# A Gralla Publication FEBRUARY 1983



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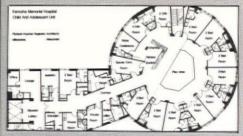


Synercube 9000 Series Desk and Table



Tolleson 7000 Series Seating





p. 90





Cover: Rush-Presbyterian's humane-hospital-look atrium is depicted by graphic artist George Koizumi. Healthcare articles start on page 74.

Len Corlin

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Co-Publisher & Adv. Sales Dir.

Gary S. Puro

Associate Publisher & Adv. Sales Mgr.

Roberta S. Walton

Managing Editor

Katherine A. Forman

Rachel Long

Associate Editors

Donna Sanz

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Midwest Editor

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West Coat Editor

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# VOL. 25 NO. 2 February 1983 NEV O SCI DL 1 EP R S V EA S D N Y THE BUSINESS MAGAZINE OF COMMERCIAL FURNISHINGS & INTERIOR ARCHITECTURE

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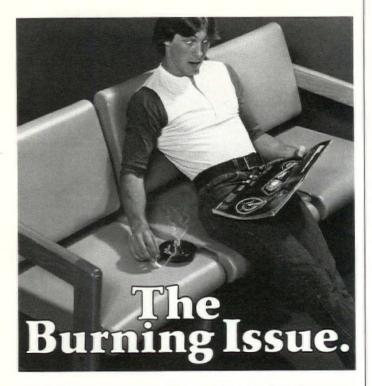
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### **Contract**

Vol. 25 No. 3

March: Office Furniture & Design issue focuses on this market segment with state-of-the-art installations. Product reviews include: office furniture/furnishings, library furniture, California-style furnishings. Lighting World II, scheduled for April 25-27, New York, will be previewed. Plus, NEOCON Countdown, a series on the world's largest contract market, will be featured.

April: Hotel/motel/restaurant installations and hospitality furniture and furnishings product review. Preview National Restaurant Show, McCormick Place, Chicago, May 21-25. NEOCON Countdown—continuing coverage of the world's largest contract show and exhibition. Wallcoverings/surfacing materials product review of wallpapers, vinyls, and rigid materials. Plus: Special Preview of the Washington, D.C. Design Center, creation of The Merchandise Mart.

#### **Advertising Representatives**

#### New York:

Frank A. Rizzo, Co-publisher & Adv. Sales Dir., Gary S. Puro, Associate Publisher & Adv. Sales Mgr., William Dahdah, Eastern Manager, Peggy Hynes, Northeast Representative, Gralla Publications 1515 Broadway, 24th Floor, New York, N.Y. 10036. Phone: (212) 869-1300.

#### Chicago:

Marie Kowalchuk, Midwest Representative Gralla Publications 3525 W. Peterson Ave., Chicago, Ill. 60659. Phone: (312) 463-1102.

#### West Coast:

Neil Silverstein, Western Manager, Gralla Publications, 16200 Ventura Blvd., Encino, Calif. 91436. Phone: (213) 788-0271.

#### Overseas:

Gianni Ratto Comunicazione e Promozione Internazionale Viale Premuda, 23, 20129 Milano, Italy Phone: 02/799809-791236

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TOALS	noxious gas	test rating (Class 5 hours in
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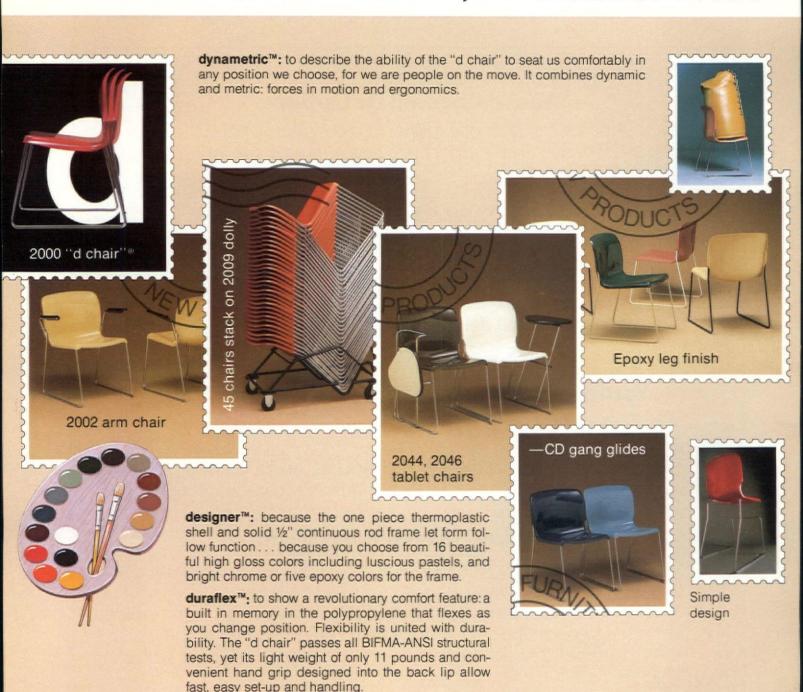
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#### SPIRAL STAIR SET STRAIGHT

Dear Editor: Frank E. Peteroy's article on human motor ability (Aug. 1982) includes several statements relating to nonstraight stairs, which require clarification. "... Spiral stairs are inherently more dangerous..." is a common misconception. Actually, spiral stairs are perceived to be less safe by most people, and consequently users tend to walk with more caution, usually holding on to the rail. Our studies indicate a lower rate of accidents on spiral stairs than on straight ones. Would it not, therefore, be more accurate to say that spiral stairs are inherently safer than straight stairs?

Another area requiring clarification is the confusion in definitions of spiral stairs and winders. In a spiral stair, all treads are of identical measurement, while the treads on winders have a variety of dimensions.

The final area of confusion is related to building code restrictions for nonstraight stairs. Generally, winders are no longer permitted, since most building codes require a flight of stairs to have treads of uniform dimensions. Spiral stairs, on the other hand, may be used in one- or two-family residences without restrictions. In commercial buildings, they may be used without restriction if the area is also served by a straight

stair. The only restrictions imposed are when they are the primary means of egress.

Duvinage is a spiral stair manufacturer and will provide additional information on this subject for articles or papers.

CARL R. PEDERSEN
President
Duvinage Corp.
Hagerstown, MD

#### LSU SEEKS DESIGN PROFESSOR

Dear Editor: The Interior Design Program at Louisiana State University (LSU), Baton Rouge, was recently granted a Quality Thrust faculty position from the State of Louisiana. As a result, we are looking for candidates available to fill this position for our fall semester by August 17, 1983.

Applicants must have environmental or interior design experience as well as background in media development or public relations. Responsibilities as a full professor, tenure track, would include interdisciplinary research in environmental design, research facilitation for existing faculty, media development for interior design programs, public relations for design disciplines regionally and nationally, and development of a graduate design program. In addition,

applicants would be required to teach interdisciplinary studio work as well as seminar and lecture courses for graduate and undergraduate students.

Salary would be \$45,000 for a nine-month academic year. Faculty benefits are inclusive.

The LSU Interior Design Program offers a degree focusing on contract or public interior design. We are administratively housed in the School of Architecture and the first two years of our program are in consort with the architecture major. The program is accredited by the Foundation for Interior Design Education Research (FIDER).

SHIRLEE SINGER

Associate Director School of Architecture for Interior Design Louisiana State University Baton Rouge, LA

#### **ERRATUM**

In the December issue Product Showroom "'Old World' Design Approach Adapts Warehouse For Reuse As Fabric Showroom" (p. 44), project designers were incorrectly attributed. S. Harris San Francisco showroom space designers are Swimmer Cole Martinez Curtis, Los Angeles.

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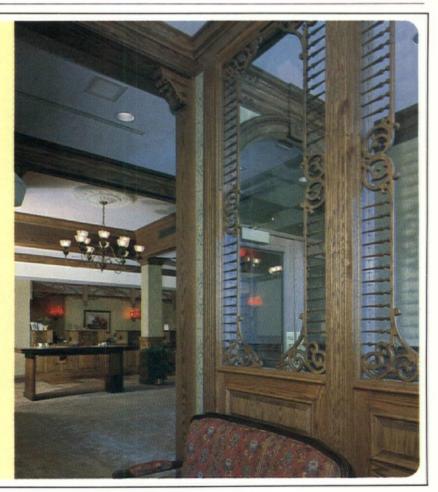
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### CONTRACT

# Dean of Yale architecture school to speak on creativity theme at CONDES, March 3-5

Dallas, TX—"A Salute To Creativity In Space Planning And Design" is the theme of CONDES '83, the Dallas Contract/Design Show, March 3-5 at Dallas Market Center. Cesar Pelli, FAIA, dean of Yale University's School of Architecture, will lead one of five seminars relating to the creativity topic.

Pelli's seminar on March 4 will focus on architectural processes relating to his work. Seminars by Orlando Diaz-Azcuy, Gensler & Associates; John Saladino; Bruce Hannah, Knoll; and Charles Pfister, Metropolitan; will also be presented. They will analyze aims, methods of work, and special sources of inspiration.

#### Seminars for practical application

Eight additional seminars will focus on practical matters of concern to interior designers, architects, specifiers, office products dealers, facilities managers, and students. Topics range from "Design Alternatives—New Concepts In The Workplace" to "Negotiating Contracts To Improve Cash Flow." All seminars are free, though tickets should be ordered in advance to assure seating.

CONDES '83 will display new products, including those in six showrooms opened in the past year. "Facilities Managers Day," March 3, will explore methods by which facility managers and

designers work together on major projects. Floorcovering seminars will also be held March 3. Exhibitors plan to host special events in flooring showrooms.

"Student day," March 5, will be highlighted with a talk by Ed Gips, national director, ASID, on "Finding

The First Job." ASID student chapters in the southwest will participate. Announce-



CONDES keynote speaker Cesar Pelli will address creativity topics March 4.

ment of the winner of the design competition for architecture and interior design students is to be made. The competition involves an outdoor restaurant and bar design for the expanded Loews Hotel Anatole, Dallas, with first prize of \$1,000. Second place winner will receive \$500.

Evening activities for the show include a concert by the Dallas Jazz Orchestra and a cocktail party, "Uptown Under Glass," hosted by CONDES exhibitors.

A full-day seminar, "How To Computerize Your Design and Planning," sponsored by two Gralla Publications magazines—CONTRACT and Facilities Design & Management—will be held

the day before CONDES '83. Program leader is Robert L. Engel, president, R.L. Engel & Associates, Chatham, N.J., a consulting firm specializing in computer applications for facilities management and design. Focus of the seminar is to aid participants in determining computer system needs and selecting the proper equipment. Cost is \$95 per person. The seminar will be held at the World Trade Center of the Market complex.

The Dallas Market Center has secured special hotel and motel rates for CONDES attendees. Its travel service also offers special rates with unlimited mileage on rental cars. Discounts up to 35 percent on American Airlines are available, as well. For reservations and travel information, call 800/527-9065 (except Texas); 800/442-7111 (in Texas).

For more information on CONDES seminars and the student design contest, write CONDES Public Relations, Dallas Market Center, 2100 Stemmons Freeway, Dallas, TX 75207; 800/427-1451 (except Texas); 800/442-1436 (in Texas).

For information on Gralla Publications' computer seminar, write Gralla Conferences, Attn: Hilary Plunkett, 1515 Broadway, New York, NY 10036; 800/223-6767 (except New York); 212/869-1300 (in New York).







Orlando Diaz-Azcuy (left), Gensler & Associates; and John Saladino (center) will discuss design aims, work methods, and inspirational sources at West Week. Ed Gips, ASID national director, will lead a job-related seminar for students.



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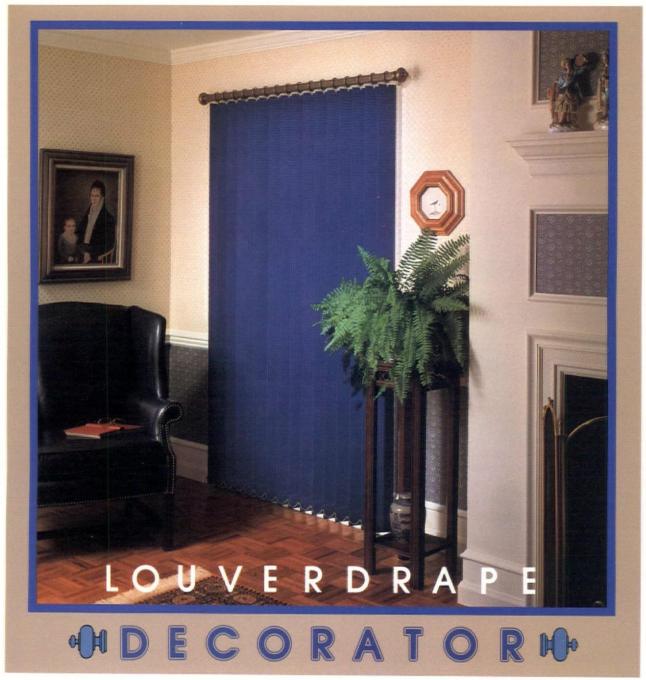
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## Workspace '83 to showcase computer support furnishings

San Francisco—Workspace '83, an exhibition and conference for facilities design and management professionals, will be held April 19-20 in San Francisco's Civic Auditorium to help meet demands for computer support furnishings, shows and forums. It will open a new channel for distribution of furnishings, shows, and forums. It will open a institutional, and commercial offices, according to conference management.

"This much-needed event is for facilities managers and planners, architects, interior designers, and contract dealers," says Leonard S. Rogers, president of National Fairs Inc.

Programs offered include "Personal Workspace: New Problems in Proxemics;" "Four Space Planners Evaluate New Furnishings and New Ideas for the Computerized Office;" "Disciplining Design for the Electronic Office;" "Anatomy of a Corporate Office Redesign;" "New Profit Opportunities for the Contract Dealer;" and "Countdown to George Orwell's 1984."

Exhibits will include open plan systems, seating, executive furniture, computer-aided design, and other office-related displays. For Workspace '83 information, contact Charley Yourd, The Charles Co., 44 Montgomery St., Suite 500, San Francisco, CA 94104. (415) 931-8255.

### 22 Canadian firms exhibit furnishings in second U.S. show

Atlanta—The second all-Canadian exhibit of contract and institutional furniture and specialty products, sponsored by the Canadian Consulate General, will be held March 15-16 in the Grande Concourse, Omni International.

Displays will include contemporary seating, desks, conference tables, systems, components, lateral files, accessories, partitions, acoustical wall treatments, and ceiling products.

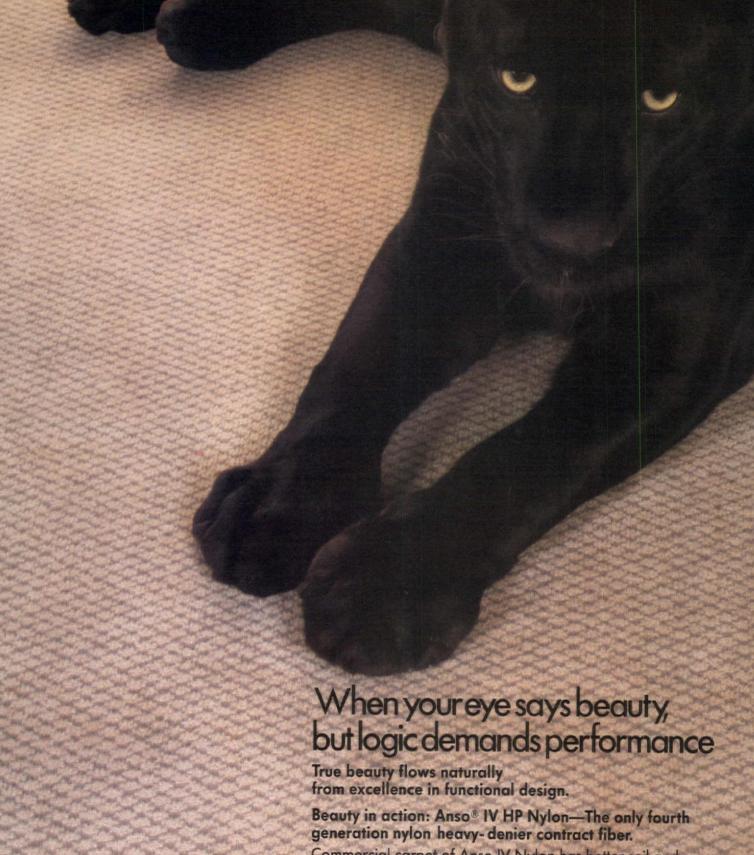
Among the exhibitors are Arconas Corp., Cambridge Store, Egan Visual, Ficobec-Lincora, Global Upholstery, Group Four, Karl Guttmann, Krug Furniture, Montel Inc., and OSC Partitions. Also displaying products are Ram Partitions, Ste. Marie Laurent, Storwal, Ambiant, Fine Edge International, and D&E Woodworks. Other exhibitors include Avenger Designs, Dynamic Custom Equipment, Idar Building Systems Ltd., Xception Design, BCB Meubles Ltd., and Helko Systems Furniture Inc.

For more information, contact H.W. Guy, Consul and Senior Trade Commissioner, Canadian Consulate General, 400 South Omni International, Atlanta, GA 30303; 404/577-6810.

#### Winchester elected IPA president

Portland, Ore.—Stanley Winchester, Living Interiors Inc., has been elected president, Interior Plantscape Association (IPA), for the 1982-83 term. Other officers elected by IPA include vice president/eastern sector Irene Mastick, Foliage Plant Systems Inc.; vice president/western sector Theresa L. Pesapane, Growing Green, Inc.; and secretary Mary Bauer, Plantscapes by Anything Grows.





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## Danish exhibition of design creativity moves to AIA HQ

Washington, D.C.—"DESIGN: The Problem Comes First," an exhibition sponsored by the Danish Design Council, moves from Chicago's Museum of Science and Industry to the American Institute of Architects (AIA) headquarters for showing in June.

Instead of illustrating design as a finished product only, the exhibition explores the idea behind the product and the creative process preceding it. The goal of the exhibition is to prove that good design is as much asking the right questions as answering them.

Furniture and lighting, traditionally associated with Danish design, are represented, but one-half of the 26 products displayed are examples of industrial creativity in new fields.

The show includes graphics, drawings, photographs, and displays of products. A slide presentation and a 120-page book supplement the exhibition.

### 200 students rally for IBD's three-day career seminar

New York—More than 200 students from across the nation gathered at the Fashion Institute of Technology November 4-6, 1982 for "Careers Unlimited," a program of seminars and factory and showroom tours for career orientation in interior design. The event was sponsored by the Institute of Business Designers (IBD).

Intrex, Scope, Edward Fields, and Scalamandre sponsored factory tours while other manufacturers opened showrooms. Steelcase hosted a program on the work of Frank Lloyd Wright presented by Edgar Tafel, AIA, and Arthur Rosenblatt, FAIA. Other seminars included: Will Carlin on dental design; Susan Forbes, ASID, on restaurant design; Richard Zampi on corporate design; Mark Kates, AlA, on store design; Georgio Cavaglieri, FAIA, on historical preservation; Ralph Larsen of the General Services Administration (GSA) on government design; Alfred Scholze on lighting design; and Ruth Hirsch on how to secure your first job.

Robert Cadwallader, president, Designer's Saturday, presented Frank Judson, president, Foundation for Interior Design Education Research (FIDER), \$3,000 in lieu of a student day program at Designer's Saturday, 1982.

#### Southeast design show premieres Oct. 20-22

Atlanta, Ga.—CONEXION '83 marks Atlanta Market Center's (AMC) newest contract and design exposition. Scheduled October 20-22 at AMC's downtown complex, the show is intended for designers, architects, specifiers, contract dealers, and corporate facility managers throughout the southeast region.

Show headquarters will be the Atlanta Merchandise Mart with temporary product displays, contract-related permanent showroom participation, and seminars. Marketgoers will shuttle to participating local showrooms outside the Mart, and to the Atlanta Decorative Arts Center (ADAC), a component of the AMC.

Representatives from major furniture and carpet manufacturers, and prominent interior designers and architects comprise CONEXION's advisory board.

#### Gold Key Awards given in 3 categories at IH/M&RS Show

New York—First place winners in the Gold Key Awards competition for excellence in interior design were recently announced at the 67th annual International Hotel/Motel & Restaurant Show (IH/M&RS).

Nearly 100 entries representing foreign and domestic groups were judged in the contest under the auspices of the American Hotel & Motel Association. The three award recipients were selected from 15 finalists. Preliminary and final judging was based on artists' renderings and photographs of areas either constructed or to be constructed during the period of January, 1981 through December, 1983.

Judges included Len Corlin, copublisher/editor, CONTRACT, and editors of four other interior design publications.

Gold Key Awards were presented in each of three categories: formal dining area/restaurant to Jeanne's Restaurant, New York; guest room to Centralla Hotel, Pacific Grove, Calif.; and front desk/lobby to Capitol Plaza Hotel, Trenton, N.J.



#### Pacific Design Center gala benefits City of Hope Medical Center

Los Angeles—Shown (from I. to r.) at the City of Hope National Medical Center here are John R. Benfield, M.D., chairman, City of Hope surgery div.; James Goodwin, Pacific Design Center (PDC) publicity director; Randy Baker, representative and member, PDC board of directors; and Murray Feldman, PDC executive director. The group toured the free medical center and research institute that specializes in disease as a prelude to a recent PDC open house and fundraising event that benefited the medical center.

In open office planning, the only constant is change.

Your professional experience has made you keenly aware of the need for flexibility in office systems. This is why All-Steel furniture and components are designed to let you add to or rearrange your clients' offices easily, quickly and economically. Business people appreciate this.

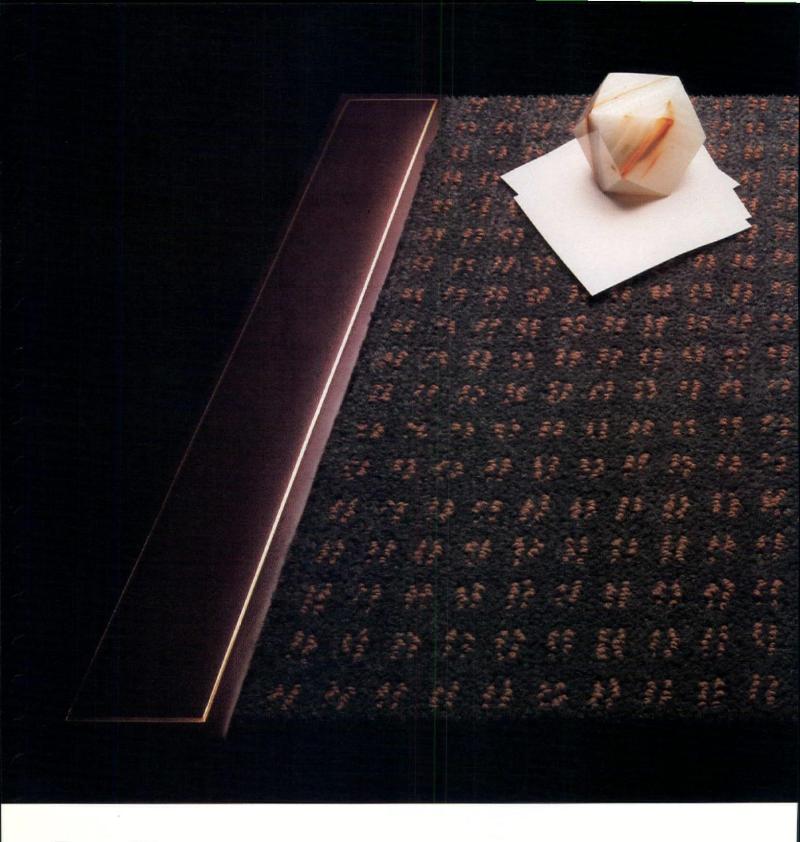
Our greatly expanded lines of panel mounted and freestanding furniture can be arranged in literally thousands of different configurations. This fits your personal design standards to your clients' practical needs.

standards to your clients' practical needs.
Versatility today and flexibility tomorrow
are just two good business reasons to specify
All-Steel. See your dealer, write All-Steel Inc.,
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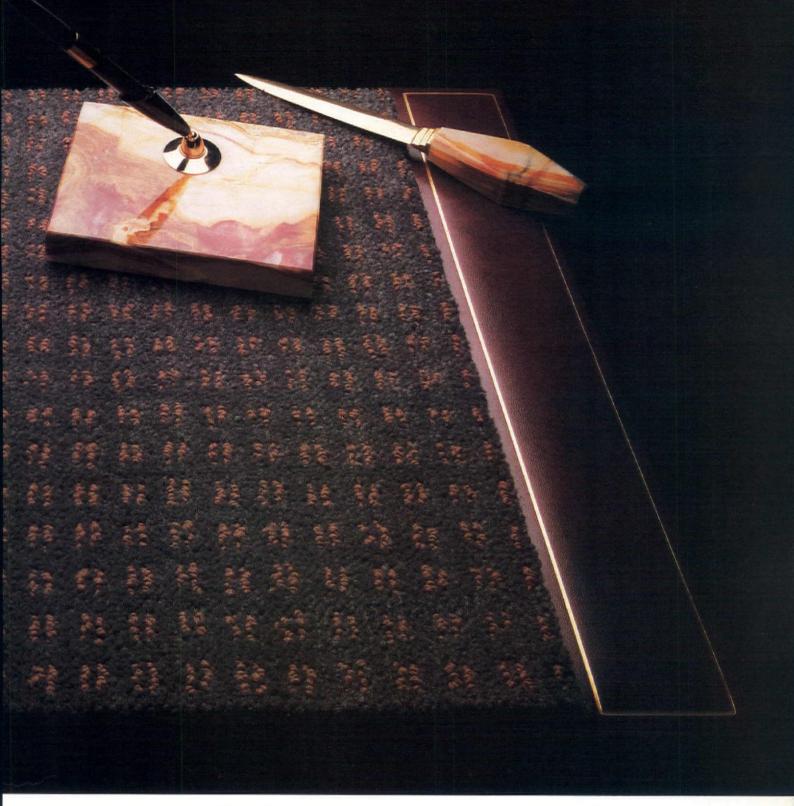
For all the right reasons.





### In offices: Carpets of Antron perform with style.

Circle 15 on reader service card



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

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

For instance, the carpet above is constructed of a new ANTRON\* continuous filament fiber specifically engineered for cut pile carpets that can withstand the traffic of a commercial en-

vironment. With a clean, smooth texture that won't fuzz or shed.

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

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

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



#### Design for future is IDCA topic, June 12-17, 1983

Aspen, Colo .- "The Future Isn't What It Used To Be-A Conference For Tomorrow And Today" is the title and theme of the 33rd annual International Design Conference in Aspen (IDCA) scheduled for June 12-17.

Conference programs include presentations on designers' views of the future, limits to planning and design, emerging talent in the design professions, and changing expectations. Speakers will lead both formal and informal sessions on perceptions of the future and related issues. Programs also emphasize new generations in design and issues confronting them.

Forum leaders include IBM-sponsored International Fellows and young American design professionals.

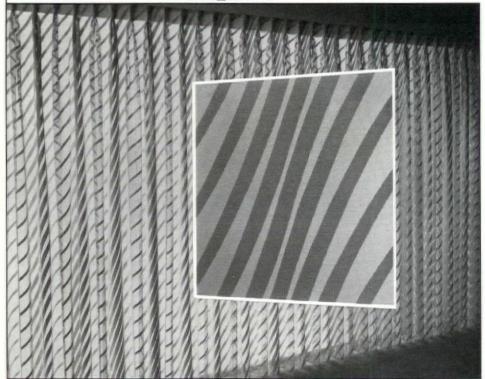
Major film showings and an allconference workshop to design a time capsule which will be buried here in June round out the conference.



#### Southwest Interior Design Center opening draws 2,500 industry celebrants

Phoenix, Ariz.-More than 2,500 manufacturers, distributors, and specifiers attended the recent opening of the Southwest Interior Design Center, this area's newest interior design showplace. Among attendees were (from I. to r.) Arthur Rohr and Gary Thomas of Blake House; Cindy Williams of Horizon; Don Shapiro of Blake House; and Hal Williams of Horizon. All five are tenants in the showplace which is now 65 percent leased.

#### Beautiful. Drapery by Gardisette.



Simply stated, Drapery by Gardisette® is the most beautiful window treatment you can use. Its clean, uncluttered lines and soft. even curves are the result of a unique bottom finish. To complete Gardisette's simple elegance, every drapery, from sheers and casements to heavier weights, is seamless.

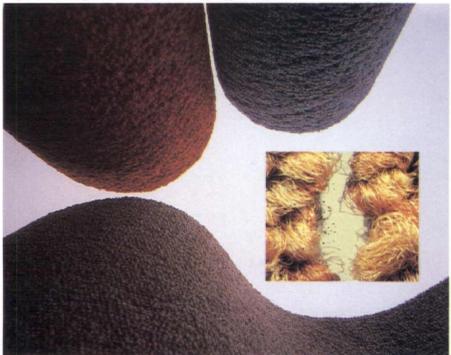
The understated beauty of Gardisette drapery will be the perfect solution to your next project. And, our drapery is usually shipped within 48 hours of receipt of your order. Call us toll free at 1-800-845-8755 for more information. In South Carolina call 1-803-224-7411.



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 Dallas, J. Riley Smith, Inc., 214-651-1352
 Denver, Linn Ledford Showroom, 303-388-4301
 Honolulu, Borland Associates, Inc., 808-538-7155
 Kansas City, Bailey Showroom, 816-931-7533
 Minneapolis, Phyllis Murray Designers Showroom, Inc., 612-338-8081
 New Orleans, Designers' Resource, 504-895-7739
 Phoenix, Linn Ledford Showroom, 602-264-7747
 San Francisco, Stahl and Stahl, 415-626-3037
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Microphoto (inset) reveals fungus growth on carpet pile after week in control chamber. Bioguard carpet (right) shows no growth and stays hygienically fresh.



# Lees reveals the truth about antimicrobial carpet.

New Bioguard® carpets offer important benefits for health care facilities. And for offices with cafeterias; for food service areas anywhere; for hotel rooms and corridors; and for schools.

**Antimicrobial.** For the first time, carpet is making a safe and significant contribution to institutional hygiene. Bioguard carpets effectively inhibit the growth of fungi and bacteria in the presence of moisture.

**Smells fresh.** Bioguard carpets cut off undesirable odors at the source by controlling fungal and bacterial action.

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Appearance. Advanced generation Antron® nylon

yarns by DuPont resist dirt and offer permanent static protection. Bioguard carpets are guaranteed against excessive wear.

In stock. Bioguard carpets (clockwise from bottom) Charger, Faculty II Bio, and On Call are in stock. Orders are filled quickly from inventory.

**Modular systems.** 600mm carpet tiles have antimicrobial action added as a made-to-order option.

Call toll-free. For test data, specification information, call 800/523-5647. From within Pennsylvania, call collect 215/666-9426. Or write for illustrated Bioguard brochure.

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☐ Atelier International Ltd., 595 Madison Ave., New York, New York, 10022. Phone (212) 644-0400. Showrooms: Chicago, Dallas, Los Angeles, Seattle, and Selected Dealers Nationally, Member ASID and IBD.

WORKS OF ART THAT WORK



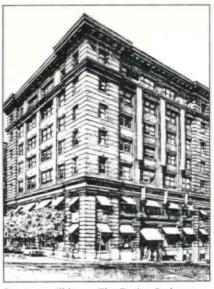
#### Ohio/Kentucky IBD stresses computers in March 4 exposition

Louisville, Ky.-Computer-related furnishings and office equipment are the emphasis of Designer's Expo '83, sponsored by the Kentucky Area/Ohio Regional chapter of the Institute of Business Designers (IBD), March 4.

Representatives of more than 60 manufacturers will present business products, furniture, floorcovering, wallcovering, fabric, and lighting. Two seminars-"Office of the Future," and "Addressing the Human Factor"include leaders Dean Richardson, Lawrence Lerner, Mitchell Kohn, Joel Makower, Marvin Dainoff, and moderator lo Heinz.

David F. Cooke, national president, IBD, will keynote the event with a 10 a.m. address.

For information on the exposition, contact IBD Kentucky Area/Ohio Regional Chapter, P.O. Box 516, Louisville, KY 40201.



Structure will house The Design Exchange.

#### **Design Exchange** beginning renovation in garment district

Kansas City, Mo.—Adjoining buildings in the garment district are being renovated to house a center for designoriented professions and resources. Called The Design Exchange, the complex will offer 65,000 sq. ft. of space for offices, studios, and showrooms.

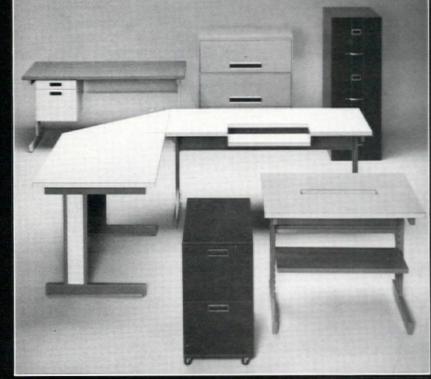
Leased space will be available to architects, designers, contract furnishings representatives, graphics designers, and commercial artists. For more information call 861/842-2177.

#### Owings awarded AIA's Gold Medal

Washington, D.C.—Architect and urban designer Nathaniel A. Owings, FAIA, co-founder of Skidmore, Owings & Merrill, is the recipient of the American Institute of Architects (AIA) Gold Medal, the society's highest award.

Owings, who has campaigned for high urban design standards in America's cities, will receive the award at the 1983 AIA National Convention in New Orleans in May.

#### Invincible: Where Freedom in Color Begins... AND ENDS.



Color. A frustration? Once. perhaps. But now Invincible electronic office furniture unshackled that last barrier to creativity. Now, Invincible puts a virtual palette of color at your command. Not merely a full scope of color, but an almost endless range of combinations. So now the move is yours. Yours to feel. Yours to express. Yours to create in fine lines or in a single bold stroke.

A stroke of genius, from Invincible to you.

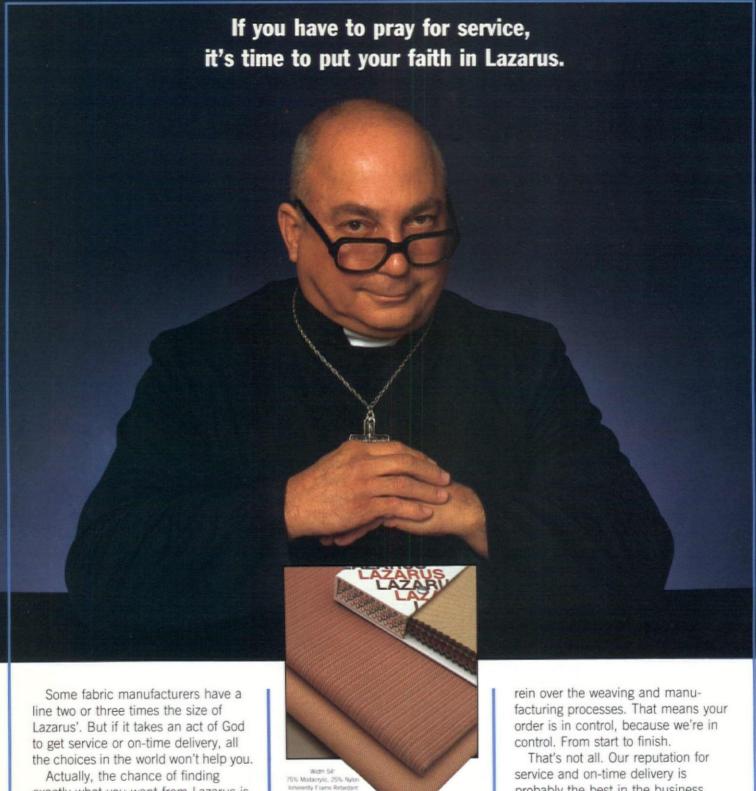


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SEATTLE, WASHINGTON, D.C. Circle 20 on reader service card



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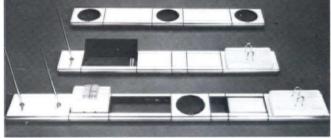


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Magazine Racks Desk Organizers Architectural Lamps

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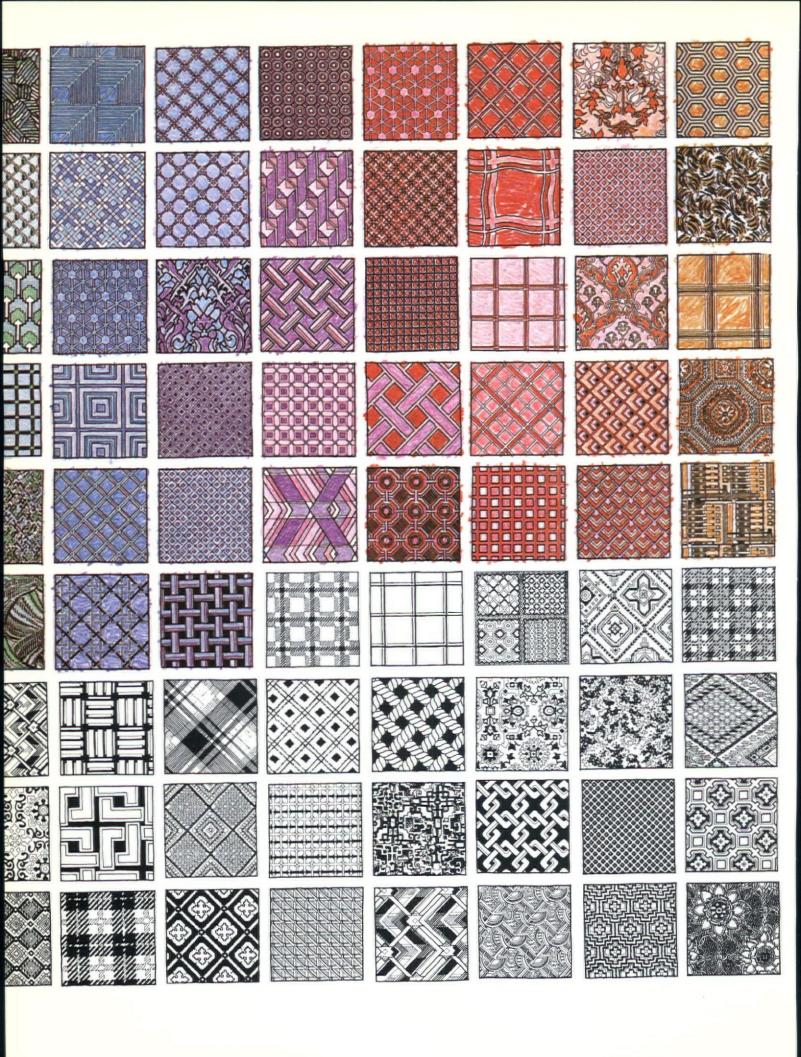
Floor Urns

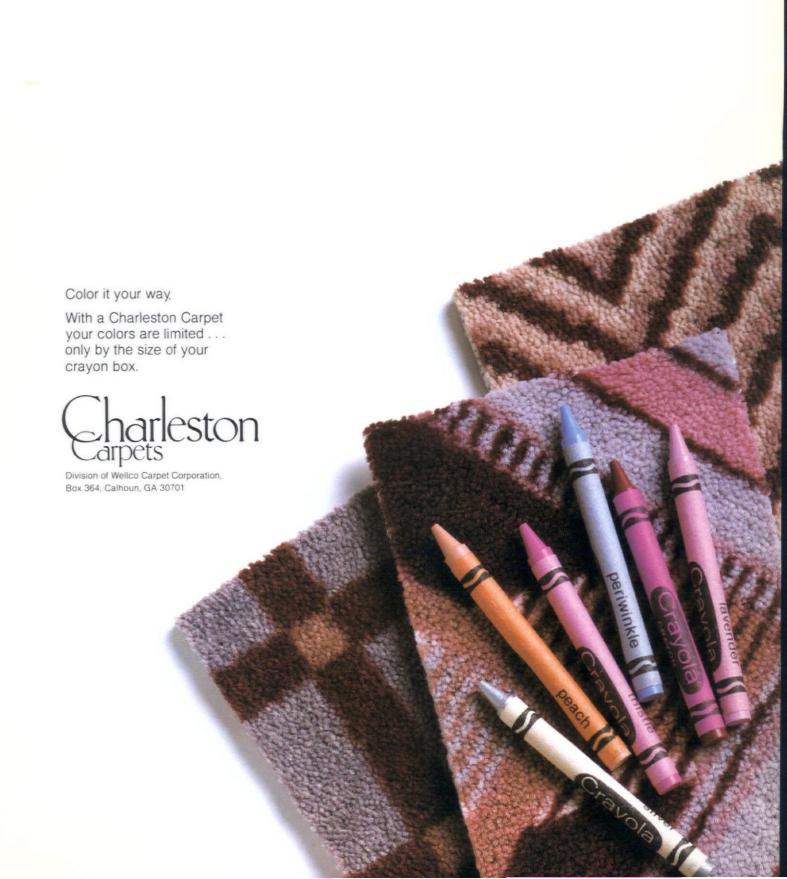


Wall Urns



**Planters** 





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Fiber-Seal was selected as the Fabric Care System for Carpeting and Fabrics in the Rush-Presbyterian health care installation featured in this issue of Contract.

Circle 24 on reader service card



# "Elegance is created out of sheer simplicity. And the effect is dazzling." Fred Palatinus, Interior Designer, Bloomingdale's, New York City

Dining becomes glamorous entertaining. Multi-optical lighting, glass, white tile, and Levolor Horizontal and Vertical Blinds all work together. Gloriously. Levolor Blinds parallel the horizontal and vertical lines of the tile. An elegant plan. Matching accents of reef blue give the room a graphic continuity. Simple and refined. And only Levolor makes horizontal and vertical blinds that match, in hundreds of colors, textures, and finishes. For details, write Levolor Lorentzen, Inc., 1280 Wall Street West, Lyndhurst, N.J. 07071.

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© 1982 Levolor Products of Levolor Lorentzen, Inc. Riviera Custom Blinds by Levolor and Levolor Vertical Blinds are both shown in Reef Blue, Color #612.

### Products marketed at worldwide exhibition

**London**—Contract products and sources for the international market will be shown at the annual exhibition Interior Design International, May 15-19.

International visitors are aided by a multi-language information service provided by Westbourne Exhibitions Limited, organizers of the event. Architects, designers, specifiers, and buyers are expected to attend, according to exhibition management.

Products on display include office systems, furniture, lighting, floorcoverings, wallcoverings, textiles, upholstery, partitions, and ceiling systems for commercial interiors.

For information on manufacturers' exhibit space, contact Nicola West, sales manager, Westbourne Exhibitions Limited, Crown House, Morden, Surrey SM4 5EB, England; 01-540-1101; Telex 926726 Wexpub G.

# IF/ASID request uniform building & fire codes

Stamford, Conn.—A uniform building and fire code is requested by members of the Industry Foundation (IF) and the American Society of Interior Designers (ASID) Connecticut chapters. During a recent forum on industry codes, Avrum Vinnick, Bernard Vinnick Associates, moderated panelists Jeffrey Brown, product manager, Milliken Carpets, and incoming IF co-chairman; Ed Bacon, chief of technical services, Bureau of State Fire Marshals; and Leo Belvel, State Building Inspection Unit.

Brown criticized current standards of testing, particularly the Steiner Tunnel Test which involves applying materials to the ceiling of a chamber and igniting the flame. "The Steiner Test is a farce because you never obtain the same results," he said. "Carpet manufacturers simply keep submitting their product until positive results are achieved." Milliken no longer implements the test. "We at Milliken feel the Pill Test to be more effective." Brown says. "This test involves igniting a methenamine pill. If more than 4-in, diameter of carpet burns before the pill is finished burning, the product has failed."

Controlling replacement of original materials is one of the primary concerns of local fire marshals, Bacon explains. "Ideally, a local fire marshal has to make an inspection of every occupancy once a year," he says. "This is totally impossible because of understaffing. So we have to establish priorities, which include educational and healthcare facilities. Office buildings are secondary and residences receive the least attention," according to Bacon.

# TYPHOON QUALITY... MORE THAN JUST A LOOK





Here are two of the latest styles to come from the boards of Typhoon's designers.

Soon you'll be seeing a lot of imitations...but you won't see the same quality.

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#### Construction begun on energy-saving office tower

Cincinnati, Oh.—Construction has begun on a 529,000-sq.-ft. office tower designed to be one of the most energy-efficient structures of its size in the city.

Developed by the Prudential Insurance Company of America, the 29-story, high-efficiency building is being designed and engineered by 3D/International of Houston.



# CARPETS

presents "Ashford" - a superb collection of Axminsters

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Circle 27 on reader service card

#### brayton textile collection

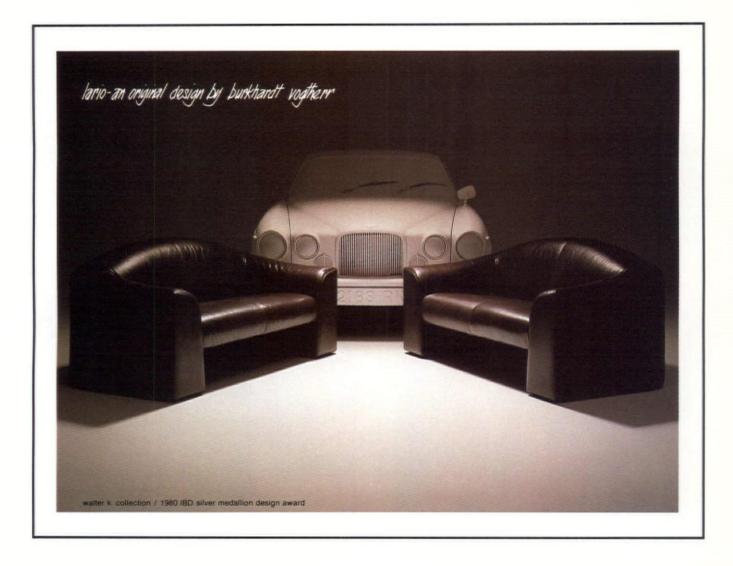
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a classic car, an elegant woman, a man in uniform . . imported textiles and sophisticated leather from the textile people.

#### brayton international collection

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#### Hyatt hotels under construction in Houston, Princeton

Rosemont, III.—Construction has begun on a \$35 million, 364-room Hyatt Regency Princeton and a \$40 million, 400-room Hyatt Regency West Houston, according to Pat Foley, president, Hyatt Hotel Corp.

The Princeton facility, scheduled for completion this Fall, will be part of the 520-acre Carnegie Center. Two fourstory wings connected to a sky-lit atrium will highlight the hotel, planned for a 16.2 acre site at Rt. 1 and Alexander Rd., two miles east of Princeton University. The atrium, which will house the hotel's public space, is designed as a landscaped garden with terraces, brick paths, and water. Guest rooms surrounding the atrium will have balconies overlooking the garden.

The Houston hotel on Interstate 10, scheduled for completion in December, will feature five buildings, each containing five stories and linked by a 16,000-sq. ft. central atrium. A four-acre lake surrounding the buildings will flow into the atrium to create a tropical pool with waterfalls and plants.



Artist's rendition of Princeton Hyatt shows landscaped surroundings.

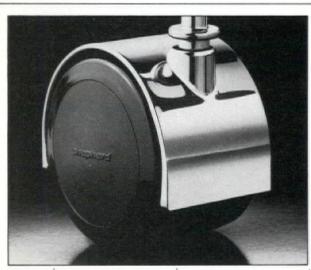
### Seminars broaden world art expo scope

New York—"Collecting Contemporary Art," "When Is A Print An Original?," and "Corporate Collections" are among seminar topics to be presented at Art Expo '83, fine art exhibition. Scheduled April 7-11 at the Coliseum, the exposition will include 300 exhibiting galleries from 20 countries, according to Gerald Leberfeld, show director.

"Art Expo attracts more international exhibitors than any other art fair in the world," says Leberfeld, "but we acknowledge the involvement and support of the vibrant American art community, the international trendsetter of the 20th century."

Art Expo, which attracts 70,000 visitors annually, according to exposition records, will offer works of established and emerging artists. Paintings, lithographs, and sculpture will be among works presented.

A "dealers only" day has been set for April 7, the show's opening day.



shepherd

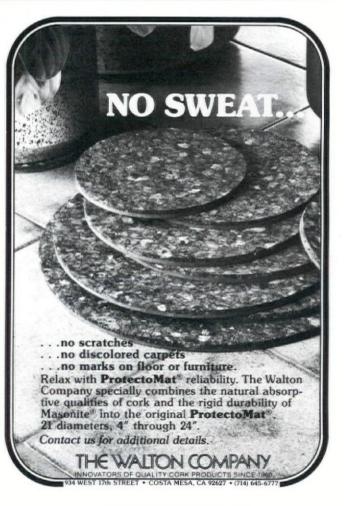
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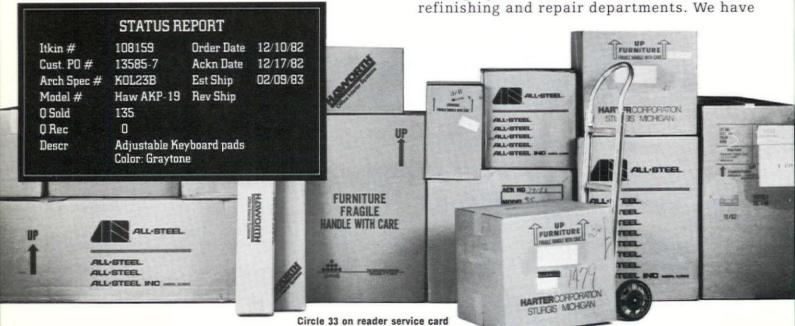
We've made a science
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135 Work Stations from Haworth
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That's because when you, the Designer, the Architect, or the Facilities Manager make a promise—we, The Itkins, help you keep it.

We've been leaders in Office Furniture Management for forty-eight years. We own our own 150,000 sq. ft. warehouse. We operate our own fleet of trucks. We employ our own installation crews. We have refinishing and repair departments. We have





we've grown as big as we are because we're big on the hard parts, the tedious parts—the details.

### Requisitioning, controlling, tracking and monitoring furniture flow from manufacturer to customer is our science. We call it Itkinistics.

We perfected it. And we practice it every day utilizing our own IBM System 34 Computer.

# Itkinistics: The capability to generate and send purchase orders to manufacturers and our acknowledgements to customers within hours after we receive instructions to get going.

No matter how large, varied and complex your furniture orders are, we process them in one day. Time saved in order processing means more time for manufacturers to make and ship furniture.

### Itkinistics: The capability to provide Weekly Status Reports or Daily Status Reports when required.

Our computer stores all original and updated customer orders and all acknowledgements from vendors, including the date of acknowledgement, the estimated shipping date and other pertinent data, as well as all information regarding receipt of furniture in our warehouse.

The data is sorted weekly to yield a Status Report which presents a detailed view of all open orders. It lists the customer's purchase order number, our control number, the specifier's number, the

item model number and description, our purchase order number, the order entry date, the date of acknowledgement by vendor, the estimated shipping date, and the revised

shipping date, if applicable.

Status Reports present a clear, up-to-date picture of the entire project—including notations highlighting areas that require attention and actions that are being taken.

### Itkinistics: The capability to identify and correct potential errors and glitches all along the way.

Because our computer almost always reports inconsistencies and inaccuracies, we find them before our customers do.

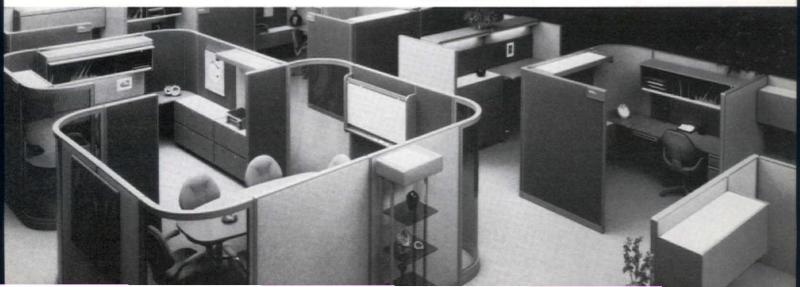
We've even developed a computer program to provide us with a Missed-Acknowledgement Date Report and a Missed-Ship Date Report. The former lets us know by customer which purchase orders have not been received by the factory. The latter identifies by customer any furniture that has not been received on time at our warehouse.

## Itkinistics: The capability to coordinate, track and control all the elements of a project from start date to completion date with maximum efficiency.

To fully appreciate how Itkinistics can help make furniture management so much easier and more efficient you really have to see it work. Call or write Lewis Itkin, President, to arrange a meeting.

Itkins

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Excellence in design... unsurpassed in craftsmanship.

Davis is proud to present the internationally known Kill Collection designed by Kastholm & Fabricius of Fellbach, Germany.

The awards and merits bestowed on this collection only serve to confirm the renowned esthetic appeal of each design.

appeal of each design.
The Kill Collection employs not only award winning European design but perhaps the finest craftsmanship in all the world. From the sculptured metal frames and special die-castings to the hand stitched leather upholstery, Kill is indeed the epitome of craftsmanship.

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# CONTRACT

### DOES DIVERSIFYING MEAN BETTER SERVICE?

Robert M. Stewart President Stewart, Romberger & James Pasadena, CA—



**66** Design is an all-encompassing term; therefore, design businesses and philosophy should reflect diversification. Cross-fertilization between various types of jobs and clients—corporate headquarters, financial institutions, or restaurants, for example—can strengthen a firm and enable it to render more valuable service to its clients. **99** 

### MOVABLE WALLS REQUIRE MORE DESIGN EXPERTISE

Jack Tanis President Vaughan Walls Dallas—



**66** In 1981, 20 million lineal feet of walls were constructed in the U.S., 85 percent of which was drywall. By 1991, this will reverse to 80 percent relocatable walls and 20 percent fixed. As a result, interior architecture will gain importance. Designers will need expertise in interior alternatives to avoid financial waste when walls have to be moved. **99** 

### POST-MODERN STYLE IS MERELY DECORATION

N. David O'Malley, AIA President, CEO Welton Becket Associates Los Angeles—

**66** Architecture should serve society, and decoration doesn't get to the root of

the problem. I believe that postmodernism has merely absorbed into its dogma current values in the worlds of fashion and merchandising. It's a license to be arbitrary. The creative mind believes in the future, in both human and technological change. It has a responsibility to society and when we lose sight of this responsibility—this vision—not only are we diminished as artists and designers, but our art and our work also suffer. 22

### CANADIAN COMPANIES SEEK U.S. MARKETS

John New Marketing Manager Reff Inc. Toronto—



66 The Canadian market is 10 times smaller than that of the U.S. And although it is a strong market, there is also a design regionalism impacting Canada that one does not see in the U.S. Specifiers here have a tendency to buy from local manufacturers. This is less true in the U.S. where one sees wider product variety throughout the country. These factors make Canadian manufacturers seek out American markets for their products. ??

### WORKER PRODUCTIVITY ENHANCED BY PRIVACY

Mike Brill BOSTI Buffalo, NY—



**66** The open plan office as we see it today is in need of much refinement before worker productivity can truly be maximized. Even closed, private offices are acoustical sieves. Imagine, then, the lack of acoustic resistance where space

dividers are but partial partitions. Studies have revealed that less than three panels surrounding an office space offers no privacy and as little noise reduction as the bullpen. **99** 

#### TEAM MANAGEMENT HELPS COMPUTER OPERATIONS

Bruce Graham, FAIA Principal Skidmore, Owings & Merrill Chicago—



**66** Today we are finding companies that are planning for management teams—the Japanese form of management—rather than for the individual manager. This is particularly true in computer operations. Rather than opting for systems furniture in private offices to house these employees, they are grouping them in one conference-type area. I think this movement is motivated in part by the cost of private spaces but also by the realization that people work well in team environments. **99** 

### AUTOMATED OFFICE MUST ALLOW FOR GROWTH

Dieter Knape President iil Limited Toronto—



66 Computer and electronic environment manufacturers must keep in close touch with computer companies to be aware what firms are coming out with in order to accommodate the hardware. Because the automated office is still a relatively new phenomenon, we are in an evolutionary process. There is room for product improvements every three or four months. 29



chairs & arm-chairs by Artifort distributed by Castelli

design by Geoffry Harcourt RDI

116 Wilbur Place Bohemia, New York 11716 Telephone 516 589 0707

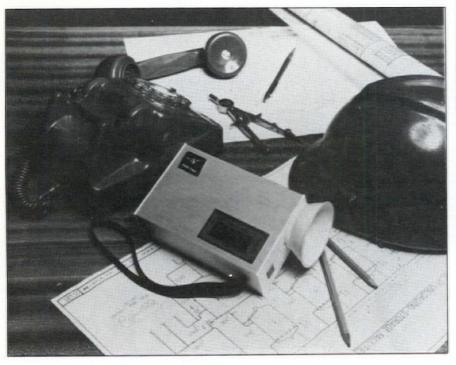
Circle 35 on reader service card





# CONTRACT GY

## Battery-operated measuring tape handles 90-ft. distances



E.M.U. Electronics introduces a battery-operated measuring tape capable of handling distances ranging from 2.5-ft. to 90-ft. Unit operates via ultrasonic echos and is accurate to plus or minus 1-in. Readings are displayed digitally. Both metric and standard versions are available. Circle No. 396.

# Custom signage created by electronic board



Venus 4000 electronic message/ animation center is an advanced microprocessor-based system that combines graphics, animation, and word messages. Displays are custom-designed to produce the correct message for individual users. Manufactured by Daktronics Inc., systems, such as Mobile Municipal Auditorium display (shown), feature large lampbanks that are controlled by Venus 4000. Circle No. 397.

## 22 function/20 line program mix possible with multi-function, electronic phone

United Technologies' multi-function instrument (MFI) telephone allows a program mix of 22 available features and/or 20 lines. Product was designed for use with the firm's Infotran™ systems. Completely electronic, solid-state unit weighs less than standard telephones and offers 10 to 20 buttons. Deluxe model comes with a built-in speaker and microphone, allowing hand-free operation. Features include call preview, privacy function, progressive conference, and speed calling.

Circle No. 257.



# Air flow control, wire management incorporated in datastations

Structural Concepts' electronic technical furniture is designed to provide safe, neat cable and wire storage in individual workstations. Units feature a personalized ventilation system that delivers individually controlled air flow to each station. Custom sizes and configurations are available. Circle No. 252.

#### 2,000-hour calculator has nine functions and memory



Metcor Mfg. offers a desktop calculator as part of the 3000 radius series. Product features 2,000-hour batteries, five-minute automatic shut-off, and nine functions with memory. Finishes include polished and black chrome, polished bronze, and brass. Unit snaps out of its housing for battery replacement. Keys are molded in character shape. Circle No. 253

## **Encoding system labels disks**

Disk Ease System from Realco catalogs, labels, and maintains service schedules for magnetic media as it encodes each disk. Developed for CP/M compatible computers, system uses Microsoft family of languages. Circle No. 398.

# Adjustable ergonomic workstation accommodates any VDT operator



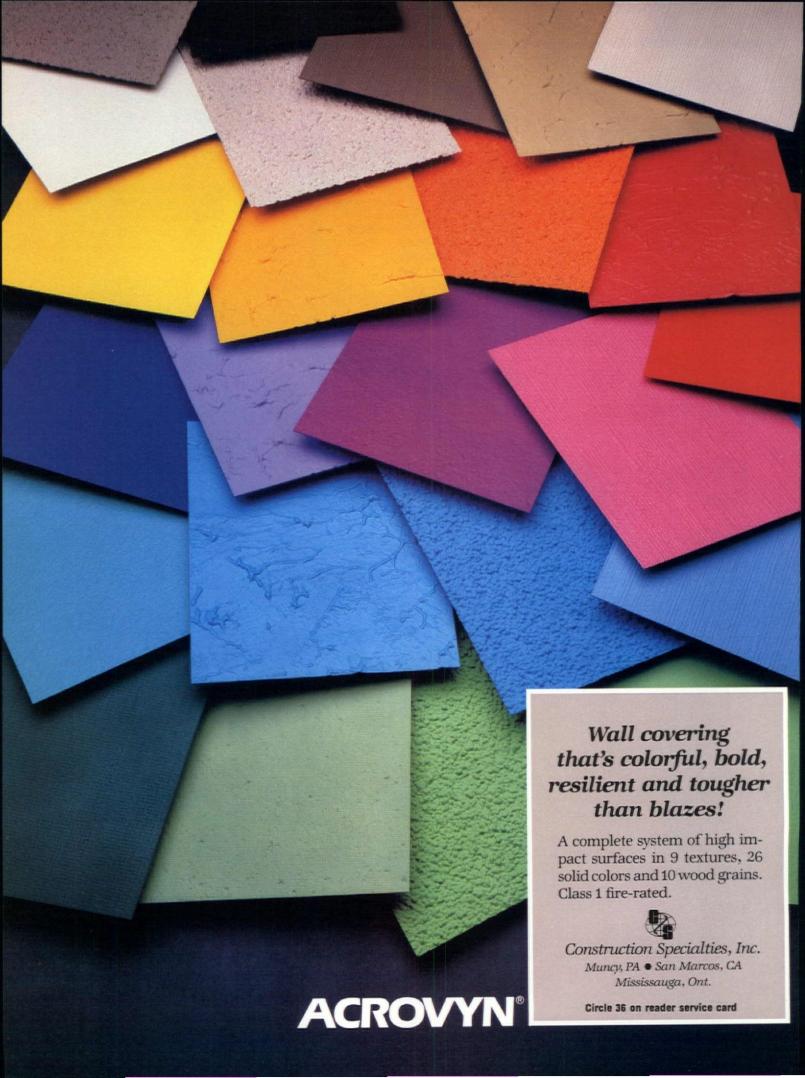
The Professional Marketing Group Inc. developed the "UFO 2000," an ergonomic workstation that permits control from a seated position. Front keyboard surface tilts five degrees and has a 10-inch vertical range. Rear surface tilts 15 degrees forward and back, and has a 10-inch vertical adjustment that accommodates any light/line-ofvision combination. Firm will match major panel manufacturers' colors and finish materials. Circle No. 254.

# Vertically adjustable surfaces enhance computerized workstation



Rangine Corp. is adding a computerized workstation to the Rakks space management system. Product is designed to accommodate computers and peripheral equipment in a small space while allowing easy access to all components. Vertically adjustable surfaces mount on floor-to-ceiling poles and permit individualized placement of monitors. Lamp

brackets hold drafting lamps and copy holders at any desired location without attaching to shelves or desktops. Components that expand and complement this system are available. All surface components come in clear or black plastic laminate or oak veneer. Metal components are offered in clear or black anodized aluminum. Circle No. 258.



"Lara". Simple planes converge to create a delicately balanced design. Inset: "Eleonora", on casters, sleekly defined in an elegant high-arm model.



A subsidiary of Stendig International, Inc.

For more information on Stendig Seating, contact: Stendig International, Inc., 410 East 62 Street, New York, NY 10021, 212 838-6050 SHOWROOMS: CHICAGO, DALLAS, LOS ANGELES, MIAMI, NEW YORK

Circle 37 on reader service card



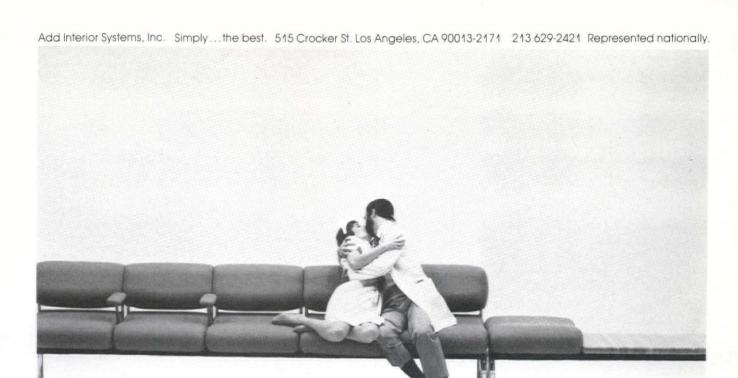
Current contract colors matched by filing system line

A palette of 36 colors for metal filing systems, developed by ISD Inc., Chicago-based interior architecture and design firm, was recently introduced by Storwal International.

Included in this series of neutral and chromatic hues are the four primary colors, five deep tones, and a range of neutrals in grayed, warm, and cool casts. Twelve grayed pastels, compatible with current contract color trends, complete the palette.

Storwal, a Toronto-based manufacturer, offers lateral filing systems, modular pedestal files, magnetic media storage units, computer printout files, and compatible contract furniture.

Circle No. 260.



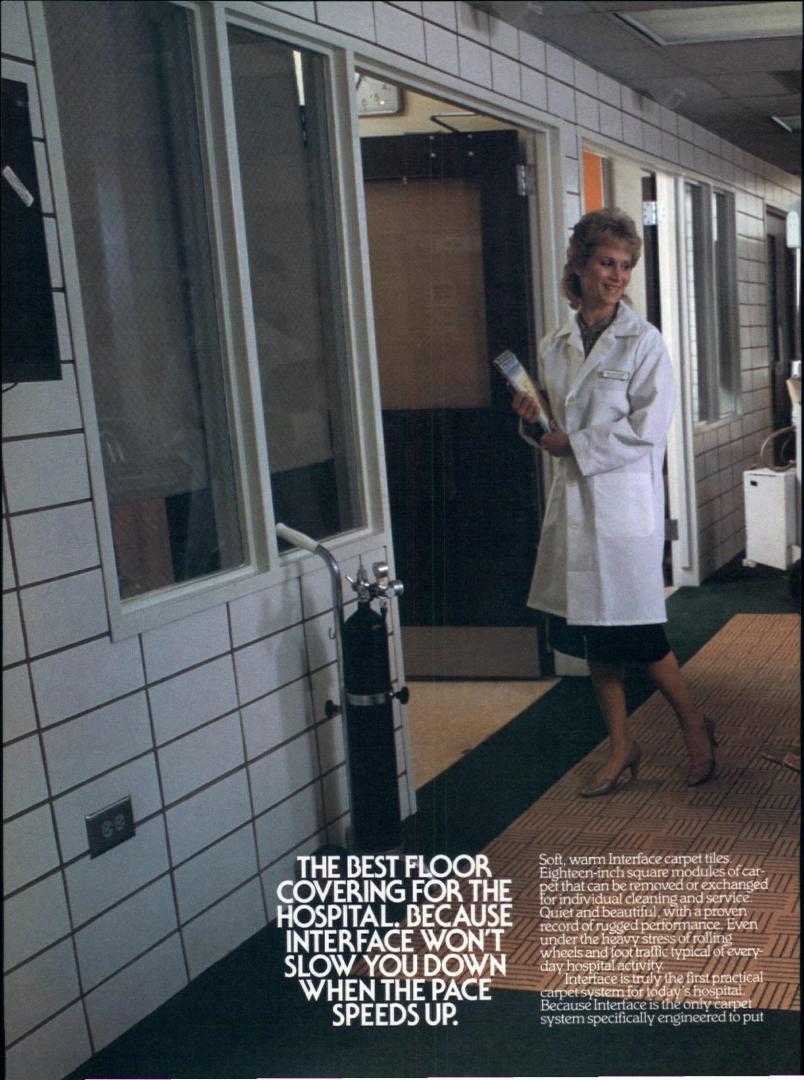
Waiting area seating: Raphael Lounging Series 116

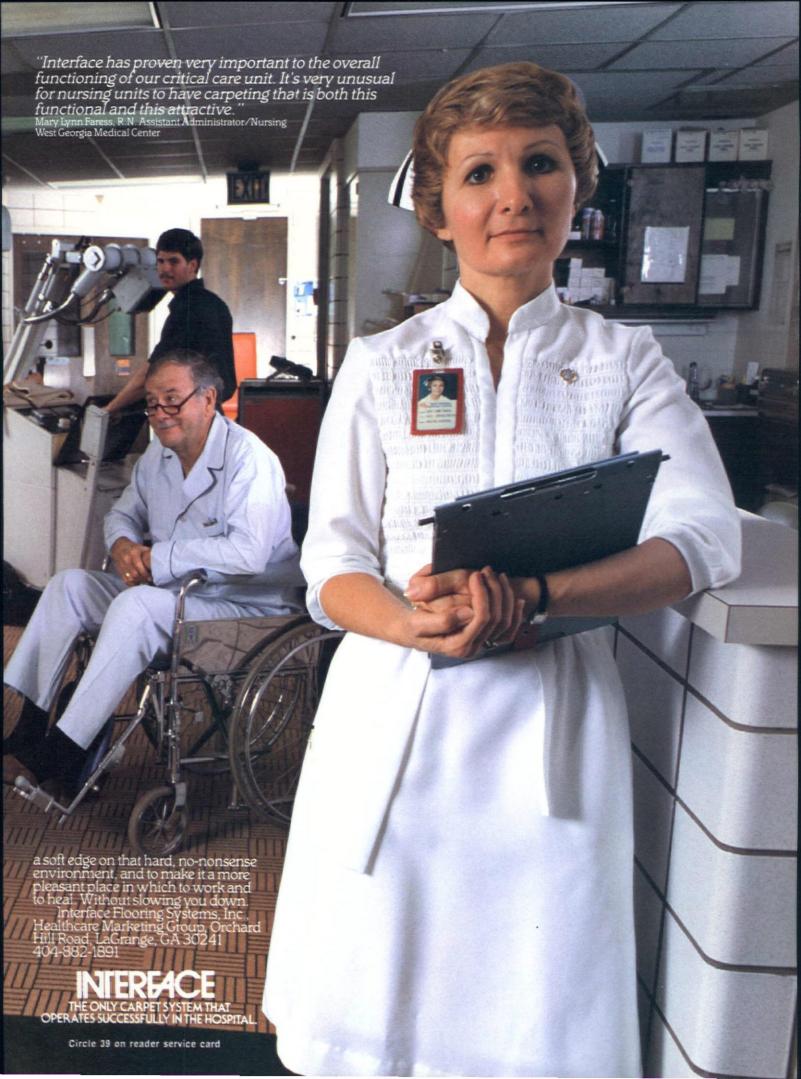


### LOVE STORY.

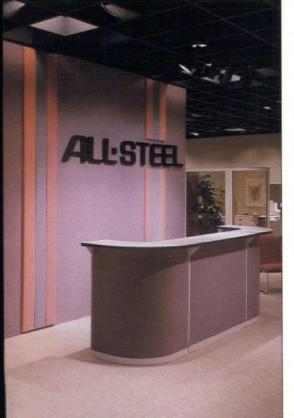
Specifying Add Interior Systems means never having to say you're sorry.

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# Systems configurations at All-Steel display new office options

Confronted with series upon series of systems furniture, reception arrangements, and seating, All-Steel designer Tom Stakem used every item to his advantage, making the Aurora, III. All-Steel showroom an example of a working open plan office.

Coordinated in the firm's fabric introduced at NEOCON '82, system panels range from 33 to 78 in., displaying each of six available heights. Configurations vary for secretarial and executive use, as well as for computer terminal placement. Both freestanding and panelmounted furnishings are used.

A custom wall with the company logo is the showroom's initial focal point. This backs an All-Steel reception station in coordinating fabric.

An existing black grid ceiling and gray carpeting are downplayed by use of color in the showroom, according to

Stakem. "The contrast should be created by furnishings, therefore drawing the eye away from the surroundings," he says. System trim in frost gray accents shrimp and mauve colors, while tying together the use of systems.



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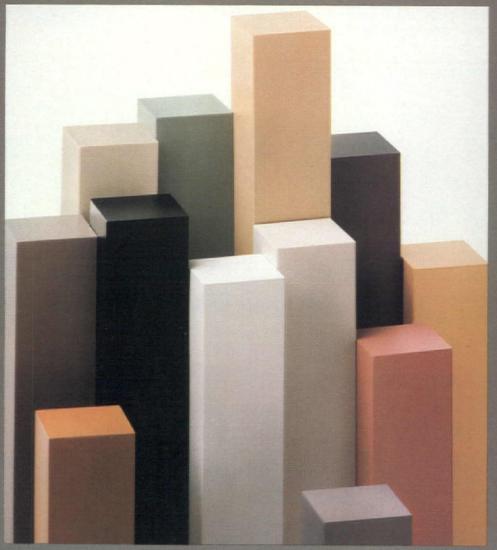


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#### PEOPLE/NEWS

Marcus R. Tucker (shown), FAIA, has joined the Houston firm of Sikes Jennings Kelly, architects and project consultants. He serves as principalin-charge of architectural projects and directs the firm's interior architecture practice.

Richard Haver (shown) has joined iil Int'l. as regional sales manager.

Vecta Contract has opened a new office in Houston, Tx. Promotions at the firm include Robert Etheridge, to territory manager for southeast Texas and Sherry L. Hood to district manager. Other new district managers are Richard LaKaff, New Orleans, and William Baxter, Dallas.

Donald Cameron (shown) has joined Mansfield Manor Ltd., New York, as design department director.

Paul Gottlieb has been named national sales manager of Saxony Carpet, New York.



Tucker





Du Pont Co. has named J.T. Chattin, Jr. marketing services manager, carpet fibers, for the New York firm's textile division. He will be responsible for residential and contract marketing programs.



Obata





Famous-Barr Commercial Interiors, St. Louis, has named Rosemary Oliver director of design, Jane Diercks and Thana Joyner project designers, and Susan Plotke staff architect.

The Bowman Group, Columbus, Oh., has formed an independent operating company, Interiors Services. Martha Allison is president.

Hellmuth, Obata & Kassabaum Inc. (HOK) architectural firm has reorganized its management structure with Gyo Obata (shown) as new chairman of the board and president. King Graf (shown) and Jerome J. Sincoff (shown) are new vice chairmen. Changes followed the death of firm president George E. Kassabaum.

Misco-Shawnee Inc. has promoted David Carzoli to sales manager, Armstrong division, Chicago. He will handle sales and marketing of the resilient flooring line.

Donghia Showrooms Inc. appointed lav lames national director, sales. He will be based in the firm's N.Y. office.

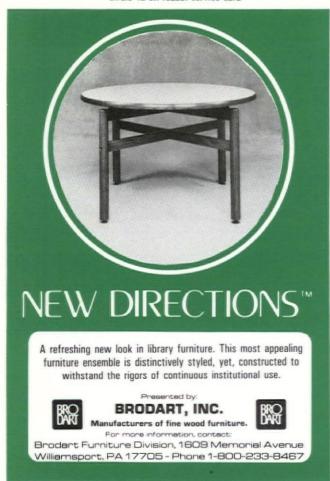
# PRESENTING PRESENTING SEON SIN Grand Café

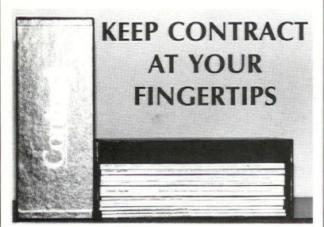
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#### PEOPLE/NEWS

Hunter Douglas Window Products Division announces the promotion of **Marilou Rightley** to product manager, Flexalum Vertical Draperies. She replaces **Paul J. Malouf** who has been named manager of engineering services.

Evans-Monical Inc. announces the following promotions: J.W. Evans, chairman of the board; David Evans, president; R.V.M. Groves, executive vice president; Trina Jones, vice president, design; and George Broussard, vice president, facilities and services.

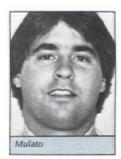
Quaker Fabric Corp., Fall River, Mass., announced two appointments to its Print Division. **Burt Goldstein** is assistant vice president, operations, and **Stanley Holmes Melton** is vice president, market development.

Precision Mfg. has named Filzer/Paul/Weinstein Inc./KFA sales representative for New York City and parts of New York state, Connecticut, and New Jersey.

Mark Wilson has been named manager, product design and development, Halo Division, McGraw-Edison Co., Elk Grove Village, Ill.

Mira-X International Furnishings Co. Inc., New York, has appointed Edward R. Mulato (shown) sales representative for Long Island, Brooklyn, Queens, and Westchester territories.

Lee Hales, facilities planning specialist and noted author/lecturer, was named marketing manager for Arrigoni Computer Graphics.



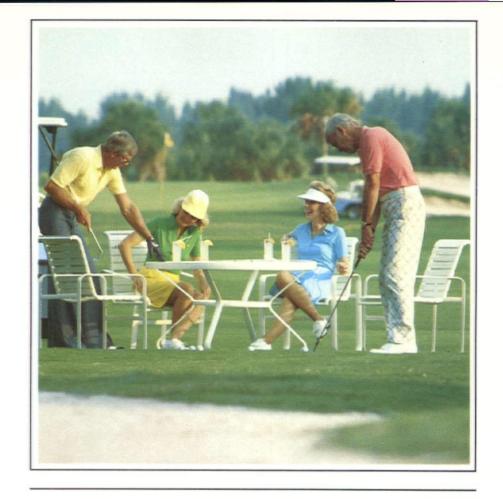
Duraclean International promoted **Fred Charlton** to the position of vice president-in-charge-of-advertising.

The 18 Merchandise Mart carpet showrooms participating in the Herculon™ treasure hunt promotion included Aladdin, Barrett, Blue Ridge, Charleston, Collins and Aikman, Columbus, Criterion, Cumberland, as well as Everest, Focus, Galaxy, Gulistan, Homeland, J & J, Porter, Richmond, Salem, and Wellco. Winners chosen from showroom visitors received an Atari 400 home computer system.

**Mueller Furniture Corp.** has opened a showroom at 232 E. 59th St., New York.

The St. Louis chapter of the Institute of Business Designers (IBD) recently elected officers for the 1982-1984 term. They include Myra L. Katz, president; Dennis A. Cassani, vice president, education; Dennis L. Ham, vice president, finance; Arlie W. Temple, vice president, membership; Lynn Harper, vice president, programs; William H. Bliss, vice president, publicity; Faye McElroy, vice president, trade relations; Michael L. Lefferson, secretary; and Barbara A. Zappulla, national trustee.

Litton Industries recently presented an Advanced Technology Award to **Robert P. Beckman**, factory administrator, Lehigh-Leopold division, Burlington, Ia. Beckman developed a new method of furniture joint construction.



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MGM Grand Las Vegas, NV • Camelback Inn Scottsdale, AZ • Intercontinental Hotel Maui, Hi • Mountain Shadows Scottsdale, AZ · Grand Teton Lodge Jackson, WY · Banff Hotel Alberta, Canada · Disneyland Hotel Anaheim, CA · Hotel Del Coronado Coronado, CA · Dunes Hotel & Country Club Las Vegas, NV · Quail Lodge Carmel, CA • The Olympic Country Club, Lakeside San Francisco, CA • Century Plaza Hotel Los Angeles, CA Harrahs Reno, NV • Marriott Inn Newport Beach, CA • MGM Grand Hotel Reno, NV • Newporter Inn Newport Beach, CA · Biltmore Hotel Phoenix, AZ · Kapaula Bay Hotel Maui, HI · Silverado Country Club Napa, CA Waikiki Sheraton Honolulu, HI • Bel Air Hotel Beverly Hills, CA • Shangri-la Hotel Singapore • Kings Island Inn Kings Mill, OH · Alice Springs Casino Alice Springs, Australia · Exmoor Country Club Highland Park, IL · Shaker Heights Country Club Cleveland, OH · Breckenridge Inn St. Louis, MO · Tan-Tar-A Resort Osage Beach, MO Crown Center Hotel Kansas City, MO . Marriott Lincolnshire Lincolnshire, IL . Radisson Hotel La Crosse, WI Walt Disney World Lake Buena Vista, FL . Hyatt Regency New Orleans, LA . Sea World of Florida, Inc. Orlando, FL · Busch Gardens Tampa, FL · Caribbean Gulf Hotel Clearwater Beach, FL · The Breakers Palm Beach, FL · Sea Pines Plantation Hilton Head Island, SC · Hyatt Regency Atlanta, GA · Fairmont Hotel New Orleans, LA · New Orleans Country Club New Orleans, LA · Hershey Motor Lodge Hershey, PA · Piping Rock Club Locust Valley, NY • Montauk Yacht Club & Inn Montauk, NY • Mt. Snow Snowlake Lodge Dover, VT Sheraton Tara Braintree, MA • Rye Town Hilton Rye, NY • Del Webb's Casino Atlantic City, NJ • Rolling Rock Club Ligonier, PA · Harrah's Atlantic City, NJ · Buccaneer Beach Hotel St. Croix · Divi Divi Beach Hotel Aruba Meridien Hotel Martinique • Mullet Bay Beach Hotel St. Maarten • Caneel Bay Plantation St. John • Little Dix Bay Virgin Gorda • Paradise Grand Hotel Paradise Island, Bahamas • Frenchman's Reef St. Thomas • Dorado Beach Hotel Dorado, P.R. · Singapore Hilton Singapore · Khartoum Hilton Khartoum, Sudan · Fijian Hotel Fiji Hotel Okura Tokyo, Japan • Elbow Beach Hotel Paget, Bermuda • Bonaventure Hotel Montreal, Quebec Ramada Hotel Dhahran, Saudi Arabia • Kuwait Hyatt Regency Kuwait • Aphrenieum Intercontinental Athens, Greece · Cerromar Beach Hotel Dorado, P.R. · Pink Beach Club Bermuda





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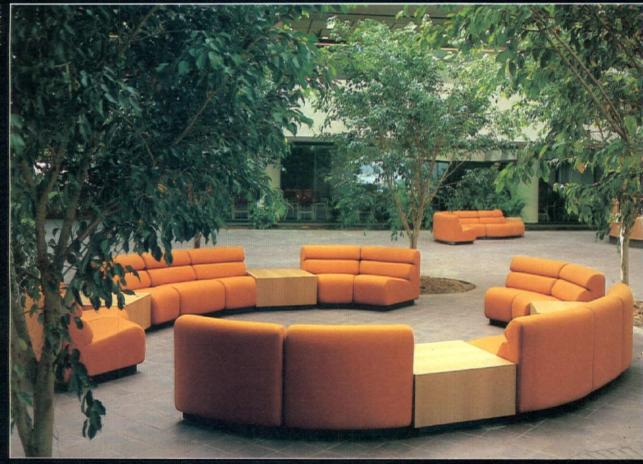
- All units are upholstered by a patented process which allows covers to be replaced on site in minutes. One hospital ordered over 200 extra covers for a continuous maintenance program.
- Special attention was given to patients' lumbar support. Coordinating arms were designed to give assistance in arising.
- · All components pass CA 117 flammability.
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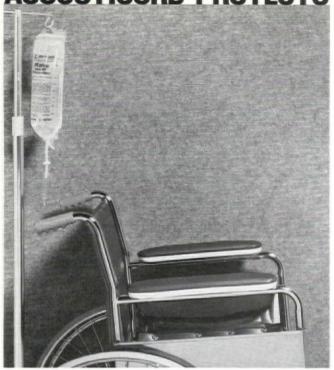
August Incorporated Box 43 Centerville, Ohio 45459 513/434-2520



OCLC Inc., Columbus, Ohio

interior design by Rodgers Associates, Stamford, Connecticut

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#### PEOPLE/NEWS

Jennifer Fox Zegel (shown), ASID, has joined the interior design staff of American Business Interiors, Melbourne, Fla.

John S. Haskell (shown), president, The Professional Marketing Group Inc., Los Angeles, has been elected to the board of directors and appointed vice president, marketing, Systems Furniture Co., Torrance, Calif

David R. Millard, Jr., joins Ellerbe Assoc. Inc., Washington, D.C. as manager, interior design div. Millard was formerly with Skidmore, Owings, and Merrill.

New 1982-'83 NOPA president is Dan Scott, president, Dan P. Scott & Sons Inc., Tulsa, Okla.

Earle S. Irwin was named vice president, manufacturing, Irwin Seating Company. Paul D. Winchester is new vice president, marketing for the manufacturing firm.



Zegel



Haskell



Mart Center/DC Inc., Chicago, has appointed Portia McGrew to the position of administrative director of its new Washington Design Center. McGrew will be responsible for day-to-day supervision of the facility.

Reece Galleries Inc., corporate art specialists, named Betty Unger staff assistant in charge of gallery administration and on-site merchandising, and Maria Davis sales representative for New Jersey and Pennsylvania.





F. Stuart Baker (shown) has been named manager, marketing, for Conwed's Interior Products Division, St. Paul, Minn. Baker is responsible for all sales and marketing activities for the division.

Judy Condylis (shown) was named sales associate/showroom manager, Tuohy Furniture Corp., Merchandise Mart, Chicago. She will assist sales efforts in the northern Illinois area.

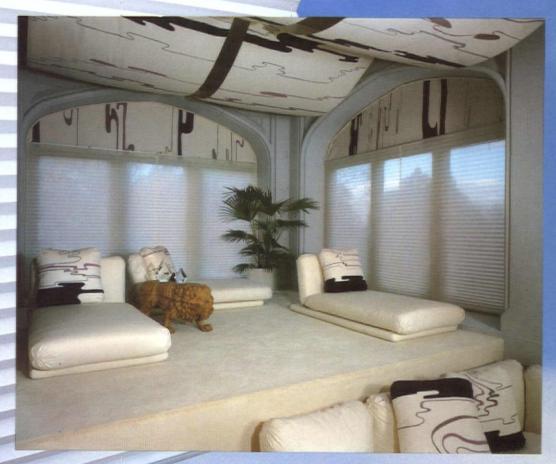
VPS Inc., formerly a subsidiary of the Vantage Companies, has been purchased by Neil S. DiGiammatteo, president and chief executive officer of the design firm.

Design Printery, New York, recently introduced its 11-print fabric collection to designers/specifiers along with the "Make Mine Country" line of seven patterns.

Donald Spitler has been appointed president of R-Way, Shebovgan, Wis.

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elegant they perfectly complement traditional as well as modern interiors . . . and fill them with soft filtered light. So practical they can reflect up to 87% of the sun's heat and glare . . . and insulate against winter chill. All these features in a design so compact that Softlights virtually disappear when not in use. A truly revolutionary new innovation in window fashions; Softlight Shades are fast becoming the choice product among leading designers. Ask for them by name.

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#### **COMING EVENTS**

#### 1983

February 19-20. Office Systems Research Assn. Second Annual Research Conference. Bellevue-Stratford Hotel, Philadelphia. February 21-23. Office Automation Conference. Philadelphia Convention Center, Philadelphia.

February 25-28. American Assn. of School Administrators Show. Atlantic City, NJ.

March 3-5. Condes. Dallas Market Center, Dallas.

March 13-16. California Peninsula Chapter/ASID "Stimulus" Mini-Conference. Asilomar, Pacific Grove, CA.

March 14-17. Federal Office Systems Expo. Washington Convention Center, Washington, DC.

March 15-16. Contract Canada '83, A Business Interiors Show. Grande Concourse, Omni International, Atlanta.

March 17-18. Michigan Design Center Preview XII. Michigan Design Center, 1700 Stutz Dr., Troy, MI.

March 17-19. West Week. Pacific Design Center, Los Angeles. April 10-13. National Office Products Assn. (NOPA) Contract Furnishings Forum (CFF) Annual Conference. Pointe Resort,

Furnishings Forum (CFF) Annual Conference. Pointe Resort, Phoenix, AZ. April 19-20. Workspace '83, Exposition of Products & Services for

April 19-20. Workspace '83, Exposition of Products & Services for Commercial/Institutional Spaces. Civic Auditorium, San Francisco. April 25-27. Lighting World II. New York Hilton, New York.

May 6. Varieties '83. The Marketplace, Philadelphia.

May 16-19. National Computer Conference. Anaheim & Disneyland Hotel Convention Center, Anaheim, CA.

June 8-10. A/E Systems '83, Electronic Design & Architectural Drafting Equipment Exhibition. Market Hall, Dallas.

June 14-17. NEOCON 15, National Exposition of Contract Interior Furnishings. Merchandise Mart, Chicago.

July 16-19. International Carpet & Rug Market. Atlanta Market Center, 240 Peachtree St., N.W., Atlanta.

July 16-20. Summer Floorcoverings Market. Atlanta Merchandise Mart, 240 Peachtree St., N.W., Atlanta.

September 11-13. National Decorative Accessories Show, First National Exposition of Decorative Interior Products. Moscone Center, San Francisco.

September 22-23. Michigan Design Center Preview XIII. Michigan Design Center, 1700 Stutz Dr., Troy, Ml.

**September 22-25.** The Woodworking Fair. Los Angeles Convention Center, Los Angeles.

September 28-October 2. National Office Products Assn. (NOPA) Annual Convention & Exhibit. Hyatt Regency & McCormick Place, Chicago.

October 20-22. CONEXION '83, First Annual Southeastern Contract Design Market. Atlanta Market Center, Atlanta.

**November 9-10.** CONTRACT/Facilities Design & Management Computer-Aided Space Design & Management Conference. Halloran House, New York.

#### Foreign Trade Shows 1983

April 14-17. International Show for K.D. Furniture. Le Bourget, Paris, France.

May 1-5. Saudi Business '83. al-Dhiafa Exhibition Center, Riyadh, Saudi Arabia.

May 4-8. Scandinavian Furniture Fair 1983. Bella Center.

May 15-18. CONTEXT, London Home & Contract Textile Show. Earls Court, London.

May 15-19. Interior Design International, International Contract Furnishings & Interior Design Exhibition. Olympia, London.

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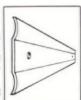
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Creating separate public, staff, and patient traffic Mech routes, as well as providing a large number of single-patient rooms were PH two of the problems addressed in the Hansen Lind Meyer's design treatment of Labs/Research Dept Admin Rush-Presbyterian-St. Luke's 15 Mech | Future Inpatient "Atrium Building" expansion, Chicago. The 220-bed addition combines vertical node transportation Labs/Research PH Dept Admin with separate transfer levels to avoid traffic snarl-ups. 14 Atria, and a 90-seat Tea Inpatient Room, lend a non-institutional flavor to Labs/Research 13 the addition. **Dept Admin** Inpatient Labs/Research Dept Admin Inpatient Labs/Research 11 Dept Admin Inpatient Inpatient Cath Lab 10 10 Inpatient Labs/Research Dept Admin Inpatient Inpatient Patient Transfer Level Labs/Research **Perinatal Inpatient** 8 Dept Admin Labor/Delivery Dept Admin Inpatient Inpatient Support Dept Admin **Nurseries** Labs/Research Dept Admin 6 Support Inpatient Support Support 6 6 Surgery Labs/Research **Dept Admin** 5 Staff Transfer Level Labs/Res/Admin Inpatient Labs/Research **Public Functions** Dept Admin 4 Administration Inpatient/Public Labs/Research Dept Admin Labs/Research CTA Mech 3 Inpatient Dept Admin 3 Eng & Maintenance Labs/Research Labs/Research Inpatient Dept Admin Dept Admin Main Cancer Ctr S. Paulina Street Hospital **Emerg/Acute Care Employee Center** Entrance & Entry Chapel **Nuclear Medicine** Inservice Ed Diag Radiology Medical Records Eng/Maint/Kitchen Mech Cancer Ctr Pharmacy Mech **Service Transfer Level** 



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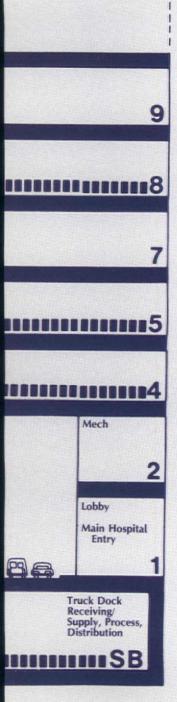
by NANCY HOLTON

Iternate care institutions, hospital chains, group purchasing, long-term marketing plans, and establishment of hospital profit centers are a few of the healthcare trends emerging in the mid-1980s. Economic pressures, sky-rocketing costs, and stagnating reimbursements have been straining traditional healthcare systems, leading to the development of new concepts for structuring and managing facilities.

These dynamic evolutionary changes resulting from economic pressures are forcing healthcare facilities to place far greater emphasis on the bottom line, even among not-for-profit institutions. A driving competitive philosophy has pervaded the healthcare field.

Both company-owned and privately-owned hospitals, operated totally for profit, have jumped into the fray, dominating some markets with hospital chains that facilitate group purchases and provide services less expensively.

In addition, a variety of alternate care institutions have appeared. Some are organized by hospitals and hospital operating companies to generate additional profits and provide specialized care economically. Others are designed to directly compete with hospitals. Among the latter are



HEALTHCARE FERMENT

# Free-standing clinics will expand fast

out-patient ambulatory care centers, emergency services centers, and extended-hour physician offices.

# Highly competitive climate

The need to cut costs and operate at maximum efficiency has created a highly competitive climate. Hospitals must reduce the length of patient stays, yet keep their beds full. They must rely less on government reimbursements and more on private insurance and patient payments.

This is all good news for members of the design community. Excellence in architecture and space design is being recognized by hospitals and alternate healthcare centers as a key to attracting

# "Better design is an element in the growing competition among hospitals."

patients. A survey completed by Badische Corporation recently, indicates that some architectural and interior design firms have increased their healthcare related business by more than 70 percent.

While the healthcare area remains relatively small compared with some other end use markets, it has entered a long-term, boom period that will increase in importance to designers and architects.

A look at the statistical evidence lends credence to this contention: While the overall number of hospitals in the United States has been declining in recent years, new construction continues. Even in today's slow economy, healthcare construction is projected to be ahead of 1981 by a few percentage points. Contrast that with new construction of commercial buildings, such as stores and offices, down by 25 percent last year.

Hospitals in the 1980s will require nearly \$200 billion in capital, of which about 75 percent will be used for additions and improvements, according to industry sources.

# Management firms influence

Another positive sign for designers is the growing influence of hospital management companies. This segment of the industry grew by 76 percent in number of hospitals between 1976 and 1981 according to the Federation of American Hospitals (FAH). Some of these firms are so huge, they manage as many as 400 hospitals. In addition to new construction, these management companies tend to purchase distressed hospitals at advantageous prices, then invest substantial sums for redesign and refurbishment.

The FAH also notes that the for-profit segment of the hospital industry will generate \$40 billion annually by 1990, compared with just \$7 billion in 1980.

Considerable opportunity is also available for designers in the area of alternate treatment centers. Freestanding clinics, which number about 200 now, are expected by industry sources to reach 10,000 in the next five years.

#### **HMOs** proliferate

Another example of dramatic growth in alternate care is the development of Health Maintenance Organizations (HMOs). A type of extended health insurance which encompasses delivery of healthcare services, HMOs are staffed by physicians who provide medical care to members. HMOs grew from 41 service centers in 1971 to 250 today, according to Consumer Reports. Membership in the HMOs tripled over that period to about 10 million people.

Wight and Company, Inc., an architectural and engineering firm based in Downers Grove, Ill., has done a considerable amount of work with HMOs in the past 18 months and finds that they set high design standards.

"We found that today's clients want an interior expression far removed from



"We have noted a reduction in sedatives ordered by patients."-Kaleba

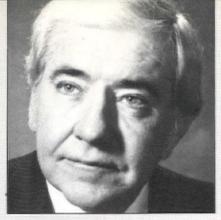


"The amount of work on the boards now is staggering."-Price

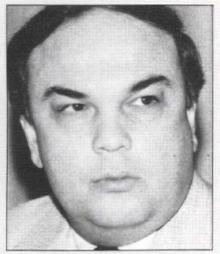
that common to traditional healthcare facilities." says R.B. Wight, president. "Our approach has been to create an atmosphere that reflects a home environment—a relaxed, comfortable, and attractive setting. The strategy we followed has focused on sophisticated color schemes, high-quality materials, informal but graceful furniture, and other means to fashion a warm and secure interior."

Wight believes comfortable and reassuring surroundings promote a sense of professionalism. "The more at ease you place a patient, the more secure he or she feels about the quality of care he will receive."

As the influence of alternate care facilities and company-owned, for-profit hospitals increases, not-for-profit hospitals are taking competitive action. In several areas of the country, non-profit hospitals have banded together under unified marketing umbrellas to take advantage of group purchasing power. They have combined equity to back loans and generate profit centers. In this way, they hope to compete with large companies and avoid acquisition by the chains. These steps enable them to refurbish their



"... clients want an interior ... far removed from traditional ..."-Wight



"We wanted to . . . create a pleasant environment for the staff."-Baca

physical properties and, thus, compete more effectively.

Robert M. Baca, director of interiors for the architectural/design firm of Matthei and Colin, Chicago, has found that good design is an important element in today's more competitive hospital environment. His firm, doing 98 percent of its business in healthcare, works primarily on hospitals.

# Federal money reduced

"With the reduction in available Federal monies, the competition among hospitals to get patients and keep beds full is greater. Better design is definitely an element in this competition," Baca elaborates.

He points to a recent project, Mercy Hospital in Davenport, lowa, as an example. Mercy is part of the Sisters of Mercy, a not-for-profit organization which encompasses hundreds of hospitals worldwide. A totally new hospital was constructed as a replacement facility adjacent to the old one in Davenport.

"Creating the right atmosphere was extremely important. We wanted to attract patients and make them comfortable and at the same time create Nancy Holton is a healthcare specialist and contract carpet consultant for Badische Corporation.

a pleasant environment for the staff," he says. "A quiet atmosphere, with a richness of decor, yet easily maintained, were key considerations."

The new hospital offers all single patient rooms, with wood grained furniture, rather than the institutional-looking materials which used to be standard in hospitals. Vinyl wall coverings replaced epoxy paint in many areas. Ceilings are lower, more home-like. And all rooms, corridors, and waiting areas are carpeted with warm colors for a more residential appearance.

"Mercy went from virtually no carpeting in the old hospital to 70 percent carpeted surfaces in the new facility. The result, in terms of noise reduction is phenomenal," he says.

Matthei & Colin have found that when good design is emphasized, not only are patients more comfortable, but employees feel more content and staff turnover drops considerably.

Richard Kaleba, vice president for planning and ancillary services at Mercy, noted other benefits with the upgraded facility. "Utilization of beds has gone up steadily since the new hospital opened," he says. "With single rooms we don't have to worry about having separate rooms for smokers and non-smokers, for male and female patients, or for younger and older people, so trafficking is easier. We have noted a reduction in the amount of sedatives being requested by patients."

Mary Price, head of design for the Los Angeles offices of Arthur Shuster Inc., also finds that good design has assumed new importance among her clients, primarily organizations building retirement facilities. She has seen enormous increases in construction of retirement communities and life-care centers, as well as refurbishment of nursing homes in the last three to five years. She says, "The amount of work on the boards now is staggering."

With an increasing percentage of the population projected to reach retirement age soon and the American reluctance to take care of the aged at



home, she believes her segment of the market will continue to grow.

One project, due for completion in March, exemplifies the length to which organizations are now prepared to go to make their retirement centers attractive to prospective residents. La Vida Llena, located in Albuquerque, N.M., is a retirement community funded by four Protestant churches. Entrance fees begin at about \$20,000 for a single-person apartment with monthly maintenance charges starting at \$400. Typical of the life-care concept gaining prominence

# "... to create an atmosphere that reflects a home environment."

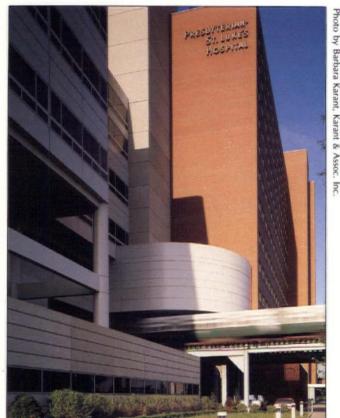
today, the fee includes all medical care for the resident's lifetime, but does not make the apartment part of the individual's estate (see article on Westminster-Canterbury Nursing Home on page 86 of this issue.)

"Obviously, this community is meant to attract people who are fairly comfortable financially. It must be an extension of the homes they are leaving and, therefore, be physically attractive with all the amenities of a residential hotel. The common areas feature libraries, game rooms, and a lavish dining room, all in addition to very attractive apartments," Price says.

Even the medical center is beautifully designed, she explains. "It is important that when residents become ill, they are treated in comfort and when recuperated, go back to their living areas speaking well of the nursing center staff and environment."

# ATRIA BRING FUTURE LOOK TO HOSPITAL EXPANSION

Rush-Presbyterian's coordinated color palette, city views, and tea room take sterility out of institutional design



by ANNE KRUEGER Contributing Editor

Atrium spaces, city views, and a pleasing color palette have brought a new look to one of Chicago's outstanding health-care institutions. The combined design innovations serve to eliminate the institutional look of Rush-Presbyterian-St. Luke's new medical center addition, creating a more comfortable environment for patients, staff, and hospital visitors.

The space design gameplan at Rush-Presbyterian's "Atrium Building" encompasses the usual healthcare considerations of acoustics, handicapped access, and durable furnishings. At the same time, it addresses the problems of establishing separate public, staff, and patient traffic routes, while creating a large number of single-patient rooms within the limitations of a constricted urban site that is bisected by an elevated Chicago Transit Authority train track.

The 220-bed expansion is an addition to the center's established 850-bed tertiary care and medical teaching facility located on the near west side of Chicago. It also houses surgery, surgery ICU, admitting, and support spaces. A 187,500-sq.-ft. modernization program was integrated with the 410,000-sq.-ft. addition, using color and signage throughout to coordinate and unify the center.

#### Seeks sought colors

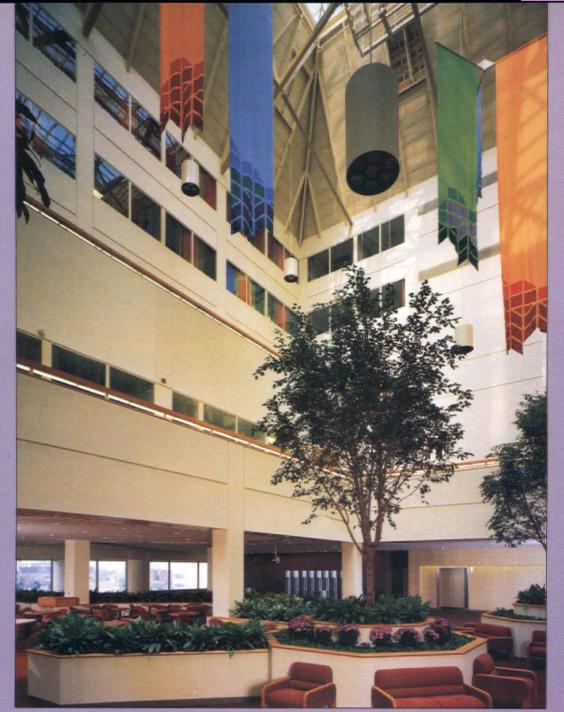
While interior design and architecture firm Hansen Lind Meyer wanted to provide a non-oppressive workplace/medical facility at Rush-Presbyterian, the intent was to incorporate a soft, warm residential feeling within the confines of an institutional environment, explains James Seeks, interior space designer.

"What we did was provide a color mix of both warm and cool colors within a prescribed value range. While certain colors may tend to be depressing, they were not eliminated. We used them in moderation," Seeks says.

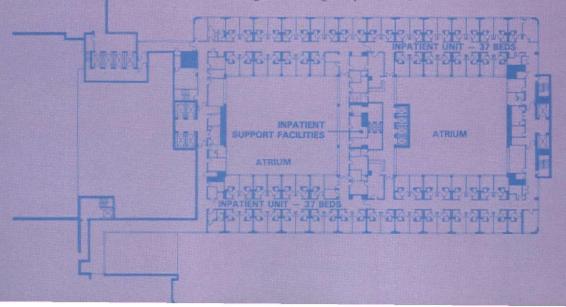
A strong mix of golds, blues, greens, oranges, rust-oranges, and tans were used to brighten up and tie together patient rooms, corridors, and public spaces, including the center's two atria.

Key to the facility's non-traditional flavor are the airy atria, which meet natural light and ventilation requirements. The east atrium rises five stories from the fourth level, where it is open to the public and is connected with the center's "main street." A west atrium opens on the fifth level and is three stories high. This space is not open to the public, but

Joint Hansen Lind Meyer/Solomon Cordwell Buenz & Associates Inc. venture resulted in polished exterior of "Atrium Building" extension (top left). Key to non-traditional flavor inside (left) are relaxing atrium spaces.



More like a hotel is atrium (top) of Rush-Presbyterian, where exciting spaces take the sterility out of institutional design and set patients at ease. Inpatient support facilities separate atria, which are flanked by 37 single-bed rooms on each floor looking in on atrium or out of building as shown in groundplan (below).



# Every patient room has a view

may be used for hospital functions at a later date.

Atria allow every patient room to have a view. In addition, all patient day rooms, nurse stations, and the surgery waiting room have pleasant interior or exterior panoramas.

Exterior rooms face southern and northern surrounding cityscapes. Interior rooms face the atria—each featuring sunlit open space, much greenery, and colorful banners in the gold, blue, green, orange color theme. Seeks says both atriums were designed to showcase major works of art in the future. He claims the atrium design gives a unique dimension to color coding. Vertical window blinds maintain privacy in atrium-facing patient rooms, but also are the medium for dramatic color design. Vertical patterns of related colors in these blinds alternate from floor to floor. As banners in the related color scheme shift in air currents and colored blinds are opened and closed, the two cores of the healthcare envi-

ronment are filled with visual interest and create a large-scale graphic for atrium visitors. Color accents also are repeated in patient-room furnishings and are alternated from room to room, providing a sense of continuity.

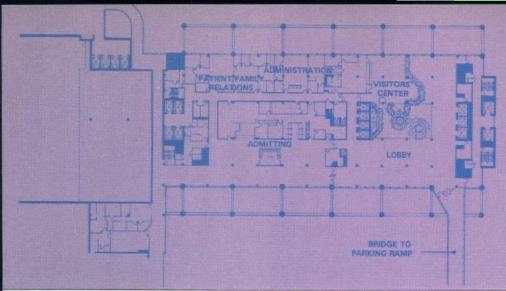
Consideration also was given to staff members who work in the same areas every day. Those staffers doing daily duty in the fifth-floor surgery suite, for instance, are permitted an atrium view via one-way glass running the length of the suite.

Other efforts to create a more comfortable healthcare facility ranged from using oak trim on railings and doors to crea-

Lounge areas (below) are posh, colorful, and light-filled to make both visitors and patients as comfortable as possible. Hansen Lind Meyer gave special design attention to waiting area seating in order to accommodate physically-limited patients. More than 80 percent of the seating is furnished with arms.



Photo by Abby Sadin, Sadin/Schnair Photography Inc.



Patient room has touches of bright color introduced in vertical blinds at windows and in fabrics (below). Fourth level plan view reveals atrium lobby, visitors' center, admitting office, patient family relations area, and administrative offices of hospital (left).

tion of a 90-seat Tea Room in the building's "main street." Here visitors, staff, and patients have views of the surrounding city or the atrium while eating or relaxing. Food services for the Tea Room are concealed behind a monolithic planter.

The "main street" was created by consolidating public functions and establishing patterns of public circulation. It begins on the fourth floor to accommodate the elevated train which passes underneath, as well as the mechanical interstice located below. It also provides a link to the parking structure and other buildings.

Lobby, admitting areas, and visitors' center all are located on this fourth level. Color-coordinated signage guides visitors through these public areas. Tea Room place settings also fit into the blue, gold, green, orange color scheme, Seeks says.

He adds, "In renovation work, it's very important to make existing facilities blend with new work. Where numerous buildings were connected, as in this case, the public had to be color-keyed to elevators and levels. Color coding, vertical transportation, and signage help provide continuity from one floor to another, one facility to another."

Via circulation studies, Hansen Lind Meyer created separate corridors for patient transfer traffic, staff transport, and service traffic. Corridors and cross corridors carrying staff traffic were looked at very closely and steps were taken to avoid snare-ups with public traffic, Seeks says. The top three floors were separated for inpatients.

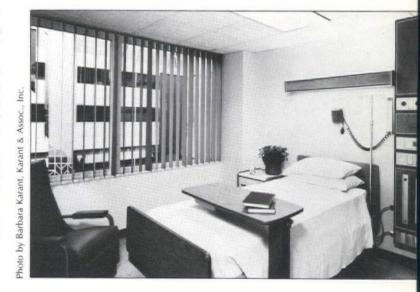
#### Choose durable furnishings

As in most healthcare environments, furnishings at Rush-Presbyterian were selected for durable construction and for accessibility to patients with a variety of physical limitations.

"We have to be concerned with patients stumbling, falling, and hitting themselves on chairs," Seeks explains. "So, we have a soft-edged radius corner approach to all seating. The front edge of chair cushions always are rolled so they don't cut off appendage circulation." This is particularly important for an elderly person who must sit a great deal, or for those patients wearing casts, he points out.

Upwards of 80 percent of Rush-Presbyterian's seating is furnished with arms to facilitate both elderly and incapacitated patients getting in and out of chairs with ease and safety. Vinyl-upholstered chairs with wood frames provide maximum maintenance and longevity characteristics at Rush-Presbyterian. The chosen chair design had to look good in vinyl, Seeks says. Since longevity is of prime importance, vinyl instead of fabric covering; wood instead of upholstered arms, was used on all hospital seating.

Other healthcare design considerations utilized in the



Rush-Presbyterian "Atrium Building":

- Work surfaces are stain-resistant and non-reflective.
- Walls reflecting on patients, especially behind bed (patient-room) headboards and elsewhere in exam and treatment rooms, are neutral in color.
- Bountiful greenery is planted in the fourth floor public atrium and along fifth floor balcony to muffle sounds that might carry to upper floor patient rooms and for esthetic reasons.
- Atria offer the additional benefit of being energy efficient at a lower first cost, because atrium walls were considerably less expensive to build than exterior walls. Hansen Lind Meyer estimates indicate reduced heat loss will save Rush-Presbyterian at least \$1 million in energy costs at today's high fuel prices.
- Three additional floors can be added to patient towers without relocation of atria. □

#### SOURCES

Console tables—Condi. Seating, chairs, tables—Metropolitan. Lighting—Luma Lite Products Co. Window blinds—Carnegie. Wallcovering—Vicrtex. Carpet, carpet tiles—Lees, Interface. Paint—Benjamin Moore. Plants and cylindrical planters—Tropical Plants Rental Inc. Banners—Midwest Embroidery Co. Signage—Spanjer Bros. Inc. Carpet and fabric protection—Fiber-Seal.

Interior design and architecture—Richard F. Hansen, AIA, Principal and Project Director; Jerry Quebe, AIA, Assoc. Project Director; Rod Thomson, AIA, Project Architect; Tom Thomas, AIA, Project Designer; Jim Zajec, Construction Manager; James W. Seeks, ASID, IBD, Interior Design; Mitchell Neymeyer, Graphic Designer; Ed Mikelson, ASLA, Landscape Architect; Hansen Lind Meyer, P.C.

Exterior design and architecture—Hansen Lind Meyer and Solomon Cordwell Buenz & Associates Inc.

# Health Consortium's CAD System Unites Competing Architects

Hospital Corporation of America standardizes design, eases repetitive jobs, increases productivity with computer-aided design program

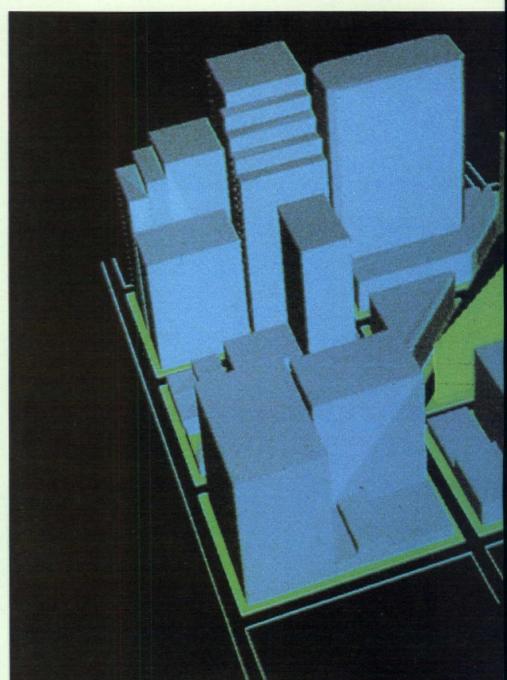
n an unprecedented move in late 1981, the Hospital Corporation of America (HCA), Nashville, Tenn., formed a task force comprised of seven competing architectural and engineering firms to explore the use of the computer in hospital design. Under the direction of Roger Panther, Ph.D., HCA's assistant vice president of design and construction, the group investigated Computer-Aided Design (CAD) to determine if that technology was sufficiently advanced for these firms and HCA to profit from its use. HCA, a 350-hospital organization, is a major client of each of the participating firms.

At the same time, HCA's design and construction division began to standardize the design of all its new acute care and psychiatric facilities. Because hospital design is filled with repetitive elements, HCA made this move to standardization to achieve functional hospital design and to eliminate unnecessary square footage and expense.

This meant examining individually each hospital space or room (exam/ treatment and special procedure rooms, as cases in point) for 37 departmental areas. HCA chose two outstanding department managers for each area from among its 350 hospitals and assigned them an equipment planning specialist and a management/clinical systems specialist from the corporate office. Some 60 people undertook the design standardization of every one of the key rooms contained in most hospitals.

Results of these dual projects were twofold. A little over a year after the task force was formed, the seven Nashville firms—Earl Swensson Associates Inc. (architects); Gould Turner Group P.C. (architects); Gresham, Smith & Partners (architects); Yearwood & Johnson Architects Inc.; Smith, Sekman Reid Inc. (mechanical and electrical engineers); and Stanley D. Linsey & Associates Ltd. (structural engineers)—each purchased its own CAD system, an interactive computer graphics system produced by Intergraph Corporation.

Results of HCA's effort to standardize the design of each key hospital room were compiled in a three-volume manual, "Hospital Design Guidelines," and given to the seven firms, which were now entering this information into



Computer-generated perspective of new addition to hospital complex by Intergraph CAD system is one of many functions performed on behalf of Hospital Corporation of America by seven architectural and engineering firms that have adopted the system (below). Menu of architectural floor plan elements used in the CAD system (right) is typical of architectural application in HCA hospitals throughout the world.

their data banks. The firms will exchange all computerized data with one another so each has all the relevant design information needed to handle HCA projects on the CAD system from its data bank. That system has been

### PALES | PA

programmed to perform the full range of traditional design and drafting tasks in the language of the architect/ engineer with greater accuracy and in much less time than manual methods.

Standardization also saves time and expense in the design process, making it easier for HCA to communicate efficiently with its consulting architectural and engineering firms. Now, with close affiliation of those firms having been developed in concert with the CAD concept, not only are designers from the various disciplines in a firm communicating through the CAD system, but designers from different firms are talking to each other by exchanging information tapes.

# Professional synergy created

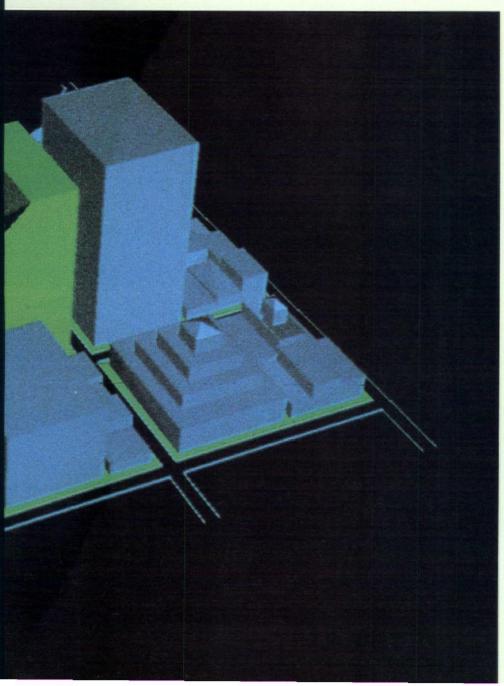
Besides the tangible plusses of the HCA consortium of architects and engineers—increased vendor clout, productivity, and work load; and relief from time-consuming drafting tasks—exploring the new CAD system has had a spillover effect in the area of professional and human relationships.

Mike Gould of Gould Turner Group puts it this way: "From the moment we sat down together, we communicated well. The fact we shared a common client was an impetus for us to cooperate. Beyond that, we began to trade ideas. All in all, the whole thing worked better than anyone could have imagined."

Adds Ted Stanton of Yearwood & Johnson, "I think it's important that people in the professions get together and fantasize. Because of the nature of the business, architects often are isolated from their colleagues. The group arrangement has thrown some of us together, and what is emerging is more than just the sum of one brain plus another. It's a sort of synergy, where one plus one equals three."

#### Task force chooses system

Before any commitments to CAD could be made, other kinds of data had to be gathered. The task force



HCA CONSORTIUM

# CAD speeds architectural/engineering functions

considered some 40 CAD vendors at first, eventually narrowing the field to five, then to two firms. Some members of the group, like Yearwood & Johnson's Stanton and Robert Smith, principal of Smith, Seckman Reid, logged over 75,000 airline-miles investigating vendors and visiting other A&E firms that already had made the leap into CAD.

Intergraph's Architectural System was the group's final, unanimous choice. "That system," says HCA's Dr. Panther, "met the bulk of each firm's needs. In a sense, the choice was a compromise, but one in which everyone was satisfied." Adds structural engineer Stan Lindsey, "Architects in the group probably gave more in the end, because the engineering firms wanted a system with more computational power—a little more, in fact, than the architects might have needed." When the group drew up their single purchase order, Lindsey went into Intergraph's most

powerful central processing unit (CPU), a VAX-11780. The other six firms went with smaller CPU's and, like Lindsey, from one to three workstations.

The single purchase order arrangement brought a number of advantages to the group's member firms. For Gould, partner in the group's smallest firm, the advantage of this unique affiliation was obvious. "Alone," Gould says, "we couldn't have afforded the time and expense to research all those vendors and fly all around the country to meet with them." Yet, he knew his firm had to commit fully to the CAD idea—if that was the group's decision—in order to keep pace with the work load from HCA.

# Makes replication more efficient

Financially, too, the advantages of the group purchasing arrangement were immediate and obvious. The purchase price of a workstation is less when a firm buys 12, for instance, than when it

design projects that are essentially repetitive, either from job to job, or from element to element within the same job. Data in the CAD system is stored in levels of information, much like the "levels" of information represented by each sheet of an overlay drafting assignment. The overlay drafting system is perfectly adaptable to the storage of information in a computer. Says Flem Smith of Gresham

and Smith: "CAD demands that a firm's manual system be in order if the firm is going to get the most out of the system."

Consortium's hospital facilities

include 21 institutions

not shown on map (right).

The CAD system has its greatest impact in making replication and repetition of details more efficient. "First of all, you design in full-scale on the CAD," says Ed Johnson of Yearwood & Johnson, "in actual dimensions. That means we have the ability to design in an area of 322,000 ft. by 322,000 ft. if we needed it." When working off pre-existing concepts where there is a significant element of repetition, the machine can replicate everything from doors, to rooms, to wings, to entire floors, and display it all in any scale the

# More accurate by 600 ft.

operator chooses—within seconds.

Adds I.C. Thomason's Tom Malloy, "Contract documents for a 150-to 200-bed hospital, which generally take six to eight weeks to produce, are now being turned out on the CAD system in half the time. We expect that figure will drop to around two weeks, once we are fully geared up on the system."

Accuracy of dimensioning along with the system's incredible speed in repeating design elements are great advantages to the architects as well.



Seven highly competitive architectural and engineering firms working with the 366-hospital Hospital Corporation of America are represented by (l. to r.) Jack Horner, Stanley D. Lindsey & Assoc. Ltd.; Flem Smith, Gresham Smith & Partners; Ed Johnson, Yearwood & Johnson Architects Inc.; Earl Swensson, Earl Swensson & Assoc.; Lou Baldini, I.C. Thomasson Inc.; Tom Seckman, Smith Seckman Reid Inc.; and Steve Turner, Gould Turner Group P.C.

buys a single, stand-alone unit. Even so, most small firms—those with 10 people or less—comprising about 80 percent of the 11,000 to 12,000 architectural firms in the country, still could find it financially difficult to purchase a CAD system without a major client like HCA contributing significantly to the overall work load.

For the architects, the CAD system will have its most dramatic impact on



"You can't fudge with the computer," says Gould. "It forces you to get things right, on the front end." Stanton gives the example of a project manager in his firm who worked for a week on area calculations for a hospital with eight floors. "We digested eight sheets of floor plans in the computer," says Stanton, "and it produced its calculations in a little over four minutes for each sheet." The results were figured out to four decimal places and were more accurate, according to the project manager, than his own calculations by 600 sq. ft.

The system's data base can store all sorts of detailed information. A CAD system's design file might include, for example, engineering codes, dimensions, ratings, prices, and sources. Because the system maintains a running record of everything entered into it, data can be retrieved and summarized in a multitude of forms, almost instantaneously. The implications of this kind of capability, especially in the construction phase of a project, are only beginning to be perceived.

### Freedom from nitty-gritty

Freedom from tedious and mechanical work is an exciting and even exhilarating prospect for the more abstract-thinking designer or engineering professional in the seven firms. "Release the designer from the nitty-gritty, drudge work of the job," says Earl Swensson, "and you open up more time for him to think creatively, to do the things the machine can't do."

One thing the machine can do, by

interacting with the designer, is try
out in a matter of minutes a number of
approaches to a problem, graphically,
before the designer decides on a
solution. Parts of designs, or whole
sections, can be moved or changed in
orientation on the display screen. The
system also is capable of displaying
three-dimensional models of both
interiors and exteriors, and these can be
rotated for viewing from a number of
angles. Design revisions and
enhancements are also easily
accomplished on the CAD system.

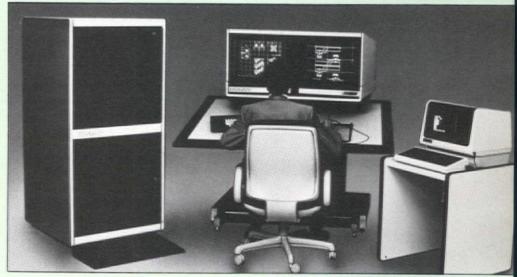
## Users expect CAD to save time

While many of the involved architects and engineers are imaginatively aware of the possibilities of the system, all are concerned with what it can do now to justify their investment. All have expectations for the system and most have general ideas in mind about how the system will affect productivity in their firms. Gould is shooting for a two-or three-to-one overall increase in productivity, with expectations of a 10-to-one increase in designing details and

Johnson uses the example of a 120-bed, four-floor hospital: "If we had to draw manually each room on each floor, it might take us a week to produce a set of contract documents for each floor. With the CAD system," he continues, "a single designer can turn out final drawings for all four floors in a day or so. Take four weeks out of the delivery process on a \$25 million project and, in interest alone, you can save nearly half a million dollars."

Architect Gould sees a minimum two- to two-and-a-half year payback period for the system, but adds his firm already has exceeded what was originally expected to be spent on equipment. Still, Intergraph's menu-accessed CAD system is proving "amiable" enough that with 10 to 15 days training, according to Swensson, an architect can sit down at a workstation and be productive.

Through 1982, HCA has built 14,000 hospital beds at a construction cost of \$1.3 billion. The company plans to spend an additional billion dollars in the years 1983-84. □

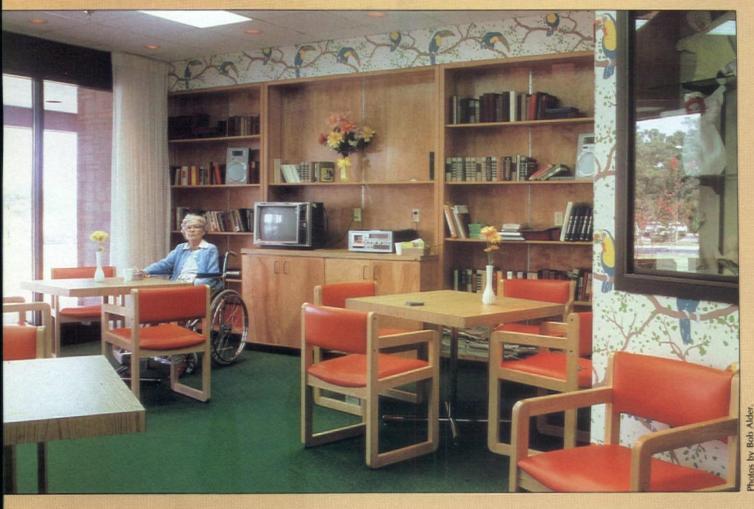


seven-to-one in the production of finish schedules. Swensson's Joe Crumpacker estimates a 10-to-one increase in finish schedule production.

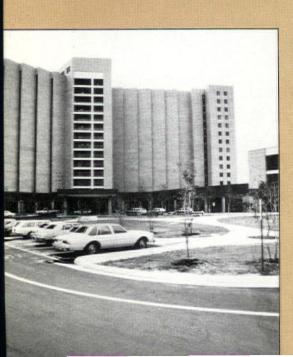
Once a single-bed hospital room, for example, is entered with all its dimensions into the system's data bank, it can be moved intact anywhere within an area. It can be duplicated and placed in a series with its likeness. Or it can be "flipped," replicated in mirror image, then repeated, then flipped again.

Intergraph Corporation's Architectural Innovator™ system dramatically reduces costs, while increasing potential for advanced design solutions among seven competing firms employed by HCA, which spent \$571 million for hospital construction in its 14-year history as a healthcare consortium.

# \$30 Million Nursing Home Serves Human Needs, Adheres To Codes



Virginia designers develop 383,000-sq.-ft. facility-by-the-sea that conforms to mandates for healthcare planning



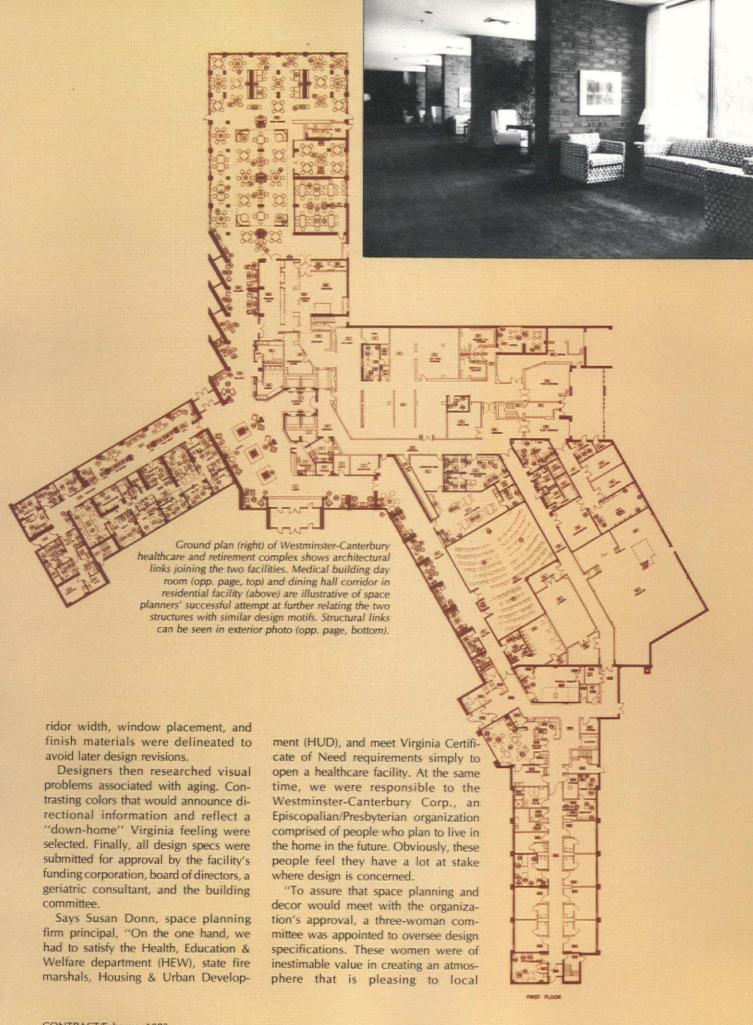
oes the need to meet stringent healthcare standards and codes mean sacrificing comfort and home-like ambience in healthcare facilities? At one time, both goals collided, apparently vying with one another and making simultaneous achievement of the two almost impossible.

But, these difficulties are past history. At Westminster-Canterbury retirement home and healthcare facility, Virginia Beach, Va. project designers resolved these two disparate factors by working with architects from the onset, studying geriatric charts to determine colors best suited to aging eyes, paying careful at-

tention to interplay between fabric patterns and veiling reflections, and checking all specifications with the correct authorities. The result of these efforts is an inviting \$30 million, 383,000-sq.-ft. habitat and care facility-by-the-sea that conforms with local, state, and federal mandates.

#### Colors add "down-home" flavor

Susan Donn + Designworks Nortolk planning and design firm, collaborated with Virginia architects Shriver & Holland to assure that basic design elements affected by codes were incorporated into building plans early. Criteria such as minimum room size and cor-



# Budget bridges functional & esthetic demands

residents-the facility's future tenants."

Flanked by the Atlantic Ocean and Chesapeake Bay, the facility's two buildings are connected by a ground floor extension as well as interrelated design motifs. In the retirement home, a federalist blue is the dominant surface color and is accented by muted pinks and yellows. The healthcare facility features easily maintained neutral tones with green accents. Both color schemes have a strong relationship to the cast of the sea.

Upholstered furniture chosen for the retirement facility consist of clean, rectilinear pieces that adapt to a range of period decors. Such selections combine well with antique furnishings donated by Westminster-Canterbury members, many of whom belong to old Virginia families.

# Research minimizes later revisions

With the exception of budget constraints, few restrictions limited design of the housing facility. However, requirements affecting healthcare design as set forth by HEW, HUD, Life Safety and Care-Type Housing codes, as well as the Public Health Service, include the following:

- Alteration of original plans for private rooms to double occupancy quarters.
- Fire and safety alarms, emergency lighting, and fire-safe walls, ceilings, patient rooms, and hallways.
- Room areas—exclusive of toilets, closets, lockers, and vestibules—no less than 80-sq. ft.; no more than two beds per room, side-by-side, parallel to window walls.
- Windows encompassing no less than 1/8 of room area; one-half of window space to be openable; windows sills no higher than 3-ft. from floor.
- Main corridors at least 8-ft. wide; uninterrupted handrails provided on both sides of corridors.
- Class A ASTM E-84 fire-ratings for furnishings, wallcoverings, floorcoverings, fabrics, window treatments, and wall hangings.

Although extensive research went into architectural and interior design



"People who plan to live in the home in the future . . . have a lot at stake where design is concerned"-Susan Donn, principal, Susan Donn & Designworks.

spec development, several minor elements demanded later treatment if esthetic and functional requirements of users were to be met. For example, levers were substituted for doorknobs in an attempt to ease egress. Downlights in hallways which created a "puddle" effect were removed and replaced with fluorescent fixtures. These emit more generalized, unobstrusive illumination that is easier on older eyes.

Finally, space planners searched for seating, flooring, and casements that would be cost-effective, easily maintained, and add a home-like feeling. As a result, floors are carpeted throughout the housing facility as are those in healthcare building corridors and public spaces. Carpet patterns that do not distort vision were carefully selected. Window blinds were specified for maintenance purposes although residents may add curtains if desired. Seating selection involved a series of trips to the Chicago Merchandise Mart where designers evaluated ergonomic features of a wide range of chairs.

Additionally, a generous art budget was provided. Works are custom pieces by local artisans that reinforce the facility's native Virginia appeal.



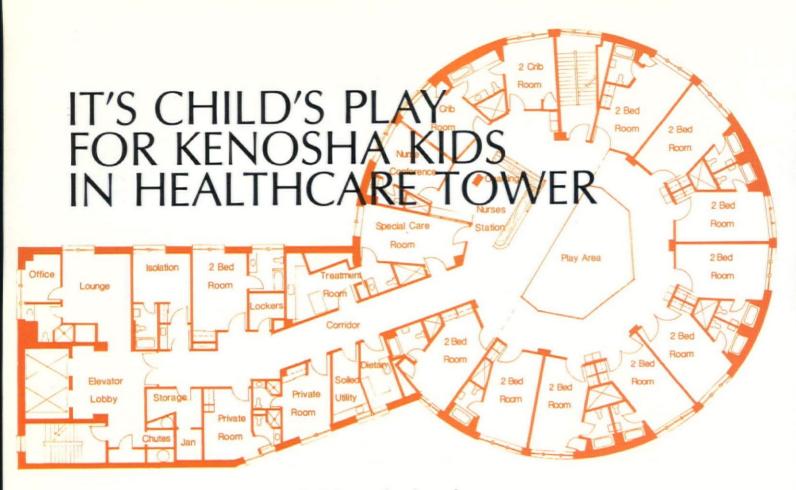
#### SOURCES

Seating—Thonet, Nemschoff Assoc., St. Timothy, Hickory Chair Co.
Fabric—Clarence House, Bassett McNab, Waverly, Schumacher, Boris Kroll,
Lazarus, Naugahyde. Tables—Howe. Window treatments—Maharam.
Wallcoverings—Karl Mann. Carpet—Lees, Bigelow. Cabinetry and
millwork—Burton Lumber. Plants—Mr. Greenjeans.

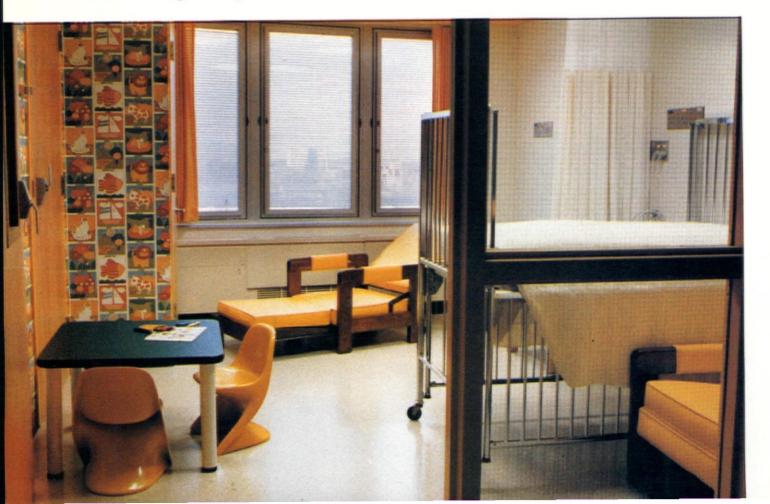
Interior design—Susan Donn, design director; Irene Freedland, project manager; Susan Donn + Designworks. Architecture—Shriver & Holland. Norfolk, Va. General contracting—Basic Construction.

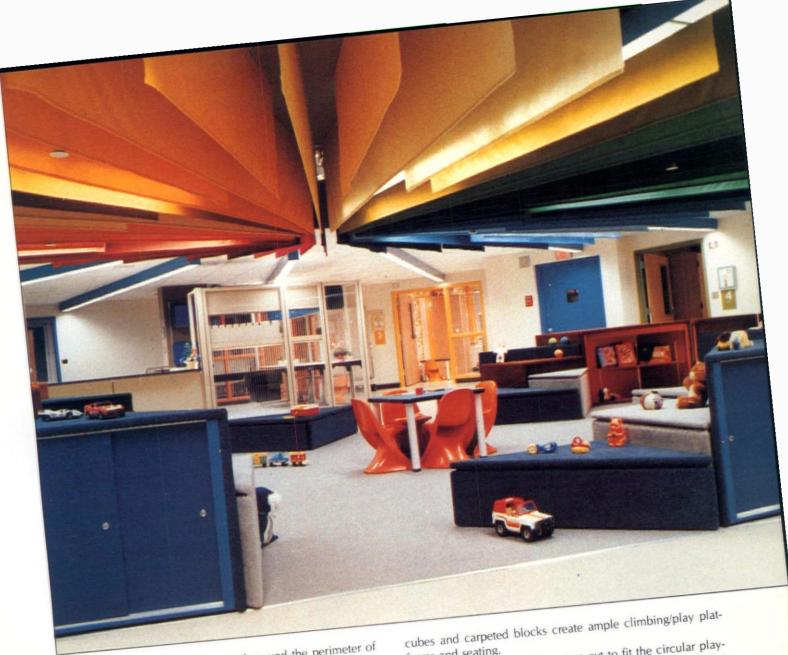
Columns in residential facility reception area (below) would be visual obstructions if not incorporated in design schemes. Instead, planners surrounded them with seating and plants and gave them a purpose in the structure.





PKR designers make children feel at home while integrating medical elements into humanized design





fter rooms are constructed around the perimeter of a round building, what can be done to make a circular center space functional? In the case of the Kenosha Memorial Hospital Child and Adolescent Unit, Kenosha, Wis., trapped center space makes a perfect play area and nurses' station with high visibility and easy ac-

Brainchild of Plunkett Keymar Reginato (PKR) Architects cess from all rooms. and PKR Interior Consultants, Milwaukee, the tower unit required a design yielding constant patient supervision. Rooms built around outside walls of the hospital tower offer impressive views of Lake Michigan, as well as provide copious amounts of daylight. The 10,000-sq.-ft. tower holds one special care, two crib, three private, and 10 semi-private rooms.

Existing ducts and structural elements determined the new layout of the tower constructed in the 1960s, according to Albin Kubala, project architect, PKR. All rooms are spoked from the center of the round space. The remaining circular configuration forms a play area where multi-colored felt banners hang overhead to baffle sound. Laminated plastic storage

Building materials were custom-cut to fit the circular playforms and seating. space in interchangeable forms. Children have convenient access to the area; those unable to leave their rooms can view the playspace from their beds. Double doors on two rooms create a completely open doorway for center area visibility. Clear acrylic panels surrounding the adjacent nurses' station give conversational privacy while allowing high visibility for constant supervision of key areas.

# Vivid colors enhance space

Fifteen different vividly colored wallpaper designs were chosen for patient rooms. Bright signage hung outside doorways and corresponding door trim also help children identify their own rooms. Patients' artwork may be hung outside room entrances in permanently mounted frames.

Joan Jenquin, interior designer, PKR, continued the cheerful theme with blue, green, orange, and yellow accents for draperies and furniture. Rooms are furnished with bed/chair units so parents may sleep near children; play platforms in the center area are high enough for comfortable adult seating. A parents' lounge holds a private bath and conversation area.

Soft gray carpeting brings warmth to the central core while ceramic tile surrounds the space and defines corridors. Rooms have vinyl flooring, yet are warmed by wood doors and furnishings and wall-mounted lighting. Jenquin consulted hos-

Floorplan of children's ward (opp. page, top) illustrates circular layout of space. Adjacent corridor contains rooms for older children. Child-sized furniture in each room (opp. page, below) allows in-room play. Collective playspace (above) has carpeted platforms for play and seating, as well as nurses' station for constant supervision.



pital maintenance staffs on choices of colors and materials.

For pre-teens, or teens too old for the collective play area, a corridor leading to the tower has been fitted with several patient rooms. A brightly painted wall with unit signage directs visitors through this corridor after entry from the elevator bank. This wall treatment is different than unit signage in any other part of the hospital, according to PKR.

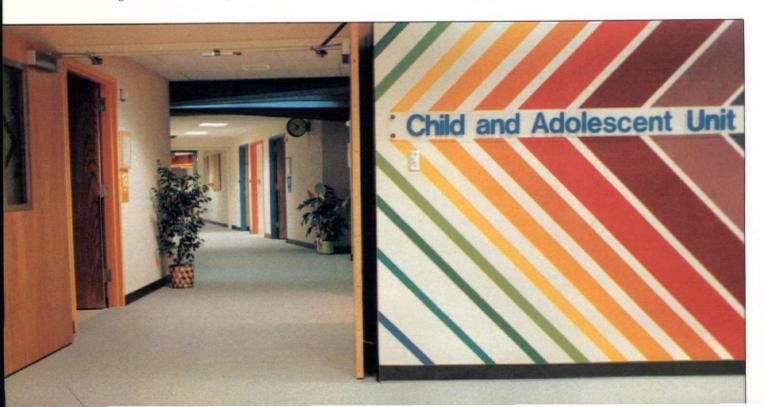
Making children feel at home while achieving unity in design elements and medical requirements was a foremost objective in the Kenosha project. Reports Jenquin, "We wanted to provide a non-threatening environment, so we integrated the human dimension and perspective of young users into design."

Wheel of banners hung above play space (above) muffles sound and brightens ceiling to coordinate with primary colors used throughout the area. The same tones, used for wall treatment and signage in the elevator lobby (below), mark entrance to the unit.

## SOURCES

**Architect**—Plunket Keymar Reginato Architects; Albin Kubala, project manager. **Interior designer**—PKR Interior Consultants; Joan Jenquin, project interior designer.

Carpet—Lees. Wallcovering—Vicrtex, Imperial. Lighting—Columbia. Flooring—Armstrong. Banners—Julien Shade Shop, Northwestern Drapery. Drapery fabric—Maharam. Children's chairs, tables—Krueger. Chairs—Duofold. Nurses' station, exchange cart—Herman Miller. Signage—ASI/Derse Technical Signage.



# HEALTHCARE FACILITIES COLORS KEYED TO STANDARDS

Unlike most commercial or institutional environments, hospital facilities have specific requirements that help carry out the healthcare mission. Particularly in the use and rationalization of color, standards are set to meet specific environmental, patient, and staff needs.

Margaret Richter, president of Margaret Richter Associates Inc., New York City health facilities consulting firm, provides this color-usage chart, used in the planning and development of health-related facilities.

"A true design concept," says Richter, "revolves around a theme, which, in the case of hospital design must be guided by strict design rules—hospital building codes established by Federal, state, and local authorities.

"Hospitals, by their very nature, have

an enormous amount of furniture and equipment to combine into a design concept. Color and finishes of these items should be made on the basis of standards, not a piece-meal basis. The latter usually will result in an array of goods and finishes that lack the warmth of a concept."

The accompanying chart provides a basis for effective planning. □

# STANDARD HEALTHCARE DESIGN REQUIREMENTS

WHERE	WHAT	HOW	WHY	
Patients Bedrooms/ Bathrooms	Wall Colors	One color per room	Accent colors are institutional	
		Don't exceed four interrelated room colors	Difficult to	
		interrelated room colors	maintain	
Patient Bedrooms	Cubicle Curtains	One color and/or pattern	Installation ease	
(Except Pediatrics and Intensive Care)		hospital-wide	after washing	
		Machine washable	Maintenance needs	
		Inherently flame resistant	Code	
		Mesh top	Ventilation	
Patient Bedrooms	Window Draperies or Shades	One color and/or pattern hospital-wide	Installation ease after washing	
			Visual consistency from the outside of building	
Patient Bedrooms	Plastic Laminate	One standard color or pattern	Design consistency	
		Both furniture and wall console	Replacement ease	
Patient Bedrooms	Chairs	One color per room	Design consistency	
		Not to exceed four colors per floor	Flexibility without confusion	
Patient Bedrooms	Shower Curtains	One color or pattern	Flexibility	
		Hospital-wide standard	Maintenance ease cost-efficiency	
Patient Bedrooms	Doors leading to corridor	One color or finish	Design continuity	
		Avoid plastic laminates with "wood" finishes	Avoid a mixture and abundance of wood grains	
Corridors	Wall base strips	Hospital-wide standard	Continuity	
		To match corridor doors	Continuity	
Corridors, where heavy equipment is used	Corner guards with removable vinyl strips	Hospital-wide standard	Design continuity	
		To match wall base strip	Design continuity	
Nurses' Stations	Workstations	Counter sections to be at eye level when a staff member is seated behind the station	Permit visitor/staff direct observation of intensive-care patients	

CONTRACT/February 1983

# Controlled Patient Movement Vital In Healthcare Seating

Comfort, ease of maintenance, and extended use features contribute to good healthcare facility chair design



A patient exerts downward force necessary to push up and out of a chair into a standing position. Note that because the armrests are typically set behind the front of the chair seat, the direction of push is behind the knees, so most of the force must be exerted by the upper body.



Armrests, extending well in front of the seat front, enable sitter to first pull himself forward in the chair, with hands and feet aligned. This enables the sitter to use more highly developed leg muscles to help in standing up. Note, too, that the rear of the seat has riser to provide an extra lift, making it easier to stand up.

# by ROGER KENNETH LEIB, AIA

hairs used in healthcare facilities must offer patients the ability to accommodate some bodily movement. They must serve as an integral element in a continuum of movement between bedrest and walking.

How well the chair facilitates safe movement from bed to chair, chair to wheelchair, and chair to walker determines its validity in the healthcare environment.

Well designed chairs provide for absolutely stable armrest fronts that extend as far forward of the seat front as possible. That stability of armrest fronts is crucial, since it is against them that the user will push when rising out of the chair. Any instability at that point will make the patient unsure. Downward motion of the armrest fronts will act against the direction in which the user is trying to move, or worse, cause a fall.

A forward extension of the armrest fronts allows the user to first pull forward in the seat, over the center of gravity of the feet, bringing the leg muscles into use for the task of rising, rather than using the much weaker upper body muscles, which usually must do all the work.

Allowing the legs to do more of the work is especially important to the Parkinsonian patient, the debilitated patient, and the patient with arthritis in the arms or shoulders. Forward-extending armrests also will aid the user in transferring to a walker.

Fold-down arms can help in special

instances where side transfer of hip patients is required. Seats with rear edges that elevate to lift or help propel users to their feet are recommended.

## Stability

- Is there "rear scoot" on the chair? Soft glides on the rearmost supports of legs become the "leading edge" when a chair slides backwards. Generally, the softer the glides are, the higher the coefficient of friction. This should be an available option.
- Is there danger of front tip on exiting? Side tip? Determine the area of floor circumscribed by the parts of the chair base (glides, for instance) that actually make physical contact with the floor surface. These should fall outside of that area of the chair taking direct vertical load and certainly outside the user's center of gravity. Obviously the broader the base, the more stable the chair. Test by tipping the chair being evaluated.
- What about rear tip? Can a patient with long legs pivot backwards far enough to shift the center of gravity behind the rearmost floor contacts and thus tip backwards?

#### **Initial Comfort Factors**

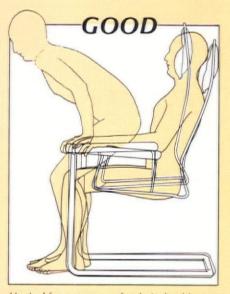
How comfortable is the general form and construction of the chair? How evenly is pressure distributed along the body? As a rule of thumb, the more contact the chair makes with the user's body, the less pressure there will be at each point of contact. The more even the distribution, the greater the comfort. This maximization of body contact with the chair is especially important to patients with peripheral neuropathy, for whom the greater contact area increases their sense of support and security. Chairs should have anthropomorphic contouring.

The rules of initial comfort are really fairly simple:

· Pick a chair with pronounced lum-



Most rockers and chairs with forwardly-cantilevered armrests react under the downward force exerted by a sitter pushing upward. Instead of providing a stable support, they tip forward or downward as the sitter tries to move in the opposite direction.



Vertical front supports of a chair should serve as axial props for pushing against by keeping the front of the armrests motionless.

bar support. Almost everyone's lumbar region is located at the same height off the seat. The average specifier's physiognomy is a good sounding board. Test the chair, see how it feels, and trust personal observations.

- A high-back chair should have a small pillow adjustable in height. This should nest into the small of the neck.
   Adjustability is highly desirable since this height (small of neck to seat) varies significantly among individuals.
- The chair should be flat or slightly convex across the shoulders. Concave seatbacks cause hunching forward of the shoulders.
- Seats should be slightly resilient (so as not to concentrate pressure on the ischial tuberosities) but firm. Soft seats (and loosely slung wheelchairs) uncomfortably rotate the hips inward.
- The front edge of the seat should be rounded downward to minimize pressure under the thighs, which diminishes circulation to the legs.
- Seat angle should lean the user into the chairback sufficiently so that an appropriate portion of weight is supported by the chairback, not just the seat. Again, the more even the distribution along the entire dorsal surface of the body, the greater the sensation of comfort. Limiting factors of incline are the functions the user will perform in the chair and ease of exit.
- Armrests help take some of the weight from the upper body off the seat, when the rear top surface (especially) is firm, but slightly resilient to minimize pressure on elbows. Front edges should be large and rounded for easy gripping, especially by arthritic hands.

## **Prolonged-use Comfort Factors**

How comfortable will the chair be over time, for prolonged sitting? How do materials and dynamics of the chair affect natural body processes?

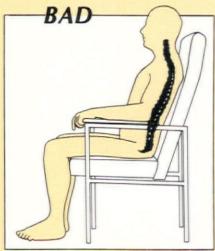
 Is the chair dynamic or rigid? Rule of thumb: either the chair accommo-

#### HEALTHCARE SEATING

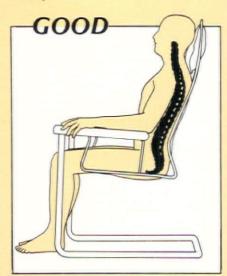
# Extended functions relate to medical needs

dates gross body motion (such as rocking or tilting) or the healthy user eventually will fidget and squirm (both to work off body tensions and redistribute pressure along the body). It has been estimated that a day's rocking in a typical rocking chair provides the equivalent of a 20-minute brisk walk.

- Does the chair cycle pressure distribution? There are many sophisticated means and commercial accessories for changing the concentration of weight along supported parts of the body, particularly for decubitis treatment. A simple rocking motion, which tips the user into the chair, accomplishes this well by redistributing pressure along the underside of the legs and seat.
- Does the chair become hot and sweaty? For the sake of washability, most chairs are covered in a non-porous vinyl, which usually builds up heat and accumulates moisture. Consider heavily channeled vinyl or even better, chairs with washable, porous mesh seats and backs. Eliminating heat buildup and sweatiness does away with two causative factors in decubitis formation and allows an existing condition to heal.
- Can the user's feet be elevated? The issue is more complex than it might seem: elevating the feet without opening out (flattening) the seat/back angle can rotate the hips into an awkward and uncomfortable position. In a non-recliner, the most comfortable position angles the legs downward. Along what points are the legs supported? If the leg support doesn't extend far forward enough, circulation in the legs can be impaired. Unless such supports are extendible and retractable by the patient, they tend to impair the user's ability to exit a chair.
- If desired for medical reasons, an integral ottoman or a freestanding ottoman which can be slid under the chair should be specified. Such ottomans have the singular advantage of serving as an extra stool in crowded rooms.



Common faults with chair back configurations: Most backs are either flat or concave in the lumbar region where they should be convex to support the small of the back, or convex too high above the seat to give proper support to the correct area. Headrests typically curve too far back away from the head or forward to meet the small of the neck. Curving away from the neck is uncomfortable for everyone. A fixed height neck curvature is comfortable only for those who are either taller or shorter than "average."



A chair should give proper lumbar support in the correct region of the back. An adjustable headrest fitting into the small of the neck provides comfort and support no matter what height the sitter.

# Housekeeping and Maintenance Requirements

- Will there be a rotting or odorretention problem? When subject to frequent urine or other body waste spills, stuffed chairs, or those with inner spring construction, are archaic. Sling chairs with a minimum of cracks and crevices are desirable.
- Washability. Can the chair be scrubbed down or even sterilized? A minimum of stuffing or internal hollows in which moisture can collect should be sought. If a high degree of washability is required, choose either a vinyl or porous mesh sling, or a removable fabric pad, which can be separately laundered or dry cleaned.
- · Durability of materials. Metal chairs, properly finished, maintain their appearance far longer in an institutional setting than do their wood counterparts. Fused "powder" coatings on metals, offering an unlimited range of color possibilities, recently have become very popular with designers. While their chip resistance is quite good, being plastic, they will scratch. Nothing in common use exceeds the durability of good chrome plating. Processes vary widely with dual nickel (marine-grade) chrome finishes topping the list. If wood is to be used, a two-part catalyzed polyurethane finish is the most durable.
- Replacement of non-durable parts. Typically, the parts of a chair to show wear, vandalism, or burn marks most are the seat and armrests. Chairs should have the following characteristics: 1) a seat whose function will not be impaired by stabs or knife slashes that would permit fluids or other moisture to enter a closed space; 2) a removable replaceable pad covering the seat; and 3) removable and replaceable armrests.

# **Decorative Requirements**

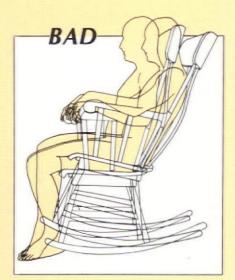
Is the chair traditional or contemporary? Characteristics which make a chair "traditional" in appearance also make it

generally inappropriate to the health care setting. These negative characteristics are: unnecessary and impractical stuffing, inappropriate and counterfunctional coverings, excess weight and bulk, potential smoke and fuel contribution, rigidity, and limited function.

That's a big price to pay for a socalled "homey" look, and a chair is too crucial a piece of patient care equipment to burden with such functional deficits. It's far smarter to colorcoordinate a functionally-designed (contemporary) chair into a setting and achieve a homey look through less functionally-strategic specifications such as wall, floor, bed, window coverings, and case goods.

#### **Extended Function**

- Should a chair recline? Many administrators prefer a mixture of recliners and non-recliners in a healthcare facility, limiting recliners to areas with more severely debilitated users.
- Should a chair accommodate food service? This option is a useful one. However, as with airline meal service, most trays hold the diner captive until someone else removes it. An overbed table or other freestanding, lightweight TV-type tray with legs circumvents the problem. Tables or trays with recessed centers to contain spills are ideal.
- Can a chair help keep urine spills off the floor and thus permit more widespread use of carpeting? Yes. Such underseat urine collection pans are quite appropriately used with porous mesh seats.
- What about commode chairs? Fine, but with a soft, resilient or at least flush seat ring. Prolonged sitting on a hard, highly-contoured seat ring can be painful to the point of cruelty.
- What about patient transport-type wheels? A fine idea, and much more appropriate to the user incapable of auto-mobility. A foot shelf to keep the feet off the floor, reasonable stability,



The motion of most rockers lifts the feet of the sitter off the floor.



A geriatric chair, like the best office chairs today, should recline at the rear, while the front of the chair remains at a fixed height to prevent liftoff.

and brakes on a minimum of two casters are important.

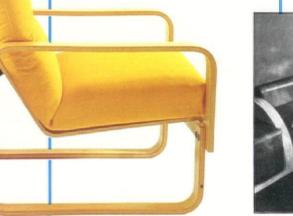
- Patient restraint considerations. Do chairs effectively keep a patient from falling out? Probably not, but there are a variety of chairs that make patients feel as if they are wearing horse blinders. The most failsafe means of keeping a patient from falling out of the chair is with an integral restraint belt or vest. Avoid makeshift sheet restraints from which patients can't be freed rapidly in the event of fire.
- Input-output: should chairs accommodate IV poles and drainage bags? If stationary chairs are used in a facility, there's little purpose in having a special chair-mounted IV pole attachment (parts for which are likely to get misplaced), since the standard IV poles should service the patient in bed as well.

In cases where mobile wheel-based chairs are used comprehensively in a facility, attached IV poles might service a relatively small percentage of patients conveniently outside of their rooms. Drainage bags generally attach so conveniently that special accommodations for them are superfluous.

• Multifunctionality. A chair is a bed is an exam table is a skateboard. Just how much should be expected from a chair? The answer depends on how one views seating. It may function only to hold someone in an upright posture. Or the same piece of equipment can be used to perform a variety of functions. To impose a variety of functions on a chair, however, tends to limit its ability (in a design and engineering sense) to optimally serve its most important role—that of being a good seating instrument for its user. □

Roger K. Leib, AIA, is an architect, product designer, and president of Add Interior Systems Inc., Los Angeles, a manufacturer of healthcare seating.

# SOFT-EDGED FURNITURE BOOSTS USER-SAFETY IN HEALTHCARE SETTINGS





Designed Interior

New furnishings & ancillary products for medical spaces illustrate this market's emphasis on ergonomic design



Ambiant Ltd.

Acme Kitchen



Haller Systems



Tuohy Furniture





Ambiant Ltd.—Series 900 high-back seating is designed by Michael Stewart. Made from 11-ply, molded lacquered maple veneer, chairs are covered with field-replaceable standard or COM fabrics cushioned by polyurethane foam and dacron. Individual parts can be removed for maintenance.

Circle No. 222.

Designed Interiors Inc.—Coordinated chair units, laminate cube tables, magazine racks, and lamps are available. Seating is constructed of highdensity, vinyl-covered foam set within all-wood frames. Circle No. 212.

Acme Kitchen-Integrated kitchenette units include refrigerator, range, sink, and storage cabinet. A choice of 10 sizes and four colors are offered.

Circle No. 207.

Haller Systems—Modular steel medical consultation room furniture adapts to needs of user. Work surfaces, instrument storage, x-ray viewing screen, and examination table integrate to create flexible medical environments.

Circle No. 217.

Tuohy Furniture-Plexus Armchair Group is made with red oak, ash, or walnut frames. Fabric or vinyl upholstery is supported by suspension webbing. Seats are of polyurethane foam with a plywood core. Tables are made of plastic laminate with particle board core. Circle No. 210.

Kinetics—Discipline seating and table units are engineered for heavy-traffic areas such as hospital cafeterias. A variety of upholstery fabric and color options are offered. Circle No. 231.



CI Designs

Cl Designs-Warren Platner chairs are made with laminated bentwood frames in white oak, walnut, or colored maple. Molded-foam seating is offered with a choice of standard or COM fabrics.

Circle No. 205.

Circle No. 221.

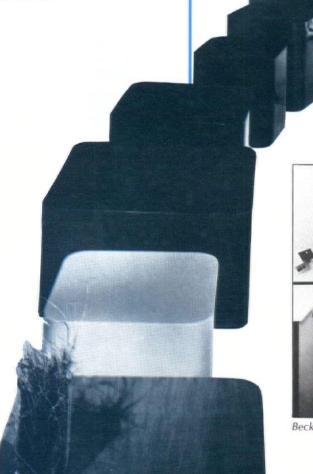
Howe-Designed by Norman Cherner, tables are offered in fixed, folding, and flip-top versions. Column is of steel tubing in polished Chromax.



Howe

Beck-Lee—MSU cabinetry line features 3/4-in. thick, laminated panels and drawers. Units are set on leveling glides for stability. Circle No. 202.

Intrex-Radius-corner table units are called Quarks. Designs are available in 14 glossy and low-glare colors as well as five woods and five burls. Circle No. 203.



Beck-Lee

Intrex

# Add to product usage with optional components



Modern Contract Furniture—New healthcare furnishings introductions include two lounge/solarium groups, desks, freestanding pedestals, bedside cabinets, and auto-adjustable overbed tables. Firm seats and high backs provide comfort and support for elderly and recovering patients. Furniture features butcher-block end panels.

Circle No. 223.

Adden Furniture—Roommate Collection of solid oak institutional furniture includes wardrobe (shown) with sliding door, chest, and adjustable shelf. Stops, which are cut into the unit's top and bottom, prohibit side panel damage when closet door is slammed.

Circle No. 228.

AMSCO—Sink module is stainless steel and features over- and under-counter storage. Medication module has double-lock narcotics locker, security wall-lock, and "door unlocked" warning light. Product is part of firm's Unicell Space and Material Management System for healthcare environments.

Circle No. 211.

Cumberland—Reception desk is available in a variety of configurations. Standard mid-height ledge is located 32-in. above the floor. Oak, walnut, and oil-finished wood are offered.

Circle No. 209.

Plymold Booths—CEBRA collection features four- and six-seat clusters in both wall- and island-style configurations. Chairs have self-centering swivel-spring return; tabletops are of mar-, stain-, and burn-resistant laminated plastic. Products can be quick-shipped. Circle No. 206.

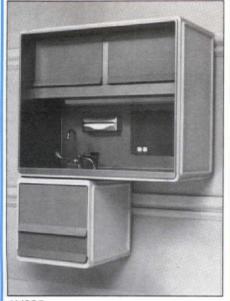
ModuForm—Durable, maintenancefree lounge furniture is specifically en-

Modern Contract Furniture

gineered for heavy-traffic areas such as hospital lobbies. Seating features seamless, 1/4-in. leather-grained vinyl upholstery and a polyurethane, fire-retardant foam core. Circle No. 201.



Adden Furniture



**AMSCO** 



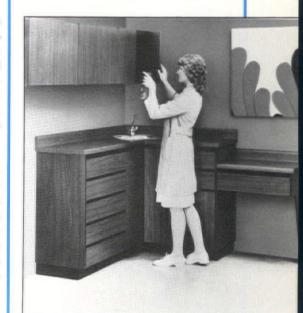
Add Interior Systems



Add Interior Systems—Warren Chair is part of complete patient seating group offered by the firm. Called Dynamic Seating Collection, it includes high- and low-back versions, armless chairs, ottomans, and dollies. Drip pans, meal trays, and footrests are options. Forward-extending armrests (shown) ease egress. Circle No. 227.

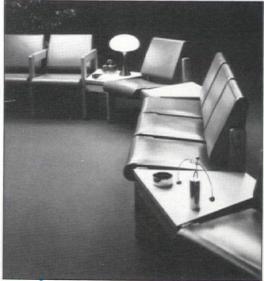
Midmark—Modular cabinets are specifically designed for healthcare facilities. Complete customization is offered by 16 units which combine to form labs, treatment rooms, nurses stations, and pharmacies. Modules are constructed of heavy-gauge steel frames with durable, high-pressure laminate fronts and panels. Circle No. 218.

Plymold Booths



Midmark





ModuForm

HEALTHCARE FURNITURE/FURNISHINGS

# Child care gets strong design focus



Paoli Chair

Wellco





ICF

Paoli Chair Co.—Style #120-1 convalescent chair has padded back and arms that add comfort. Exposed wood arm fronts and cleaning clearance between back and seat ease maintenance. Tray has safety lock. Circle No. 216.

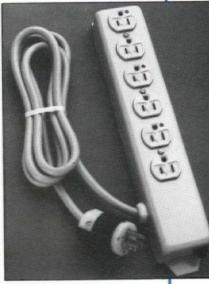
Wellco—Expanded Specta Graphics II collection includes new, modular corridor carpet. Total group consists of six continuous screen-printed patterns in 21 stocking colorways and a velour cutpile pattern in 24 solid colors. Made from Anso Perfect Luster nylon, carpet is certified for heavy-traffic areas.

Circle No. 224.

ICF—Healthcare furniture designed by Alvar Aalto in the 1930s is available, newly-manufactured, from the firm. Endorsed by the Health Ministry of Sweden as safe for children, rounded-edge tables, chairs, and stools are of laminated birch with linoleum and plastic laminate inset tops. Circle No. 213.

SGL-Waber—Four multiple outlet strips containing hospital-grade components were recently introduced by the firm. Available with 6- and 15-ft. cords, outlets have push-to-reset circuit breakers and are UL-rated. Units feature seamless steel casing with a white, baked-on finish. Circle No. 214.

Playscapes—Children's play environment, designed for pediatric facilities, features carpeted interior walls and



SGL Waber

Playscapes

floors and durable laminate exterior. Unit is constructed to fit in a corner and provides storage space for toys and games. Circle No. 229.

**Brayton Int'l**—"Sirino" seating has detached seat and back cushions that enhance sitting comfort. Designed by Michael Knoll, group is available in one-, two-, and three-seat versions. **Circle No. 226.** 

Madison Furniture Inds.—Sculptured oak seating, designed by Umanoff-Huin Assoc., features radiused edges and fully upholstered seat and back. One-, two-, and three-seat models are offered.



Brayton Int'l

Madison Furniture



**Bogden Grom Ltd.**—Children's play sculptures are made from fiberglass. Artist will create large-scale animal figures

in custom colorations. Installations include a play area at the Jewish Guild for the Blind. Circle No. 232.



# Safety features comply with standards

**Thonet**—Crockett lounge group has 1-in.-diameter, 14-gauge polished chrome-plated or powder-coated tubular steel frames. Fabric or vinyl, zippered, replaceable seat and back cushions have elastic fabric support platforms that add comfort.

Circle No. 230.



Castelli—Manufactured under license from Artifort, ergonomic seating features single-shell polyurethane construction. As designed by Geoffrey Harcourt, chair is upholstered over injection-molded fire retardant foam and has gas cylinder height adjustment that enhances user comfort.

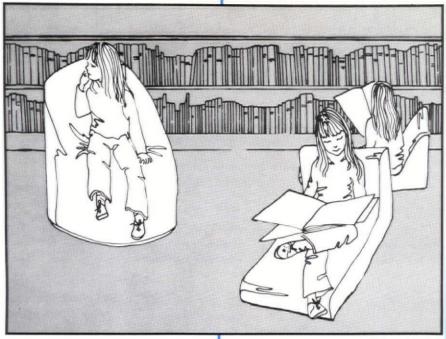
Circle No. 208

Cramer









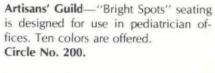
Artisans' Guild

**EBCO**—"Mountain ash" bed/casegood group features solid oak perimeter molding, horizontal full-width oak drawer accent, and wood drawer pulls. Laminate finishes add durability. **Circle No. 215.** 

**Badische**—Waiting lobby at Mercy Hospital, Davenport, III., features Commercialon 4600 carpet from J & J Industries. Fiber is Zefran CR-4. Circle No. 219.

Cramer—Clean Room seating is designed for sterile environments. Cushioned-vinyl covers and chromeplated frames are easily maintained. Seating can be certified to meet Class 100 sterility standards. Circle No. 220.

Architectural Fiberglass—Planters and receptacles are made from fiber-reinforced plastic that is open contact molded. Galleria line (shown) is offered in two size variations and a range of colors and finishes. Company is a division of Krueger. Circle No. 204.



Shelby Williams—Geriatric platform rocker is constructed of oak and features a cushioned, reversible seat. Back cushion is tied to frame for extra stability. Foot stool is also foam padded. Circle No. 249.



Shelby Williams





# PDC VIEWS TWO CONTINENTS AT WEST WEEK, MARCH 17-19

Los Angeles—Paul B. MacCready, developer of the world's first human-powered aircraft will present "The American Initiative: Alternatives In Energy And. Design" to open West Week at the Pacific Design Center, March 17-19. MacCready captured audiences at the International Design Conference at Aspen in 1980 with the story of his plane's flight across the English Channel.

West Week's theme, "Gateway To The Americas," will be fulfilled by "The Americas: Three Viewpoints In Design," a seminar featuring Frank Gehry, FAIA, president, Frank Gehry & Associates; Ricardo Legorreta, architect, Legorreta Architects, Mexico City; and Charles Moore, FAIA, principal, Urban Innovations. Moderator is John Pastier, urban design editor, Arts and Architecture.

MacCready's "Gossamer Albatross" human-powered plane joins an exhibition of the internationally acclaimed "Memphis" furniture/furnishings line from Milan, representing creative works of 24 top designers. An opening day seminar will

discuss "Memphis: Concept And Philosophy" with designers Andrea Branzi, Ernesto Gismondi, Michael Graves, Arata Isozaki, Barbara Radice, Peter Shire, and Ettore Sottsass.

### Contract symposium repeated

Your Turn/My Turn, the international contract furnishings design symposium, brings distinguished designers to West Week for the third annual event sponsored by PDC 2.

The American Society of Interior Designers (ASID) will sponsor a pre-market ASID Industry Foundation Day March 16. A full-day event, "Design Change: The Verdict Is In," will address changes in architecture and interior design. Joan Blutter, ASID, will moderate.

For information on West Week, contact James Goodwin, Pacific Design Center, 8687 Melrose, Los Angeles, CA 90069; 213/657-0800. For information concerning PDC 2, contact Judi Skalsky, 635 Westbourne Dr., Los Angeles, CA 90069; 213/854-6367.

# WEST WEEK "GATEWAY TO THE AMERICAS"

#### March 16

ASID Industry Foundation Day

#### March 17

9 a.m. Registration

10:30 a.m. The American Initiative: Alternatives In Energy and Design

12:30 p.m. The Mediterranean: A Design Influence In The Americas

2 p.m. Memphis: Concept And Philosophy

9 a.m. Structuring Design Fees: Staying Competitive And Profitable

#### March 18

9 a.m. Showrooms Open

9:30 a.m. Facilities Management Program

10 a.m. The Residential Product Design Process: A Design Dialogue

1 p.m. Pre-Columbian Art and Architecture: A
Contemporary Design Influence In the Americas

2:30 p.m. The Design Process: Personal Statements

3:15 p.m. A Design Charrette And Evaluation

3:30 p.m. \*Design Trends

4:30 p.m. \*Design Basics: Lighting and Color In 1983

6 p.m. Showroom and Floor Events

#### March 19

8:30 a.m. Interiors by Architects

9 a.m. Showrooms Open

9:30 a.m. \*The Design Decade: Mass Quality Or Elitism?

10:30 a.m. Spectacular Environments In The Americas

10:30 a.m. \*Personal Profiles/Design Masters/Design Symposium

noon \*The Future State Of The Art of Systems

1 p.m. \*A Design Relationship: How To Begin And Nurture The Designer/Manufacturer Relationship

2 p.m. Vision Of The Future: The Influence Of Film On Design

3 p.m. The Americas: Three Viewpoints In Design

5:30 p.m. The Party! A Celebration Honoring The International Design Community

\*denotes PDC 2 design workshop

### **Exhibits**

The Gossamer Albatross, PDC Galleria, 5th Floor Memphis-Post-Modern Furniture From Milan, PDC Rotunda, 1st Floor





GF Business Equipment's "Open Plan System" (far left) accommodates electronic data processors on surfaces of varying heights. Space No. 200.

Haworth's Unitek™ electronic support furniture (left) and TriAmbient™ lighting offerings have been expanded for showing at West Week. Space No. 193.







MacCready

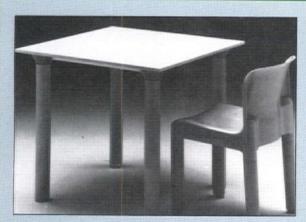
"Prestwick" fabric from Brickel has look of Scottish tweed in rich colors. Yarns are skein dyed and woven. Space No. 260.



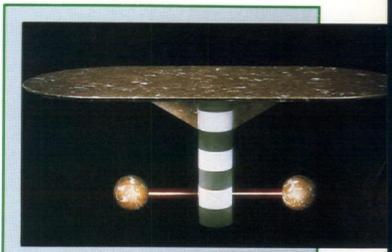
Legorreta

West Week's theme, "Gateway To The Americas," brings Ricardo Legorreta, Charles Moore, and Frank Gehry together in a seminar discussing viewpoints of design on North and South American continents. The design scope of West Week is broadened by speaker Paul B. MacCready.

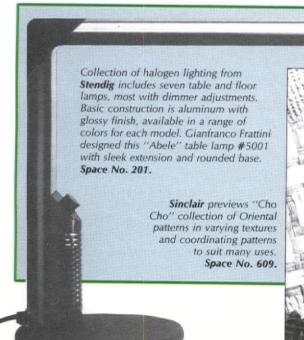


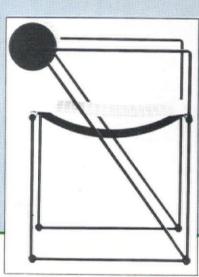


Anna Castelli Ferrieri designed the "Bistro" table of high-impact grade ABS for Beylerian Ltd. Product is suitable for indoor or outdoor usage since paints are integrated into plastic. Space No. 146.



Michele DeLucchi's design for "Memphis," a modernistic array of furniture, is among items on display March 17-19.



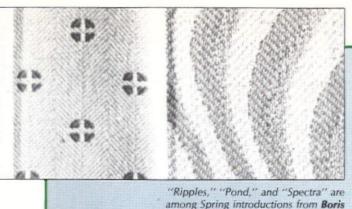


Geometry is interpreted in interesting angles of Mario Botta's latest design for ICF. Arm or armless versions are offered in black or silver with sling seat of perforated steel in contrasting color. Backrest is polyurethanecovered rotating cylinders. Space No. 239.

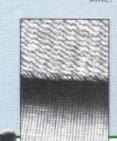
# Designer Conversations give intimate look at creative roles.

Manufacturer		pace No.	Manufacturer	Designer Spa	ce No.
Artemide	Ernesto Gismondi	266	4:30 p.m.		
Atelier International	Perry Allan King	235	Arc-Com	Jeffrey Layne	241
Ben Rose	Ben Rose	211	Executive Office Concepts	Sumner Adams	263
Executive Office Concepts	Sumner Adams	263	"G"	Bergmiller	267
Hauserman	Dan Flavin	208	The Gunlocke Co.	Don Keith	210
	Massimo Vignelli		Harbor/Benedetti	David Hammer	255
Herman Miller	Chuck Cooper	229	Harter	Louis Mark	261
ICF	Ken Walker	239	Hauserman	Charles Pelly	208
Pacific Condi	Charles Pelly	219	Haworth	Mark Klungle	193
Knoll International	Jhane Barnes	203	Kasparians	Kasparians Managemen	
Ron Rezek/Lighting	Ron Rezek	268	Kimball, Artec	Rich Thompson	230
Shaw-Walker	Robert A.M. Stern	253	Knoll International	Lucia Mercer	203
	George W. French		Krueger	Tom Tollerson	226
	John Crouse		Stow/Davis	Richard Ogg	351
Brickel	Steve Brickel	260	Westinghouse	William Anderson	250
Design Tex Fabrics West	Hazel Siegel	213			
Forms & Surfaces	Don Powers	245	MARCH 19 9:30 a.m.		
Haller Systems	Fritz Haller	257			
Harbor/Benedetti	O.J. Holohan	255	Atelier International	Perry Allan King	235
Harter	Louis E. Mark	261	Ben Rose	Ben Rose	211
Kimball, Artec	Rich Thompson	230	Herman Miller	Bruce Burdick	229
2:30 p.m.			ICF	Ken Walker	239
Stendig	Paolo Piva	201	Pacific Condi	Charles Pelly	219
Stow/Davis	Richard Ogg	351	Ron Rezek/Lighting	Ron Rezek	268
Sunar	Douglas Ball	206	Shaw/Walker	Robert A.M. Stern	253
Westinghouse	William Anderson	250		George W. French	
3 p.m.				John Crouse	
Arc-Com	Jeffrey Layne	241	10:30 a.m.		
"G"	Bergmiller	267	Artemide	Ernesto Gismondi	266
The Gunlocke Co.	Stanley Felderman	210	Brickel	Steve Brickel	260
Haworth	Mark Klungle	193	Design Tex Fabrics West	Bart Moore	213
Kasparians Inc.	Kasparians Managem		Forms & Surfaces	Bill Brackney	245
Krueger	Tom Tolleson	226	Haller Systems	Fritz Haller	257
3:30 p.m.			Harbor/Benedetti	O.J. Holohan	25.
Atelier International	John Nichols	235	Harter	Louis Mark	26
Ben Rose	Kimberly Christman	211	Kimball, Artec	Dewey Hodgdon	230
Herman Miller	Don Chadwick	229	* Stendig	Paolo Piva	20
ICF	Ken Walker	239	Stow/Davis	Richard Ogg	35
Pacific Condi	Charles Pelly	219	Sunar	Douglas Ball	20
Ron Rezek/Lighting	Ron Rezek	268	11:30 a.m.		
4 p.m.	KOH KEZEK		Arc-Com	Jeffrey Layne	24
Shaw-Walker	Robert A.M. Stern	253	Executive Office Concepts	Sumner Adams	26.
Silaw-waiker	George W. French		"G"	Bergmiller	26
	John Crouse		The Gunlocke Co.	Stanley Felderman	21
Artemide	Ernesto Gismondi	266	Haworth	Mark Klungle	19
Brickel	Steve Brickel	260	Kasparians Inc.	Kasparians Managemer	nt 27
Design Tex Fabrics West	Pat McCullen	213	Knoll International	Lucia Mercer	20
Forms & Surfaces	Chris Edwards	245	Krueger	Tom Tolleson	22
Haller Systems	Fritz Haller	257	Westinghouse	William Anderson	25
	Paolo Piva	201	Continuing conversation:		
Stendig Sunar	Linda Thompson	206	Study/Michael Brill		25

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"Ripples," "Pond," and "Spectra" are among Spring introductions from **Boris Kroll**. Each is primarily wool. **Space No. 530.**  Ettore Sottsass, whose "Memphis" design is featured here, says of the innovative line, "'Memphis' started from the necessity, intensely felt by a group of Milanese designers, to say, to do, and to see the fulfillment of things they had been contemplating for some time."





"Orbis" desk lamp from Ron Rezek/Lighting has ball joints allowing 360-degree rotation and 30-degree vertical adjustment. Space No. 268.



Madison Furniture
Industries will show chairs
#C66E05 and #C26E05 in
walnut and oak,
respectively, in the Shelby
Williams showroom. Chairs
are design of
Umanoff-Huin Associates.
Radius, contour edges are
featured with fully
upholstered seat and back.
Space No. 274.

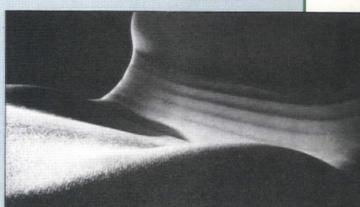
Jhane Barnes, Coty award winner, has designed a textile collection for Knoll Textiles that incorporates a multitude of colors and rich textures, Introductions are suited to upholstery uses. Space No. 203.

"Wes-Tech" series from
Westinghouse is comprised
of freestanding, linkable
desks and cluster tops for a
variety of layout
arrangements. "Tilt
Carousel" VDT base offers
fingertip position control for
users. System integrates
with firm's open plan line
for office application.
Space No. 250.



The "106" chair, designed by Giancarlo Piretti, is geared for use in a variety of spaces. Within the past 10 years, that chair, along with the "Axis" line, has been produced in quantities exceeding 3.5 million. From Castelli, unit has upholstered or wood veneer seat and back assembled into a side frame structure of diecast aluminum alloy. Legs are steel tubing. "Axis" series, a system of seats on beam construction, will be shown in the Gail Epstein Enterprises showroom. Space No. 267.





"Christa Chair" close-up shows unique construction of seat and back contours. Designed by Charles Pelly for Hauserman, the product will be shown in the firm's PDC showroom. Molded form is designed for working comfort. Space No. 208.

# Manufacturers focus on new items & their designers



Richard Ogg developed the "Ogg" chair for Stow/Davis with a border of continuously curved wood laminate. Wood border, in white oak or walnut, edges upholstered seat and back. Chair is available in high-back, low-back, and side chair versions. Bases may be coordinated with wooden perimeter.

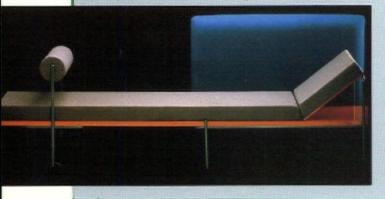
Space No. 351.

Stainless steel supports a trim, upholstered frame in "Omega" arm chair from Vladimir Kagan Designs Inc. Designed by Kagan, chair has loosely attached back and seat cushions, as well as a separate cushion for the lower back. Kagan silk upholstery is shown.

Space No. 500.



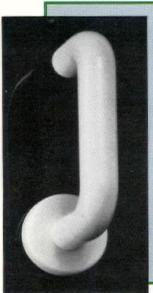
Andrea Branzi's "Century" chaise, designed for the "Memphis" collection, is a striking mix of slim lines.



"Uni Chair" from Atelier International comes in seven models with 98 variations. Designed by Werther Toffoloni, chair is licensed by IBIS, an Italian firm, for U.S. manufacturing. Space No. 235.

Kimball Office Furniture
Co. brings the "Radiante"
collection to West Week,
featuring guest and
executive seating. Side
chair with open or closed
arms, and an executive
swivel/tilt model comprise
the series. Oak, walnut, and
mahogany construction are
offered in eight finish
variations. Swivel/tilt model
has pneumatic height
adjustment. Space No. 230.





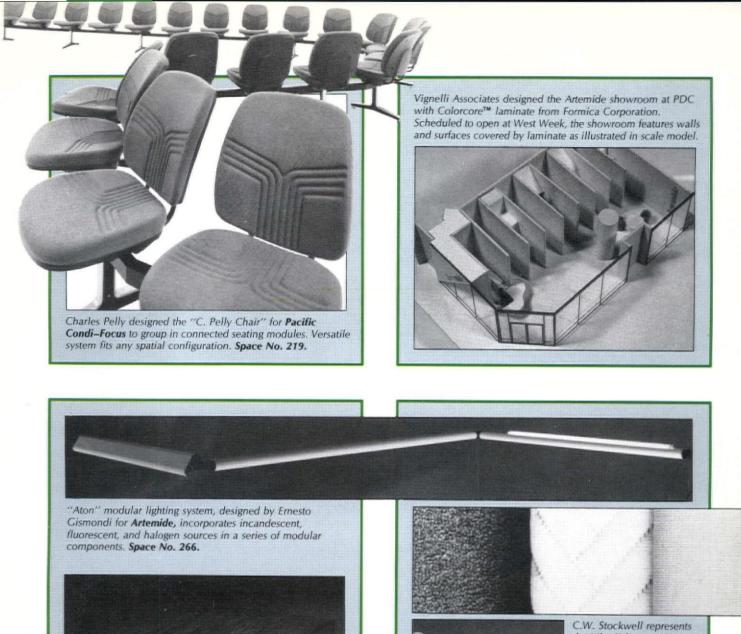
Lever handles in nylon and stainless steel are compatible with major mortice locks and latches. From Forms & Surfaces, handles are anti-static. Space No. 245.

"The Cameron Group" from **Sunar** is a design of Douglas Ball, director of design. **Space No. 206.** 





Janus et Cie showroom will house faucets and fittings from Watercolors Inc. for the line's first American introduction. Single-lever faucets are manufactured in Italy. Space No. 146.





WEST WEEK

#### System additions respond to computer usage



plated and fused finishes. Item is a design of Leonard Scott. **Space No. 270.** 



Corry Jamestown will show a privacy option screen as part of the firm's "2000" panel system. Self-contained modular panel incorporates a one-in. metal blind between two layers of bronze acrylic or clear glass. Space No. 110.



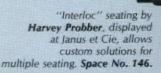
Artec "MFS" is an executive furniture system in mahogany, first shown at New York's Designer's Saturday. Detailing on worksurface edges and top cap is executed in architectural-grade veneers and solids. Catalyzed vinyl finish protects furniture. Space No. 230.

Upholstery/wallcovering fabric from Ben Rose is called "Aurora," a nylon/wool blend. Twelve colors are offered.
Space No. 211.



"Phoenix" stacking chair from The Gunlocke Company features flared arm design, achieved by steam-bending solid oak or walnut hardwoods. Triple-stitch detailing on upholstery provides added durability. Removable arm tablet and stacking cart are optional. Designed by John Duffy, line includes highand low-back swivel chairs, guest chair, and new stack model suited to office, conference, and dining applications.

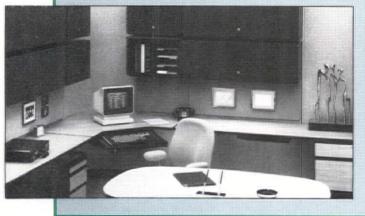
Space No. 210.

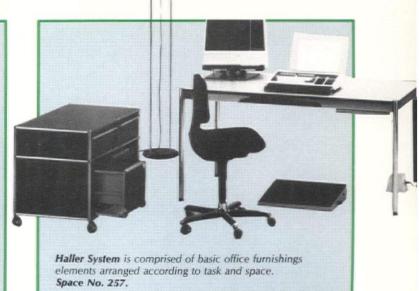




ExpanDesk® modular furniture is part of an extended group of systems from **Shaw Walker** utilizing standardized componentry. Line makes custom design possible for many configurations. **Space No. 253.** 

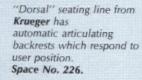
Corner space is efficiently utilized with the Action Office® management workstation from Herman Miller. VDT is accommodated with keyboard drawer at typing level. System provides easy access to terminal area. Space No. 229.







"Quadrante," designed by Antonio Citterio and Paolo Nava for **B & B America**, has clean lines of aluminum and glass. Top is deeply beveled with chamfered corners. **Space No. 201**.



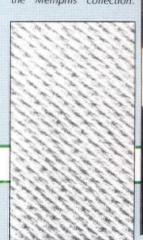


Gail Esptein showroom will display Harmon's "Command" panel system components.

Space No. 267.



"Memphis" designer Peter Shire has created an unusual assemblage of forms and color in his seating addition to the Milanese line. Called "Bel Air 82," Shire's design is one of more than 60 items created by a team of 24 designers which make up the "Memphis" collection.





Worsted wool fabric from **DesignTex**, called "Wool Marquise," is Teflon-coated and meets Class A flamespread standards. **Space No. 213.** 



Produced at deSede manufacturing facilities in Switzerland, "DS 210/211" executive seating is marketed by Edward Axel Roffman Associates at the Gail Epstein showroom. Leather-covered model is offered in high-back swivel/tilt with casters, low-back swivel armless, and low-back swivel with arms. Space No. 267.



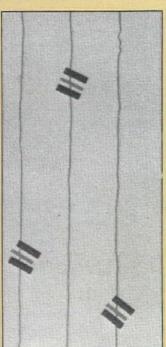
lack Lenor Larsen

### FABRIC FLAMMABILITY CODES GET MORE AND MORE COMPLEX

Jack Lenor Larsen—"Firewater," a synthetic sheer window fabric woven in Switzerland, is constructed of flameretardant Trevira CS/270. Circle No. 305.

Contract Handprints—Vinyl wallcoverings meet Class A fire retardancy standards. The Collection, designed by Patty Madden, was recognized in the IBD/CONTRACT award competition. Circle No. 274.

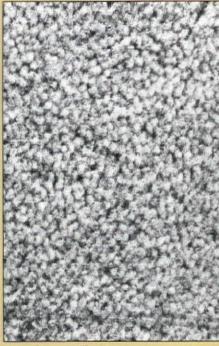
National Products Inc.—
"Phoenix" series represents
the first Tambour wallcovering
line to meet Class A requirements of ASTM E-84 testing.
Wood veneers, cork, brushed
and polished metals, as well as
custom fabrications, are offered. Circle No. 286.



Contract Handprints



National Products

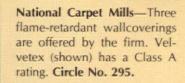


National Carpet Mills

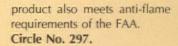
wenty-six people died as a result of carbon monoxide poisoning in the widely publicized Westchester County, New York, Stouffer's fire. Many other fire-related deaths, such as those at the MGM Grand Hotel in Las Vegas, occurred during the past year due to inhalation of toxic gases produced by burning of synthetic materials and furnishings.

Because of such tragedies, local fire marshals now are starting to more stringently interpret fire codes which have been in the Uniform Building Code books for several decades. With the possibility of one national standard code a very distant one, the Business & Institutional Furniture Manufacturer's Association (BIFMA) provides its own standard for upholstered furniture flammability. That standard has been in general use for the past four years. BIFMA's goal is to eliminate the lack of uniformity among product-related safety standards regarding office design.

Understandably, when specifying fabric, esthetic considerations command designer attention. Fire, while hardly courted, still looms as a very real and unpleasant



Vicrtex—"Taos" is a new vinyl wallcovering which received a Class A rating from Underwriters Laboratories. Guaranteed for five years,



Brunschwig & Fils—"Menars" bordered panel and "Oxford" chevron stripe, as well as other offerings, meet standards of the UFAC cigarette burn test, California Home Furnishings Act 117, FAA 25.833, NFPA 701, and the New York City





firecode test. Circle No. 271.

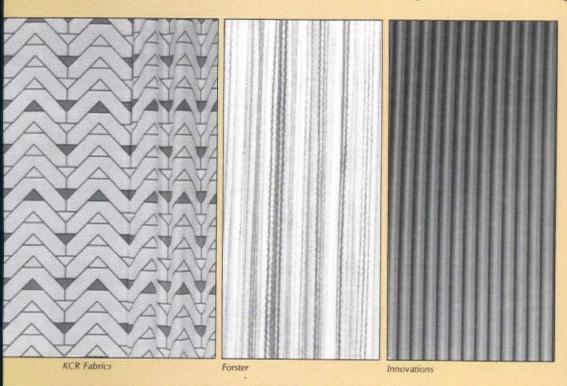
Bangkok Industries—Genuine wood-faced veneer can be bent, wrapped, and die-cut for many applications. Pre-treated product meets Class A fire retardant requirements.

Circle No. 285.

Brunschwig & Fil

Bangkok

## Cross-section of fire resistant fabrics/products help specifiers meet some of toughest government regulations



KCR Fabrics Inc.—"New Snow" pattern is available in custom colorations, printed on inherently flame-resistant ground fabrics. Depending on fabric, product suits drapery or open plan panel applications.

Circle No. 293.

Forster Textile Mills Inc.— Verel/Viscose combination creates an inherently flame retardant fabric. Varied yarn combinations and colorations are offered. Products resist sun and mildew. Circle No. 280.

Innovations in Wallcoverings Inc.—"Lonrib" wallcovering meets requirements for Class A fire retardancy rating. Textured in vinyl, wallcovering is available in five colors.

Circle No. 268.

possibility. Experts report designers often are not educated in this area and rely on the advice of sales agents. As different municipalities tighten restrictions, future creativity on the part of designers will be challenged when they find themselves restricted to only those materials that can successfully pass applicable fire codes. Along with weighing fabric costs, availability, function, and physical appearance, the designer/specifier also must develop a basic knowledge of fire codes or put the specification process at legal risk. This educational task is rendered more difficult because

flammability codes vary by geographic location. Codes for fabrics and other building materials differ from state to state and municipality to municipality. Across the U.S., more than 300 different fire code regulations are presently in effect. While measurements and other criteria differ, the following testing procedures have commonality with fire codes in various sections of the country.

With fabrics, as well as other building materials, the question is not whether or not the product will burn. It will. Correct terminology is expressed by identifying a fabric or



patterned series includes "Hopscotch," "Midscotch," and "Largescotch." Verel™ inherently flame-retardant fabrics are drapeable.

Circle No. 303.



Gilford

Interspec

material as flame "retardant" or "resistant." Either because of its inherent qualities or through application of chemical fire retardancy treatments, a fabric is tested for its ability to resist the passage of flame during a specified period of time.

The American Society for Testing & Materials' ASTM E-84 test is one of the most common standards used by manufacturers to establish fire-resistant classifications. Called a tunnel test because items are tested in a horizontal tube, the test measures surface burning characteristics of fabrics and other building materials. Flame spread, fuel contribution, and

smoke density are measured and given numerical ratings. Depending on these ratings, materials are classified Class A, B, or C corresponding to use.

Codes are based on materials prescribed for use in a variety of building applications, such as a public area or an individual office. It is the potential human occupancy load factor that receives the Class A or B rating-not the fabric alone. A fabric which carries an ASTM E-84 ratings of 25 or less would be suitable for a Class A area, such as a heavily trafficked hallway or exit. A Class B rating is numerically

Gilford Inc.—Layer of polyethylene, laminated between fabric wallcovering and paper backing, permits cleaning with soap and water without damage to wallcovering. Called "Get Acquainted," product is woven in Norway

and meets requirements for Class A flame spread rating. Several color variations are offered in warp weaves.

Circle No. 266.

Interspec—"Resonance" printed design is from the "Limited Editions" collection. Drapery styles are woven of Trevira™ polyester and meet standards of NFPA 701. Product is machine washable and is offered in geometric patterns in various colorations.

Circle No. 283.

J. Josephson Inc.—"Yang Willow" printed design is among vinyl wallcoverings in the Vinyl Weave V book. Corduroy fabrics coordinate with lines. All materials are rated Class A under definitions of NFPS. Circle No. 287.

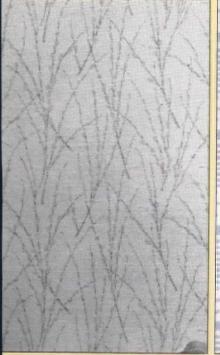
Owens-Corning Fiberglas—Development of Beta-Care fabrics meets industry demands for products with low smoke emission. Fabric passes tests of NFPA 701 with minimal smoke generated as cited under NFPA 258. Product is applicable for contract draperies. Circle No. 290.

Construction Specialties Inc.—Acrovyn™ wallcovering is constructed of semi-rigid, resilient vinyl/acrylic which withstands impact, mars, scrapes, and abrasions. Product meets Class I standards of the ASTM E-84-75 in .028-in. thickness meets Class II and III finish requirements.

Dazian's Inc.—Solid color nylon face velvets are offered in a range of 26 colorations. Designed for commercial use, products meets testing standards of the City of Boston, New York City, FAA commercial interiors, and NFPA E-84-79, Circle No. 288.

Circle No. 264.

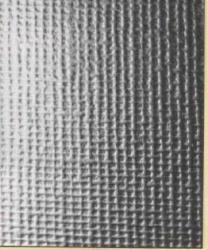
Ametex—"Pyrosquare," a 1981 IBD gold medal award winner, is woven of 100 percent Trevira™ polyester. Fabric is 48-in. wide and inherently flame retardant. It meets major U.S. and foreign testing requirements for fire retardancy. Circle No. 278.



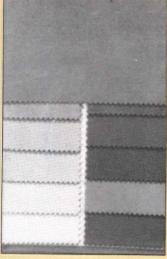
J. Josephson



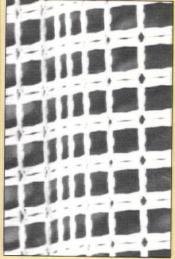
Owens-Corning



Construction Specialties



Dazian



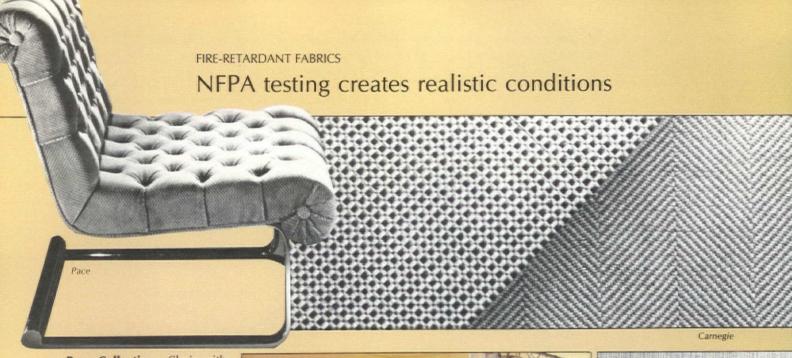
Ametex

noted 26 to 75, and Class C is 76 to 200. The lower the number, the better the fire resistance.

ASTM's test measures how far flame or smoke travels after the material has been ignited in a 10 minute period. Control materials are asbestos cement and red oak, with respective ratings of zero and 100.

#### Vertical tests are better suited for fabrics

Generally, vertical tests are considered more stringent than horizontal ones. In a vertical test, the fabric is allowed to hang freely and thus more closely resembles the characteristics of fabric in a real fire. The National Fire Protection Agency NFPA 701 test includes vertical standards for both small-scale (14-in. fabric swatch) and large-scale samples (four yards of fabric). Results of a flame source applied to the fabric for a specified time (12 seconds for small-scale, two minutes for large) are measured. The sample must self-extinguish within two seconds. Ratings are expressed in a pass/fail manner. Most local and state codes are fashioned after NFPA 701 testing procedures, which use the same



Pace Collection—Chair with cantilevered base meets flammability codes of California code 117-75. Circle No. 296.

Carnegie—"Windsor" and "Macleod" are woven with flameretardant yarns. Circle No. 299.

Hoechst Fibers Industries— Trevira™ polyester is woven by Indecor to create this flameproof cubicle curtain for healthcare use. Fibers meet standards of FF3-71, NFPA 701, and CS-191, method 5903. Circle No. 265.

from the VESCOM 21 collection, is offered in four colorways. Product meets standards of ASTM E-84 test as a Class A fabric. Circle No. 327.

Decor International Wallcovering Inc.—Jacquards collection is made up of Oriental patterns. Fabrics meet standards of the ASTM E-84 tunnel test. Circle No. 294.





Hoechst

Decor

numerical ratings as ASTM E-84 for Class A, B, or C materials.

The FAA 25.853 standard of the Department of Transportation's Federal Aviation Administration Regulations for Compartment Interiors encompasses two tests: one horizontal and one vertical, depending on how fabric is to be used. Flame resistance is determined by measuring the burn rate of the specimen. In order for a fabric to pass, the burn rate cannot exceed four inches per minute.

Extremely difficult to pass is the FAA wide body test—which is the vertical one—because a fabric cannot

have a burn or char length of more than eight inches and must self-extinguish in 15 seconds. Furthermore, drippings cannot occur for more than five seconds after removal of flame.

Wallcoverings are generally tested horizontally. Tests such as ASTM E-84, NFPA 225, UBC 42-1, and Underwriter's Laboratories' UL 723 apply. Upholstery is subject to such tests as State of California bulletin 117, FAA 25.853 (b-3), and Port Authority of New York and New Jersey. These are vertical tests. Draperies are subjected to such tests as Title 19 of the California code, New York code 294-40SR, and both



large- and small-scale NFPA 701 procedures.

While most state and local codes are modeled after NFPA 701, some cities, like Boston and San Francisco, have drawn up their own standards. Widely considered the hardest of the fabric flammability tests to pass, the Boston fire code tests treated as well as inherently flame-resistant fabrics. Results are measured on a pass/fail basis. A Bunsen burner is held under a vertically supported swatch for 10 seconds, after which the fabric must self-extinguish within three seconds. A requirement making this test that difficult to pass is that the

fabric must successfully undergo this procedure twice. The Boston test also has very stringent criteria for synthetic fabrics because of its restrictions relating to "drop off" material, which may continue burning.

San Francisco regulations state that unless a fabric has passed rigid tests, it cannot be installed on a wall. The city also requires that all wallcovering fabic tests be conducted with not only the fabric specified, but with the actual adhesive to be used. Copies of the tests must be submitted to the city so that the fabrics can be registered. State of



FIRE-RETARDANT FABRICS

### Wool weaves are among inherently flameproof



Reed

Leathercraft—Inherently flameretardant leather upholstery covers executive seating. Several chair heights are available. Five-star base model is shown. Circle No. 326.

Unika-Vaev—Sina Pearson, director/designer was inspired by tropical fruits for the "Kiwi Cloth" line. Constructed of 100 percent worsted wool in a plain weave, cloth passes the ASTM E-84 tunnel test as a Class I fabric. Circle No. 262.

Reed Wallcoverings—Bolta-Wall™ wallcovering comes in a wide range of colors. Textured surface creates interesting appearance. Material is highly rated according to the ASTM E-84 tunnel test.

Circle No. 291.

Zumsteg—Cotton fabric with velvet-type surface, called "Kilo Faconne," is printed with a delicate design on an embossed stripe. Tested for fire retardancy, fabric comes in six colorways. Circle No. 272.



Unika-Vaev

California bulletin 117 employs three vertical tests: one for synthetics, one for chemically treated fabrics, and one for fire-resistant fabrics, such as polyester or modacrylic.

Port Authority of New York and New Jersey (Federal Test Method Standard 191-5903) utilizes a horizontal temperature test (critical flux radiant panel) for certain fabrics and a vertical test for other fabrics, depending on use. The amount of heat required to continue to burn a particular sample is measured in watts per sq. ft. The higher the number value, the better the product in terms of flammability. The New York City Fire Test is a small scale vertical used for draperies.

City Fire Test is a small scale vertical test used for draperies.

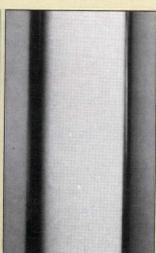
One manufacturer reports that after discussing fire codes with senior designers and purchasing agents of major West Coast Design firms, all agreed that more restrictions are becoming a part of their daily routine. One firm mentions that it will not even consider a material for interior use unless it meets Class A requirements. Another major interior design firm indicates that specifications received from the architectural groups with whom it works now include exacting fire code requirements. And they promise to get even more complex.



Arc-Com



Zumsteg



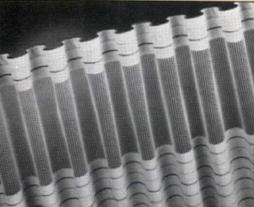
Knoll



David & Dash



Stow Davis



Lazarus

Arc-Com-"Eurythmic" print collection of drapery and wall hangings achieve environmental harmony by utilizing patterns and colors with a calming effect. Product is especially suited for healthrelated applications. Basecloth is inherently flame-resistant and has passed stringent fire codes. Circle No. 276.

Stow Davis-Virgin wool textile from Australia is yarn-dyed and heathered before spinning to give the fabric subtle coloration and a soft hand. Fireretardant fabric called "Freeman," is offered in 10 colorways and measures 54-in. wide. Circle No. 269.

Lazarus Fabrics-"Komplete Kube Plaid" is constructed as a one piece cubicle curtain with mesh and body knitted at the same time. Fabric is fireretardant polyester and meets several fire codes including the New York City board of standards, NFPA 701, and the State of California small scale test. Product is available in four colors. Circle No. 306.

Knoll International-"Furrows" wallcovering, woven of Trevira™ polyester, meets demands of many stringent flammability codes. Fiber passes FF3-71, NFPA 701, and CS-191. Circle No. 263.

David & Dash—"Hampton" collection ranges from multicolored pindot to striped patterns. Color palette spans beige to mauve. Line passes requirements of the CS-191-53 California flammability test. Circle No. 300.

#### INDEPENDENT TESTING BUREAUS

Better Fabrics Testing Bureau 101 West 31 St. New York, NY 10001

Commercial Testing Company 1215 So. Hamilton St. Dalton, GA 30720

Factory Mutual Research Corp. 1151 Boston-Providence Trnpke. Norwood, MA 02062

The Govmark Organization P.O. Box 807 Bellmore, NY 11710

Southwest Research Company 6220 Culebra Rd., San Antonio, TX 78284

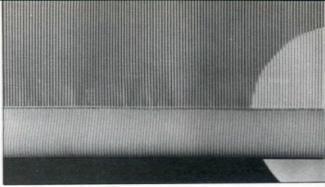
U.S. Testing Co. (East) 1415 Park Ave. Hoboken, NJ 07030

U.S. Testing Co. (West) 5555 Telegraph Rd. Los Angeles, CA 90040

York Research Corp. 1 Research Dr. Stamford, CT 06906

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Holland Shade-Comfort-Flect spring roller shades and vertical blinds are composed of a vinyl-coated fiberglass base covered with a see-through, woven-mesh cloth backed with transparent mylar. Product permits maximum outward visibility while blocking ultraviolet sun rays. Circle No. 241.

Appropriate Technology-Window Ouilt™ cuts heat loss at windows by as much as 79 percent. Five layers of material, including an aluminized plastic sheet covered by polyester fibers, create dead air pockets for better insulation. Product is available in fireretardant materials. Circle No. 240.

Levolor—Sun Tamer™ Screen cuts air conditioning costs, reduces glare, and protects interior finishes against fading without impeding view. Constructed of fiberglass yarn coated with flameproof vinyl for exterior installation, item can reduce solar heat gain by 84 percent.

Circle No. 248.



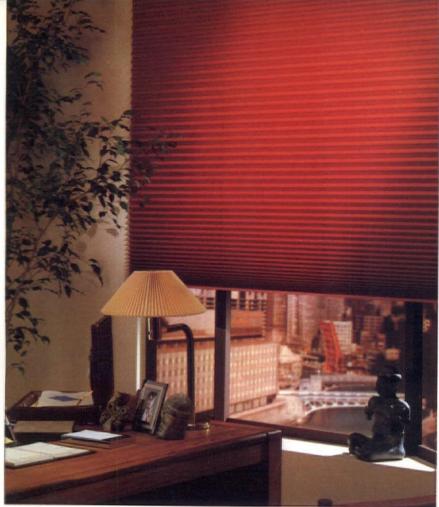
Marathon

Marathon-Bali Blinds conserve up to 49 percent of energy loss at windows. Aluminum, textured blind reflects 65 percent of solar heat. Duplex blinds are white on outside and are available in 20 interior colors. Circle No. 242.

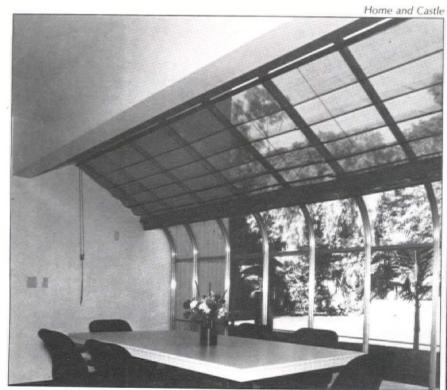


ppropriate Technology



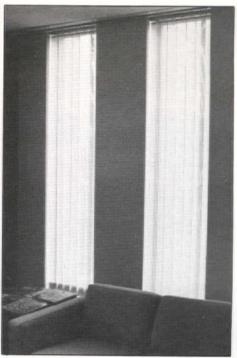


Verosol



Home and Castle—Track-guided, moveable skylight and greenhouse Pacifica shade is available in sunscreen and canvas. Custom fabricated cloth shades are offered. Circle No. 238.

**Sol-R-Veil**—Vertical blinds are constructed of Layfayette fabric. Vanes are available in widths ranging to five inches. Blinds can be operated manually or motorized. **Circle No. 247.** 



Sol-R-Veil

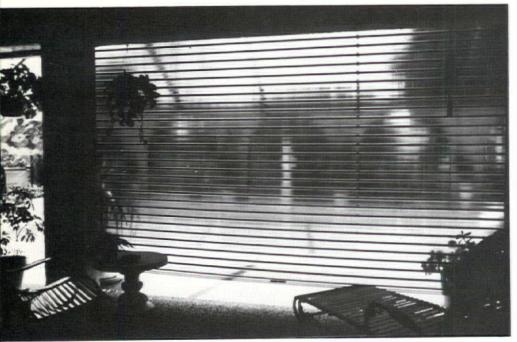
Verosol—Pleated shades offer three degrees of office privacy. Veropaque (shown), the densest fabric, prevents visibility to interiors. Also available are Verolucent and Verolusion fabrics. All three offer the same energy-efficient properties. Circle No. 235.

Plastic-View—"See-thru" window shades reflect up to 92.5 percent of solar energy and retain 44 to 56 percent of interior heat in winter. Metalization process reflects and re-radiates heat back into rooms. Passive solar design permits 100 percent of available free solar heat to enter. Circle No. 236.

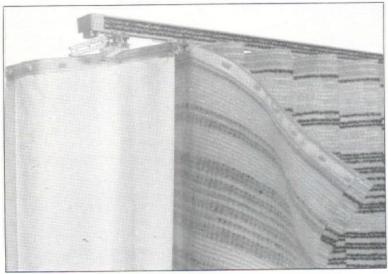


Plastic-View

### 'Dead air blanket' boosts thermal performance



General Electric



Baker Drapery

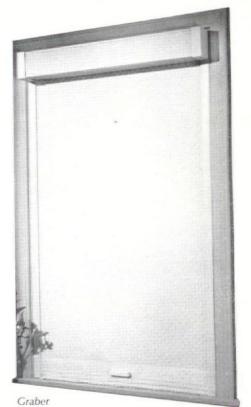
Baker Drapery—Snap-a-Pleat™ drapery system is constructed of an aluminum alloy track with double channels allowing cord and drapery carriers to work independently. Optional prefabricated liner snaps to back of drape forming a dead air pocket to reduce energy loss. Circle No. 237.

**Graber**—Designed to decorate and insulate, The Window System™ features a spring-tension roller mechanism covered with thin, five-ply fabric. Air-tight

edge seals on all four sides to eliminate drafts. Product can be installed from the inside or exterior of buildings.

Circle No. 244.

General Electric—See-Through shutters introduced by Security Shutter Corporation are constructed of the firm's tough Lexan™ resin. Designed to permit interior surveillance, product features a built-in support system that converts shutters into energy-saving awnings. Circle No. 239.





Plaskolite



Phifer Wire Products



Louverdrape



Nanik



Hunter Douglas

Plaskolite—Interior magnetic storm window is designed to automatically expand and contract. Air leakage is prevented by a tight seal between acrylic glazing and windows. Product suits commercial and industrial settings. Circle No. 234.

Louverdrape—Vertical blinds rotate to block direct sunlight. Perforated solid vinyl louvers reduce glare and reflect up to 75 percent of radiated heat to reduce operating time of heating and cooling equipment by 12 percent. Product is available with contrasting edge stripes. Circle No. 246.

Phifer Wire Products—"Sunscreen<sup>TM</sup>" reduces solar heat gain by as much as 70 percent and increases plate glass performance by 15 percent in winter. Constructed of durable, open-weave vinyl-coated fiberglass yarn, it appears opaque from its exterior while permitting visibility from the interior. Circle No. 233.

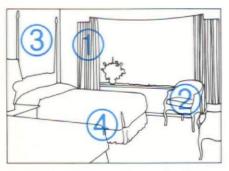
Nanik—Secondary System Window traps venetian blinds between an existing window and a secondary window. Product is installed from the inside of building. Window system reduces heat conduction by more than 50 percent. Circle No. 245.

Hunter Douglas—Flexalum Thermstop blinds reduce heat loss by 43 percent. Non-organic Thermstop is an energyefficient finish for aluminum blind slats. Surface reflects heat in summer and is available in eight colors.

Circle No. 243.

# FLAME/STAIN PROTECTION DESIGN FREEDOM





NOTE: Not all finishes or processes listed are necessarily applied to the items illustrated.

#### 1. For Drapery Fabrics

- Flame Resistant Finishes
- Stain Resistant Finishes

#### 2. For Upholstery Fabrics

- Stain Resistant Finishes
- Backing (for stability) in a flame-retardant formulation
- Flame resistant finishes

#### 3. For Fabric Wallcoverings

- Flame Resistant Finishes
- Stain Resistant Finishes
- Acrylic backing (for ease of installation) in a flameretardant formulation

#### 4. For Bedspread Fabrics

 Lightweight, washable backing in a flame-retardant formulation The variety of protective finishes and backings for decorative fabrics available from Kiesling-Hess allows the designer to work with virtually the full spectrum of natural and man-made fabrics to create guest-pleasing, guest-protecting room decor for America's finest hotels.

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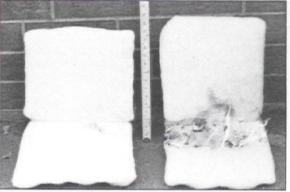




Architex



Bates Fabrics



Cumulus Fibres

# Use non-flammable textiles on panels & windows

Armstrong—Soundsoak acoustical wall panels, with sound absorption ranging from .55 to .85 NRC, have a flame spread less than 25, according to standards of the ASTM E-84 tunnel test. Embossed modacrylic, weaves, and vinyls are materials offered. Circle No. 261.

Cumulus Fibres Inc.—Cumugard™ combustion modified batting product is a non-woven polyester for upholstered furniture. Product is suited for use as cushions or filling. It passes tests under the Boston Fire Code and Underwriters Laboratories. Circle No. 279.

Bates Fabrics Inc.—Designed for window treatments, cubicle curtains, and other end-uses, fabric exceeds standards for fire retardancy set by U.S. Department of Commerce and California Fire Marshal. Product is static-free and is woven of Monsanto's SEF™ modacrylic fiber. Circle No. 270.

Architex International—"Wallternatives II" represents 700 fabrics for wallcoverings, all with Class A rating for fire retardancy. Textures and designs from the U.S. and 13 countries are included. Circle No. 284.



La Seigneurie

La Seigneurie—"Glasscloth" has a composition of woven fiberglass and inert mineral coating, making it applicable for humid and high-traffic areas. Fabric visually removes imperfections in walls and has an ASTM E-84 Class A fire rating. Circle No. 399.

Armstrong

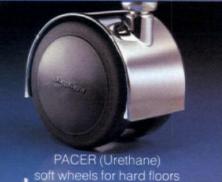


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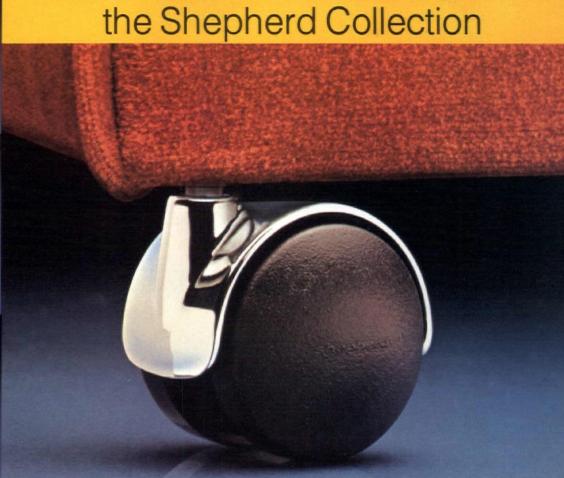




steers the best course everytime

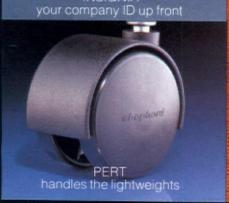


# Other Twin Wheel Casters from

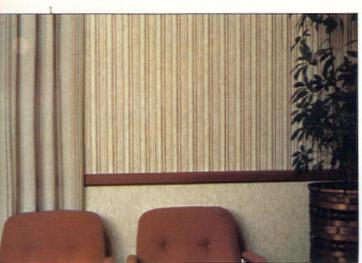


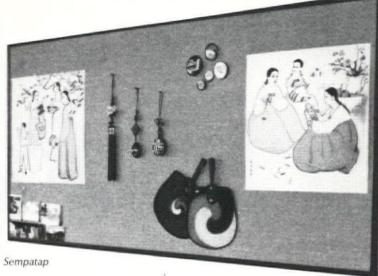




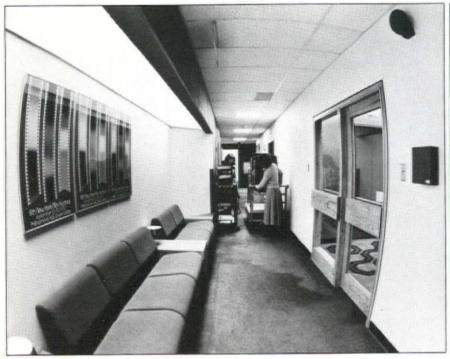








S.R. Wood





Conwed

Rohm and Haas

## Broad textural & color spectrum adds esthetics to functional, fire-retardant materials

**S.R.** Wood—"Crown Jewel" textile collection meets requirements for fire retardancy under NFPA standards. Wallcoverings are Class A rated. Collection of coordinated wallcovering, upholstery, and drapery is available in solids, stripes, warp lays, and weaves. **Circle No. 281.** 

Conwed—Acoustical panel systems are designed to absorb 65 to 95 percent of

sound which hits them. Panels maintain Class A rating under fire code ASTM E-84-80. Silent 95 panels are recommended for perimeter walls for added insulation. Silent 65 panels are effective for room-to-room privacy and as tack boards. Circle No. 273.

Rohm and Haas Company—"Kydex" wallcovering meets Underwriters Laboratories' standards for fire retard-

ancy. High-impact material resists scratches, impact, scuffing, and gouging. Circle No. 301.

Sempatap—Fire-resistant "Material U" tackboards are available in many colors. Material also absorbs sound and serves as an insulator. Sempatap wallcoverings are available in either a sealed surface that can be painted or as grasscloth or jute. Circle No. 298.

Poly and wood...

a versatile combination in the hands of Krueger craftsmen Krueger's Strax seating is offered in arm, armless and bench versions...and any combination can be ganged together. What's more, they also stack.



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Vaughan Walls



Sommer Coverings



General Drapery Services

### Fire-safe fabrics also offer acoustic control

StretchWall div. Joel Berman Associates—An alternative to standard fabric wallcoverings, Stretchwall+™ mounts on frame system to meet virtually any application. Fastening under tension prevents sagging, rippling, or puddles in the material. Product meets NFPA 701 and the ASTM E-84 tunnel test as a Class A item. Circle No. 289.

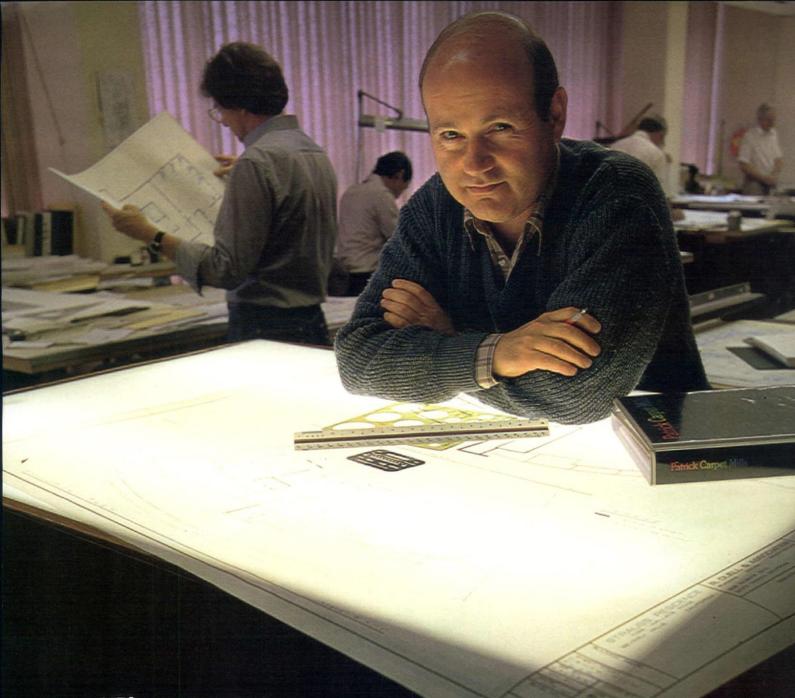
General Drapery Services Inc.— Flame-retardant, 114-in.-wide linen is installed over flameproof dacron. Material meets rigorous standards set by fire codes determined by New York/ New Jersey Port Authority, the City of Boston, the State of California, and several government agencies.

Circle No. 277.

Vaughan Walls—Relocatable and reuseable full-height walls of naturally fireproof gypsum panels are capable of receiving any decorative finish. Product

is available with a full range of options, including doors and a variety of surfaces. Circle No. 304.

Sommer Coverings—"4050" fabric is part of the "Rendez Vous" collection meeting standards of the ASTM E-84 tunnel test. Two-tone effect resulting from design comes in eight shades. In addition to conforming to rigorous flammability codes, product has NRC rating of .15. Circle No. 282.



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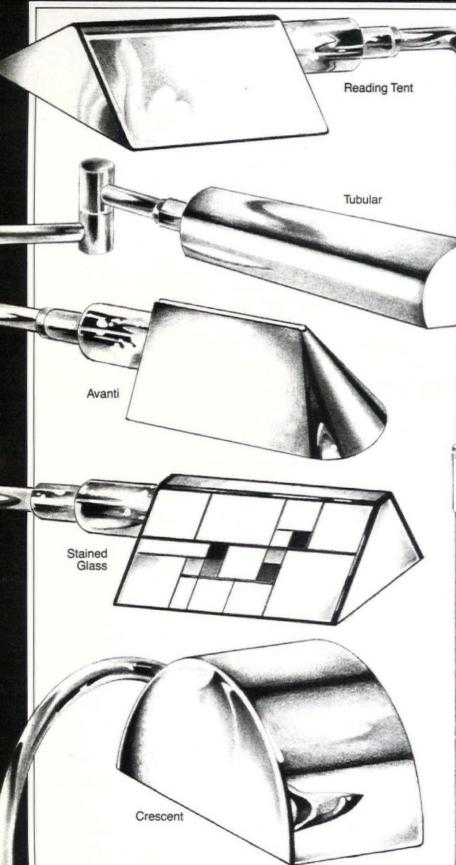
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2937 Maria Street, Rancho Dominguez California 90221. Telephone: (800) 421-1846

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To prevent marring even by fingerprints, the shades are tray-carried to special ovens where protective lacquers are baked to a hard, longlasting beauty.

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The newest addition to our line, the signed/numbered **Stained Glass** shade incorporates a design that provides optimal reading light and a work of art.

Our classic **Crescent** and **Tubular** shades, like all Koch+Lowy swivel shades, have a *fully enclosed* solid brass swivel, precisely tooled for a full 360° rotation and, a 90° tilt. They'll never sag, droop or flop, and never need adjustment. Nylon seating rings ensure smooth, noise-free operation. Virtually indestructible, these swivels are one more reason why Koch+Lowy lamps represent a lifetime value.

Consider these shades and examine our full line at Koch+Lowy showrooms around the country, or write under your letterhead for our catalog.

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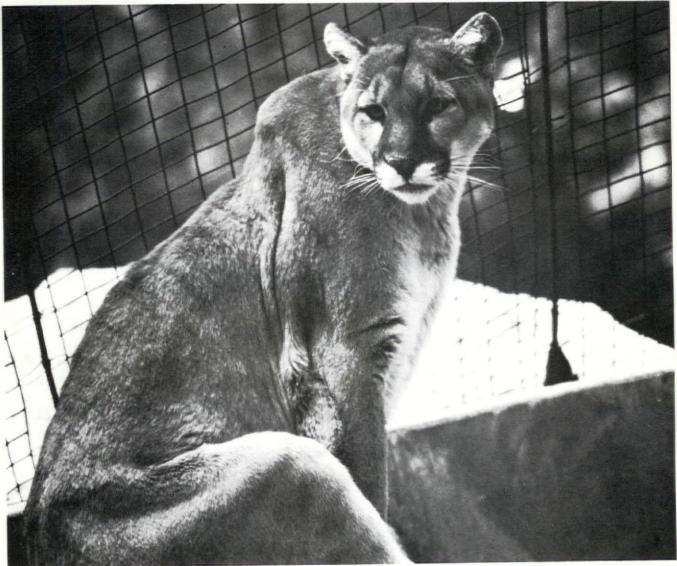
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Way Number One: zoos. Wonderful places, zoos. For people. For all of us to learn about animals from faraway places. For a glimpse of rare species that still exist only in zoos. But if the cougar and other wildlife could choose...

Well, there's Way Number Two: natural habitat. Enough of it to provide what all animals need to survive: food, water, cover and a place to raise their young. But does it have to be either/or?

In too many parts of the country we haven't yet found the right balance between our human needs and the animals' need for natural habitat. In too many places chainsaws and bulldozers are recklessly destroying habitat and with it the wildlife.

Solution? Wise conservation policies that can help protect habitats without stifling necessary development.

Recently the National Wildlife Federation acquired a 2,765-acre tract in northern California's Shasta Valley—the Lava Lakes Wildlife Area and Nature Center. With its lakes, marshes, forests, sagebrush and grazing land, the new area provides habitat for 67 species of mammals, from shrews to mule deer, along with waterfowl, fish, reptiles, amphibians, and some 150 species of birds.

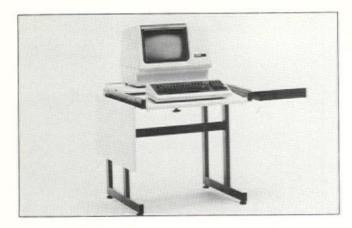
That's the way to conserve wildlife—natural habitat. Space in America must be allocated fairly. That way, the animals will survive and so will we.

Help save a place for wildlife. Write Department 401, National Wildlife Federation, 1412 16th Street, N.W., Washington, D.C. 20036.

Save A Place For Wildlife.



#### **PRODUCTS & SERVICES**



#### **OPERATOR KEYBOARD ADJUSTS AND SLIDES**

Ergonomic computer terminal unit has adjustable keyboard platform for controlled incline and sliding capability. Optional dropshelf and drawer shelf are reversible for left or right positioning. From **Precision Manufacturing Co.**, unit can be incorporated into the firm's office furniture system or existing installations. **Circle No. 387.** 



#### CARPET SEPARATES STORE APPAREL AREA

Women's designer apparel area of Diamond's, Tucson, Ariz., is separated from aisle space by custom carpet from **Bentley Carpet Mills**. Constructed of DuPont Antron III nylon, carpet was specified for installation by designers at Swimmer Cole Martinez Curtis. **Circle No. 388.** 



#### LOGO CLOTH PERSONALIZES APPLICATION

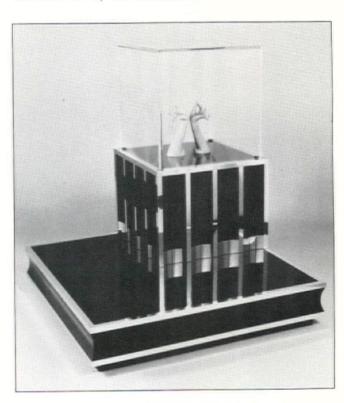
Displays, tablecloths, skirting, draperies, and upholstery are made to order with company logo for greater visibility and marketing impact. **Dan Newman Company** offers the product in 60-in.-wide material. Samples are available. **Circle No. 389.** 

#### CARPETS RID STATIC PROBLEMS IN CRT ENVIRONMENTS

"Contempo Series" computer-grade, static-control carpeting from **United Technical Products** features the Berber look and is available in a range of earth tones. Carpet is guaranteed to eliminate static problems associated with computers and other sensitive electronic equipment. **Circle No. 309.** 

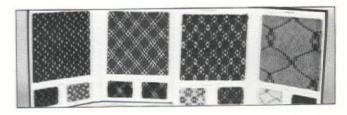
#### LAMINATES OFFERED IN RICHER, SOFTER SHADES

Lamin-Art offers six, new, high-pressure, decorative laminates in richer, softer shades. Cedarbark, copper leaf, zinnia, mimosa, clay, and cafe gray are available with glossy and textured finishes in vertical or standard grades and 48- by 96-in. and 48- by 120-in. sheet sizes. Circle No. 310.



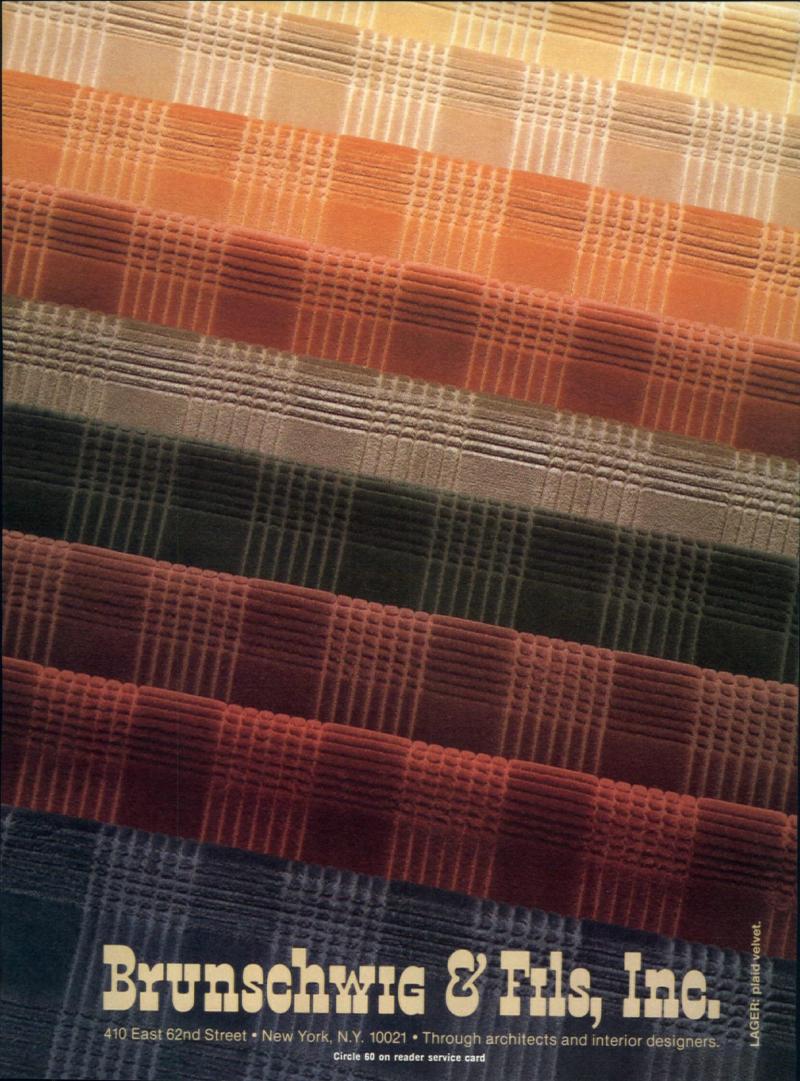
#### LAMINATES COMPRISE DISPLAY FIXTURES

Glass covered display case was custom designed by Sid Diamond Display Corp., New York, and fabricated by H.C. Osvold Co., Minneapolis. Suitable for small displays, unit is made of **Wilsonart** laminate 1595-6, FG-11 in black with mirror finish and edged in brass. Tables and other custom units are offered. **Circle No. 390.** 

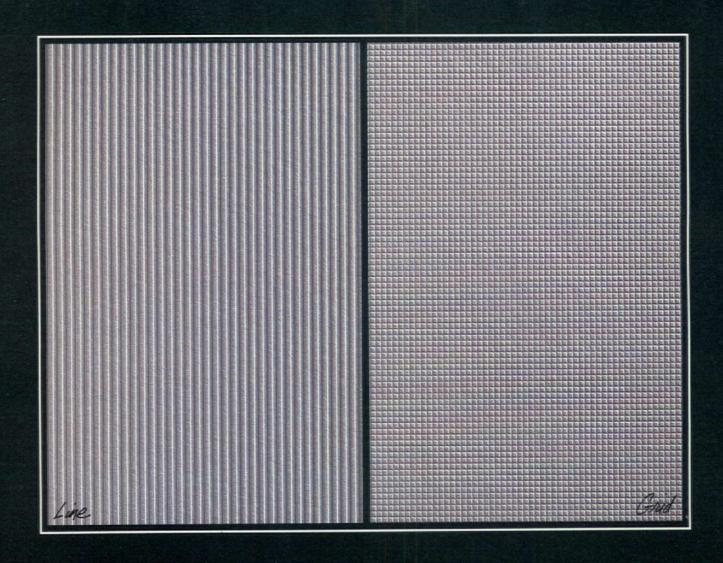


#### **DUPONT & BADISCHE YARNS COMBINED**

Antron III nylon from DuPont and Badische's Zeftron nylon have been combined to construct the "Sterling Collection" of carpets from National Carpet Mills Inc. Four patterns are stock qualities with custom designs available in minimum yardages. Line is designed for heavy or medium commercial use. Circle No. 391.

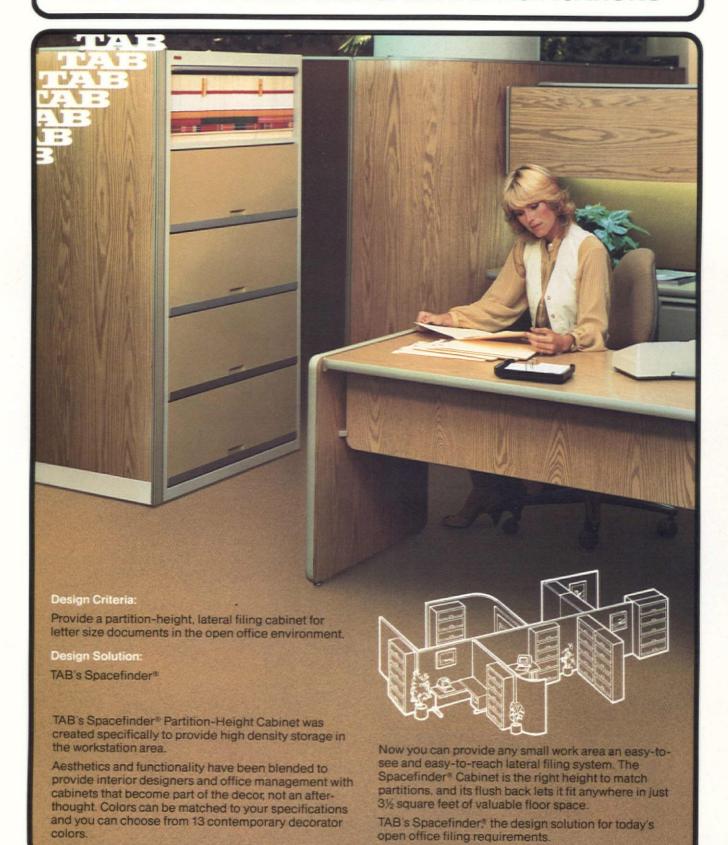


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#### **DESIGNED TO MEET DESIGNER'S SPECIFICATIONS**



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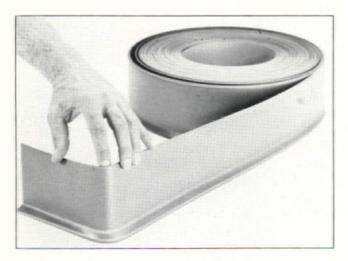
#### **PRODUCTS & SERVICES**

#### SEATING TEMPLATE SIMPLIFIES DRAFTING

A 1/4-in. scale restaurant seating template made of durable plastic is now available from **Gildesigns**. All common-size table and chair shapes and a back-to-back spacing guide are included. Developed to serve as a faster, more efficient drafting tool, product enables designers to place tables and chairs appropriately without moving the template. **Circle No. 332.** 

#### WOOD FLOORING RATED FOR CRITICAL FIRE AREAS

Class B fire-rated wood flooring from **Hartco** is prefinished to eliminate need for sanding and staining during installation. Parquet flooring is available in 12-in. squares and three colors ranging from a natural color through a darker tone. **Circle No. 317.** 



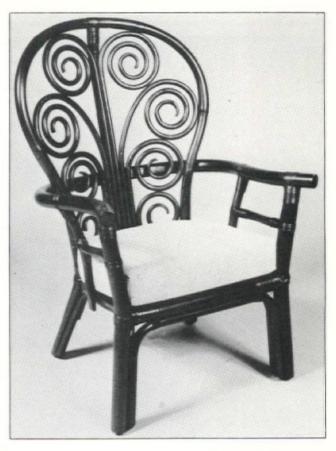
#### **COVE BASE CORNERS WRAPPING PROBLEMS**

**Johnsonite** rubber cove base, called "EZ-WRAP," wraps around corner bases without cracking. Available in five colors, base is fire rated and comes with or without standard toe. Rubber is 1/8-in. thick and is available in 4-ft. lengths or 120-ft. coils, **Circle No. 393.** 



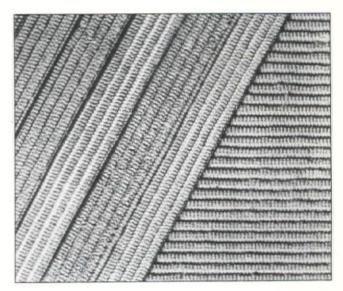
#### SLIM DRAWERS PREVENT DAMAGING PILE-UP

Slim drawers in this 22-drawer file prevent destructive pile-up of too many materials in one drawer. Storage is possible for materials measuring from 18- by 23-in. to 38- by 50-in. Heavy-gauge construction is of steel finished in black baked enamel. Unit is from Foster Manufacturing Company. Circle No. 394.



#### SCROLL STYLING DETAILED IN RATTAN

Throne scroll chair is available from **Typhoon International**. Hand-lacquered finish protects rattan; poly-filled seat cushion may be upholstered in a wide range of fabrics. Chair works well in boutiques and apparel departments, as well as in tropical commercial settlings. **Circle No. 392.** 



#### NATURAL LINEN RUG FEATURES HARD-EDGED DETAIL

Hard-edged styling is featured in a 100 percent linen-face Wilton floorcovering from **Saxony Carpet Collections**. Woven in Holland, rug is available in six pastel background shades with contrasting natural or monochromatic natural pile and can be installed wall-to-wall or bound as an area rug. **Circle No. 308.** 

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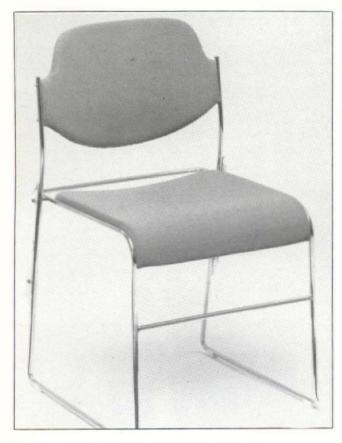
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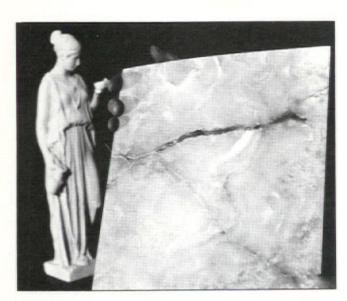
Circle 63 on reader service card

#### **PRODUCTS & SERVICES**



#### CHAIR STACKS 40 HIGH FOR EASY STORAGE

Labostac chair from **Functional Office Furniture** stacks 40 high, requiring approximately 3-ft. of vertical storage space. Arms and/or writing tablets may be added to suit applications. Frame is of lightweight, chrome-finished steel. Seat contours may be cushioned and upholstered or finished to specified color. **Circle No. 395.** 

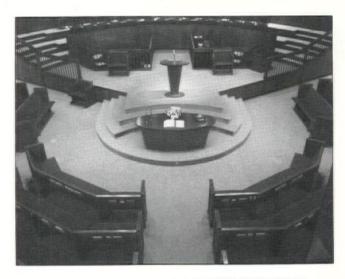


#### MARBLE REPRODUCTIONS ADDED TO FINISH LINE

Three reproductions of fine marble are recent additions to Westinghouse's decorative, Micarta furniture finish line. Classic Beige, Crystal Mint, and Almond Ice Marble offer technical detail in color ranges of beiges, tans, rusts, and greens. Gloss finishes add Old European flavor to fine furniture. Circle No. 311.

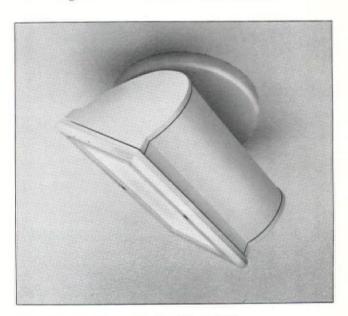
#### REDUCE PLANT MAINTENANCE WITH WATER SENSORS

Planter Technology's Natural Spring Sensor System controls plant watering cycles, allowing correct amounts of moisture to reach plants while preventing overwatering. Planter sides are filled with water approximately once a month. The sensor then monitors the flow of water to soil, thus reducing maintenance time and cost. More than 750 Natural Spring Planters installed in Harrah's Reno Headquarters received the American Interior Plantscape Association's Highest Honor Award for 1980-81. Circle No. 333.



#### CARPET'S THREE-PLY YARN ELIMINATES STREAKING

Three-ply yarn construction eliminates streaking in Joy Carpet's Rough Rider, a continuous-filament, Antron III, twist-pile nylon floorcovering. Product is offered in 28-oz. deniers as well as custom weights. Seven-year wear guarantee and Class B fire-rating are standard features. Circle No. 315.



#### REFLECTOR EMITS UNIFORM LIGHTING

Elliptipar's smooth surface reflector emits uniform light by projecting high light intensities to surface points located at the greatest distance from the fixture. Available with tungstenhalogen and fluorescent bulbs, models are offered in surface, pendant-, and cantilever-mounted configurations and are UL-listed for indoor and damp locations. Circle No. 318.



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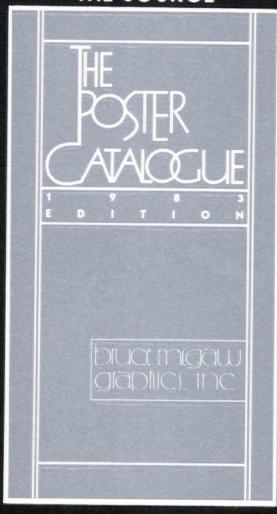
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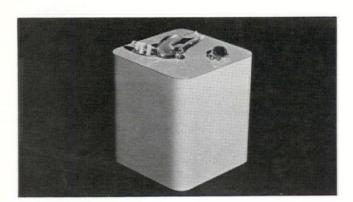
Circle 66 on reader service card

#### **PRODUCTS & SERVICES**



#### ROOM SENSOR BOOSTS ENERGY SAVINGS

Per-Sen (personal sensor) from **Flec Systems** is a low voltage unit which uses ultrasonic technology to detect motion in a 450-sq.-ft. area. Sensor activates and deactivates lights and other electric equipment when users leave or re-enter monitored areas. Unit has adjustable time delay of one to 12 minutes. **Circle No. 343.** 



#### GEOMETRIC TABLES AVAILABLE IN VARIED FINISHES

A line of geometric tables is available from **Cubicon** in a variety of plastic laminate finishes. Wilsonart laminates are standard; custom, post-formable high-gloss laminates can be supplied. **Circle No. 328.** 



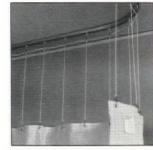
#### WEAVE CARPETS WTIH ANTI-STATIC FIBERS

150

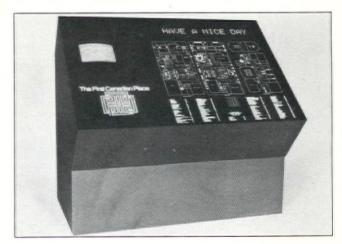
Trio Diamond carpet is of 100 percent Timbrelle nylon, woven with anti-static Epitropic fiber, and is available in six colors. Other offerings from Carpets International U.S.A. are American 80's Rosetta, Herringbone, and Modular patterns made of 80 percent wool/20 percent nylon in four colorways. Circle No. 324.

#### **CURTAINS ALLOW VENTILATION SPRINKLER USE**

Hardware Associates' 2585 Cubidrop Suspension System for hospital curtains is molded of 100 percent nylon and is flame-resistant. Curtain drops provide needed clearance for sprinkler coverage and assure proper ventilation.



Circle No. 385.



#### COMPUTERIZED SIGNAGE AIDS BUILDING USERS

Public Access Systems, Ltd., a division of **The Other Sign Co.**, introduced two computerized directory systems. "CompuDirect" for shopping malls, contains a map, video display, and a push-button directory console. When activated, computer indicates store location and most direct route. "CompuDirect 4," for office buildings, requires users to key in the first letter of companies or individuals they seek. A monitor then displays an alphabetical listing of all names beginning with that letter. **Circle No. 342.** 



#### PROTECT HEALTHCARE FURNITURE WITH VINYL FINISH

Alpha collection of healthcare furniture from **R-Way** consists of chests, desks, dressers, nightstands, and beds. Ultravioletcured, scratch-resistant R-Clad vinyl laminate covers wood grain or colored finishes on surfaces and drawer interiors. Alpha line complements the Oakur series, an existing line of furniture. **Circle No. 323.** 



The April CONTRACT Hospitality/Restaurant "Executive Buyer Edition" provides you with in-depth data on recent, impressive hotel, motel, restaurant, club and other hospitality installations...provides advertisers with circulation to 29,000 all-contract specifier/buyers, plus 5,000 influential hospitality end-users — at regular ad rates!

April Ad Deadlines: March 10, orders; March 14, film; March 18, furnished inserts.

#### Upcoming "Executive Buyer Editions"

June: Government—Government installations, plus extra circulation to 5,000 government purchasing executives. Space closes May 10.

August: Commercial Buildings—Remodeling editorial, plus extra circulation to 5,000 corporate facilities executives and commercial building owners. Space closes July 11.

October: Banks— Top bank projects, plus extra circulation to 5,000 bank presidents and board chairmen. Space closes Sept. 9.

November: Offices—Specialized editorial, plus extra circulation to 5,000 office managers/facility planners. Space closes Oct. 10.

December: Store Planning—Practical information, plus extra circulation to 5,000 planners, developers and managers of stores, chains and shopping centers. Space closes Nov. 10.

February: Health Care—Specialized health care data, plus extra circulation to 5,000 health care executives. Space closes Jan. 10.

## **Contract**

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# How to Computerize Your Design & Planning

Sponsored by Gralla Publications' CONTRACT and FACILITIES DESIGN & MANAGEMENT Magazines

> March 2, 1983 Dallas Market Center Dallas, Texas

Seminar Leader Robert L. Engel



Robert L. Engel is President of R. L. Engel & Associates, Chatham, NJ, which is a consulting firm specializing in computer applications to facilities management, design, and

ment, design, and furniture and furnishings management.

Mr. Engel was formerly associated with Environmental Research & Development Inc., as executive vice president; Resource Dynamics, Inc., as vice president of operations and systems development; Environetics International, as project director; and the Architects Collaborative—Johnson & Burgee, Minoru Yamasaki, Swanke Hayden & Connell—as architectural project manager.

In addition, Mr. Engel is a registered architect in New York, New Jersey, Connecticut and Pennsylvania, and is certified by the National Council of Architectural Registration Boards. He holds professional membership in American Institute of Architects, National Computer Graphics Association, World Computer Graphics Association, SIGGRAPH, New York Society of Architects and American Planning Association.

A well-known author and lecturer, Mr. Engel has been awarded a B.A. in Art History from the City College of New York, an M.S. in Computer Graphics from Massachusetts Institute of Technology, and an Architectural Certificate from the Boston Architecture Center.

If you are seriously considering computerization for your design, drafting and/or planning firm, this seminar will:

- help you determine if you really need a computer system
- provide you with a step-by-step guide to obtaining the right hardware/software system for your operation.

#### Seminar Outline

#### I. INTRODUCTION

- What Computerization Means to Design & Planning Industries
- What It Can Accomplish

#### II. SIX CATEGORIES OF SYSTEMS CURRENTLY ON THE MARKET

- What they are—Computer-Aided Design/Drafting Systems, Computer-Aided Building Management & Maintenance Systems, Office Automation Systems, Inventory Control Systems, Real Estate Management Systems, and Computer-Aided Planning Systems
- Their Functions—Limitations and Benefits
- Their Costs

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- Corporate Usage/Experience with Systems
- III. THE EVALUATION PATH TO COMPUTERIZATION

#### Discover how to:

- Investigate the Possibility
- Define Needs
- Develop Outline Specifications
- Identify Vendor Community
- Request and Analyze Information
- Determine Cost Parameters
- Analyze Cost Benefits
- Develop Request for Proposal
   —Vendor guarantee of cost and performance of system
- Implement
   —Test product/train staff/

#### IV. CASE STUDY

document

 Find out—in advance—how other companies became computerized; how they began; benefits/pitfalls; "real" costs

#### V. QUESTIONS & ANSWERS

 Ample time will be allotted to answer questions and address your specific needs

#### REGISTRATION INFORMATION

To register, simply fill out this registration form or call Hilary Plunkett, toll free at 800-223-6767 or 212-869-1300. Registration fee is \$95 which includes admission to full-day seminar and take-home materials.

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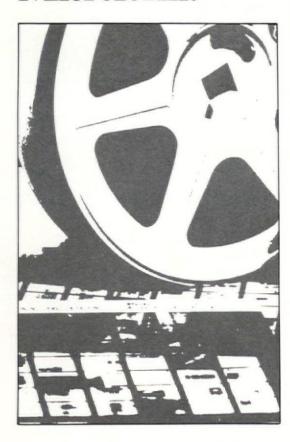
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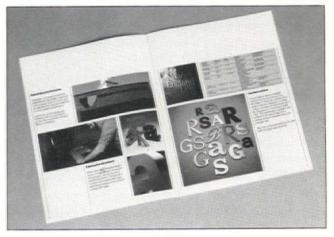
#### **CATALOGS & BROCHURES**

Virton™ and Dura-Glass™ fiberglass wallcoverings are the subject of a new brochure from Johns-Manville. Six-page booklet lists product features such as inert composition, easy application, and flame-resistance. Circle No. 400.

New catalog from Landscape Forms overviews Trestle—a group of benches, tables, kiosks, and litter receptacles for interior and outdoor applications. Products complement firm's previously introduced accessories offerings.

Circle No. 401.

Prices, manufacturing methods, and color choices for Spanjer signage products are the focus of recently released literature. Products are available in a wide range of materials for both wall-hung and freestanding applications. Circle No. 402.



Steel Art offers a four-color signage catalog to designers and specifiers. Covered are cut out, fabricated, subsurface, and metalphoto® signage. Circle No. 403.

Premier Art & Design offers a four-color catalog depicting a range of metal art products. Complete wholesale price list is included. Circle No. 404.

Four new catalogs are available from Amstore. Booklets detail the firm's Showcase Panel Collection featuring all-welded steel frames; groove wall and slat wall display panel systems; Design III fitting room system; and E-Panel system.

Circle No. 405.

InterRoyal freestanding bookstacks are designed for libraries. Both bracket and case-type bookcases are featured in a new 16-page brochure. Circle No. 406.

Varied signage products from Environment Graphics Systems are outlined in a black and white brochure. Booklet gives prices for both nameplates and signage inserts.

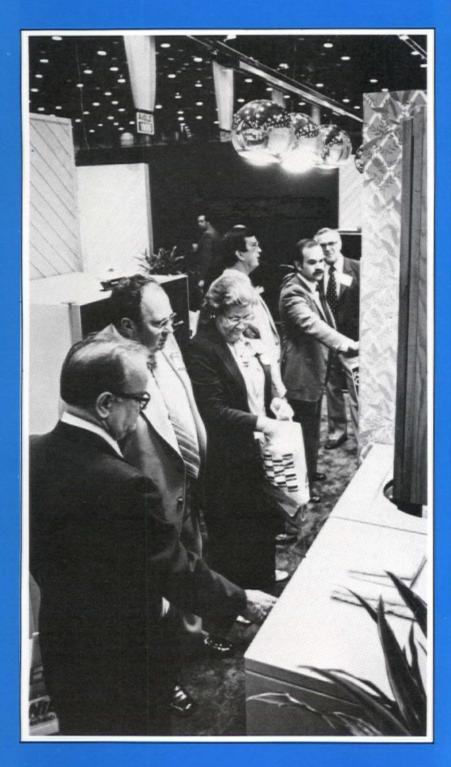
Circle No. 407.

Ergotech ergonomic seating from Nightingale is the subject of a new four-color catalog. Detailed are all movable and adjustable parts and components that enhance user comfort. Circle No. 408.

Pervel Contract Brochure for the commercial wallcovering market covers 12 patterns in 108 colorways. Introduced is Dimensional Swade, a carpet look for walls. Circle No. 409.

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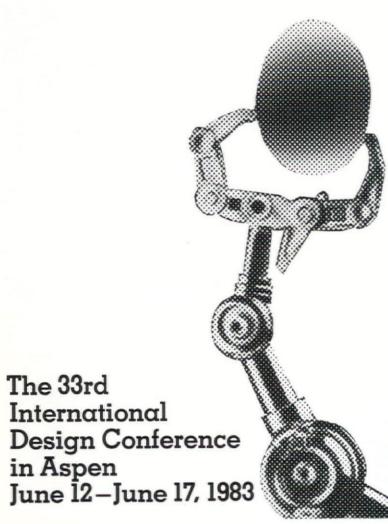
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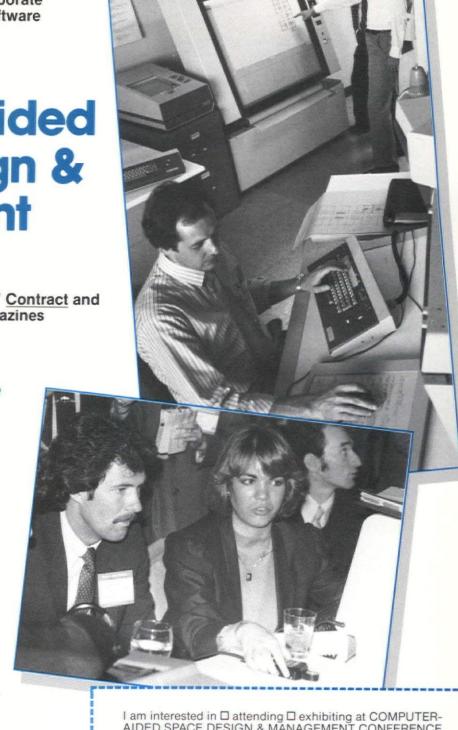


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