern Art**, 11 W. 53rd St. (708-9400). MoMA's big fall show is Contrasts of Form: Geometric and Abstract Art, 1910-1980. The paintings on display come from a recent gift of 249 works from the Riklis Collection of the McRory Corporation and from the museum's collections. They range from Futurist and Constructivist work of the early part of this century through the Moderns to contemporary practitioners such as Frank Stella, Agnes Martin, and Sol LeWitt. A show of new photography will run concurrently.

**Restaurants**

A very subjective sampling of what's new on New York's thriving restaurant scene. Please call ahead for reservations, hours, credit cards, etc.

The downtown scene's newest superstar is El Internacional, in TriBeCa (219 West Broadway, 226-8131), a tall, fancifully designed space, you can mingle with a mix of celebrities and locals who are busy chowing down on Italian food, or, of course, just mingling. Up the street is the Safari Grill (Third Avenue at 65th Street, 371-9090), which, as its name implies, looks suavely tropical, and specializes in grilled foods. Just around the corner on 65th Street is Café Marina (935-1161), a cool, cleverly lighted interior with Barraganesque overtones and a pleasant Mexican menu.

For those who prefer the quiet of an elegant little restaurant to the ear-splitting din of the usual hangar-sized watering hole, Arcadia (21 East 62nd Street, 223-2900) may be just the place. The food is the new American cooking so popular with young chefs, the atmosphere is civilized, and, as one might expect, the prices are not low.

Finally, no tour of new Manhattan dining spots would be complete without mentioning the Cajun craze. Most of the good Cajun spots are downtown, but the West Side's Memphis (329 Columbus Avenue, at 75th St., 496-1840) is a good uptown alternative. This cavernous, minimalist interior is always packed with an appropriately trendy crowd who are enjoying the restaurant's Cajun (and more general Southern) cuisine, which is very good.

**Discounts**

Fly United or Delta Airlines to Designer's Saturday and save 35%. Call or refer your travel agent to these numbers to get the special rates. Delta customers must book 7 days in advance.

**United**: (800) 521-4041; use Designer's Saturday account number, 5628.

**Delta**: (800) 241-6760; account number U0192.

Four New York hotels also offer special rates for Designer's Saturday: The Barbizon, 63rd St. at Lexington Ave., (212) 838-5700, (800) 223-1020, $95 single, $105 twin; the Drake, 20th St. at Park Avenue South, (212) 521-0900 (800) DRAKENY, $165 single, $165 twin; the Helmsley Palace, 50th St. at Madison Ave., (800) 221-4982, $195 single, $215 twin; the Loews Summit, 51st St. at Lexington (212) 752-7000, $109 single, $120 twin.

American cooking so popular with young chefs, the atmosphere is civilized, and, as one might expect, the prices are not low.
Designed to put people in control of their surroundings, the Syntrax System allows users maximum flexibility for their electronic tools. Problems such as wire management and computer interface can now be solved with people-oriented answers.

Incorporating unique wire management capabilities, Syntrax adds unconventional versatility to a working environment by easily adapting to additional workstations. Through the use of an electronic trough, all wires and cables can be neatly hidden and channeled through linking tops.

The Syntrax System presents a more organized, personalized work area with the addition of an accessory console which accommodates accessories such as paper and telephone trays.

With the addition of the console taskboard, not only is privacy and visual display enhanced, but the elements of color and texture as well.

With Syntrax, workstations can now be carried to new levels of productivity through design. Today, and for the technology yet to come.

To find out how you can put people in control of their surroundings, please write All-Steel, Aurora, IL 60507.
Beauty, elegance and performance in the office
The Cygnia Collection

Haworth captures the beauty and elegance of wood in a fine new furniture system that enhances the most discriminating environment — and responds to the most demanding performer.

With the quality and performance of Haworth furniture, The Cygnia Collection is created in luxurious oak and mahogany wood finishes with soft, radiused edges and fine detailing. Yet it's a system so flexible that it can respond to the needs of an entire organization.

There's beauty...there's character to the Haworth Solution.

Let us show it to you.
1-800-344-2600
Haworth, Inc., One Haworth Center, Holland, MI 49423
American Seating
American Seating features System R, offered as a solution when the situation requires combining office, technical, and laboratory spaces.
Circle 104 on reader service card

All Steel
All Steel has expanded the Syntrax System to accommodate greater visual privacy, a more efficient division of space, and more personalized workstations.
Circle 102 on reader service card

Alma Desk
The Devonshire System combines the adaptability of an open office system with the solidity of traditional styling. The new system is compatible with the 1900 Series office furniture.
Circle 103 on reader service card

Arconas
The A-T series of chairs, designed by Andre Vandenbueck, provides compact seating for lobbies and lounges. The covers can be changed easily for cleaning or redecoration.
Circle 105 on reader service card
Artec
Artec introduces a beveled solid wood top cap in oak, walnut, or mahogany for their office furniture systems. The beveled top cap provides an angular alternative to the radiused top cap.
Circle 106 on reader service card

Atelier International
Club, designed by P.G. Ramella, is a versatile reading lamp with a rotating head, adjustable arm, and frosted diffuser. It is available in dark gray with white base or red with dark gray base.
Circle 108 on reader service card

Artemide
Artemide features the Aton Modular Lighting System, designed by Ernesto Gismondi. The modules, of extruded aluminum with a lacquer finish, are available with fluorescent, halogen, or incandescent bulbs. A variety of connectors and accessories allow maximum flexibility.
Circle 107 on reader service card

Baker Knapp & Tubbs
Baker Contract features the Serif Collection, with classical detailing. The collection includes seating, desks, credenzas, wall units, and reception area furniture, all available in a wide variety of finishes.
Circle 109 on reader service card
Beylerian
A durable chair suited to outdoor or indoor use, the Halo Chair is available in a textured finish as well as a PVC finish.
Circle 110 on reader service card

Brayton
New from the Brayton International Collection is Executive Echelon Casegoods. Executive offers a complete range of products for upper management levels, among them this executive table desk of wood and leather.
Circle 111 on reader service card

Bruckel Associates
The Stave Chair was designed by Ward Bennett with dining or writing in mind. It is hand­sanded and comes in a variety of finishes and fabrics.
Circle 112 on reader service card

Brueaton
The Spider Table is a whimsical occasional table designed by Stanley Jay Friedman. Shown here with a clear glass top and stainless steel base, the Spider Table is also available in Brutone Bronze, or any of 125 colors with a choice of clear or blue­tinted glass.
Circle 113 on reader service card

CI Designs
CI Designs will feature pieces from the Magic Office group designed by Warren Platner. These include a hi-rise credenza, a conference table desk, and seating.
Circle 114 on reader service card
Castelli
Castelli introduces a new textile line selected by GN Associates of New York. The line incorporates many wools and new leathers in a complete upholstery collection.
Circle 115 on reader service card

Corry Jamestown
QQ, a line of office seating created by Robert Taylor Whalen, combines small-scale, durable finishes and modest pricing. Additional QQ products will be introduced at Designer’s Saturday.
Circle 116 on reader service card

Croydon
Croydon introduces D'Elegance, a modular executive wood suite. The eight-piece suite, veneered in cherry, includes a table desk, single- and double-pedestal desks in two sizes, two freestanding credenzas, and a freestanding return.
Circle 117 on reader service card

Cumberland
The Triple Table is part of Cumberland’s new line of lacquered tables from Holland. The three triangular tables are available in a choice of 16 colors, which can be combined.
Circle 118 on reader service card

Davis
Track, designed by Robert Bernard Associates, is a versatile modular seating system. Individual units can stand alone or assemble into complete seating environments, and a wide range of finishes and surfaces is available.
Circle 119 on reader service card
Alma.
IDCNY.

We invite you to visit our magnificent new showroom.
4th Floor/Center Two/Long Island City, New York

P.O. Box 2250, High Point, NC 27261
Architectural Presence

Certain rooms have it; few offices do. No wonder our Ethospace interiors group has caused so much excitement in the design community. It brings the solid presence of architecture into the communicative freedom of open, adaptable office space.

Ethospace walls are faced with modular tiles, any or all of which may be glazed. So they let the light in. And with floor-to-ceiling and three other heights to choose from, the walls themselves let light in—as much as is consistent with the privacy you need. Equally important, they let space in. Now workplaces that were open solely as a means to productivity are open to increased comfort and pleasure as well.

Ethos: the spirit of a culture. Ethospace™ interiors: work environments that reflect the spirit of a culture.

*herman miller*

Zeeland, Michigan 49464

Circle No. 439 on Reader Service Card
The Aton Modular Lighting System
Design: Ernesto Gismondi

Do functions, use, and personnel change frequently in your space? Has the lighting been poorly planned or forgotten entirely? Is your space temporary; are you planning a move or expansion?

Model Pilade low voltage, 50 W PAR 36 spotlamp on track module

Model Sintesi spotlight 1 x 100 W on connection module

Model Pilade low voltage, 50 W MR 16 spotlight on connection module

64" fluorescent module, double tube 2 x 32 Watts with screen diffusor

20" halogen module 1 x 300 Watts with antidazzling grille

4-way connector

90° elbow connector

Sales Headquarters & Showroom:
Artemide, Inc.
New York
150 E. 58 Street, New York, NY 10155
Telephone: 212/980-0710

Regional Offices & Showrooms:
Chicago
851 Merchandise Mart
Telephone: 312/644-0510

Dallas
624 World Trade Center
Telephone: 214/747-6060

Houston
Space 10002
The Decorative Center
Telephone: 713/623-2284

Los Angeles
266 Pacific Design Center
Telephone: 213/659-1708

Model Pilade low voltage, 50 W MR 16 spotlight on connection module
Flexibility Above All

Does your space need more than just regular fluorescent lighting? Do you need lighting for CRT terminals, indirect lighting, potlighting, track lighting, halogen lighting, incandescent lighting, signage, electrical outlets, or loudspeakers?

Finally, would you like a lighting system that, for a change, will enhance the design of your space?

If your answer to any of these questions is yes, Artemide strongly suggests that you take a close look at its Aton Modular Lighting System.

The flexibility of the Aton Modular System lets you adjust its many options to fit the changing needs of your space. Energy efficient and easy to install, the Aton Modular System helps you reduce lighting costs while increasing comfort and productivity.

Artemide can provide for you, free of charge, a computerized layout showing how the Aton Modular System can meet the lighting requirements of your particular space. Would you like a color brochure? Write to Artemide on your letterhead, or circle number 334.
Dunbar
Dunbar introduces the Berne Edition, a new office system designed for both open and traditional office environments. The frame is engineered for total wire management, and is complemented by cabinets and work-surfaces in mahogany solids and veneers.
Circle 120 on reader service card

GF Furniture Systems
Syntop, the result of a collaboration between GF and Stoll/Giroflex of Switzerland, is based on the ergonomic research of Etienne Grandjean. Its patented Multamove mechanism allows the backrest to follow the user’s every move, ensuring comfortable support for any posture.
Circle 123 on reader service card

Gunlocke
Gunlocke introduces a new line of Computer Resource Furniture for Designer’s Saturday.
Circle 124 on reader service card

DUX
Zimba, a shelving system designed by Karl-Erik Cullen, is designed to fit compactly into small office spaces. It is available in white, black, or gray lacquer.
Circle 121 on reader service card

Fixtures Furniture
Rhombus, designed by Gerd Lange, is a complete systems chair, which is stackable and gangable and has optional arms and tablets.
Circle 122 on reader service card

Hardwood House
Hardwood House will feature the E.S.I.-3 Collection of armchairs at Designer’s Saturday. The chairs are available in either open-arm or arm-insert variations and a wide variety of fabrics and finishes.
Circle 125 on reader service card
The Com System—a worthy interruption of space.

It's the handsome IBD Gold Award-winning Com Worksurface and Storage System.

Unlike panel-supported systems, the Com System is free-standing and open so one can enjoy the surroundings. In addition, personnel at multi-station configurations can pass information to each other easily and share VDTs.

An important feature that you can't see is important because you can't see it—the channeling for wire management that's uniquely engineered to make this system easy to put into service.

The Com System was designed by F. Frascaroli and C. Biondi for C.O.M., Bologna, Italy, and is distributed under license by Krueger. Write to Krueger, P.O. Box 8100, Green Bay, WI 54308 or call (414) 468-8100 for details on Krueger's Com approach to workspace.

Circle No. 386
Harter
The Super Task Harter Anthro Chair is intended for executives and managers who do their own information processing. The design, by Jan Kuypers, is based on the posture studies of Dr. A.G. Mandal, and includes a forward-tilt seat control.
Circle 126 on reader service card

Haworth
The Cygnia Collection is a new wood system designed for the flexible environment of the open office. It is compatible with the UniGroup open office system, but is intended for use by image-sensitive businesses such as law firms, banks, and investment companies.
Circle 127 on reader service card

Helikon
Cameo, a versatile chair designed by Eve Frankl, can be used as a swivel, pull-up, or conference chair.
Circle 128 on reader service card

Hiebert
Hiebert celebrates the opening of its new showroom and first-time participation in Designer's Saturday with the introduction of four new furniture systems, including new developments in the IPA system.
Circle 129 on reader service card

Howe Furniture
The Donahue Table, designed by Tim Donahue, is available in a selection of sizes and heights in rectangular and square models, with either columnar legs or a pedestal base.
Circle 130 on reader service card
Warmth of wood
and strength of steel,
a simple solution
to the complex task
of defining space.

Corry Jamestown
Stratus. Designed by Norman Cherner.

Circle No. 400 on Reader Service Card
GREAT OFFICES BEGIN WITH MODERN MODE.
Intrex introduces a racetrack-shaped, multiveneered table as part of the Twentyniners collection of conference, desk, and dining tables. The top features semicircle veneers atop a split drum base.

Circle 133 on reader service card

Tinta, a system of modular, interrelated casegood components, work surfaces, and vertical panels, can be deployed in a number of different configurations.

Circle 131 on reader service card

Working from fragments of documentation, Giandomenico Belotti has created furniture from sketches by Man Ray, Gerrit Rietveld and Theo van Doesburg for ICF's Homages series. The Man Ray chair is of block polyurethane foam (a material that did not exist when he made the drawing), and the frame is of chromium-plated steel.

Circle 132 on reader service card

ICF

JG introduces new components for its Powerflex Desk System. These include an offset CRT corner unit, a radius-edge desk series, conference table, and a series of privacy screens and accessory panels.

Circle 134 on reader service card
Arrow...Cantilever...Pyramid...
Cloverleaf...Beta”... five new base designs for Davis Conference Group. Each was inspired to create a special design theme while still being both functional and versatile.

Conference Group was originally established to help solve the dilemma of designing for the boardroom by offering a number of base designs with multiple top sizes, shapes and edge treatments.

Davis has also added many new accessories, such as lecterns, visuals and wall shelves.

DAVIS CONFERENCE GROUP
A division of
DAVIS FURNITURE IND. INC.
P.O. Box 2065, High Point, NC 27261-2065
(334) 889-2009
Merchandise Mart 11-116A

Circle No. 353 on Reader Service Card
Kimball

Kimball introduces modifications to the 7500 Series executive workstation group. Among the changes are new mirror-sheen catalyzed lacquer finishes.

Circle 135 on reader service card

Kittinger

Kittinger features the Hunt Table Reception Desk with an added element—a new runoff. This extension can be used to accommodate a typewriter or a communications center.

Circle 137 on reader service card

Kinetics

New from Kinetics for Designer's Saturday is the Desk Mounted Screen System, which incorporates the Powerbeam Desk Concept and allows greater privacy and flexibility.

Circle 136 on reader service card

Knoll

The Handkerchief Chair, by Vignelli Designs, is a fiberglass sidechair with a bent steel rod base. Shell colors include red, yellow, white, dark gray, and two light gray Zolotones. It is available in arm or armless versions.

Circle 138 on reader service card
SHELBY WILLIAMS SYSTEMS

Start with the classic beauty and warmth of wood, together with a contemporary palette of fabric colors. Add patented task lighting and designed-in compatibility with the needs of the electronic office. The result is Shelby Williams Systems.

This state-of-the-art design is integrated with the industry's most complete range of products and services to maximize the efficiency and effectiveness of the workplace. From wall panels, to office furniture, to lighting, every element is considered for its effect on the total environment. We call this disciplined approach Intérics, the science of creating environments that work.

To learn how Shelby Williams Systems can put the science of Intérics to work for you, stop by our New York Showroom during Designer Saturday.

High Point Offices: Manufacturing: 1567 Prospect Street, P.O. Box D, High Point, NC 27261
New York Showroom: A & D Building, 150 E, 58th St., Suite 300, New York, NY 10155
Chicago Showroom: Merchandise Mart, Suite 929, Chicago, IL 60654

SOON TO BE DISPLAYED IN SHELBY WILLIAMS WORLDWIDE SHOWROOMS

SHELBY WILLIAMS SYSTEMS
The science of creating environments that work.

Circle No. 427
Aalto Jubilee 1935-1985

Join us in a celebration.

This Designer's Saturday will be the fiftieth anniversary of Alvar Aalto's furniture factory. Founded in Finland in October, 1935, Artek, for the last fifty years, has continuously produced Aalto's furniture from early prototypes for his own buildings to production for world-wide distribution today.

Aalto is unique in being the only twentieth-century master architect to be a partner in the ownership of his factory, guaranteeing quality control and faithfulness to his designs.

ICF is proud to have been the American partner of Artek since ICF’s founding in 1962.
New from Krueger is the Versa chair. Available in arm or armless models, the chair can be stacked six high and can also be ganged. Its relatively small scale makes it useful in tight places.

Circle 139 on reader service card

The Rondo chair, designed by Max Pearson for Lehigh-Leopold, is intended to function as a side chair for conference rooms and office systems. The open-arm version is easily stacked.

Circle 141 on reader service card

Designed by Ernst Dettinger, the Council armchair stacks with ease. The solid beech back and frame are available in a wide variety of finishes.

Circle 140 on reader service card

The 6400 Table Group, designed by Brian Kane, offers a variety of shapes and sizes, ranging from square and rectangular to round and oval. Available finishes are laminate, natural maple, or 24 textured colors from Metro's new color system, MetroColor.

Circle 142 on reader service card

Interchangeable “tiles” in various sizes, colors, and fabrics allow individual workers to create Ethospace® interiors that really suit their needs.

Circle 143 on reader service card
Be confident of a captive audience when the seating is Apta.
The science of Apta solves the problems of fatigue and discomfort brought on by static seating. An "intelligent" chair, adaptable to the weight of the individual, Apta moves with the body and offers support and comfort at all times.
In the 1980's comfort is not merely a convenience, it's a necessity.

Castelli Furniture, Inc.
116 Wilbur Place
Bohemia, New York 11716
Phone 516 589 0707

Showrooms
New York
Chicago
Houston

Extraordinary Concepts/
Extraordinary Furniture
Finally, an office chair that puts ergonomics comfortably to work.

The Anthro™ Chair. A new idea in seating that takes the principle of ergonomics a step further. Extends it. Expands upon it with a unique touch control feature that allows back and seat to respond independently to the body’s ever changing contours.

It’s an active chair for active people. A comfortable chair in which to extend the body. A chair that enhances productivity because it conforms quickly and responsively to even the most subtle shifts in posture and task mode.

It’s a personal chair. And because it offers a sensible range of options it fits the personality of the organization as well. A few basic models support the entire working team by putting people comfortably to work, while putting facility managers comfortably at ease.

Designed by Jan Kuypers. Based on the ergonomic research of Danish physician A. C. Mandal. Shown with Harter’s new adjustable height desk.

Anthro. A hardworking chair for hardworking people.
Four new Office Furniture Systems are currently being developed for introduction by Hiebert. All share simple, refined detailing and a comprehensive standardized scope of line. Design, detail and hardware variations establish the individual character of each line and an extensive new finish and textile program, integral with the new systems, enhances the design possibilities.

For more information on Hiebert’s new directions in Office Furniture Systems, please contact your nearest sales manager.

The new systems will be displayed during Designer’s Saturday at Hiebert’s New York Showroom, 155 East 56th Street, between 3rd Avenue and Lexington.

Hiebert, Inc.
P.O. Box 6266
19801 S. Santa Fe Avenue
Carson, California 90749
Telephone (213) 603-0441
Modern Mode
The Cadent desk, part of a collection of casegoods and coordinated seating, is designed by William Sklaroff. The line is available in oak, walnut, mahogany, cherry, or maple woods, and in 14 standard finishes.
Circle 144 on reader service card

Myrtle Desk
A walnut bookcase unit with four hinged doors, designed as a top unit for credenzas, is a new addition to the 400 Sedgefield Collection for Designer's Saturday.
Circle 145 on reader service card

Harvey Probber
Skyline seating adapts Art Deco skyscraper motifs to the chair. It is molded of self-skinned foam over an integral welded-steel frame, and upholstered with synthetic down.
Circle 147 on reader service card

Pace Collection
The Trio side table consists of two surfaces supported by three lacquered spheres and three vertical posts. The assemblage was designed by Leon Rosen and is available in a wide variety of sizes and finishes.
Circle 146 on reader service card

Reff
Reff features new developments for System 6, an integrated system available in both wood and laminate finishes. It can be specified as free-standing, panel-hung, or tandem.
Circle 148 on reader service card

Shaw/Walker
The Tempo 3 Radius open office system has been revitalized for Designer's Saturday. Functional changes and design enhancements, suggested by users and designers, have been incorporated into the system to make it more flexible and responsive to the needs of users.
Circle 149 on reader service card
Kinetics is thinking:

Dallas

The Dallas Stacking Chair: is there another that looks this good, is as comfortable, or comes in 420 different color combinations? Nope.

Kinetics
be inclined to agree. We believe that after you have inspected our presentation, you will

of corporate needs and tastes. Virtually unlimited solution to any set

contemporary design, provides a combined with quiet elegance and

a new textile program – all of this,

three finishes, fifteen finishes colors, three edge

and four metal options and finishes. Then ever, fifteen

options, a wider spectrum of options

important office environment project.

objective decision for your next

technical data you need to make an
dimensional, processes, and the

about our manufacturing capabilities,

will give you detailed information.

Professional representatives

manufactured. Of the finest office furnishings ever
displayed may be representative
guest for excellence. The pieces

are furnishings that are the

Presented at Designer's Saturday

Excellence

Pursuit of
Paul Letarouilly’s three volume masterpiece “Edifices de Rome Moderne” condensed into a single hardbound volume.

Progressive Architecture

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 DeFelice
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 7% Sales Tax.

August 1985 ........ Rogers in the U.S./Morphosis
June ................ Paul Letarouilly at Rice/Energy design/Superinsulation
May ................. Computers in architecture/Furniture awards
April ................ Pelli at Rice/Energy design/Superinsulation
March .............. Volvo Headquarters/Hospitals/Elevators

NEW *

1 Edifices de Rome Moderne
by Paul Marie Letarouilly
366 pp., illus. . . . . $55.00
Paul Letarouilly’s masterpiece of 1840, which took thirty-five years to complete includes 354 plates showing plans, sections and elevations as well as perspectives and large-scale details of the most important and notable buildings in Renaissance Rome. 3’ x 2’ map of Renaissance Rome included. Circle B601 under Books.

2 Computers in the Architectural Office
by Natalie Langley Leighton
192 pp., illus. . . . . . . $25.50
This lavishly illustrated volume shatters the myth that architect-designed houses are more costly than developer-bounded 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 B602 under Books.

3 Structural Systems
by Henry J. Cowan and Forrest Wilson
256 pp., illus. . . . . . . $16.95
This is a comprehensive guide to preliminary structural design. It uses 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. . . . . . . $25.50
Written to foster understanding of design concepts, this rich source of architectural prototypes 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, or in actual design, Circle B604 under Books.

5 Affordable Houses Designed by Architects
Edited by Jeremy Robinson
168 pp., illus. . . . . . . $39.95
This lavishly illustrated volume shatters the myth that architect-designed houses are more costly than developer-bounded 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.

6 Earth-Sheltered Habitat History, Architecture and Urban Design
By Gideon S. Golany, Ph.D.
294 pp., illus. . . . . . . $32.50
This lavishly illustrated volume shatters the myth that architect-designed houses are more costly than developer-bounded 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 B606 under Books.

7 Design and Planning of Swimming Pools
By John Dawes
284 pp., illus. . . . . . . $32.50
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 techni-
Shelby Williams Systems
Shelby Williams Systems introduces a new addition to the System 2 group of open office furniture—System 2/SL. It features single-section, wood-capped panels, hang-on capability and complete compatibility with all System 2 components.
Circle 150 on reader service card

Steelcase
Steelcase introduces a new collection of electronic support furniture—the 8800 Series. The new line is a group of freestanding, modular components and accessories, featuring a selection of curved table tops that provide ergonomic benefits.
Circle 151 on reader service card

Stendig
Stendig presents the Bellini chair, an automatic ergonomic office chair from Vitra. It comes in three versions: Persona, the standard model; Figura (shown), completely fabric-covered; and Image, the executive version.
Circle 152 on reader service card

Stow & Davis
The Canto Collection, designed by Norman Dieckman, focuses on the need to accommodate computer components in the workplace. Credenzas come with a choice of four automation storage packages. Canto is available in four standard veneers.
Circle 153 on reader service card
Per f o r m a  Seating. Furniture for Today's Business Environment™

A new expression for Gunlocke. A new resource for the environment where seating comfort and performance are of particular significance.

Per f o r m a. Accomplishing in both open and private spaces what the name implies.

Per f o r m a™

The Gunlocke Company  Wayland, New York 14572  1-800-828-6300

Circle No. 371 on Reader Service Card
Sunar Hauserman
Niels Diffrient's Jefferson chair is featured at Designer's Saturday, along with the tensil lighting system for RACE. The lighting is the result of a collaboration between Nicholas Goldsmith of FTL Associates, Peter Barna of Light and Space, and Sunar Hauserman.
Circle 154 on reader service card

Thonet
The Snodgrass Interlock Lounge System, designed by Warren Snodgrass, is a fully upholstered lounge seating system with chair, bench, two-seat, and three-seat units.
Circle 155 on reader service card

Vecta Contract
The Esprit Tables series is a group of conference work tables designed by William Raftery. The conical foot conceals a caster and nylon cup, and the legs are clad in foam, which is available in 13 Vecta thermoset colors.
Circle 156 on reader service card

Westinghouse Furniture Systems
Westinghouse Furniture Systems will showcase the Specials Program at Designer's Saturday. The West Group executive workstation, with wood veneer cabinets and work surfaces, is available through their catalog.
Circle 157 on reader service card

Zographos
The Cinnamon Chair, designed by Nicos Zographos, is a pull-up/dining chair. The carved frame is natural-finish cherry.
Circle 158 on reader service card
A crisp design by Fred Scott of Hille which combines functional comfort with a look reflecting today's corporate style.
toby ... see it at designer's saturday

design: casala/owsld j. beck

atlanta 404/231-0185  boston 617/423-0040  chicago 312/822-0711
dallas 214/747-7130  denver 303/628-5500  houston 713/622-2165

los angeles 213/652-5450  miami 305/233-8637  minneapolis 612/872-0510

new york 212/371-6131  st. louis 314/241-6431  san francisco 415/984-3801

Circle No. 332 on Reader Service Card
RHOMBUS™

A new standard of design excellence. This inspired new seating system by Gerd Lange is the newest addition to the Fixtures Furniture Collection. Revolutionary in concept, encompassing more than striking beauty, more than unequalled function, RHOMBUS establishes a new class, a class by which all others will be judged. Judge for yourself at Fixtures new showroom/IDCNY Center 2, 6th floor, on Designer's Saturday.

FIXTURES FURNITURE

1642 Crystal, P.O. Box 6346, Kansas City, MO 64126-2825
800/821-3500 • 816/241-4500, Telex: 434218 Fixtures KSC
PROGRESSIVE ARCHITECTURE'S SIXTH ANNUAL COMPETITION

International Furniture Competition

WINNING PROJECTS TO BE DISPLAYED AT MAJOR INDUSTRY EVENTS

PROGRESSIVE ARCHITECTURE announces the sixth annual competition recognizing outstanding furniture and lighting design proposals, not yet being marketed by any manufacturer as of entry deadline, January 16, 1986. 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 1986 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 ceremony 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.

SUBMISSIONS are invited in all categories including chairs, seating systems, sofas, tables, desks, work stations, storage systems, lighting, beds, and miscellaneous furniture pieces.

THE JURY FOR THIS COMPETITION
Ralph Caplan, New York, author, editor, critic.
Paul Haigh, principal, Haigh Space Ltd., New York, architect and furniture designer.
Perry A. King, principal, King Miranda Associates, Milan, Italy, industrial, furniture, lighting, and interior designer.
Margaret McCurry, principal, Tigerman Fugman McCurry Ltd. Architects, Chicago, Ill., architect, interior and furniture designer.

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.

DEADLINE FOR SUBMISSION
JANUARY 16, 1986
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.

<table>
<thead>
<tr>
<th>ENTRANT: ADDRESS:</th>
<th>ENTRANT: ADDRESS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>DESIGNERS RESPONSIBLE FOR THIS SUBMISSION</td>
<td></td>
</tr>
<tr>
<td>(identify individual roles if appropriate):</td>
<td></td>
</tr>
<tr>
<td>I confirm that the attached entry meets eligibility requirements (paragraph 1-3) and 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).</td>
<td></td>
</tr>
<tr>
<td>SIGNATURE NAME (typed)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CATEGORY:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>FURNITURE COMPETITION</th>
</tr>
</thead>
</table>

Progressive Architecture
P.O. Box 1361, 600 Summer Street,
Stamford, CT 06904

(Receipt)
Your submission has been received and assigned number:

<table>
<thead>
<tr>
<th>ENTRANT: ADDRESS:</th>
</tr>
</thead>
</table>

ELIGIBILITY
1 Architects, interior designers, industrial designers, and design students from all 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.

<table>
<thead>
<tr>
<th>SUBMISSION REQUIREMENTS</th>
</tr>
</thead>
</table>

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. PA will not accept submissions with outstanding custom duties or postal charges. 8 Drawings(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. PA 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, 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 16, 1986. 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 16. Hand-delivered entries must be received at street address shown here by 5 p.m., January 16.

ADDRESS ENTRIES TO:
International Furniture Competition
Progressive Architecture
600 Summer Street
P.O. Box 1361
Stamford, CT 06904
Make the color in your mind's eye...reality.

Take a closer look. Discover what makes Bigelow's extraordinary Corporate Concepts Collection™ an unprecedented achievement in woven commercial carpet. Our four inspired patterns are enhanced by the endless colors from nature's palette. And this offers you complete freedom of design.

There's no better time to find out how our 150 years of manufacturing expertise can help you achieve your contract goals. Let Bigelow bring your ideas to life, creatively.

Bigelow®
Reflects your imagination.

Selected from the Corporate Concepts Collection, top to bottom: Beige Tint, Crusader Blue, Wild Mint, Patterns, across: Islands, Suede, Cubes, Accents.

Bigelow Sanford, Inc.
Box 3089
Greenville, SC 29602

Circle No. 310 on Reader Service Card
The Noraplan Flooring System
Exciting Choices in Institutional Flooring


Choose from Solid, Marbled and our exclusive Duo patterns in 26 standard colors and color combinations. All three styles can be coordinated for exciting visual effects.

The Noraplan Flooring System perfectly coordinates function and beauty . . . all in 100% synthetic rubber. Exciting Choices in Institutional Flooring . . . Only from Nora Flooring, #1 in the World.

For more information on the Noraplan Flooring System, write: Nora Flooring, 4201 Wilson Avenue, Madison, Indiana 47250 or call (812) 273-1852.

Circle No. 404 on Reader Service Card

Call Sweet's BUYLINE® 800 toll free
noraflooring

© Nora Flooring 1985

Legenday of the Freudenberg Group
Kostof's History

Does architecture have a history? If so, what are its limits? Such a question might not sound so naïve in our re-historicizing era. We have learned to recognize the very concept of history as a 19th-Century attempt to make sense out of a confusing patchwork of histories. But we also seem to have abandoned most workable definitions of architecture. Spiro Kostof thinks that there is such a thing as architecture, and such a thing as architectural history. He teaches at the University of California, Berkeley, and believes that there is a market for it, so they gave him ten years and the resources to produce a massive textbook, entitled A (note: not "the," or "a new," or "an alternative") History of Architecture: Settings and Rituals.

What, then, is this particular architectural history? Is, as Kostof tells us, "architecture, as the title of his book says," "...a history of settings and rituals," "... both less and more than a grand tour." Kostof promises us a history of architecture firmly embedded in its social and spatial context, resplendent with all the powerful imagery and spatial excitement that built structures at their best have had to offer. He delivers on this promise.

He also promises not to make the mistake of ignoring the vernacular and non-European designs. To this promise he pays lip-service by dismissing 20 centuries of Chinese architecture, for instance, with such sentences as: "Linearity and axiality—these were the operative principles of Chinese design, or by summarizing Gwendolyn Wright's brilliant study of antiarchitectural impulses in American architecture and their class- and sex-based suppression with a short, though well-written, paragraph. His reasoning is a self-fulfilling analysis: "On the other side, peoples ignorant of Roman technology lived simple lives that made only the gentlest demands on natural resources and left the land without permanent markers. That is why it is hard to recover their traces." His unspoken definition of architecture, which might have something to do with making demands on resources and turning them into something that endures, necessitates his dismissal of all non-Europian designs.

He avoids previous definitions, long since proven to be straitjackets that might provide other than spatial limits. When pressed, though, he does not, as in his cursory treatment of non-Western architecture, define his terms very clearly. "Architecture," he says, "is nothing more or less than the gift of making places for some human purpose. . . Structure in this process is no more essential than texture or decoration or space." So what is essential, and what is that "gift"? Sometimes it is "the collective memory of the Eastern Mediterranean land" that allows for the making of structures whose meaning is guaranteed by precedent. "Sometimes," he says, "... inspiration, in Wright's case at any rate, was of the most fundamental architectural sort, with no concession to decorative recall." Architecture as memory, inspiration, fundamental archetype. Such phenomenological terms might sound familiar, but they do not clarify what architecture is.

To Kostof's credit, he does show us what architecture looks like, and how it is made. His case studies of great buildings, whether the Speyer Cathedral or the University of Virginia, are clear, concise, and well illustrated. He has a great knack for condensing; in his paragraph on Jefferson, for instance, the work of Vincent Scully in American Architecture and Urbanism, Lewis Mumford in The South in American Architecture, and Manfredo Tafuri in Architecture and Utopia are compressed into a paragraph that is also a piece of clear, descriptive prose. His summaries of Rykwert, Summerson, and Giedion are equally eloquent and well used. An easy answer might therefore be that this volume is no more than a summary of current opinions on architectural history applied to case studies of what are generally considered to be the finest pieces of that craft created in Western Europe.

The only question remaining then might be what the use of such a volume might be. A History of Architecture is obviously not a grand rewriting of architectural history according to a thesis that redefines our definition of the field. The book is too large and discursive to serve as an adequate textbook (at least for this teacher of architectural history), and too small and discursive (and inadequately footnoted) to be a serious reference book. Yet it is also not a catalog of pictures, names, and dates in the manner of Banister Fletcher. I will stick with the excellent series of specific volumes on specific time periods by E. Gwennlwyd Owen, or the splendid✲
the subtitle of the volume, *Settings and Rituals.* It must, though, be gathered from scattered hints throughout the volume. In a good structuralist manner, there is a deep structure here, which is the significance of this book, and perhaps of all of architecture and architectural history. In Chinese architecture, he says: "... it is the ritual and the diagrammatic plot that endure, not the actual physical structure." Thus the ritual, the way in which a building itself structures its use, can be retained in memory and can form the basis for enduring form. Similarly, "... all public architecture ... has significance beyond its utility. The user brings to it, and therefore takes from it, much more than the material form warrants." Function and form are subsumed by the manner in which they represent "the pageantry of human endeavor."

The unspoken final definition utilized by Kostof is that only the paradigms, the most dramatic and expressive acts of humanity, form architecture. Painting, sculpture, and writing are by implication less able to ritualize our actions into social settings. Nonexpressive architecture, such as some vernacular, is also inferior and gets short shrift. *A History of Architecture* is Kostof's argument for the history of architecture as a series of paradigmatic actualizations of human action, which crystallize civilization (polity, or culture) and then float above them into some Parthenon. Louis Kahn and Frank Lloyd Wright are clearly the author's favorites, because their designs invented their own institutionalized rituals and settings. Of Wright he says: "... Architecture for him was an institutionalized metaphor, and the institutions he honored were timeless ones." Similarly, Kostof's book is both ahistorical and antiarchitectural in its effort to seek its significance beyond the built structure.

Kostof is tentative about the current crop of accepted masterpieces: "... our architecture may be content to reflect our tolerant, salvation-shy, conservative outlook. We will know, in good time." Presumably, after the functionalist and ideal definitions of Modernism, the romantic and linguistic definitions of Venturi, Rowe, and Scully, and the scholastic history of Frampton and Stern, Kostof's ritualistic maxims will one day endanger their own adequate architectural paradigms.

L.A. Guides

**The City Observed**

For visitors to Los Angeles, as well as for many of its residents, the best known parts are often those glimpsed from the freeways or reached from their off-ramps. Quite reasonably, as this new guide contends, L.A. (the name is usually abbreviated, unlike that of other American cities) is not so perceivable as a set of places or neighborhoods as it is as a collection of theme parks that terminate or punctuate a series of rides. Although this concept may be debatable, its usefulness as a way of organizing a guide to the architecture and landscapes of this megatropolis is obvious. At 421 square miles, L.A. is not imaginable as a whole whose parts have a logical sequence. [continued on page 238]
THE VOGUE COLLECTION. A downpour of today's reigning favorite solids, including nine new laminate selections chosen with designer input. Stocked in popular sizes in Textured Finish* with Nevamar's exclusive ARP SURFACE® to keep them looking new longer. Expect new rainbows of color from Vogue in the days ahead...as the climate of design changes. For samples, call 1-800-438-6380. In Maryland, call 1-301-569-5000. Nevamar Corporation, Odenton, Maryland 21113.

Circle No. 405

*Also available in Glossie Finish without the ARP SURFACE.
What Moore and his coauthors have done is to define the parts and the boundaries, some of which lie outside the city limits but are part of the mythological L.A., and then “conflate” them, as Moore puts it, into a city that can be vividly experienced, even if it remains somewhat a state of mind.

Though the implication is that this guide should be a car companion, like all good travel literature it is great armchair reading. Among the many memorable descriptions that could be cited are those for the Mission Inn in Riverside, Bullock’s department store on Wilshire Boulevard—in fact, the whole section on Wilshire—the Burbank Studios, Frank Gehry’s house, and the freeways themselves. Moore’s observations twinkle with a degree of wit that causes frequent giggles and even bursts of laughter—a rare thing in writing over the years will recognize his enthusiasms and biases. Not that he originated all of them. As he points out, Noel Coward observed of L.A., “There is always something so delightfully real about what is phony here. And something so phony about what is real.” Moore’s special interest here is in “pushing around notions of the limits of reality,” and this mildly revisionist attitude, in addition to his talent as a wordsmith, makes the book well worth reading. Many aspects of L.A. that have been written about at length elsewhere are encapsulated with jewel-like precision. Take, for example, the kind of exemplary background, and often great foreground, architecture that Southern California is noted for. Moore has a succinct prescription for this Mediterranean pastiche: “1) a number of intimately scaled structures, which 2) constitute a simple, strong place with 3) an interesting sequence of small- and middle-sized spaces, with 4) simple walls on which dance the shadows of lush plants and 5) a little bit of fascinating ornament.”

Although Moore’s enthusiasm for Disneyland seems unlimited, he does not endorse all of the L.A. make-believe so unqualifiedly. The Getty has somehow been uglit half way in the local reversal of the real and the phony. . . Many knowledgeable people love it; others loathe it. Some of us figure that if we could just put a finger on exactly what is the matter, half the problems of our time might suddenly come clear.” Many people feel that the above description could be applied to Los Angeles in general. It will be a test of the authors’ persuasiveness if, observing the city through their eyes, skeptics are converted to a new perspective and not merely confirmed in their worst suspicions. 

Sally Woodbridge

Architecture in Los Angeles
A comprehensive guide to the man-made environment of Los Angeles, this volume is even more focused than the authors’ 1977 Guide to the Architecture of Los Angeles and Southern California (now out of print). David Gebhard, professor of Architectural History at the University of California, Santa Barbara, and Robert Winter, professor of History at Occidental College, Los Angeles, were also among the authors of the 1973 Guide to Architecture in San Francisco and Northern California. They guide the reader to famous buildings, as well as back streets and alleys, pointing out the city’s little known treasures, classical monuments, and tacky copies. The book contains an introductory essay, over 2000 descriptions of buildings, notes on city history, freeways, murals, and historical preservation, a comprehensive bibliography, and a photographic history. The authors of The City Observed, reviewed above, dedicate their book to Winter and Gebhard, without whose guide, they say, they “would have been lost.”
Anso IV® nylon.
The one carpet fiber to meet
every commercial demand.

There are thousands of stories in any big city, and one carpet fiber that's right for each floor. No matter what the activity, the outstanding beauty and built-in protection of Anso IV nylon will more than meet the demand.

- Active, effective, soil and stain resistance chemically built into the fiber to last for the life of the carpet.
- More effective maintenance reduces problems, disruptions and costs.
- Rigid construction specifications, tested and certified, backed by a 5-year warranty.*

For assured performance, limit your specification to “Anso IV nylon.”

For further information and sources, write or call:
Allied Fibers, Contract Technical Specialist, P.O. Box 31, Petersburg, VA 23804, (804) 520-3599, (800) 992-9922.

*See Warranty label for details.
Progress Lighting. The single source for the broadest range of commercial lighting fixtures.

Track systems which include new 120V MR-16, 12V MR-16 and PAR-36/46 lampholders. Recessed fixtures which in addition to HID, fluorescents and 12V MR-16, also offer the new 120V MR-16 light source. Plus "Non-destructibles", energy saving fluorescents, exit lights and decorative fixtures. All from a single source. All engineered and tested to professional standards. All UL listed and manufactured to deliver high-efficiency photometric performance.

Progress Lighting enhances your creative solutions to design challenges. We prove it every day on lighting jobs across the country. We maintain inventory in six regional warehouses and deliver through our nationwide network of stocking distributors.

When it’s time to look at lighting, look at Progress - the single source. Call the Sweet’s BUYLINE for your Progress Representative (800-447-1982) (in Illinois 800-322-4410).
“SD” (Space Design) made its debut in 1965 as a comprehensive monthly magazine on architecture, urban problems and fine arts which was unique in the world and led the modern design. Since then “SD” has been highly praised by many people in every quarter of society and now established an unshakable standing in the fields of architecture and design.

It seems to be attributed to overwhelming support of the wide-ranged readers who strongly sympathize with the magazine’s original policy and novel editing — a posture to pursue untiringly and comprehensively the design problems of now-a-days demanded by the age of dynamic urbanization.

“SD” tries to advance further by making its articles richer in contents which focus their attention on the methodological, technological and aesthetic themes of modern architecture, city and fine arts.

The text of “SD” is in Japanese but carries summary in English of some feature articles, too.

Selected back issue

8401 Arata Isozaki 1976-1984  
Sold out

23 works including Tsukuba Center Bldg. by Isozaki, with notes by the architect. Full English texts.

8402 The Arts and Crafts Movement andLate Nineteenth Century British Architecture ¥2500

Design: D. Rams and F. A. Porsche

8404 Gardens : Wonderland of Contrivance and Illusion All the major gardens in Europe and U.S.A. English texts.

8405 L. A. Modernism ¥2500

Including the interview with E. McCoy. English text.

8406 The Artist Le Corbusier : Lithographs ¥2500 and Etchings ; Columbus, Indiana : Museum of Modern American Architecture

8407 Art Nouveau : Capturing the Magic ¥4000 of Dim Space All the major Art Nouveau architectures in Europe. Photographs by Keichi Tahara. 116 pages including 48 color pages.

8408 Mario Botta ¥2500

8409 Hisao Koyama : The Three Books ¥2500 of Architecture Hisao Koyama's Composition Book introducing his works. English text.

8410 James Stirling : New State Gallery ¥2800 Stuttgart ; Robert Venturi : Venturi Collection of Knoll International

English texts by James Stirling and Robert Venturi.

8411 Achille Castiglioni ¥2500

Recent Projects by Kohn Pederson Fox Associates.

8412 “SD Review, 1984” ¥2500

18 regular entries, 1 special entry.

8501 HIGH-TECH ¥4300

Introducing the prominent persons and works in HIGH-TECH architecture, including C. Eames, J. Prouve, F. Otto, B. Fuller, R. Piano, N. Grimshaw, T. Farrell, R. Erskine, etc. English texts.


Please enter my subscription to Space Design (SD)

Starting in __________________, 1985

☐ new subscription

☐ 12 issues ¥30,000 (seamail postage included)

☐ 24 issues ¥50,000 (seamail postage included)

Please register my order for the following back issues of SD:

Name

Profession

Address

Signature

The amount is being sent in advance by:

☐ international money order

☐ enclosed check

☐ bank transfer
Hardcover edition

Seiichi Shirai ¥4500
7 great works of Seiichi Shirai, a great master architect of Japan.

Arata Isozaki ¥4500
28 great works of Arata Isozaki with notes by himself. Chronological review. Writings by H. Hollein.

Arata Isozaki 1976-1984 ¥5300
23 works including Tsukuba Center Bldg. by Isozaki, with notes by the architect. Full English texts.

Kisho Kurokawa ¥4500
Extensive works of Japanese metabolism, with writings by C. Levi-Strauss, etc. Full English texts.

Fumihiko Maki ¥4500
Selected works—architecture and urban design—of Fumihiko Maki, with writings of Philip Drew, Maki, etc. Full English texts.

Kenzo Tange ¥5000
58 architecture and urban designs of Tange, selected by himself. 202 pages. Full English texts.

Kenzo Tange 1977-1983 ¥5300
1977-83, 21 architecture and urban designs of Tange. 218 pages. Full English texts.

Masako Hayashi ¥4500
All works of Japanese female architect. Full English texts.

Kiyonori Kikutake ¥4500
All the major works of Japanese metabolism of Kikutake and his writing. Full English texts.

Tadao Ando ¥4500
Selected works and drawings of popular Japanese young architect. Writings by Y. Futagawa, T. Ando, etc. Full English texts.

Shin’ichi Okada ¥4500
The Supreme Court, Metropolitan Police Department, etc.

Sutemi Horiguchi ¥4500
Organization of architecture and garden. Major works of Japanese pioneer of modern architecture. English texts.

Extra edition

This is a de luxe edition for keeping of the feature part reproduced from the regular edition of "SD" magazine.

Alvar Aalto ¥4500
All the major works including Finlandia Hall, Villa Carre etc. Writings by Juhan Pallasmmaa, Michele Merckling. With English summary.

Carlo Scarpa ¥4500
Great work of Italian maestro covering architecture, furniture, and industrial design. With English summary. 162 pages.

Kim Swoo Geun ¥4500
All the major works of distinguished Korean architect. English texts.

Andrea Palladio ¥4500
31 works of Palladio by color photos and drawings. 1 Quattro Libri dell’ Architettura. 170 pages. English summary.

Gio Ponti ¥3500
Special issue edited by Lisa Ponti in memory of her father. Writings by L. Ponti, Alessandro Mendini, etc. Full English texts.

I. M. Pei & Partners ¥4500

The Whirlpool : ¥4500
Post-Modernism-Young American Architects. Works and projects of 50 young American architects.

Erik Gunnar Asplund ¥5000
All the major works including Woodland Cemetery. Dramatic Skandia, Gothenburg Law Courts, etc. With English summary.

Art Deco in New York ¥5000
About 80 Art Deco architecture. The Art Deco architectural map and list of New York City.

Gardens : Wonderland ¥4700
Of Contrivance and Illusion
All the major gardens in Europe and U. S. A. including Villa d’Este. Versailles, Schloss Schonbrun, Alhambra, Stourhead, etc. English texts.

Please register my order for the following hardcover/extra edition of SD :

The amount is being sent in advance by :

☐ international money order
☐ enclosed check
☐ bank transfer

U. S. dollars, Sterling pounds, West German marks, Swiss francs and French francs equivalent to the above Japanese yen prices are acceptable.

Payment should be made in advance by mail transfer to our bank:
The Shimbashi Branch of the Kyowa Bank, Co., Ltd.,
account number 514936 in the name of Kajima Institute Publishing Co., Ltd.

Send your payment made payable to :
Subscription Department
Kajima Institute Publishing Co., Ltd.
5-13 Akasaka 6-chome, Minato-ku,
Tokyo, 107, JAPAN
Belgian linen's variety of textures and colors offer contract and residential applications a unique warmth and richness. All wallcoverings have a class A Flame Spread Rating in accordance with the ASTM-E-84 tunnel test. For distributors call or write Linen Hall II, 104 W. 40 St., NY 10018 (212) 221-0800.

LINEN HALL II
BELGIAN LINEN WALLCOVERINGS

Circle No. 347 on Reader Service Card
Some things just naturally work well together.
Procter & Gamble World Headquarters

The new corporate office complex for the ubiquitous soap company makes a major contribution to the form of its city, not only with its elegantly sculptured twin towers, but with a two-block-long public garden as its entrance. Inside are airy, marble-lined lobbies and uniquely organized work spaces—all with the elegant detail for which Kohn Pedersen Fox is justifiably noted.

Two apartment developments

Economical low-rise, market rental apartments can be given fine architectural distinction, as in these examples: one in Evanston, Illinois, by David Hovey, the other in Tempe, Arizona, by Joseph Valerio.

Technics: Below-ground Technology

All of our sudden basements are testimony to the difficulty we have keeping out underground water. The products exist; what is needed is the knowhow.

P/A in November: Preservation and Reuse

P/A’s annual special issue on this subject will include generous coverage of government policy, generic design issues, and individual examples ranging in scale from small to vast. Technics will take up replacement materials.
MAKING WORK SPACE WORK.

We see the modern office the same way you do. Simple. Clean. Coordinated. And that's why we've become the number one source for decorative finishes that bring together partition walls, load bearing walls, and a variety of metal and wood furniture elements into a unified office interior. Borden offers the widest choice of colors, textures, and patterns in metal and wood vinyl laminates and wallcoverings in the industry. Applied to the substrate of your choice, they make the work space work. Contact your Borden representative soon. Together we'll bring a fresh new focus to the office environment. COLUMBUS COATED FABRICS, Division of Borden Chemical, Borden, Inc., Columbus, Ohio 43216. Phone: (614) 297-6060.

GUARD* DECORATIVE FINISHES
Dorsal ESD Chair

Two years ago, a semiconductor manufacturer asked Krueger for a version of its Dorsal chair that was suitable for use in a clean-room assembly area where control of dust and static electricity is an important concern. This request alerted Krueger to the need for a chair possessing static dissipation characteristics compatible with the most stringent clean-room standards. The result is the Dorsal ESD chair.

The chair’s shell is of polypropylene blended with an additive that “migrates” to the surface of the shell and creates a conductive surface. In addition, the chair is upholstered with Gore-Tex, a material designed to control static build-up and filter particulate matter from the interior of the chair. The chair’s structure, when used in conjunction with a conductive floor and the optional grounding chain, is designed to aid in dissipation of static electricity.

Fire-Safe Lever Handles

Lever handles have come to replace door knobs in public buildings, as they are easier for handicapped persons to operate. But the use of levers on fire doors creates a possible hazard; there is a danger that, under pressure from a squirtling fire hose, they might give way and allow the fire to spread.

Fusible link inserts, designed to melt at a certain temperature and disengage the lever from the spindle, prevent the door from opening under pressure. Baldwin Hardware’s design goes one step beyond. The fusible link is in the lever trim. When the link melts, only one side of the door becomes inoperable. People trapped in a high-rise building have the option of escaping via a door, while firefighters are not in danger of getting caught in an air trap should a fire door open accidentally.

Joanna Wissinger

Circle 100 on reader service card
New Products and Literature

The Ambassador chair collection is available in high- and low-back versions with open arms, and chrome, bronze, or powder-coated base and arm caps. Featured in the collection is Elle, a chair styled, tailored, and proportioned for the woman executive. Nienkamper.

Circle 217 on reader service card

The 7310A armchair for commercial use is constructed of solid maple available in several of Chainnaster's fabrics and vinyls. Chairmasters, Inc.

Circle 218 on reader service card

The Therm MB roofing system consists of a continuous filament spun-bonded polyester base ply laminated between courses of hot melt adhesive. The membrane consists of a controlled mixture of bitumens modified with synthetic elastomer and woven fiberglass reinforcement. The membrane offers excellent weatherability, fatigue and puncture resistance, a broad application temperature range, and excellent elongation and recovery characteristics, according to the manufacturer. Tremco.

Circle 219 on reader service card

The Norament System coordinated synthetic rubber flooring is slip-, chemical-, and burn-resistant and continuously self-waxing. There are 39 standard and special colors and unlimited custom colors. Patterns include a raised pastille, a two-toned pastille, a raised geometric pattern, slate-look, a one-piece coving-tread-riser, and miniature pastilles. Nora Flooring.

Circle 220 on reader service card

Natural Expressions workstations designed by Gordon Randall Perry are intended for use with the company's sound divider. The group includes work surfaces, returns, bookshelves, flipper door cabinets, pencil drawers, and mobile pedestals. Materials are hardwood solids, veneers of oak, walnut, and mahogany, and Stellapal molded polyester developed in Switzerland. Vertical surfaces have the option of fabric coverings. Worksurface edges are bronze duralodic or etched and anodized aluminum to create a horizontal wire management that eliminates wire clutter. Tibbet, Inc.

Circle 221 on reader service card

Solar structures incorporating Southwall Technologies' Heat Mirror metal-coated transparent film have efficiency increased up to 85 percent without noticeably decreasing light. The film reflects heat to the inside in winter, to the outside in summer. Other advantages include reduced condensation and decreased fabric fading. Four Season Solar Products.

Circle 222 on reader service card

The Multi-Tech workstation organizes the work area for privacy and storage. Desk units and divider units can be assembled in a number of configurations. Made of industrial grade particleboard with laminate finish in nine colors, unit drawers; cabinet bodies, and shelves are edged in black PVC. Desks are 48 inches wide, 24 or 30 inches deep. Uses include laboratory cubicles, computer workstations, instructional workstations, and study student centers. Fisher Scientific.

Circle 223 on reader service card

'New Construction Reports' identify plans for development and construction in the early stages to allow interested firms to follow up. The reports provide names, titles, and addresses of key people, a description of the proposed project, and approximate cost. For additional information about subscribing to the service contact Jeffrey Clark, Operations Manager, Clark Associates, 127 Scranton Building, Lake Bluff, Ill. 60044.

Circle 224 on reader service card

Hansa 'Desktop Liberators' include a swing-arm telephone support, a telephone carrier, telephone carrier with letter tray, swivel letter trays, and lamp, all attached to the desk edge. Freeing desktop space. Colors are putty, black, and chocolate. Business Accessories.

Circle 225 on reader service card

The Natural residential skylight has a PVC curb, which provides substantially less condensation than aluminum. Weatherright neoprene sealants and fusion welded frame corners protect against air infiltration and exfiltration. Glazing is either double-dome acrylic or insulated glass. Naturalite, Inc.

Circle 226 on reader service card

Fiberglass wallcoverings for public buildings and residences have flame spread, fuel contributed, and smoke developed values of zero. The dirt-repellant surface can be washed as needed. There are eight different patterns, which hide minor wall surface imperfections. The material is pretrimped, and butted seams are practically invisible after painting. Mirror of Sweden, Inc.

Circle 227 on reader service card

The Normbau rail system of tubular molded nylon over a steel core is available in two diameters and fifteen fade- and scratch-resistant colors. The rails combine with the company's other building hardware. The rails are factory assembled to designer specifications and shipped to the site for installation. Areas of use include schools, hospitals, offices, shopping malls, nursing homes, and residences. Normbau, Inc.

Circle 228 on reader service card

Sensa 1 table lamp, designed by Seán Corcoran and Jorge Freyer, operates without being touched. As the hand passes over the shade, it rises, and the 30-watt incandescent bulb turns on. Another sweep of the hand turns the bulb off and lowers the shade. The lamp has a satin black anodized aluminum base and shade with rubber bellows and a Delrin cap. It has been selected for the Whitney Museum's exhibition entitled "High Style: Twentieth Century American Design." Sointu, Inc.

Circle 229 on reader service card

The SLM maxi-floodlight and SLA mini-floodlight are detailed in an eight-page full-color brochure. There are isolux curves and tables that provide photometry and electrical data on the SLM, including high-pressure sodium, metal halide, and mercury vapor light sources. Stonco Lighting.

Circle 230 on reader service card

Model 782 stacking chair is compact, lightweight, economical seating for churches. Construction is of solid oak with foam seat and back covered in a choice of fabrics. It has front and back divided book racks. An optional ganging and locking device allows the chairs to be placed in straight rows or in a curve up to a 20-degree radius. Overholtzer Church Furniture, Inc.

Circle 231 on reader service card

[Continued on page 253]
"Du Pont showed us how to significantly increase productivity with Systems Drafting."

James W. Rivers, Vice President
The Mathes Group (formerly Mathes, Bergman & Associates, Inc.), New Orleans, Louisiana

"We've been implementing a Du Pont overlay drafting program for large and small projects for six years," says Mr. Rivers, "and we estimate a 30% savings in drafting time as a result. We also save time on corrections because we don't have to redraw floor plans every time there's a change.

"A case in point is our work on Place St. Charles, one of New Orleans' newest buildings. Du Pont showed us how to effectively increase productivity in the architectural planning for this 53-story building.

"Having drawn floor plans, we supply pin-registered bases to each engineering discipline. This speeds development of preliminary and final plans by all consultants, reduces errors and makes it easier to coordinate efforts among disciplines.

"And because we also save time on corrections, and reduce repetition, we gain more creative design time."

Overlay drafting is a cost-effective way to make high-quality drawings. And it's a major step toward implementing computer-aided design. Perhaps it's time you found out how high the rise in productivity can be at your firm.

Return the coupon below for more information on how a Systems Drafting approach can work for you.

Note: Place St. Charles is a joint venture of Mathes, Bergman & Associates, Inc. and Moriyama & Teshima Planners, Ltd.

Du Pont Company, Room X39085,
Wilmington, DE 19898

☐ Send me your new brochure on overlay drafting.

☐ Have a Du Pont Technical Representative call.

Name ________________________
Title _________________________
Company ______________________
Street _________________________
City __________________ State __ Zip __
Telephone _____________________

Industrial Systems Division
Circle No. 359
"CALL SHERWIN-WILLIAMS AND TURN YOUR GREAT EXPECTATIONS INTO BREATHTAKING REALITY."

Dial 800-321-8194 for precise specification assistance from the paint, wall, and floor covering experts.

At Sherwin-Williams you get this vital quality, service and problem-solving combination:

- Coating, wallcovering and floorcovering systems that are industry standards
- Hands-on service from knowledgeable representatives
- Immediate access to technical support from the largest maker of coatings in the U.S.A.
- Computerized custom color-matching accuracy
- Toll-free access to Paint DataBank™ for fast, expert specification assistance

Whether you're specifying finishes for industrial, commercial or institutional projects, call Sherwin-Williams' Paint DataBank™ toll-free 800/321-8194 (in Ohio, 800/362-0903).

Circle No. 416 on Reader Service Card
Spiral stairs in five-foot and six-foot diameters have four posts per stair for strength, safety, and style. The new design conforms with pertinent UBC, BOCA, and SBCCI building codes. The stairs are easily assembled from stock pieces and have reversible stair treads to allow right or left entry. They are suitable for interior and exterior use. Logan Co.

Circle 232 on reader service card

Herrtronic® electronic humidifiers have microprocessor-controlled electronic circuitry to monitor and automatically adjust amperage draw, water level, conductivity, and output. All standard models comply with Electronic Testing Laboratory Standards and carry an ETL label. Applications include computer rooms, laboratories, offices, clean rooms, and light industrial facilities. Herrmifier Company, Inc.

Circle 233 on reader service card

TigreLok 1700 Series electromagnetic locking device is designed to legally lock egress doors with a 2100-pound holding force. It conforms to NFPA 101 regulations and provides safe, positive door control. There are no moving parts, and built-in surge protection prevents lock malfunction. A door position switch provides remote monitoring. Riexson-Firemark.

Circle 234 on reader service card

Elegance® marble tile, imported from Italy, is said to exceed industry standards for flatness, tight sizing, and shade control from piece to piece. The 12" x 12" x ¾" thick tiles, which are slightly beveled on all surface edges, come in ten colors, and are polished on the face and two adjacent sides. They can be used on residential and nonresidential floors and interior walls. American Olean Tile.

Circle 235 on reader service card

QuikLink voice and data module functions as a central point for workstation communications wiring. For use with Panel Concepts' System 2PLUS IMPAC and Midline raceway panels, it allows the office planner to predetermine voice/data wiring distribution and termination, integrating it into overall office design. It provides a variety of connectors used by most office computers/communications equipment, and wiring remains within the panel raceway. A snap-on cover provides access to wiring. Panel Concepts.

Circle 236 on reader service card

Structural glazed facing tile data sheet explains its use in food service applications and illustrates several installations in color. The tile has zero flame spread and zero smoke developed. It exceeds ASTM C-126 requirements for imperviousness, resistance to faking and crazing, flame spread, toxic fumes developed, and resistance to scratches. Typical specifications are included. Stark Ceramics.

Circle 237 on reader service card

PermaBrick® natural earthen brick impregnated with acrylic resins is now UL-listed for slip resistance. The durability of PermaBrick, combined with the UL listing, makes it particularly suited to installation in high traffic areas. PermaGrain Products.

Circle 238 on reader service card

Exsotrol® blinds for exterior solar control block the sun before it strikes the glass for improved building energy efficiency. On cloudy days they can be opened to allow daylight into the building, reducing artificial lighting needs. The three models are described in an eight-page brochure that includes detail drawings, design considerations, a color chart, and suggested specifications. Blinds can be operated manually or electrically with computer controls. Baumann, Inc.

Circle 239 on reader service card

(Continued on page 254)
Wilsonart® decorative metals

A collection of solid metals can be used for vertical interior applications. Consisting of 14 solid aluminum in a variety of surface colors and textures and one solid brass, they are available in flexible sheets, edge banding, and grooved tambours (except solid brass). They can be curved to a 3-inch radius. A four-page brochure shows the colors available and includes descriptions and specifications. Ralph Wilson Plastics.

Circle 244 on reader service card

STO pocket manual

Answers questions about insulating a building from the outside, from how to get started to preparation of substrates to troubleshooting. It also provides information on the company's exterior insulation products, STO Industries.

Circle 245 on reader service card

Steel windows

Catalog outlines the features and benefits of heavy intermediate steel windows. It discusses improvements in glazing techniques and new hot-rolled steel shapes. The 20-page, full-color brochure includes a portfolio of recently completed projects using Hope's steel windows. There is a comparison of steel and aluminum thermal-break windows. Hope's Architectural Products, Inc.

Circle 246 on reader service card

'Pretty Pleats' custom shades in opaque and sheer fabrics are available in eight colors. The pleats are woven in, and the shades can be cleaned by vacuuming or spot-cleaning by wiping with a cloth and mild detergent. A four-page brochure describing the shades and providing samples of the fabric in colors offered is $1.25. Order Brochure AS1016 from Levolor Lorenzten, Inc., 1280 Wall St., West, Lyndhurst, N.J. 07071.

The Stee1wall® operable wall system, 2200 Series, is described in a 12-page full-color brochure. Standard panel widths are 4 feet-2½ inches; heights are to 30 feet or more. Panels are top hung, with top and bottom sweep or automatic seals, and they stack on edge or on centers. There are several panel facing materials available. Richards-Wilcox Mfg. Co.

Circle 247 on reader service card
Space frames as arches, pyramids, cones, and domes and in vertical, horizontal, sloped, stepped, and multiplane forms are shown in color in a 16-page brochure. The company assists in the design, engineering, fabrication, and assembly phases. Computerized information is applied to these stages and to materials and cost phases. Drawings illustrate details of the Octa-Hub® and Orba-Hub® connectors. Specifications are included. Space Structures International Corp. Circle 248 on reader service card

Clear-Pb® lead plastic for x-ray room shielding combines radiation protection and distortion-free viewing of patient and equipment. The material is shatter-resistant and can be fabricated into large, continuous panels for use in the building of large, continuous and property data. Nuclear equipment. The material is shown in color in a 16-page brochure. Dimensions, water capacity, pump/motor, and heater/filter data are provided. Capacities range from two people to as many as eight. Accessories shown are covers, cedar surrounds, and tables. Kohler. Circle 250 on reader service card

Total electronic compatibility (TEC) carpet of Anso IV HP nylon ends electrostatic disruption of sensitive electronic equipment, according to the manufacturer. It uses highly conductive fibers linked to a special latex backing to control static from people entering a sensitive area, or other source, reducing it below the level of machine sensitivity. An eight-page brochure discusses the problems associated with static charges and explains how the carpet fiber reduces it to acceptable levels. Allied Carp., Fibers Div. Circle 251 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.

Furniture of the Twentieth Century and Bieffeplast Showroom, New York (p. 120). Architect:


Hot tubs in several designs for indoor or outdoor use are illustrated in a 12-page color brochure. Dimensions, water capacity, pump/motor, and heater/filter data are provided. Capacities range from two people to as many as eight. Accessories shown are covers, cedar surrounds, and tables. Kohler. Circle 250 on reader service card

At Moen, you get European style without extravagant prices. That means higher value for your customers and higher profits for you.

Down-to-earth price.

At Moen, you get European style without extravagant prices. That means higher value for your customers and higher profits for you.

New Casa™ by Moen.
**PIA Job Mart**

**Situations Open**

**ARCHITECTS**

Design and technical architects with 4-10 years experience needed for national A/E consulting firm located in the Midwest. Prefer individuals with experience in health care projects ranging from $2.5 to 40 million. Bachelor’s/Master’s of Architecture required; registration preferred. Excellent opportunities for promotion. Outstanding compensation and benefits. Please submit letter of application and resume to: Director of Personnel. Box 1361-466, Progressive Architecture EOE

Architects with minimum 3 years experience needed full time for design and production work within progressive office. Send resume and salary requirements to Ion Berindei, Warren Freedfenfeld & Associates, 171 Milk St., Boston, MA 02109. No calls please.

**CADD Systems Manager** for award-winning 65 person firm in D.C. Graduate architect with minimum three years CADD experience. Begin by 11/1/85. Salary commensurate with qualifications. Send resume/salary requirements to P.O. Box 33914, Washington, D.C., 20035.

**Computer Graphics Center Director**—DAAP College, University of Cincinnati, College with 1900 students in art, design, and environmental disciplines will house University’s $1 million computer graphic facility. New leadership position requires highly motivated individual to administer and develop facility into major teaching and research center. Responsibilities include center administration, planning, and development; faculty training and curriculum support; liaison with computer-related committees and groups. Reports to College Dean. Qualifications: Ph.D. or Master’s degree in computer graphics-oriented discipline such as Electronic Visualization or M.S. in Computer Science or Engineering with strong computer graphics background and interest in its application in the arts. Salary commensurate with education and experience. Competitive benefits package. Send resume, cover letter, sample of work, list of three referees, and evidence of administrative/creative/technical expertise to: Professor Charles Ellison, Chair, CGC Director Search Committee, College of Design, Architecture, Art, and Planning, University of Cincinnati, Cincinnati, Ohio 45221-0016 by October 15, 1985. Women and minorities are encouraged to apply. Equal Opportunity, Affirmative Action Employer.

**Project Architect**—Position available in arch. design dept. of dev. firm for ambitious design oriented reg. arch. winn. 5 yrs. exp. in bldg. reuse & const. in all phases of project. Send xerox reduction of design work and resume w/desired salary to: Drogaris Companies, 131 E. Grant St., Lancaster, PA 17602.

**Project Eng—Supervise & coordinate design & construction Las Vegas, NV hotel/casino. Hire professionals, contractors; obtain permits, insure daily on-site quality control, approve funds payments. Report to investors on status. Requires 5 yrs mgmt & eng exp in major construction projects. Must be fluent in Mandarin & Cantonese Chinese dialects. Salary $40,000+; send this ad & your resume to Job #8505866, Employment Security Office, 131 S. 8th, Las Vegas, NV 89101, not later than Oct. 9.

**ARCHITECT**

Commercial Architect for In-House and Outside Health Care Consulting Services

For more than 50 years, the dedicated professionals at St. Joseph’s Hospital have been responding with pride to the health care needs of the growing Tampa Bay area. At our 649-bed acute care facility, we recognize the need to keep pace with the demands of the community and are continually upgrading and expanding our facilities.

To accommodate these efforts, we seek a talented architect, experienced in health care environments, who will provide inside services for the hospital and consulting services to be marketed to outside health care facilities.

The successful candidate will direct the hospital’s architectural department and consult with administration on master plan space use and development. This position provides a full scope of architectural services for planning and construction programs, assists in marketing professional consulting services, assists with the preparation of certificate of need applications, and prepares the department capital budget, as well as managing expenditures.

Qualified applicants will be graduates of an accredited architectural course with a B.A in Architecture, or its equivalent. A Florida Department of Professional Regulation License is required, as is 5 years of experience as a practicing architect, 2-5 years in the health care field, strong skills in code compliance activities, and a comprehensive understanding of agency document submission processes and inspection requirements. NCARB certification is highly desirable.

In recognizing the important contributions of its professional staff, St. Joseph’s provides one of the most complete benefits package available. In addition to highly competitive salaries. For prompt confidential consideration, send your resume with salary history and requirement to Jean Sanborn, Employment Coordinator.

St. Joseph’s Hospital Employment Services
Tampa Medical Tower
2727 W. Buffalo Ave., Suite 300
Tampa, FL 33677-4227
Telephone (813) 870-4538

Architects to join one of their two design studios.

The highly qualified candidates will possess 2-10 years of experience with a quality firm as well as a solid academic history. Along with communication skills, graphic abilities, strong conceptual design and architectural expression with a developing theoretical base are imperative.

We offer a variety of nationwide projects; growth potential and the opportunity to utilize your creativity in a studio arrangement. Share our commitment to design excellence in the most dazzling metropolis in the Sunbelt.

Compensation includes a comprehensive benefits package and salary commensurate with experience and ability. Direct resumes to: Robert Kumlin, Director of Operations, CRS Sirrine, 414 West Fifth, Fort Worth, Texas 76102.

CRS Sirrine is an equal opportunity employer.
Rugged beauty that means business.

“Natura Liberty” is more than beautiful; this glazed ceramic tile is tough enough for the busiest floors — commercial or residential. Its unique color-on-color glazes have enduring good looks that can withstand any high-traffic location. Yet it won't overwork you when it comes to maintenance.

See the entire line of the new, easy-care “Natura” ceramic tiles in the showroom of your Florida Tile distributor. For the name of your nearest distributor call: 1-800-FLA-TILE.
PROJECT ARCHITECT
Registered architect with at least 5 years experience wanted for midwest location of national A/E firm. Responsibilities include coordination and preparation of design development and construction documents, quality control of documents, and supervision of architectural teams. Prefer healthcare, criminal justice and/or institutional background and excellent technical ability. Commensurate with experience, excellent compensation and benefits are offered. Please submit resume to: Director of Personnel, Box 1361-465, Progressive Architecture, FOE.

The Department of Architecture, University of Wisconsin-Milwaukee anticipates making two tenure track appointments at the Assistant Professor level to commence in the fall of 1986. The successful applicants will teach a design studio, deliver lecture courses, and undertake research and scholarly activities in one of the following areas: Construction and Structures, Facility Management/Interior CAD, and Real Estate Development. Qualifications in studio teaching and lecture delivery will be given equal weight. A complete application includes: a letter of interest; names, addresses and phone numbers of at least three references; a curriculum vitae; and a portfolio. To ensure consideration, all of the above must be submitted by October 25, 1985 and received within five days thereafter. Salary is competitive. Send applications to: University of Wisconsin-Milwaukee, Department of Architecture, Attn: Audrey K. Maynard, P.O. Box 413, Milwaukee, WI 53201. UWM is an Affirmative Action/Equal Opportunity Employer.

Urban Planning/Architecture—A tenured or tenure-track appointment in the School of Architecture and Urban Planning, rank according to qualifications. Junior appointment may be in Urban Planning, senior appointment will be in Urban Planning ½ Architecture. Terminal degrees in planning and architecture required, with Ph.D. in Planning or a related discipline or significant research experience. Teaching and research will be in physical planning and urban design; interests may include related areas such as real estate development, perception of the built environment, etc. Responsibilities include coordinating the joint M.Arch/MUP program, teaching in architecture and/or urban planning programs, active research and professional/community service. Submit vitae, portfolio, and name three references to: Professor E.R. Alexander, Chairman, Department of Urban Planning, University of Wisconsin-Milwaukee, P.O. Box 413, Milwaukee, WI 53201 by October 30, 1985. The University of Wisconsin-Milwaukee is an Equal Opportunity and Affirmative Action Employer.

Services
Architectural History—One-year Masters Programme at University College London. Located in central London, accommodation available. Fees £3,310. For details write: M.Sc Tutor, Bartlett School, University College London, 22 Gordon Street, London WC1H 0QB, England.

Holistic Environmental Consultants—We provide design services to architects who have clients that require special work/creative awareness. Interiors sensitive to comfort, including sound, color, texture, and lighting. Impact along with spatial lighting impact along with spatial distribution. Lighting may be considered for the design of projects under an annual budget of over $15 million. For details and Competition Registration information please write: Professor Ralph Warburton, AIA, AICP, P.E., Hon. ASLA; Professional Adviser; Campus Plan Competition, University of Miami; Coral Gables, FL 33124-9178.

ITALIA SIEPS AGENZA™, a recruiting service to find architects, interior, graphic and industrial designers, marketing and sales support people for consultants and businesses. Founded in 1972, international office: 60 W. 55 St., New York, N.Y. 10019; 212/586-4750.

Rooftop Garden Design Symposium—Saturday, Oct. 29, 1986. Intended for architects, landscape architects and designers who wish to learn more about the technical constraints and aesthetic possibilities of rooftop design. For further information or to register write: Dr. Richard Crews, M.D. (Harvard), President, Columbia Pacific University, 1415 Third St., Dept. 2A69, San Rafael, CA 94901; Toll Free: 800/227-1617, Ext. 480; California: 800/772-5345, Ext. 480.

University Degrees! Economical home study for Bachelor's, Master's, Doctorate. Prestigious faculty counsels for independent study and life experience credits. Free information—Richard Crews, M.D. (Harvard), President, Columbia Pacific University, 1415 Third St., Dept. 2A69, San Rafael, CA 94901; Toll Free: 800/227-1617, Ext. 480; California: 800/772-5345, Ext. 480.

Notice
Please address all correspondence to box numbered advertisements as follows: Progressive Architecture % Box 600 Summer Street Stamford, Connecticut 06904

Advertising Rates (Effective January 1985 issue)
Non-display style: $115 per column inch. Approximately 35 words per inch. Column width approximately 1 3/4". No charge for use of box number. Situations wanted advertisement: $65 per column inch. Noncommissionable.

Display style: $160 per column inch, per your layout. Maximum 8 inches. Commissionable to recognized advertising agencies.

Check or money order should accompany the advertisement and be mailed to Job Mart % Progressive Architecture, 600 Summer Street, P.O. Box 1361, Stamford, CT 06904.

Display style advertisements are also available in fractional page units starting at 1/8 page and running to full page. Contact Publisher for rates.

Insertions will be accepted no later than the 1st of the month preceding month of publication.

EMPLOYEES APPRECIATE THE PAYROLL SAVINGS PLAN.
JUST ASK THE COMMONWEALTH OF PENNSYLVANIA'S STAFF.

"I have three children and I can't think of a better way to save for their education...their future."
—Theresa L. Mitchell
Governor's Press Office

U.S. Savings Bonds now offer higher, variable interest rates and a guaranteed return. Your employees will appreciate that. They'll also appreciate your giving them the easiest, surest way to save.

For more information, write to:
Steven R. Mead, Executive Director, U.S. Savings Bonds Division, Department of the Treasury, Washington, DC 20226.

U.S. SAVINGS BONDS
Paying Better Than Ever
Design Flexibility Never Looked So Good.

Introducing

The Armco CW-100 Wall System.

With the new Armco CW-100 Wall System, you can design buildings with all the great looks and durability of concrete hardwall construction — at a material savings of up to 53% of an ordinary pre-cast system.

The unique ribbed design of the 8-foot by 16-foot CW-100 panels gives you the same strength and durability as other pre-cast or tilt-up concrete hardwall systems at a significantly lower material cost. The lighter weight of the CW-100 Wall System means savings in foundation costs, labor and construction time. And Armco CW-100 panels arrive at the jobsite ready-to-install, so there's no field casting, weather delays or lengthy curing.

Yet, when you design with Armco CW-100, your building's appearance is limited only by your imagination. You can choose smooth or brush exterior finishes, add accent stripes and virtually any exterior design or color to suit your client's image. Blend CW-100 panels with glass, wood, masonry, stone and other contemporary materials. Wiring and plumbing can be recessed within notches built into the ribs of the panels' interiors.

You can even top your Armco CW-100 building with an Armco Standing-Seam Roof System, the weathertight roof system with a proven 50-year record covering more than 700 million square feet in place.

Here's how to learn more.

Send for a free copy of "Introducing the CW-100 Wall System." It's a fact-filled brochure loaded with photos of CW-100 buildings under construction, as well as in finished commercial, industrial and office structures. You'll read about the many design alternatives available with CW-100, including curtain wall and load-bearing applications. You'll get information on the three Armco Structural Systems available with CW-100. Plus much more.

Armco Building Systems is a unit of Armco Atlantic, Inc.

The Armco CW-100 Wall System

For your free copy, send the coupon to Armco Building Systems, Dept. 7505-9, P.O. Box 2010, Cathedral Station, Boston, MA 02118.

Name ___________________________
Title ___________________________
Company ________________________
Address _________________________
City ___________________ State ___________ Zip ______
Telephone _______________________

Circle No. 321 on Reader Service Card
SELECT
SADDLEBROOK
A WORLD-CLASS RESORT

Clustered in the midst of Florida pine and cypress, just 25 minutes north of Tampa International Airport, a complete resort has been carefully crafted with all its facilities within easy walking distance. At Saddlebrook, skillfully blended into a unique Walking Village environment are 450 lavishly decorated, privately owned suites, meeting rooms and banquet facilities, 27 championship holes of golf, 17 tennis courts, swimming in the meandering half-million-gallon Superpool, tropical and intimate dining, entertainment, shopping and a complete health spa.

To aid in planning your next vacation, meeting, or second home purchase, call or write Saddlebrook for a detailed guide.

Saddlebrook is the recipient of the AAA's coveted Four-Diamond Award; McRand's Conference Award...

The Best New Resort in the Country; Meetings & Conventions' 1983 Gold Key Award and the Mobil Four-Star Award.

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
(813) 973-1111
Phone Toll Free Continental U.S. 800-237-7519
In Florida 800-282-4654

Circle No. 411 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
Dept. P/A
P.O. Box 5120
Philadelphia, Pa. 19141

My check or money order for $_______ is enclosed.

Please send P/A library cases
_____ One for $6.95
_____ Three for $20.00
_____ Six for $36.00

binders
_____ One for $8.50
_____ Three for $24.75
_____ Six for $48.00

Company _____________________________
Street __________________________________
City __________________ State & Zip _______

Check must accompany order. Add $2.50 per item for orders outside U.S.A.

Allow 4-6 weeks delivery

SUPER GOLF PACKAGE

$42.50 Per person/per night
Double occupancy
(state tax and gratuities not included)
June 15 - September 14, 1985

Package includes:
• Accommodations
• Unlimited daily greens fees
• 18 holes guaranteed daily
• Advance reserved tee times
• Golf bag storage
• Daily admission to Jockey Club Spa

Select Saddlebrook for
Super Golf or Tennis Holidays

Whether you want to improve your ground stroke, take a few strokes off your game or practice your backstroke in the Superpool, Saddlebrook has a special package that will help make it happen. Improve your golf game on Saddlebrook's 27 championship holes (36, by October 1985). Designed and built by Arnold Palmer and Dean Refram, Saddlebrook's golf courses are both beautiful and challenging. For tennis, Saddlebrook has 17 courts — 13 Har-Tru (five lit for night play) and 4 Laykold. Clinics and pros are available for golf and tennis, as well as complete Pro Shops. Saddlebrook is close to Busch Gardens (Tampa) and convenient to the Walt Disney World Magic Kingdom® and EPCOT Center. Write or call toll-free 800-237-7519, in Florida 800-282-4654 or 813-973-1111, P.O. Box 7046 Wesley Chapel (Tampa), FL 34249.

SUPER TENNIS HOLIDAY!

$39.00 Per person/per night
Double occupancy
(sales tax and gratuities not included)
June 15 - September 14, 1985

Package includes:
• Accommodations
• Unlimited tennis, with 3 hours guaranteed court time daily
• 1½ hour use of electronic ball machine daily
• Daily admission to Jockey Club Spa

Billie Jean King, winner at the recent Ladies Legends of Tennis Tournament at Saddlebrook.

Circle No. 412 on Reader Service Card
P/A Advertisers' Index

AA-Abingdon Ceiling Co., Inc. ... 28
Alcoa Inc. ... 1718
Allied Fibre ... 259
AllSteel, Inc. ... 10, 1118
Allwin Desk Co. ... 66
Amoco, Inc. ... 236
American Olean Tile Co. ... 12, 13
AMPAT Group & Pilkingen ... 89
Ancon ... 22
Andersen Corp. ... 60, 61
Aquastatic, Inc. ... 71
Arc Corn Fabrics, Inc. ... 21
Architectural Manufacturing Co. ... 72
ARCO Building Products ... C3
Arconas Corp. ... 5118
Armco Building Systems ... 88, 259
Armistead, Inc. ... 20, 2118
Artline Corp. ... 11
Arrock Floor Products ... C2
Artistic Corp. ... 86, 87
Baker, Kraupp & Tubbs ... 176
Bent Western International ... 92
Bigelow-Sanford ... 213
Blum Co. ... 33
Boussac of France ... 94
Brower Lighting Co. ... 2
Brands International, Inc. ... 53
Brayton International Collection ... 5218
Brunschwig & Filz, Inc. ... 169

262

CMC 95 ... 80
California Redwood Association ... 50
Canon, USA ... 77
L.E. Carpenter & Co. ... 66, 67
Castelli Furniture ... 5718
Chevney, Inc. ... 28
Chicago Metallic Corp. ... 81
Clearprint Paper Company ... 91
Click Systems, Inc. ... 64
Columbia Lighting, Inc. ... 70
Columbus Coated Fabrics, Div. Borden Films ... 248
Construction Specialists, Inc. ... C4
Cookson, Inc. ... 90
Corry Jumestown Corp. ... 2718
Cromcraft ... 243
C-Tec Corp. ... 160

Da-Lite Screen Co., Inc. A Heritage Communications Co. ... 168
Davis Furniture Industries, Inc. ... 3118
Delta Faucet ... 55
Dow Corning Corp. ... 47, 49
Dow Corning Corp. ... 28, 259
DuPont Co. ... 4, 5, 164, 165
DuPont Co., Industrial Systems, Architectural Films ... 254

Elision Corp. ... 238
Farrel Lock ... 95
Flintkote/Trans Ceramic ... 32
Furniture Furnishings ... 129
Flexco ... 76
Florida Tile, Div. of Sikes Corp. ... 257
Ford North America ... 54
Fornica Corp. ... 19, 29
Forms + Surfaces ... 6
Four Seasons Solar Products Corp. ... 170

Golden Coatings & Resins Architectural & Maintenance ... 163
Greiff Fabrics, Inc. ... 94
Gumbach Co. ... 19018
Harvey Corp. ... 38, 3918
Haworth, Inc. ... 1218
W.P. Hickman Co. ... 170
Hiebert, Inc. ... 40, 1118
Houston Instrument, Div. of Baush & Lomb ... 92
Human Factor Technologies, Inc. ... 46
IGF, Inc. ... 34, 3518
IDNY ... 172, 173
ill., Inc. ... 44, 4518
Intergraph Corp. ... 40, 41
JW Lighting, Inc./Integrace Div. ... 167
KH Paragon, Inc. ... 170
Karastan Rug Mills ... 78, 79
Kimberly Clark Technical Papers ... 16
Knefs Furniture ... 4318
Koch + Lowy ... 93
Koh-I-Noor Rapidograph, Inc. ... 62, 63
Kruiger ... 24, 2518

Laminated Glass Corp. ... 64
Landscapes Forms, Inc. ... 244
Jack Leroy Larsen ... 38, 39
Jects ... 174
Lee Commercial Carpet Co. ... 58, 59
Levison Manufacturing Co. ... 14
Leverolf Lovetren ... 56
LOF/Glass ... 27
Harry Lumsdell Designs, Inc. ... 1

Marden Mill, Inc. ... 16618
Marvin Windows ... 8, 9, 82, 83
McDonnell Douglas AHC Information Systems ... 15
MBC-Metal Building Components, Inc. ... 22
Herman Miller, Inc. ... 18, 1918
SM Corp. ... 31
Modern Mode ... 28, 2918
Monsanto Fiber Intermediates ... 37
Monsanto Polymer Products ... 68, 69
Myrtle Desk Co. ... 818

National Paritons and Internus, Inc. ... 32
Nexum Corp. ... 238
Nora Flooring ... 254
Norwalk, City of ... 253

The Pace Collection ... 2318
Panarne, Inc. ... 108
Progressive Architecture Bookstore ... 40, 41718
Progressive Architecture Furniture Competition ... 231, 232
Progress Lighting ... 240
RCA Rubber Co. ... 92
Reynolds Metals Co. ... 35
Roppe Rubber Co. ... 72
Safelock ... 260, 261
Sargent, Div. of Kelle, Inc. ... 173
Salamandre ... 17
Sentry Electric Corp. ... 94
Seymour-Williams, Inc. ... 3318
Ship 'N' Out, Inc. ... 34
Sitecraft ... 45
Space Design ... 241, 242
Springs Industries, Inc. ... 84, 85
Sunaryse Mene ... 254, 255
Steelcase, Inc. ... 2, 318
Summitville Tiles, Inc. ... 65
Swarthman Staible ... 6, 718

T&W Systems ... 48
TeleVideo Systems, Inc. ... 253
Trendspan Corp. ... 18
United Ceramic Tile, Architectural Div. ... 78
United States Aluminum Corp. ... 130
Ventarama Skylight Corp. ... 241
Vista Manufacturing Co. ... 19
Waldron Wilson Plastics, Inc. ... 96
Wolterene Technologies, Inc. ... 81

Advertising Sales Offices

Stamford, Connecticut 06904: 6060 Summer Street P.O. Box 27361 203-348-7531
Peter J. Moore Publisher

Charles R. Selden, National Sales Manager 
Richard A. Roberts, District Managers

Donald J. Roberts, District Managers

Chicago, Illinois 60601: 2 Illinois Center Bldg. Suite 7-12 (312) 644-0889

John M. Broome, Richard A. Schaan, Mark Nugent, District Managers 
Gail Grginski, Sales Service

Cleveland, Ohio 44114: 11111 Chittick Ave 216-696-7900

John F. Kelb, Western Sales Manager 
Richard A. Schaan, District Manager

Los Angeles, CA 91456: 10255 Ventura Blvd, Suite 301 818-990-9000

Philip Muller, Ed Sexton, District Managers

Atlanta, Georgia 30326: 5400 Peachtree Road, Suite #111 404-377-3248

Donald L. Miller, District Manager

Houston, Texas 77011: 5555 West Loop South, Suite 505 713-664-9681

Calvin Clausen, District Manager

United Kingdom:

Reading, RG10 8QJ, England 
Wood Jegging, Mansion Row, Tileway Tower, Windmill House 0744-743472

Gateshead, TY1 5PU, Reading 
Malcolm M. lllick, Managing Director, U.K.

Tokyo, Japan 101: 

Otsuka Monbetsu Service 
2-13 Ichimatsu Bldg, 5th Fl, 3-1 Kanda Tsukuba 2-chome 
Chiyoda-Ku 07-252-2721

Gonzalo Uchida, President

Paris, France:

Continental Europe 
52 rue de Montmorency 75008 724 96 78

Yves Melcher, Manager
Amarlite Is Committed To Curtain Wall

In recent years the growth of the curtain wall and curtain wall technology has required a specialized approach to this complicated business. Amarlite has made the commitment to serve this market. This commitment is backed by the dedication of our entire Atlanta plant facilities to curtain wall production and the formation of our new Engineered Systems Group.

Specialized
The Engineered Systems Group is devoted solely to the specialized needs of curtain wall. It is a project-oriented group which represents a single source of communication between the customer and the plant. And it provides a quick response to the specialized sales and engineering needs of this complex business.

Flexible
This new organization expands our capability to participate in a broader range of custom and monumental projects and adds significantly to our capability of handling design/build requirements. Single source responsibility insures the quick and accurate communication that allows us to respond to changing conditions while a project is under way.

Professional
Each project is assigned a Manager and a support team of specialists who handle the curtain wall system from inception through installation. This project team concept delivers the professional expertise to interface with architects, contractors and other key project influences.

This is just one more example of Amarlite's commitment to serve. For more specific information on how we can handle your curtain wall project needs, contact ARCO Building Products, P.O. Box 1719, Atlanta, Georgia 30301. Circle No. 313 on Reader Service Card

ARCO Building Products
A unit of ARCO Chemical Company
Division of Atlantic Richfield Company

THE BRIGHTEST OUTLOOK IN ARCHITECTURAL PRODUCTS.
Stop dirt at the door with style!

C/S Pedigrid and Pedimat entrance mats and foot grids give you two elegant ways to control tracked-in dirt, mud and slush. Both systems are available in a broad range of colors, textures and surfaces, custom fabricated to any size or shape.

Write for complete details.

PEDIGRID/PEDIMAT®
Construction Specialties, Inc.
Muncy, PA • San Marcos, CA • Mississauga, Ont.
Circle No. 345 on Reader Service Card