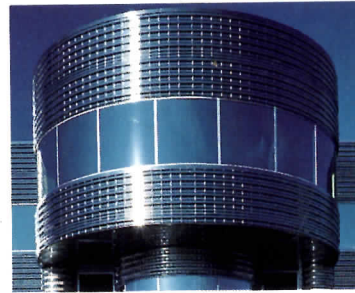
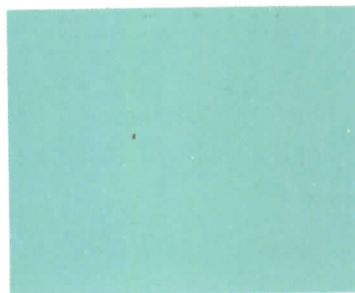
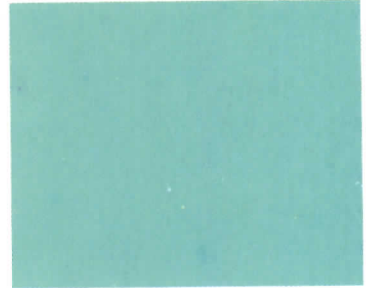
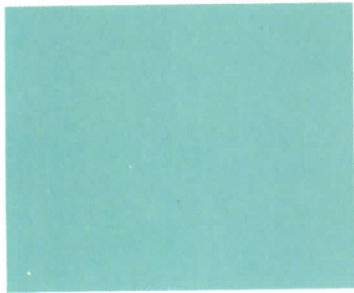
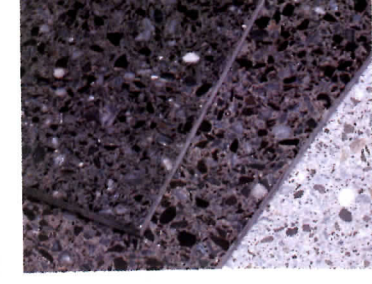
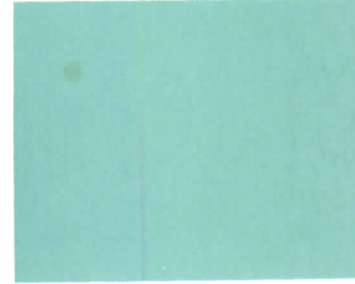


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Through December 17

"Architecture... Energy," the work of a Pittsburgh architecture firm, Arthur Lubetz Associates; at the University of Pittsburgh's University Art Gallery.

Through December 31

"Persistence of Antiquity: Images of Architecture," includes architectural models, painting, photography, sculpture, drawings, and prints by Aldo Rossi, Charles Moore, and Frank Lloyd Wright, among others; the works are all from the permanent collection; at the Williams College Museum of Art, Williamstown, Mass.

January 13-April 8

Frank Lloyd Wright's original drawings and sketches loaned by the architect's archives at Taliesin West in Scottsdale, Arizona, to the Phoenix Art Museum. The exhibit will be displayed at the museum. Coinciding with the exhibit, "Arizona Celebrates Frank Lloyd Wright: 1990-1991," organized by the Scottsdale Cultural Council in cooperation with the Frank Lloyd Wright Foundation, the Phoenix Art Museum, and Arizona State University, features special Wright-related events from January 3 through April 7 at several locations. For information: Scottsdale Cultural Council, 7383 Scottsdale Mall, Scottsdale, Arizona, 85251 (602/391-3288).

January 16-March 15

An intensive three-day course titled "Telecommunications Planning for Building Architecture and Wiring Systems" will be offered several times: January 16-18, Anaheim, Calif.; February 6-8, Las Vegas; February 26-28, Atlanta; March 13-15, Atlantic City, N. J. For information: Washington State University Conferences & Institutes (509/335-2946).

Through January 21

"Graphic Design in America: A Visual Language History," an exhibition that traces the history

of American design; at the Walker Art Center, Minneapolis. The exhibit will travel to the IBM Gallery of Science and Art, New York City; the Phoenix Art Museum; and the Design Museum, Butler's Wharf, London.

Through January 28

"Treasures from the Fitzwilliam Museum, The Increase of Learning and Other Great Objects," an exhibition of Old Master paintings and drawings, sculpture, illuminated manuscripts, ceramics, and decorative arts from the museum's collection; at the National Academy of Design, New York City.

February 8-10

American Architectural Materials Association conference on exterior building products; at the O'Hare Exposition Center, Rosemont, Ill. For information: Tony Coorlim (312/699-7310).

February 17

A call for entries for "Out of Site," the Young Architects Competition organized by the Architectural League of New York; entries must be submitted by 5 p.m. on this date. All types of projects, either theoretical or real, executed in any medium can be submitted. For information: The Architectural League of New York, 457 Madison Ave., New York, N. Y. 10022 (212) 753-1722.

February 18-May 13

"Jasper Johns: Printed Symbols," a retrospective exhibition that highlights 30 years of printmaking by the artist, at the Walker Art Center, Minneapolis; the show will travel to other cities, including Houston, San Francisco, and Montreal.

February 27-March 2

National Roofing Contractor's Association convention, San Diego. For information: Convention (312/318-6722).

February 28-March 5

Infacoma '90, an International Exhibition of Building Materials,

Heating, Air Conditioning, Insulation, Solar Energy, and Technology; at the Helexpo fairgrounds, Thessaloniki, Greece.

Through March 4

Works by David Ireland, Joseph Cornell, Anselm Kiefer, Roy Lichtenstein, and others are included in "Constructing a History: A Focus on MOCA's Permanent Collection," with paintings, photographs, works on paper, sculpture, and installations; at the Museum of Contemporary Art, Los Angeles.

By March 31

American Olean Tile Company invites architects and designers who use its products to enter "Brightest Choice on Ceramic Style," a design contest. Categories include new or remodeled residential, and new or remodeled commercial. Projects completed between January 1, 1988, and March 31, 1990, can be submitted.

For information: Lou Methfessel, American Olean Tile Company, 1000 Cannon Ave., Lansdale, Pa., 19446.

Through April 18

Several architects will speak as part of the Architectural League Series at the Greenwich Library, Greenwich, Conn. Scheduled lectures: Robert A. M. Stern, January 25; Stanley Tigerman, February 14; Charles Moore, March 29; and Jaquelin Robertson, April 18. For information: Greenwich Historical Society (203/869-6899).

August 6-12

A symposium, "Knowledge-Based Systems in Building Design," held in conjunction with the 5th International Conference on Systems Research, Informatics, and Cybernetics; at Baden-Baden, West Germany. For paper submission or guidelines: Dr. Jens Pohl, School of Architecture and Environmental Design, California Polytechnic University, San Luis Obispo, Calif. 93407 (805/756-2841).

ARCHITECTURAL RECORD (Combined with AMERICAN ARCHITECT, and WESTERN ARCHITECT AND ENGINEER) (ISSN0003-858X/89) December 1989, Vol. 177, No. 14. Title© reg. in U.S. Patent Office, copyright © 1989 by McGraw-Hill, Inc. All rights reserved. Indexed in Reader's Guide to Periodical Literature, Art Index, Applied Science and Technology Index, Engineering Index, The Architectural Index and the Architectural Periodicals Index.

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Exterior wall systems, an area of constant innovation, are not easily accommodated into building codes, most of which are structured around traditional techniques. Acceptance of new products on the basis of performance, though controversial, appears to be here to stay.

this would mean foregoing the use of products that have considerable usefulness, such as some forms of insulation—a hard judgment to make. A more potent criticism—and one that will continue to vex all members of the building team—is whether a given test is indicative of what manufacturers claim it is. Don Belles, a fire protection engineer who has developed widely used tests for fire performance of systems containing plastics, has questioned the ways industry has promoted the value of the modified ASTM E108 test, but says the UBC-76 “is a reasonable test that can accurately predict real-world performance.” “If you stand back and look at U. S. practice, you would have to say that products are considered innocent until proven guilty,” declares Brady Williamson, a fire-protection engineer and professor at the University of California.

Who decides?

Tests referenced by codes and the criteria by which a specimen is judged acceptable are the subject of endless meetings of standard-formulating groups. These sessions often pit manufacturers introducing new techniques or products against components already accepted within the codes. Some EIF systems (which, as typically composed, encapsulate foam-plastic insulation in a stuccolike coating and mesh mounted on noncombustible sheathing) have passed elaborate fire tests, including all of the tests described opposite. Nevertheless, Dick Hopkins, executive director of the Exterior Insulation Manufacturer's Association (EIMA) says the consensus in his industry is that foam plastics have been unfairly depicted as exceptionally dangerous by other groups with which his members compete. This competitive jostling can appear unseemly, but as Williamson notes, it was a desire to penetrate wider markets that caused manufacturers to engage in testing in the first place, and the result is that their safety is now better (if not definitively, in some minds) established.

Though one would think standards-setting bodies are deliberative if not dull, this is not always the case. A 1980 meeting at which the National Fire Protection Association (NFPA) voted on acceptance of PVC conduit was packed with nontechnical employees and spouses by a maker of metal conduit. The meeting became the subject of a lawsuit that went to the Supreme Court (the plaintiff PVC-conduit maker won). Though the initiative for standards-setting is often taken by industry for competitive reasons, any interested person can attend, and many of the most active participants are independent consultants or code officials who do not have a product-driven agenda. Yet, when disaster strikes, code-making bodies are frequently accused of excessive industry dominance.

Are codes changing to meet the times?

As more has been learned about natural forces, some of the assumptions under which codes are written have changed. The use of wind-tunnel testing has shown that older codes based on a simple proportion of wind-pressure-to-building-height, which were thought to be conservative, turned out to be inadequate to deal with localized effects at corners and offsets in tall buildings. With many nontraditional materials accepted at the highest levels of fire resistance on the basis of tests, are code protections being eroded due to unanticipated consequences that tests can't predict? “In type I and type II buildings that are supposed to be noncombustible, you're seeing plastic pipe, conduit, and

insulation,” says Brady Williamson. Although many of these materials are within walls where they are protected by noncombustible gypsum board, they nevertheless will add further fuel to a fire should it breach the wall; some compounds can create dense smoke as well.

Williamson is one spokesman, however, who says that the model codes' classifications of buildings by fire resistance categories are outdated. (The types I through V, with variations, to take a typical case, reflect requirements for rated construction by hours of fire resistance for structural elements, exterior walls, partitions, and shafts.) “All of these categories are arbitrary. The areas of limitation [maximum floor sizes allowed for various types of construction] are based on surveys of fire-department officials taken in the 1910s. They were asked, ‘how big a building would you like to fight a fire in?’ The results have been in the codes ever since. There is nothing intrinsic that says you can't build a wood-framed building that by today's test methods could be equal to a type I or type II. But a code official would say, ‘I can't look at that, it's a wood building.’” Williamson prefers a performance-based model, which would be a classification type that would be limited in terms of floor area and construction entirely on the basis of testing and scientific analysis. Such a model, he says, would make far more efficient use of materials and techniques now on the market. “The fire-resistive building that the codes are written around, with heavy masonry exterior and wood-timber infill, is from London of the great fire.”

Another area receiving increased research attention is the extent to which code-mandated strategies stay in place. Roy Frady has detected fatigue in some structurally glazed systems. Failure may occur, but when and if is extremely difficult to predict. Tenant-improvement projects are frequently undertaken using techniques that block fire sprinklers or abrogate fire barriers (the practice of “poking through” the floor slab for wiring revisions can create smoke chimneys if not firestopped, as codes require). Building codes often accept less fire-resistant components where sprinklers and fire-detection systems have been installed. Detection and suppression devices are highly effective but require maintenance and vigilance. A fire at the First Interstate Bank in Los Angeles is an instance in which a combination of unexpected circumstances proved catastrophic. Work was being done on the sprinkler system, which was not operating when a fire began on the 12th floor. False alarms had become so frequent during repairs that real alarms were ignored. Five floors were ultimately involved in the conflagration, which was exacerbated by a lack of firestopping material between the metal-and-glass curtainwall and the building structure. Analysts suspect that the firestopping may not have been properly installed and was dislodged by subsequent building movement.

The current system of incorporating new products by consensus standards and performance testing is not likely to change; it does make complaints about the kinds of construction allowed or not allowed inevitable. But the controversy surrounding such decisions and the complexity of modern codes should not obscure the fact that code-mandated techniques are *minimums* that the building team is urged to exceed. There are also myriad consultants—for curtainwalls and fire protection, for instance—that can assist architects in sifting through the dozens of standards (many of which are industry standards apart from the codes) that apply to any given system. *James S. Russell*

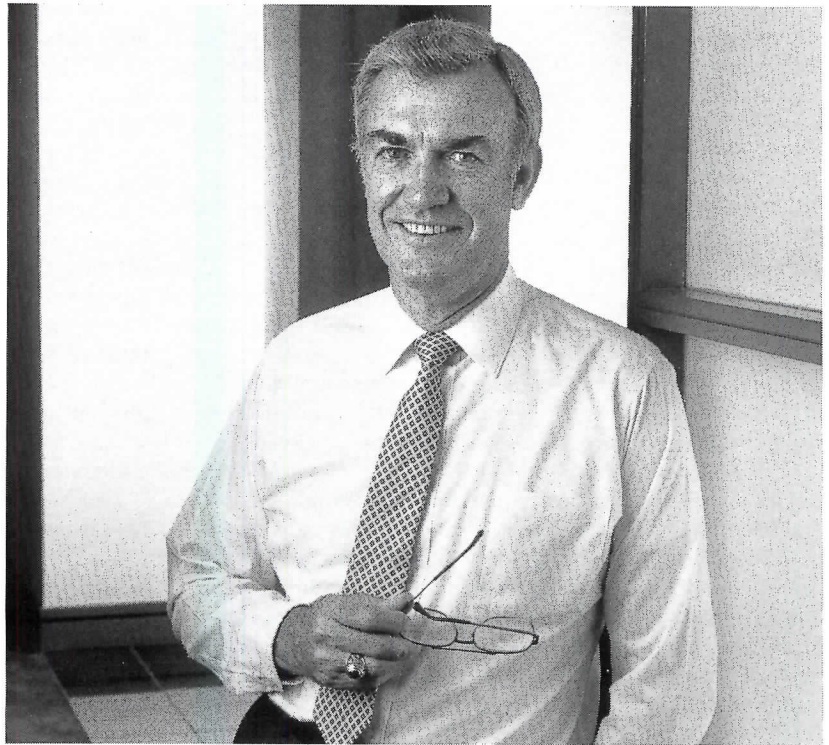
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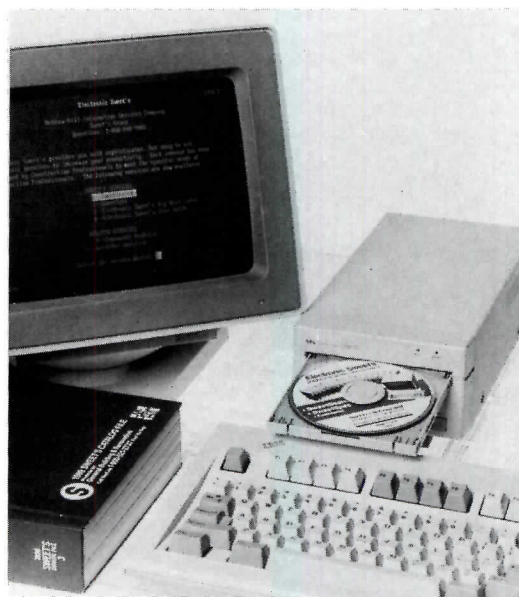
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Product Reports 1990

As we publish the 18th edition of ARCHITECTURAL RECORD's New Products issue (the first was in October, 1972) it's natural to wonder just what *happens* to new products, those assemblies or materials that are genuinely innovative and not, like most, merely a refinement or enhancement of existing techniques. Where are they now, the hopeful, trend-setting introductions of, say, 1976?

In Division 13 that year, six out of 21 products were solar hot-water heaters. As the energy crisis receded, at least in the homeowner's mind and as reflected in the tax laws, interest in heaters dwindled. In this year's issue (and last year's as well) no heaters have been included. This is not to say that using the free energy of the sun is an unsound concept (a completely solar-powered landscape light is featured on page 170), just that there are so many factors responsible for a product's success in the marketplace beyond the good idea, well executed. Vinyl-asbestos floor tile has disappeared, because we all know more about asbestos. The usefulness of any particular product varies over time.

But bad news about product performance does more than remove the failures and the economically immature from the market. Reverses can also lead to the improvement of building codes, the raising of standards, increased research and development resulting in better products. On pages 20-21, James Russell tells how.

But how about the successes? Looking again at 1976, there were no PC-based CAD programs. In fact, no PCs. There *was* one of the original Auto-Draft systems from Auto-trol: it almost needed its own room, and possibly its own mortgage. Turn to page 26 in this issue, where Division 1 starts, to review just a few of the CAD programs, hardware, and peripherals, selected from literally hundreds submitted, that reflect the most significant change in product development in the past 18 years.

There was another fledgling in that early issue, a new exterior insulating system called Dryvit. In this year's issue, there are product writeups and new literature from at least nine manufacturers of exterior insulation and finish systems. Trying to find out why some product types take off (or why not) RECORD commissions marketing surveys over our readership from time to time. One of these is summarized on pages 186-187, along with some answers we got when we asked, "Why do you specify exterior insulation and finish systems?"

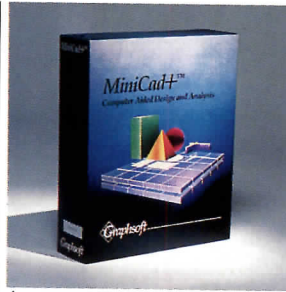
Looking ahead, the editors would like to invite manufacturers of products for the architectural market not represented in this issue to drop us a line, and we'll make sure you receive a submission form for consideration in Product Reports of 1991. *Joan F. Blatterman*

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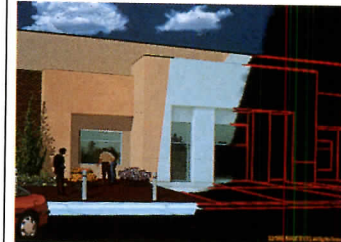
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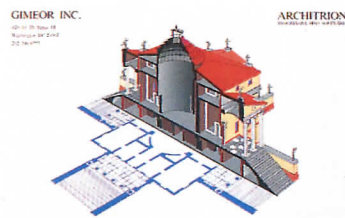
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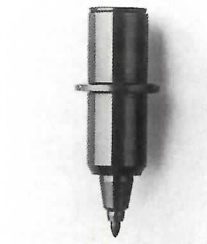
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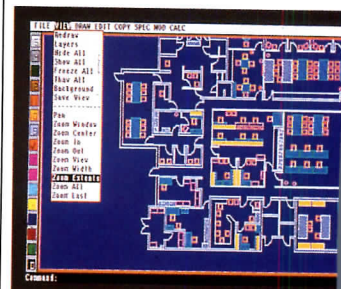
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1 Electrostatic plotters

The CADmate plotter family produces near-laser-quality output at six times the speed of pen plotters. The units, which are available in 24- or 36-in. formats, accept HP-GL data files as well as most popular PC-based graphics or CAD programs. An E-size drawing can be produced in under 30 seconds. Versatec, A Xerox Co., Santa Clara, Calif.

2 CAD software

Building on the capabilities of Mac Architron, Architron II offers enhanced lighting and shading features. With the Macintosh-compatible program, designers can view block structures with a palette of 256 colors. Gimeor, Inc., Washington, D. C.

3 Color printer

With a technology known as color thermal transfer, the 5232 Color Postscript printer provides 300-dot/in. resolution in unlimited addressable colors. Output from Apple, IBM, and other leading computers is possible through RS232/422/423, Centronics, and AppleTalk interfaces. Schlumberger Graphics Div., Mountain View, Calif.

4 Design/analysis software

Combining CAD with the power of spreadsheet analysis and a programming language, MiniCad+ 2.0 runs on a Macintosh II. Renderings in 2-D and 3-D are possible. Utility features include a built-in DXF translator that connects with IBM/AutoCAD formats. Graphsoft, Ellicott City, Md.

5 Plotter pen

Manufactured with a long-lasting nylon tip, this new HP-style fiber-tip pen is available in 10 colors. A universal ink works well on both paper and overhead-transparency media. Line widths are 0.3 or 0.7 mm. Koh-I-Noor Rapidograph, Inc., Bloomsbury, N. J.

6 Electrostatic plotter

The 5800 Series plotters nearly double the output of this manufacturer's 5800 line. They produce dry, wide-format color drawings and are especially suitable for complex, multilayer applications. A 32-bit microprocessor speeds printing by reducing rasterization time. Up to 1,024 colors can be specified. CalComp, Inc., Anaheim, Calif.

7 E-size copier

This plain-paper copier, the 636S, can produce clear, high-contrast copies from a wide range of originals, including cut-and-paste composites, poor-contrast sepias, and bluelines. Output is 6 copies/min. Dietzgen Corp., Des Plaines, Ill.

8 Pen plotter

The GRI ProPlotter is a C- and D-size unit that is compatible with Houston Instrument DMP command sets, as well as those of IBM PC and Macintosh units. Maximum drawing area is 22 by 34 in., and pen speed is 7 in. per second maximum. Gerard Research Inc., Fremont, Calif.

9 Label maker

With half the size and one-third the price of competing lettering machines, the DuraType 240 produces type in 13 styles, some with scaling (enlargement) capability. About the size of a desktop calculator, the battery-powered unit has a 16-character LCD display. Lettering is produced on 1/2-in.-wide strips of adhesive-backed tape, or opaque white tape. Kroy Inc., Scottsdale, Ariz.

10 Image library

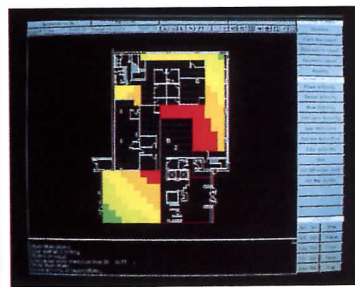
IMAG.CELS is a library of environmental clip art for PC-based CAD programs. The basic package includes common architectural textures such as bricks or wood, along with objects such as people cars, or landscapes. The library, available on 5.25- or 3.5-in.-disks, requires CAD software compatible with LUMENA 16 or TIPS format and a graphics adapter running in Targa 16. ImageTects, Saratoga, Calif.

11 CAD software

Intended as a low-cost, easy-to-use entry into computer-aided drafting, EasyCAD2 is written in assembly language for fast-processing speeds. It incorporates exclusive drawing commands and automatic dimensioning and editing control. The program runs on IBM-compatible PCs. Evolution Computing, Tempe, Ariz.

12 Carrying case

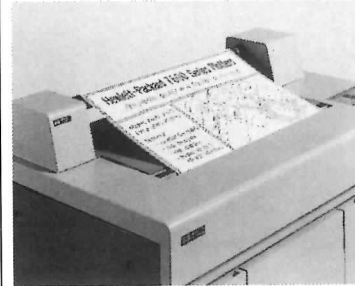
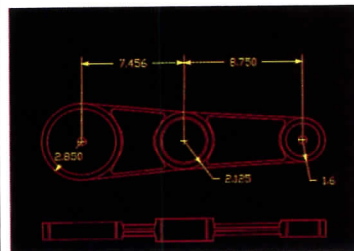
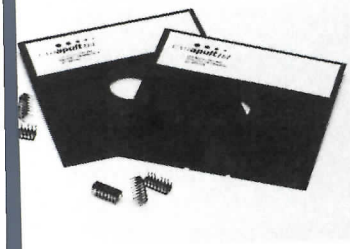
This leather case is suited for carrying rolled documents, maps artwork, or technical drawings. The exterior is fabricated of latigo leather with solid brass fittings. It is 3.5 in. in dia and 31 in. long. O Studios, Natick, Mass.



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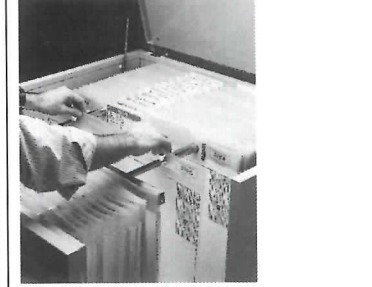
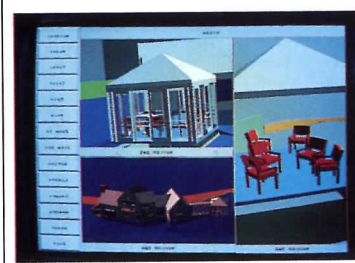
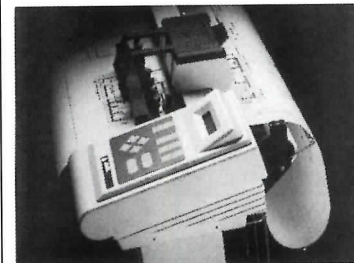
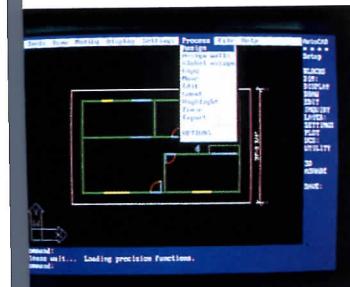
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CAD software

VersaCAD/386 represents the latest version of this product, specifically for IBM-type PCs using an 80386 microprocessor to provide a more powerful, faster-running program. A QuickRender module provides fast color visualization of objects. Versacad Corp., Huntington Beach, Calif.

CAD interface

For a firm, an authorized Autodesk applications developer, has released a drawing interface for architects, engineers, and facilities managers using AutoCAD. The system provides a library of documentation symbols and cost-estimating, asset-management, and related functions. Dapult Ltd., Wilmington, Del.

Estimating interface

Precision CADLink, an exclusive joint development between the vendor and Autodesk, Inc., makes AutoCAD, combines CAD operations with sophisticated cost-estimating based on R. S. Means data. Users can monitor the approximate cost of project designs while they are being formulated. Timberline Software Corp., Beaverton, Ore.

16 Lettering machine

The Letrex LM-500 produces adhesive lettering strips or documents in sizes from 6 to 43 points, condensed or extended typefaces, and at slants between 75 and 105. Over 20 character styles are available; each is provided via an insertion card into the typewriterlike device. Max Business Machines Corp., Garden City, N. Y.

17 CAD accelerator

For performing parametric alterations of a CAD drawing (i. e., automatically changing dimensions), Synthesis can help an engineering team create new designs in as little as a few minutes. Users can thereby avoid complex programming efforts in the original CAD program. The latest version of Synthesis, release 3.0T, is compatible with any version of AutoCAD 2.5 or later. Synthesis, Inc., Bellingham, Wash.

18 Pen plotters

DMP-61 and -62 plotters feature rapid throughput, standard 8-pen configuration, and easy setup. Pen speeds are up to 323 in./sec, depending on the axis. Paper sizes A-E are standard. An LCD screen has been added for menu selections. Houston Instrument, Austin, Tex.

19 Planning software

For allocating space on computer-designed plans, Space Planner uses extensive interactive features and graphical highlighting. The intent is to allow the user to freely define, place, and arrange space on block plans, then get a quick analysis of allocation. The program runs on Sun Microsystems, DEC, and Apollo computers. Auto-trol Technology Corp., Denver.

20 Electrostatic plotter

Enhancements have been announced for this firm's HP 7600 Series plotter, including a new take-up reel for unattended plotting; a toner that provides a sharper image; and more media choices, including overlay film. The plotter provides 406-dot/in. images in D- and E-sizes. Hewlett-Packard Peripherals Group, San Diego.

21 Rendering software

Intended to be used in IBM-type PCs, this program works with the vendor's 3-D Engine display controller. Called Hydra, the program can display, shade, and rotate 3-D models, and is described as a faster and easier-to-use alternative to AutoShade and Versacad modeling software. Nth Graphics, Ltd., Austin, Tex.

22 Dot-matrix plotter

The OmniPlotter features both vector and raster plotting in A-through D-sizes, and can output renderings in up to 20 colors. Plot resolution is selectable between 180x180, 360x180, and 360x360 dots/in. A large variety of protocols and device interfaces are available. JDL U. S. Sales Div., Westlake Village, Calif.

23 Graphics workstation

The 1612 Workstation is the first to offer 1600x1200 color resolution for IBM-type PCs. This level of resolution allows for sharp, clear images, and the absence of jagged edges, and superior display-list-processing. A 19-in. screen is backed up by a graphics board using the Texas Instruments 34010 graphics processor. An 80386-based computer can also be supplied by the vendor to drive the system. Lundy Electronics & Systems, Inc., Glen Head, N. Y.

24 File storage

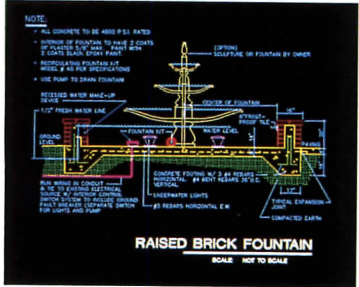
The Masterfile system comprises pin-and-post carrier strips that are specially prepunched. They fit into cabinets designed for maximum sheet sizes of 24 by 36, 30 by 42, or 48 by 36 in. Carrier strips are available in film or film laminates. Plan Hold Corp., Irvine, Calif.



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25 Graphics workstation

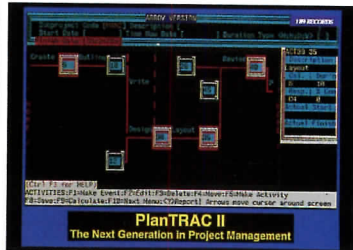
The Series 1000VS graphics "superworkstation" is said to be the first to offer high-performance graphics powered by an advanced RISC computer design. Advanced buffering, dithering, shading, and addressing functions improve image quality. Up to four central microprocessors can be specified. Apollo Div., Hewlett-Packard Co., Chelmsford, Mass.

26 Drafting furniture

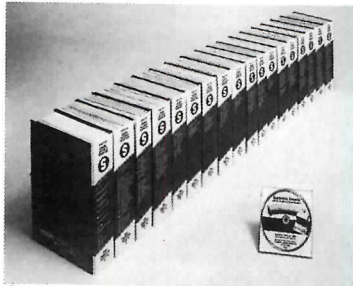
Emphasizing widely adjustable settings, this line of furniture includes a drafting table, tool drawer, bookcase, and modular reference table. The system is constructed of steel. The Huey Co., Franklinton Park, Ill.

27 AutoCAD enhancements

The CADD Construction Details package is a comprehensive library of object images for landscape construction. The third-party product is designed to be used with AutoCAD to save drafting time. Included are curbs, decks, bridges, drainage, fences, parking, and lighting. The library requires an Apple Macintosh II or IIx with 4 Mbytes of memory. LANDCADD Inc., Franktown, Colo.



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28 Project management

PlanTRAC II is a microcomputer-based project-management program for scheduling and tracking construction jobs. The program features three levels of complexity—for novice, intermediate, and advanced users. Computerline, Inc., Pembroke, Mass.

29 Construction database

The second edition of Electronic Sweet's, a CD-ROM version of the firm's printed catalogs, has several enhancements. These include 14 new product sections and upgraded section reports; a README file for last-minute changes; midyear product additions and updates; and an improved project-review procedure. Electronic Sweet's has 528 databases on more than 22,500 products. Sweet's, McGraw-Hill Information Services Co., New York City.

30 Thermal printers

The A-size Zeta CT-100 and A/B size Zeta CT-150 color thermal-transfer printers are intended for 3-D imaging and shading, scientific modeling, and presentation graphics. Resolution is 300 dots/in. Bruning Div., AM International, Martinez, Calif.



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31 Graphics tablet

Called the IS/ADB input system, this programmable tablet enables Macintosh users to move screen cursors, and to draw, sketch, or trace accurately and rapidly. The device is said to perform better than a PC mouse or the PC keyboard as an input device for images. The tablet has a set of programmable function keys to automate the entry of repetitive commands. Kurta Corp., Phoenix, Ariz.

32 Lettering system

Vertical and horizontal series of letters can be printed in four colors, five sizes, and four styles with the P-Touch II. The compact unit is ideal for labeling records or documents, composing identity tags, and the like. Brother International Corp., Somerset, N. J.

33 Desktop computer

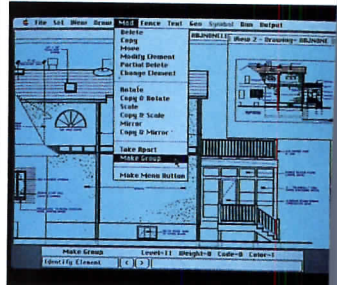
The Sparestation 1 is tailored for graphics and computing applications in the architectural, engineering, and construction markets. It features a high-speed, reduced-instruction-set computing (RISC) microprocessor, and an easy-to-use graphical interface. Networking capability to IBM or Apple PCs is standard. Sun Microsystems, Inc., Mountain View, Calif.



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34 Facility management

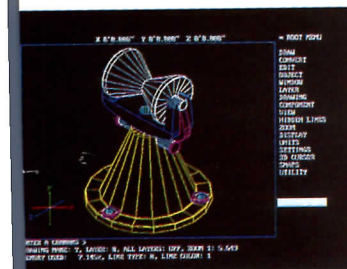
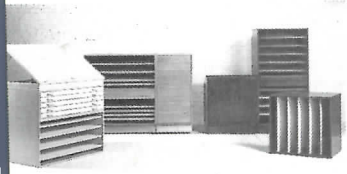
For allocating the space and operating costs of buildings or other structures, Micro CADAM Facility Manager provides integrated graphics and database functions. Plans, designs, and financial reports can be structure as graphic displays. The program requires an IBM AT-type PC, equipped with a mouse. CADAM Inc., Burbank, Calif.

35 Engineering printer

The 5080 plain-paper printer can be used to edit and print E-size documents. It incorporates a zoom function so that D- or C-size print can be made from the same-sized originals. Electronic editing includes deletion of printed areas. Xerox Corp., Rochester, N. Y.

36 CAD software

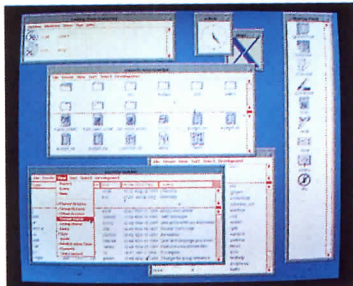
Version 3.1 of SNAP! is a 2-D CAD program intended for the Apple Macintosh. Enhancements include the addition of scalable "stroked" fonts (e.g., architect's script, Lex or outline Helvetica), and support the GTCO line of ADB digitizer tablets. The program can produce Encapsulated Postscript output, and has a translator for Intergraph drafting programs. Forethought Inc., Sunset, S. C.



Flat files and shelves
Affordable price and flexible configurations are said to be the major selling points of this line of adjustable office equipment. The units consist of 3/4-in. Melamine-shelved shelves suspended on open ends. Options include 4-1/2-in.-deep drawers and ball-bearing metal runners. Quercus Woodworking Corp., Chicago.

Design automation
Auto-Architect works within AutoCAD, providing unified functions for space planning, architectural design and drafting, site planning. Programs and model libraries allow users to work in plan, elevation, and 3-D, switching easily from one to another. D. C. A. Engineering Software, Henniker, N. H.

Drafting software
A new 3-D Drafting is said to be a cost but powerful CAD package. It builds on the existing features of a 2-D program, then extends functions into three dimensions by adding or manipulating images. It includes commands, zooming, sections, and other common features of architectural CAD are included. Generic Software, Inc., Bellevue, Wash.



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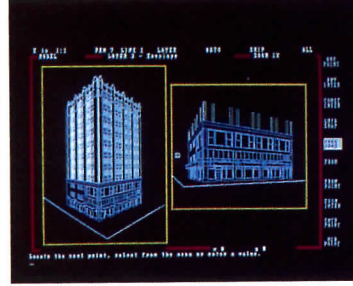
40 Computer interface
Said to bring the simplicity and ease of use of the Macintosh visual interface to the UNIX operating system, Looking Glass is now a standard feature for these workstations. The interface translates the selection of most UNIX tasks into manipulating easy-to-follow screen menus with a mouse. The program is licensed from Visix Software, Inc. Intergraph Corp., Huntsville, Ala.

41 Portable PC
The first portable version of the Macintosh PC is now available. The unit features an active-matrix liquid-crystal display screen and a trackball device for moving around the screen. Batteries are rechargeable, with a power-management circuit to conserve power. Apple Computer, Inc., Cupertino, Calif.

42 Workstation furniture
The freestanding CADCorner is a modular arrangement of desk, drafting table, work table, and storage, described as easy to rearrange from project to project. The work surface is an extra-deep 48 1/2-in., and can support 350 lb. Mayline Co., Sheboygan, Wis.



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43 Linking software
Among the new features of version 3.0 of ADVANCE is a link to standard relational database programs, such as dBASE. The two-way link allows users to file or recover specifications, cost estimates, and other data while in the process of developing a design. A "visual-guidance-system" interface also expedites cursor movement in the simulated 3-D space. ISICAD, Inc., Anaheim, Calif.

44 CAD database
DRAWBASE version 106 combines a drafting program with an integrated database that automatically assembles nongraphic information. This information includes area calculations, furniture lists, cost estimates, and materials schedules. AutoCAD drawing files can be directly imported. CADworks Inc., Cambridge, Mass.

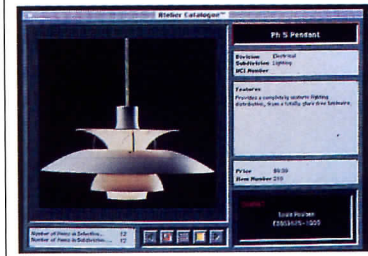
45 Whiteprinter
Odor-free, high-speed print production is the key feature of the 454 Scavenger Plus whiteprinter. The unit has a vapor-removal system that does not reduce print speed, which can be up to 40 ft/min. Blu-Ray, Inc., Essex, Conn.



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46 CAD software
Point Line CADD, version 5.0, incorporates an enhanced solids-modeling facility. This feature allows the designer to program "walk-through" views of designed structures, with realistic modeling. A video-capture feature allows the integration of site photographs with designs. Robi Graphiks, Ltd., Madison, Wis.

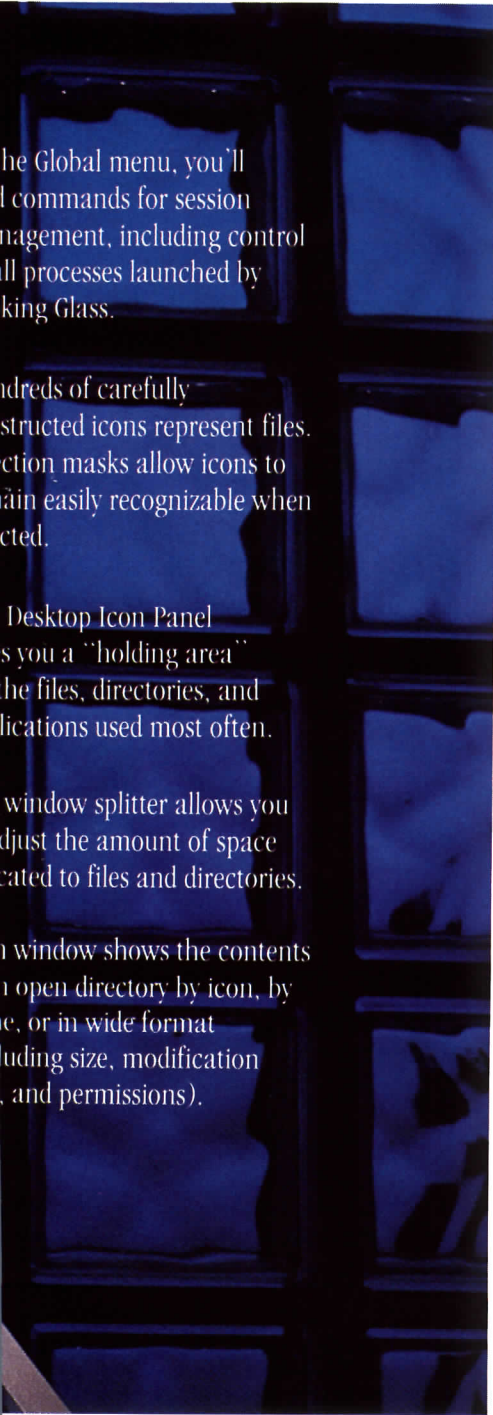
47 Voice-input system
Designed to work with versions of AutoCAD through release 10, VoiceCAD provides inputting for over 200 program commands. A circuit card (for 286- or 386-based systems), headset, and software are included. The user "trains" the program to recognize spoken commands. Voice Technologies, Orinda, Calif.

48 Materials database
The Atelier Catalog is an indexed database of materials, furniture, fixtures, and other architectural components. Intended for use on the Apple Macintosh, the program can display color images of desired elements. It is stored on CD-ROM disks. Artel Software, Inc., Pawtucket, R. I.

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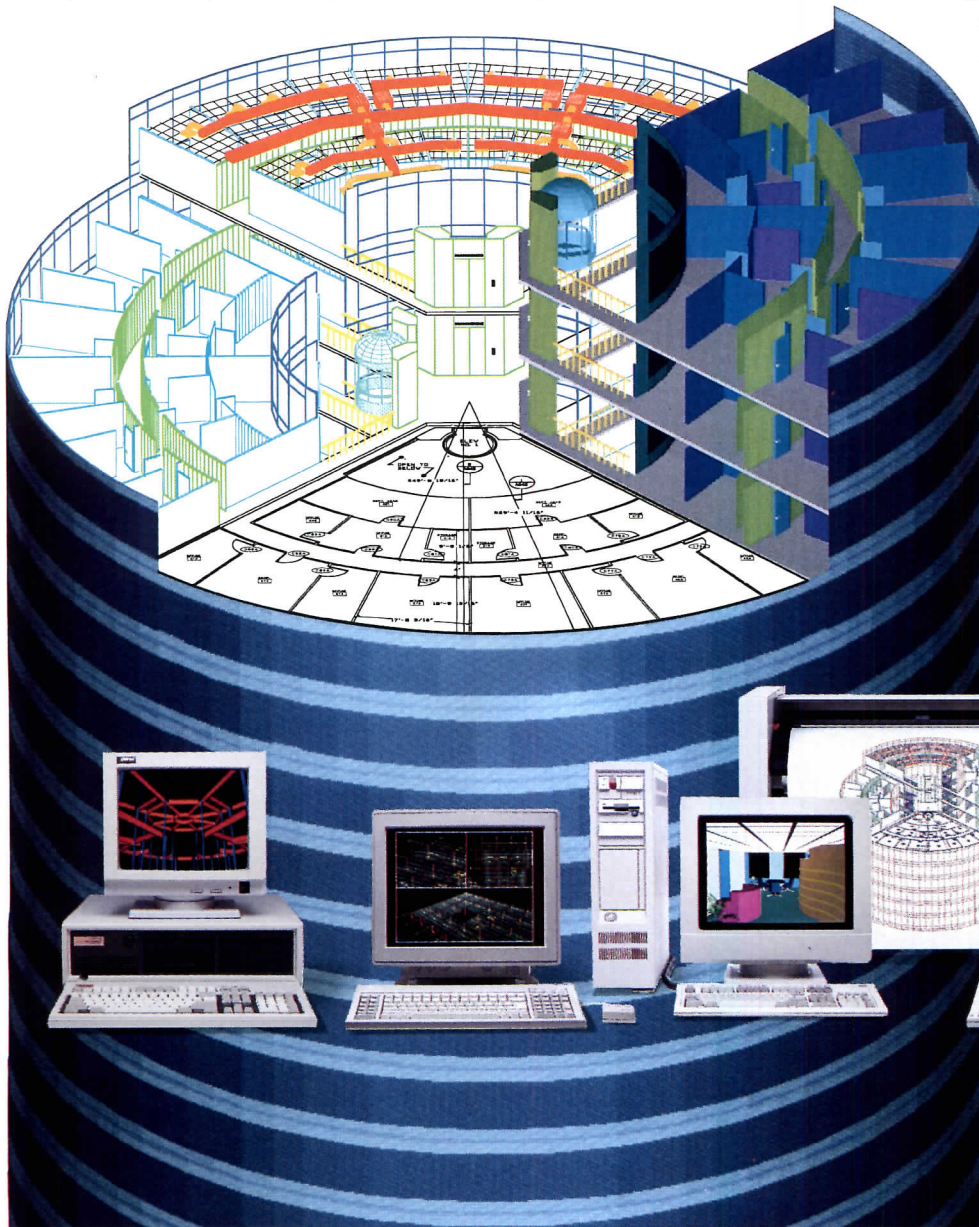
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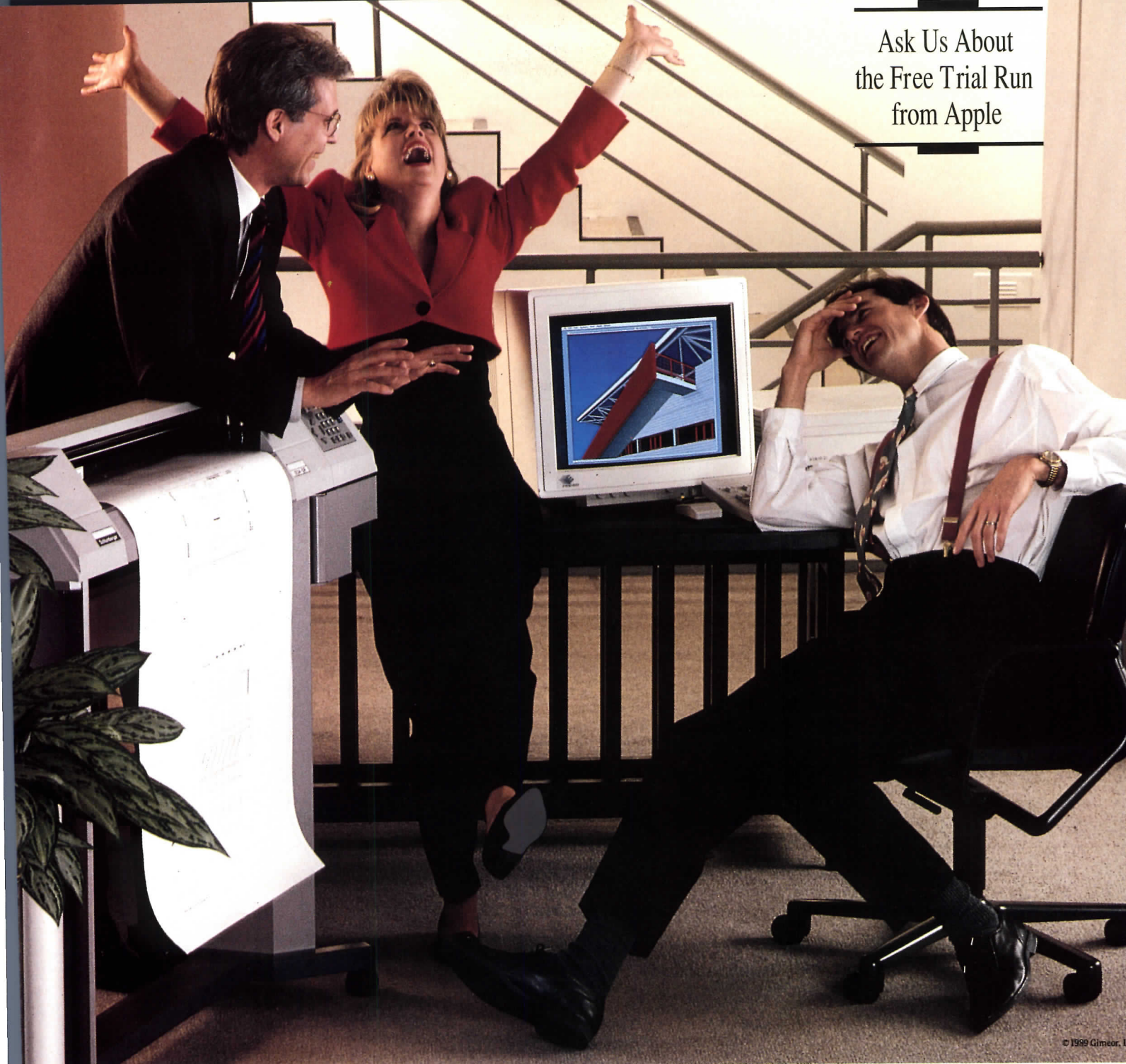
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1 General Data Product literature

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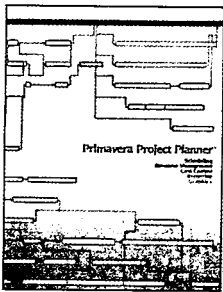
49 Plain-paper copier

A four-page color pamphlet provides details on the 5025 plain-paper copier, which can handle bond, vellum, and film sheets up to 36-in. wide. Copier has cut-line suppression to eliminate shadowing. Technical specifications (in both U. S. and metric units) are listed, as is a features/benefits chart. Ozalid Corp., Binghamton, N. Y.



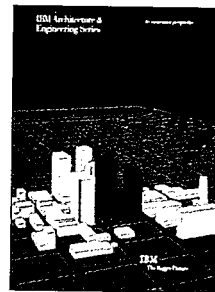
55 Facilities management

A brochure outlines Archibus/FM, designed to work with programs such as Lotus 1-2-3, dBASE, and AutoCAD, linking data in any or all of these programs to create a centralized database. Space-planning, forecasting, and related functions are consolidated. Jung/Brannen Research and Development Corp., Boston.



50 Management software

The Project Planner is an IBM-PC-compatible program for database formulation, scheduling, and tracking project data. Sample screens show how the program can be used; printouts illustrate reporting capabilities. Bar charts or logic diagrams provide clear overviews of project organization. 12 pages. Primavera Systems, Inc., Bala Cynwyd, Pa.



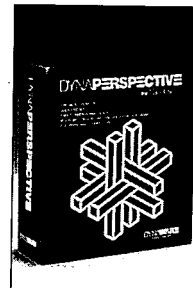
56 Architectural software

A 12-page color brochure outlines IBM's PC/RT-based integrated software for architectural design and construction. The applications include graphics, rendering, structural, energy, hvac, power, lighting and piping; each application can comprise several programs. Customization to specific needs is possible. IBM, Rye Brook, N. Y.



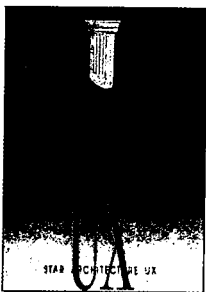
51 Printing supplies

A 66-page catalog lists this supplier's lines of drafting, printing, and plotter supplies. Liberal use of black and white photos provide illustration of the listings, and prices, including discounts, are included. Products include the firm's own brand-name products, as well as many well-known printing suppliers. Same-day shipment is promised. Dataprint Corp., San Mateo, Calif.



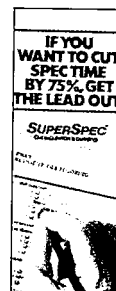
57 Presentation software

DynaPerspective, running on the IBM/PC or Apple Macintosh, allows the user to create 3-D renderings of architectural plans, with an emphasis on ease of use. Drafters are led through a rendering by the use of pull-down menus, a mouse pointer, and image-movement commands. Explained in a 4-page booklet. Dynaware Corp., Foster City, Calif.



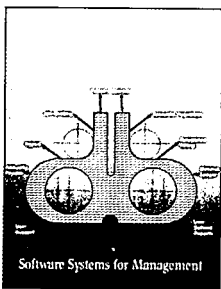
52 CAD software

An eight-page color brochure highlights Star Architecture UX, a two- and three-dimensional CAD program. The program is capable of assigning several hierarchies to data on architectural elements, and then displaying drawings or renderings. Bill-of-materials can also be generated. ARCHISTAR, Inc., Laguna Hills, Calif.



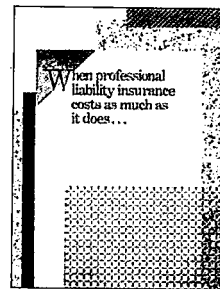
58 Specifications writing

A pamphlet outlines this firm's design-specification preparation service. The firm maintains a database of master specs on a wide range of building materials, allowing the user to go through a quick checklist, rather than looking up data. The service is offered through the mail or via a PC-modem hookup. SuperSpec, Inc., Jacksonville, Fla.



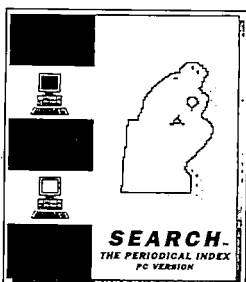
53 Accounting software

Architectural/Engineering Master Accounting Software (AEMAS) runs on IBM/PCs and compatibles. A brochure describes program modules including job costing, automated invoicing, accounts receivable and payable, payroll, general ledger, report generator, and personnel scheduling. 18 pages. Data-Basics Inc., Cleveland.



59 Liability insurance

A six-page brochure lists the benefits of this firm's professional liability policies. It suggests how discounts can be earned by limitation-of-liability clauses, and describes information services offered, including a newsletter on loss-prevention advice. DPIC Companies, Monterey, Calif.



54 Periodicals database

SEARCH The Periodical Index is an index of editorial material in 20 prominent architectural and construction magazines. It is provided quarterly on a floppy disk, or in hard copy. Index headings are Picture File, Projects, Persons/Teams, and Keywords. Details are provided in an 8-page brochure. SEARCH Publishing Inc., Devon, Pa.

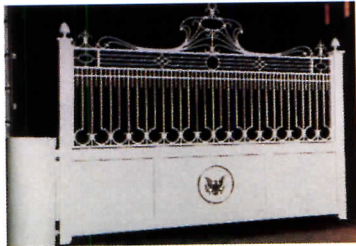


60 Plotter supplies

A full range of consumable supplies for electrostatic plotters are listed in this eight-page catalog. Products include paper media and film, chemicals, cleaners, and related products for Benson, CalComp, Versatec, and other plotters or printers. Graphic Controls, Industrial Products Div., Buffalo.

2 Site Work

Earthwork
Fences & gates
Footbridges
Fountains & pools
Geotextiles/geogrids
Paving & surfacing
Recreational facilities
Retaining walls
Site drainage
Site furnishings
Site utilities



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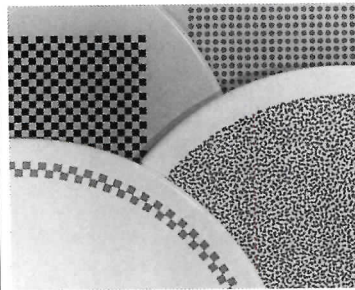
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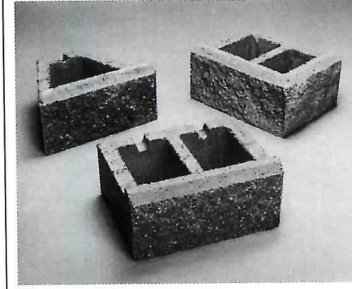
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61 Barrier system

Embassy Gate has the only antiterrorist barrier system certified by the United States government. In a full-scale test, the gate remained completely operational after withstanding the direct impact of a truck traveling at 50 mph and carrying a 15,000-lb load. For any site that needs protection from vehicles. Embassy Gate Systems, Cressona, Pa.

62 Leaning post

Where waiting and resting space is limited, such as next to telephone booths, bus stops, public areas, railway stations, and other transport facilities, the Metro leaning post is an alternative. It is constructed of 2-in. tubular steel and 1/8-in. wire in a 5/8- by 5/8-in. grid. Sintered synthetic coating available in eight colors. Kroin Inc., Cambridge, Mass.

63 Ladderback bench

Designed for parks, malls, shopping centers, and plazas, a colonial-style ladderback bench is available in 4-, 5-, 6-, 8-, and 10-ft lengths, and with custom lettering cast into each stanchion. The bench is made of metal spokes and uprights, with mahogany back slats. Bench Mfg. Co., Concord, Mass.

64 Tower clocks

Electric tower clocks, for outdoor and indoor use, come in a wide range of models, plates, markers, and hands. Diameters range from 12 to 60 in., and Electric Time will build clocks as large as 30 ft. Units mounted beyond reach may be set by remote control. Electric Time Co., Inc., Medfield, Mass.

65 Porcelain tables

A porcelain table group is available in two circular sizes and seven field or border designs. Three base colors and seven pattern colors provide up to 18 color combinations. Good for public-seating areas, shopping malls, and food courts. Forms + Surfaces, Santa Barbara, Calif.

66 Prefabricated bridges

Clear-span prefabricated bridges from 20 to 200 ft in length and 4 to 10 ft wide, made by De Bourgh, are strong enough for carts and maintenance vehicles as well as pedestrian traffic. Made of Cor-Ten weathering steel, which needs no periodic painting, bridges are shipped assembled and emplaced under De Bourgh direction. De Bourgh Mfg. Co., Minneapolis.

67 Trash receptacle

Country Casual's solid-teak trash receptacle, made in England, is said to withstand the elements untouched, year after year. The 28-in.-wide container features chamfered corner posts, and takes a 32-gal. Rubbermaid Brute container. Country Casuals, Germantown, Md.

68 Garden buildings

The Amdega line of British-made garden buildings includes six summerhouses, a gazebo, greenhouses, and garden sheds. They are made of rot-resistant Western Red Cedar, box-section flooring, and timber bracing and roof construction. Handmade leaded lights are standard, and plain glass is available. Amdega Ltd., Boston.

69 Retaining-wall system

The Allan Block is the basis of a landscape retaining-wall system that does not require mortar or stabilizing pins and can be used in a wide variety of soil and site conditions. Blocks interlock as they are stacked. The three shapes—standard, corner, and angle—permit unlimited wall designs. Allan Block Corp., Edina, Minn.

70 Garden furniture

Weather-resistant garden furniture of mahogany is available unfinished, or with a nine-coat protective clear polyurethane or painted finish. The Weatherend line includes curved and straight settees, chairs, tables, tree benches, rockers, swings, and beds. Weatherend Estate Furniture, Rockland, Me.

71 Aerators

Otterbine aeration systems not only add visual interest to water features, but also prevent the buildup of algae, aquatic weeds, bottom sludge, and unpleasant aquatic odors in ponds and lakes. Aerators come in 1 to 5 hp that produce spray diameters of 7 to 14 ft. Barebo, Inc. Emmaus, Pa.

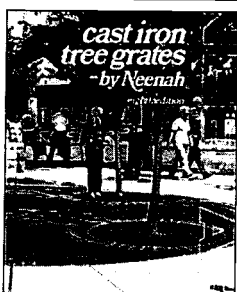
72 Park bench

The Timberform Parkway bench is produced with cast-iron supports and steel-formed arms in a broad range of colors. The wood slats in the seat are of durable marine-grade teak or Alaska yellow cedar. The benches can be ordered in lengths of 4 through 12 ft, with or without arm rests. Columbia Cascade Co., Portland, Ore.

2 Site Work

Product literature

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73 Tree grates
A wide selection of cast-iron tree grates in sizes ranging from 30 to 96 in., round, square, rectangular, multisided, and round-square combinations are illustrated. Models for original or retrofit plantings; appropriate for indoor or outdoor use. Custom-designed grates are available, and skid-resistant surfaces can be provided. 40 pages. Neenah Foundry Co., Neenah, Wis.



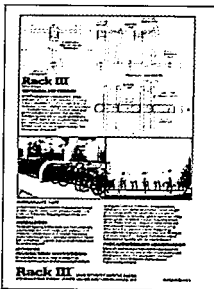
79 Garden furnishings
Shown are structures and fittings for the garden in the English manner, including gazebos, summer houses, covered seats, wooden planters, bird feeders, dovecotes, and gothic porches. Illustrated are a wide variety of trellises and arches not only for the garden, but also for the shop or office. 12 pages. The English Garden, Inc., Stamford, Conn.



74 Artificial trees and plants
Color photographs show artificial tree and plant installations in retail and corporate settings. Trees range from 3- to 30-ft in height; floral plants are in individual pots or used as ground cover, as well as for hanging, built-in, and ledge-type planters. Over 300 fiberglass planter sizes. 16 pages. Pouliot Designs, Inc., Shakopee, Wis.



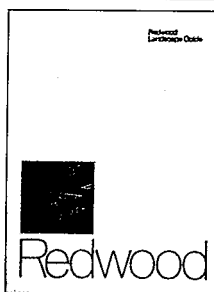
80 Terra-cotta planters
Eight-page booklet shows the Acropolis line of planters in terra-cotta, plastic, wicker, and brass for substantial landscaping. Unglazed terra-cotta urns, planters, and vases range down in size from a 40-in.-high by 22-in.-deep amaphora with handles to a 13 1/2- by 7 1/2-in. oval box. For indoor and outdoor use. Syracuse Pottery, Warners, N. Y.



75 Bicycle racks
Rack system eliminates bicycle clutter and organizes bicycle parking for office buildings, parks, schools, shopping centers, and apartments. Three-point locking system secures the frame and both wheels. Padlock protector prevents use of pry bars and bolt cutters. Described in a 2-page brochure. Rack III High Security Bicycle Rack Co., Oakland, Calif.



81 Fencing
The C Section fence is designed for service from gardens to heavy-security areas. Open-design posts eliminate the moisture-trapping characteristics of round pipe. Drawings and charts compare coatings and physical properties with other types of fence. Two pages. Cyclone Fence, Div. of USX Corp., Chicago.



76 Redwood lumber
An 8-page guide to redwood lumber grade and size specifications for outdoor use has charts that compare characteristics of outdoor woods, list suggested deck beam and joist spans, and give finish recommendations and nailing instructions. Color photographs of redwood decks, shade shelters, and fences. California Redwood Assn., Novato, Calif.



82 Environmental services
Property owners, managers, and architects need to locate and identify hazardous pollutants, such as asbestos or PCBs, in a building or site. A consultant service can assess the problem, design an abatement program, and assist the contractor in removing the hazard. Hall-Kimbrell Environmental Services, Inc., Lawrence, Kan.



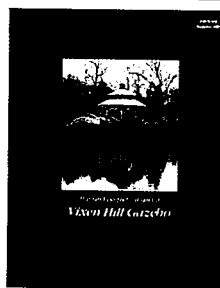
77 Paving blocks
For malls, plazas, decorative sidewalks, driveways, poolside, and parks, Asphalt Block and Brick pavers are shown in various shapes and six colors. London Walks are precast concrete pavers in colors. Checker Block is a concrete block with voids for crushed stone or grass. 12 pages. Hastings Pavement Co, Inc. Freeport, N. Y.



83 Architectural fountains
Custom fountains for indoors or out are guaranteed to perform to specified water patterns and operating heights. Lighting by the same company completes the water-feature design, shown in a 2-page brochure. Underwater electrical equipment is engineered to eliminate any potential hazards. Kim Lighting, Industry, Calif.



78 Playground structures
Nine complete play structures are shown from the Series 2000 line, which includes as many as eight play events and can accommodate from six to 29 children, ages 5 to 12. Bridges, ladders, slides, swings, tunnels, and horizontal ladders are designed for safety. Made of high-grade steel and plastic components. 20 pages. Burke Co., Inc., Fond du Lac, Wis.



84 Gazebos
A line of Western cedar gazebos ranging in height from 160 to 246 in. and in width from 119 to 252 in. comes in kit form for assembly that demands no construction skill, claims the literature. Anodized screws used in construction, stainless-steel used for ground-contact hardware, and brass bolts for assembly. Vixen Hill Mfg. Co., Elverson, Pa.

3 Concrete

4 Masonry

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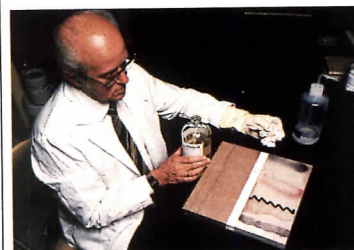
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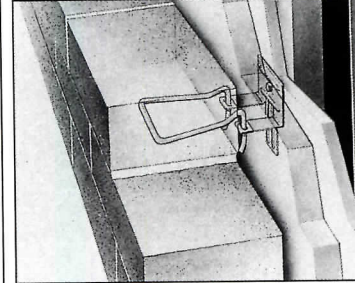
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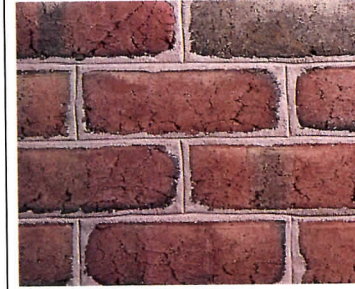
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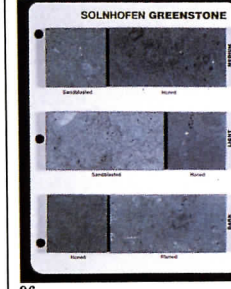
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85 Simulated stone

Exposed-aggregate precast panels are suggested where the appearance of natural stone is desired, but the budget can't support it. Precast-concrete panels with exposed-aggregate facing can closely resemble natural stone panels at much less cost, with no sacrifice in durability or strength of cladding. Preco Industries, Ltd., Plainview, N. Y.

86 Insulating concrete forms

The Thermal Wall system uses interlocking rigid polystyrene boards as a permanent form for concrete-wall pours up to 8-ft high. Preformed foam shapes are used at each corner. Plastic ties inserted in predrilled holes connect the forms. Thermal Wall Products, Inc., Naperville, Ill.

87 Concrete protectant

TSR Stain Resistant Penetrant provides stain resistance to above-grade, vertical and horizontal stone and concrete construction materials. It remains clear, nonyellowing, nonglossy, and moisture-vapor-permeable after application. Also provides water repellency and resistance to efflorescence, UV attack, and de-icer scaling. General Electric Co., Waterford, N. Y.

88 Form panels

Smooth concrete work and fast form removal are achieved with the Inner-Seal MDO overlaid panel. Made of oriented strand board (OSB), the panels receive a coating of medium-density overlay, for smoothness, and a release agent. Contractors report getting 15 or more pours from a panel. Louisiana-Pacific Corp., Portland, Ore.

89 Backer rod

Sof Rod is a soft, reticulated closed-cell backer rod that does not absorb water and is nongassing when punctured. In expansion and contraction joints it limits the amount of applied sealant and prevents back-side adhesion. Conforms to various joint irregularities and does not extrude. Applied Extrusion Technologies, Inc., Middletown, Del.

90 Stainless-steel spike

A one-piece, vibration-resistant anchor, the Stainless Steel Spike is made for use where corrosion resistance is a major concern. Sizes range from 3/16 by 1 in. to 3/8 by 4 in. Holding power is more than 2,000 lb in 4,000-psi concrete. S-shaped spike bottom is compressed in predrilled hole. The Rawlplug Co., Inc., New Rochelle, N. Y.

91 Flooring tiles

GeoStone, a thin marble conglomerate in a cementitious matrix, is said to be handsome, durable, inexpensive, and easy to install and maintain. A parallel product, GeoStone Granite, is available as tile or in slab form in 24 types, polished or honed. Innovative Marble and Tile, Inc., Farmingdale, N. Y.

92 Veneer anchor

The D/A 213 veneer anchor secures masonry to steel studs through rigid insulation or over drywall. The two-screw design gives the anchor 100 percent redundancy: one screw will carry the load. Available in galvanized, hot-dip, or stainless-steel, the anchor may be adjusted vertically or horizontally. Dur-O-Wal, Inc., Arlington Heights, Ill.

93 Designer brick

The Antique Collection, a line of brick machine-molded and manufactured to resemble the texture of old brick, is said to have the strength and durability of the handmade product. The Roman Paver, only 1 5/8-in. thick, as compared with 2 1/4-in. modular-paving brick, is sturdy, but has lower freight costs. Victor Cushwa & Sons, Williamsport, Md.

94 Mexican stone

Materials Marketing, which quarries and works 15 types of stone in Mexico, provides architectural engineering services, including shop and erection drawings and preconstruction estimates for clients considering stone as a principal design feature in their projects. Marketing Materials Corp., San Antonio, Tex.

95 Granite tiles

A line of thin-set granite tiles designed for use as commercial and residential flooring comes in 20 colors from deep black to red, pink, and a mahogany-colored granite. The 12-in.-square tiles are available in three finishes: polished, honed, and thermal, a rough-texture finish. Granite tiles are durable and easy to maintain. Cold Spring Granite Co., Cold Spring, Minn.

96 Limestone

Greenstone, a unique limestone, can be used for interior and exterior paving and cladding, and can be shaped for use as cornices, balustrades, and furniture. Available in three shades and a variety of textures: flamed finish, sandblasted, honed, and polished. Solnhofen Natural Stone, Inc., San Francisco.

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Architect: Daniel Mann Johnson and Mendenhall, San Francisco, CA.; Photography: Pete Leach, Philadelphia, PA

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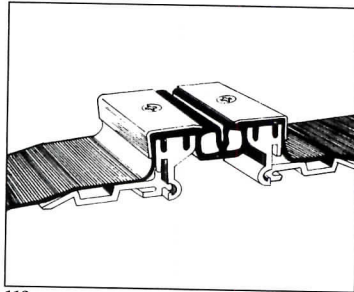
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5 Metals

Metal finishes
 Architectural metalwork
 Expansion control
 Fasteners & supports
 Gratings
 Metal stairs
 Perforated metal
 Railings & handrails



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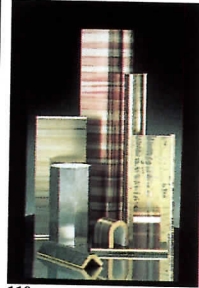
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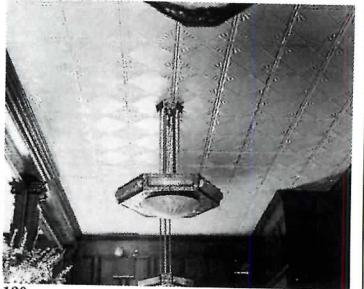
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109 Custom-curved panels
 Curveline shapes stainless-steel panels to any angle and radius, including complex multiradius curves, for roofs, walls, fascias, mansards, walkway covers, equipment screens, and other building components. The company also works in galvanized steel, aluminum, and aluminized steel. Curveline, Inc., Ontario, Calif.

110 Prefabricated railing
 Lawrence provides prefabrication or custom fabrication of brass and chrome railing. All welded ball-type posts are offered for 1-, 1 1/2-, 2-, and 2 1/2-in. tubing, and as single-line or double-line applications. Square-type posts come in brass and chrome; flush posts are brass. Lawrence Metal Products, Inc., Bay Shore, N. Y.

111 Column covers
 Aluminum, colored stainless-steel (smooth or textured), and vinyl/acrylic surfaced column covers are produced by Conspec Systems in 48 color and texture combinations. Covers are custom fabricated in aluminum or stainless steel in lengths to 16 ft, and in colored stainless to 9 ft. Diameters range from 12 in. Conspec Systems, Cranford, N. J.

112 Movement joint assembly
 The Migutan movement joint provides continuous waterproofing in plaza decks from deck through joint. The system is designed for joints up to 2 1/2 in. wide, and will accommodate lateral movement of +/- 50 percent. It is supplied with prefabricated transitions and corners. Emseal Joint Systems, Ltd., Stamford, Conn.

113 Space frame
 The Harley Systems space frame reduces construction costs by using conventional fasteners—bolts and nuts—to join web components with horizontal chords. Three types of connecting joints make possible a broad range of structural applications. Ceco Buildings Div., The Ceco Corp., Oakbrook Terrace, Ill.

114 Handrails and balustrades
 HEWI steel-reinforced nylon handrails and balustrades have corrosion-free steel cores and comply with BOCA codes. Solid thermoplastic nylon is colored throughout, has a smooth nonslip surface, and insulates against electrostatic charge. It produces no toxic discharge in case of fire. W & W Glass Products Ltd., Spring Valley, N. Y.

115 Escape ladder
 Permanently affixed to a building, the Modum escape ladder offers an optional means of escape to building occupants. Made of anodized aluminum profiles, the burglar-resistant ladder resembles a drain pipe when not in use. It opens to a 15.7-in.-wide ladder. Modum U. S. A. Corp., Houston.

116 Natural-finish railings
 Fittings, railings, and other hospitality fixtures produced by Brass Smith are now available in a new line of Natural Finishes. They combine the natural colors of sandstone, rust, black iron, and faux verdigris with a unique tough texturing that has been designed specifically for high-traffic areas. Brass Smith, Inc., Denver.

117 Decorative metals
 TNL linear effects in metal have broad decorative application, such as elevator doors, walls, and desks. Designs are in mirror-finish muntz metal, bronze, and stainless steel, and bright annealed stainless steel. Standard widths are 24 and 36 in., and lengths are 84, 96, and 120 in. Rigidized Metals Corp., Buffalo.

118 Hand-forged hardware
 Fred Fisher, an architectural blacksmith, creates forged hardware for architectural elements such as entrance arches, doors, fences, and gates. Traditional joinery is used. All site-specific styles and designs are created to meet individual requirements. Fred Fisher, Mount Solon, Va.

119 Metallic sheets
 Sublichromie, fully anodized 4- by 10-ft aluminum sheets with processed color; Nu Metal/Touch Me metallike plastic laminates in 4- by 8-ft sheets; and DUROpal, a high-pressure laminate sheet for postforming operations, are produced by Advanced Technology in broad color ranges. Advanced Technology, Inc., Greensboro, N. C.

120 Metal ceilings
 Metal ceiling and wall panels in a wide range of traditional patterns are produced by Shanker Industries in 2- by 8-ft and 2- by 4-ft sheets for overlap installation, and in 2- by 4-ft and 2- by 2-ft trimmed for grid-hung ceilings. Moldings and cone-head nails are also available. Shanker Industries, Inc., Secaucus, N. J.

JB[®] GLASS RAILING... THE CLEAR CHOICE



JB Glass Railing is an economical system of metal railing components for use with $\frac{1}{2}$ " and $\frac{3}{4}$ " tempered glass panels as structural balusters. Handrails are available in aluminum, bronze and stainless steel, together with end caps, internal splice connectors, corner bends and a vinyl protective insert to shield the edges from direct contact with metal. Julius Blum designed this system of metal railing with matching stock components to speed

fabrication and assembly, thereby saving you time and money. In Bulletin No. 3011, you will find the same attention to time-saving economics: complete, concise information on stock metal components for the fabrication of self-supporting glass panel railings. Call or write for Bulletin No. 3011 or our complete Catalog 14.

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MAKING THIS BUILDING S WOULD GIVE MOST CO

But not Vulcraft. We saw it as one of our greatest challenges ever. Because we not only supplied steel joists and joist girders for the project, we also helped design the framing system so that only limited structural damage could be expected from an earthquake measuring up to 7.5 on the Richter scale.

The Evans & Sutherland building, which contains millions of dollars worth of sensitive computer equipment, is located within a mile of the Wasatch Fault in Salt Lake City.



SAFE FROM EARTHQUAKES COMPANIES THE SHAKES.

That was essential because the building, which was constructed for Evans & Sutherland Computer Corporation, is located within a mile of the Wasatch Fault in Salt Lake City. What's more, Evans & Sutherland is a leading designer of special-purpose digital computers, software systems and display devices — products extremely vulnerable to damage from seismic tremors.

To plan for maximum protection, Vulcraft was asked to join with the architects and engineers at the design stage of the project. Already, they'd decided to use a "base isolation" system, the most advanced buffering method available. But using our steel joists and joist girders was also an important decision. The joists and joist girders are much lighter in weight than wide flange beams, so the entire building required less steel, lighter columns and less foundation. And this not only lightened the load for the base isolators, it saved appreciably on building costs.

Throughout construction, Vulcraft remained constantly involved, tailoring our delivery of materials to the exact erection schedule and meeting deadlines without fail. What's more, our joists and joist girders helped the steel erectors meet their deadlines. That's because our products are fast and easy to erect — a fact that saves time and money on virtually any job where they're used.

So whether you need Vulcraft's help to protect your building from earthquakes or you want to stay out of the hole when it comes to construction costs, contact any of the plants listed below. Or see Sweet's 05100/VUL.



The design team chose a "base isolation" system to accommodate seismic loads. They also specified Vulcraft steel joists and joist girders for the building.

VULCRAFT
A Division of Nucor Corporation

P.O. Box 637, Brigham City, UT 84302 801/734-9433; P.O. Box F-2, Florence, SC 29502 803/662-0381; P.O. Box 169, Fort Payne, AL 35967 205/845-2460; P.O. Box 186, Grapeland, TX 75844 409/687-4665; P.O. Box 59, Norfolk, NE 68701 402/644-8500; P.O. Box 1000, St. Joe, IN 46785 219/337-5411. Architect: Erlich-Rominger Architects AIA; Structural Engineer: Reaveley Engineers & Associates, Inc.; General Contractor: The Bettilyon Corporation; Steel Fabricator: D&H Steel Supply, Inc.; Steel Erector: Steel Deck Erectors, Inc.

Use Our High Strength Wide Flange Beams And Put Less Money In The Bank.

Now you can buy high strength wide flange beams for only ten dollars a ton more than standard A36 beams. And that means you can save a ton of money on steel and construction costs. Because, as you know, with high strength beams (50,000 psi) you can use lighter weight sections than with regular steel beams (36,000 psi). Matter of fact, the overall

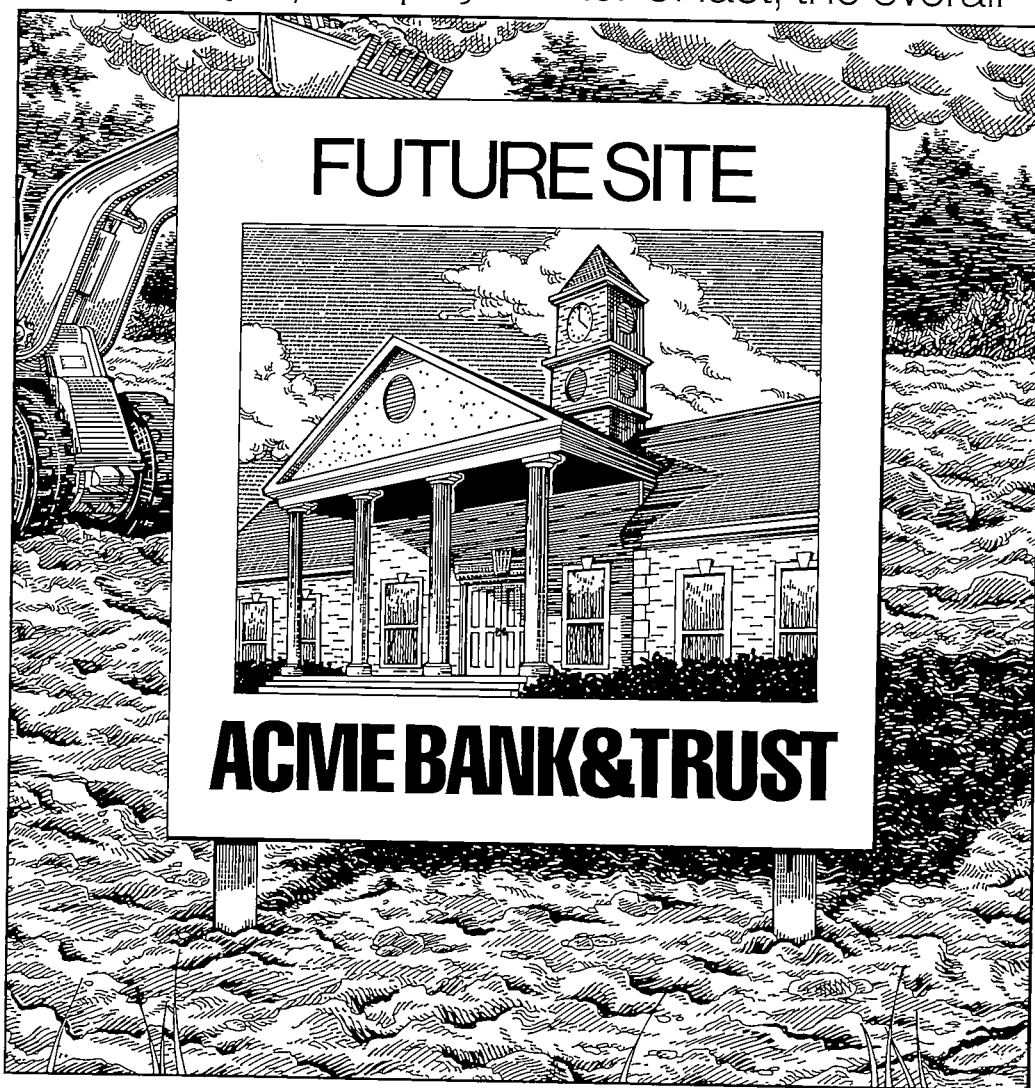
frame weight can be reduced by 20-25% and still carry the required loads. That means less steel is needed, foundations can be smaller and column sizes can be reduced.

We can offer this steel at such a low price because we produce in modern, efficient electric arc furnaces. And that enables us to keep alloying costs to a minimum. And the savings are passed on down the line.

So if you're building a bank or any other building, you'll be putting less money into it. And that should make everyone involved very happy.

Our high strength wide flange beams are available in ASTM A572 Grade 50 and CSA 40.21 Grade 44W. They range from 6" to 24" in depth and up to 120 pounds per foot. So contact Nucor-Yamato for details. Call 800/289-6977 or write to Post Office Box 1228, Blytheville, Arkansas 72316. And start putting less money in the bank, or any other building you build.

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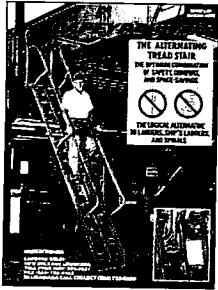
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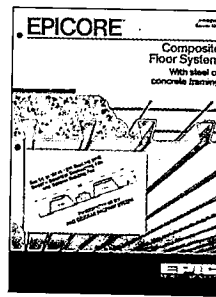
5 Metals

Product literature

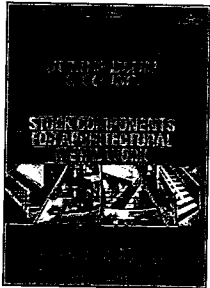
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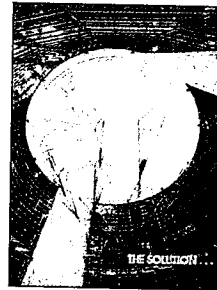
121 Alternating-tread stair
The alternating-tread stair is a replacement for ladders and spiral stairs. It uses space efficiently and permits face-forward descents at steep angles. Three models available in steel, aluminum, and wood; landing and crossover platforms are also available. Each type of stair is custom-built and described in an 8-page brochure. Lapeyre Stair, Harahan, La.



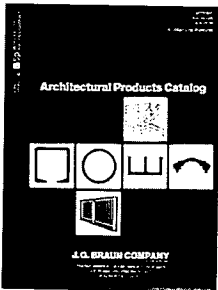
127 Composite floor system
Steel composite floor decks combine the structural advantages of a flat slab with the economy of a permanent form, permitting longer spans and using less concrete and shoring. For use in either concrete- or steel-frame buildings, Epicore is described in an 8-page brochure. Epic Metals Corp., Rankin, Pa.



122 Architectural metal work
Photographs, drawings, and specification charts illustrate the appearance and details of a broad line of architectural-metal stock materials made of stainless steel, steel, bronze, aluminum, wood, acrylic, malleable iron, and plastic. Railing systems, fittings, and accessories in a broad variety of styles. 52 pages. Julius Blum & Co., Inc., Carlstadt, N. J.



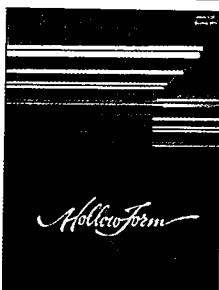
128 Spaceframes
The versatility of the spaceframe is shown in color photographs of atriums and canopies, pyramids, curtainwall supports, and stadium and mall roofs. Five different node systems make the spaceframes adaptable to many applications. Constructed of steel, aluminum, and wood. 16 pages. Mero Structures, Inc., Germantown, Wis.



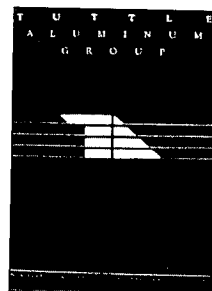
123 Architectural products
A broad range of handrail components, hardware, and accessories, as well as more than 400 extrusions commonly used for window, door, and curtainwall fabrication, are described in detail. Stock items include a range of sizes and shapes in aluminum, bronze, brass, and steel, and maintenance products. 16 pages. J. G. Braun Co., Skokie, Ill.



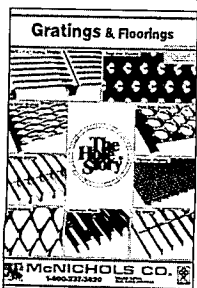
129 Metallic laminates
Series 300 copper and brass-faced high-pressure laminates come in seven designs: antique brass, Spanish gold, renaissance, mayan, Canterbury, satin copper, and satin brass. Surfaces are coated with an UV-cured polyurethane finish. Described in a 2-page booklet. Chemetal Corp., Stratford, Conn.



124 Moldings
HollowForm aluminum moldings may be used as ceiling cornice, casement trim, chair rail, or light soffit. Pre-coped and mitred corners are available. Straight runs are easily cut to fit on-site. Finish options include specular gold and clear anodized satin and bronze finishes. Custom profiles available. Described in a 4-page catalog. Cullar/La Cuesta, San Francisco.



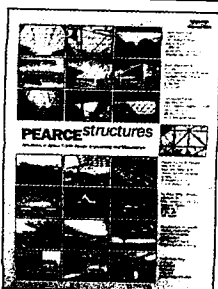
130 Architectural railings
A two-page brochure describes a line of economical aluminum and stainless-steel railings designed to be maintenance-free and easy to assemble. Suggested for installation in municipal buildings, offices, and schools. TABCO 2500 series, a round-rail style, needs no welding. Tuttle Aluminum & Bronze, Noblesville, Ind.



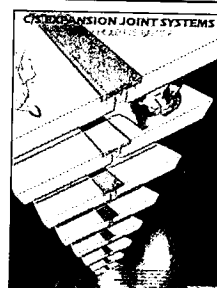
125 Floorings and gratings
Photographs, drawings, specifications, load tables, and applications for a wide line of gratings and floorings made of carbon steel, stainless steel, or aluminum. Gripper surfacing available in either formed metal or applied abrasives. Interlocking flooring panels of polypropylene and rubber also offered. 24 pages. McNichols Co., Tampa, Fla.



131 Mezzanines
A free six-minute videotape, The Wildeck Advantage covers the range of design options in custom-engineered, premanufactured, mezzanines for industrial and commercial applications. Included are details on different configurations for office retrofit and sports buildings. Wildeck Mezzanines, Inc., Waukesha, Wis.



126 Structural framing
Color photos in an 8-page brochure demonstrate the wide variety of shapes and applications possible with spaceframes. With the Multihinge connection, strut-member ends are bolted to each other. An integral glazing system reduces differential thermal movement to eliminate leaks. Pearce Structures, Chatsworth, Calif.



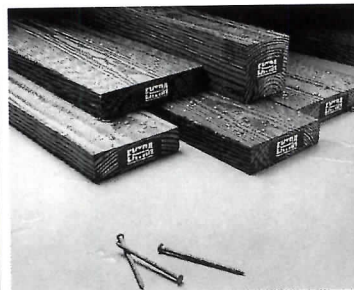
132 Expansion joints
Literature describes expansion joints designed to solve almost every type of building movement problem, including thermal and seismic, longitudinal shear, rotational tower sway, and settlement. For exterior and interior applications to accommodate joint sizes from 1- to 24-in. 16 pages. Construction Specialties, Inc., Muncy, Pa.

6 Wood & Plastics

Architectural woodwork
Connectors & supports
Laminated & processed sheets
Lumber
Plastic fabrications
Plastic laminates
Prefabricated structural plastics
Prefabricated structural wood
Simulated wood
Stock millwork
Wood treatment



133



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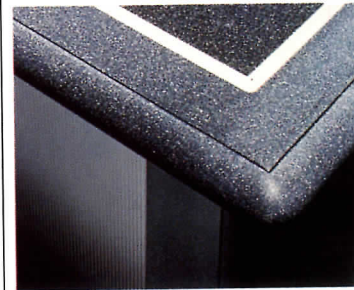
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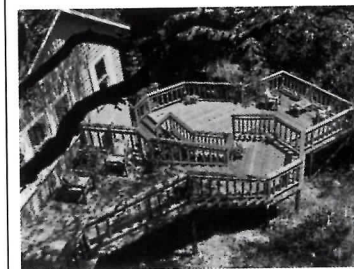
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133 Engineered lumber

Parallam PSL (parallel-strand lumber) is a high-strength composite structural wood product whose beams, headers, and columns have strengths exceeding those of dimensional lumber, glulam, and laminated veneer lumber. Beams, headers, and posts come in a variety of thicknesses, widths, and lengths to 66 ft. MacMillan Bloedel, Annacis Island, B. C.

134 Surface material

A surfacing material that has the appearance of stone, but can be cut like wood, Avonite is a nonporous polymer composite used for counter tops, bathtub surrounds, lavatories, and other decorative functions. New patterns are architectural white, travertine, white agate, lapis blue, emerald jade, and rose quartz. Avonite, Sylmar, Calif.

135 Architectural ornamentation

Aristocrat's decorative line includes fireplace mantels, moldings, niches, cornices, and corbels made of strengthened plaster; exterior canopies, columns, balustrades, and door surrounds made of glass fiber-reinforced plastic; and moldings of pine and mahogany. Aristocrat Originals, Inc. Smyrna, Ga.

136 Weather-resistant lumber

Wolmanized Extra weather-resistant lumber is Southern yellow pine pressure-treated with a water repellent and a wood preservative to improve dimensional stability and reduce warping, splitting, and twisting. Lifetime limited warranty against termite damage and fungal decay. Hickson Corp., Atlanta.

137 Tambours

Decorative tambours with Class A fire ratings come in laminate, anodized aluminum, and natural wood-veneer surfaces. Wilsonart tambours are designed for fixed interior use, such as wainscoting, cladding for columns, and front panels for desks and workstations. Sheets are 48 in. wide in lengths of 96 in. and 120 in. Ralph Wilson Plastics Co., Temple, Tex.

138 Headers

Weyerhaeuser's cost-effective glulam headers possess the same load-carrying capacity as laminated-veneer lumber, with comparable sizes for simple conversions. Members are manufactured with machine stress-rated (MSR) lumber. Design values are: Fb (bending) 2,800 psi and Fv (shear) 190 psi. Weyerhaeuser Co., Tacoma, Wash.

139 Building products

The Formica 2000X building products line now includes vanities, lavatory bowls, sheets and panels, shower units, bathtubs, and edge treatments, all offered in the new Silverado granite-look pictured. 2000X composite materials, designed for low maintenance, come with a 10-year limited warranty. Formica Corp., Piscataway, N. J.

140 Surfacing material

Nonporous Fountainhead surfacing material, pictured in Architectural White and Black Matrix, is now offered in a flecked pattern, White Poppi. The stain-resistant solid sheet has a Class I fire rating, and is suitable for interior vertical and horizontal surfaces. Nevamar Corp., Odenton, Md.

141 Redwood lumber

PALCO ships No. 2 heart structural and No. 2 structural redwood, stronger than general-purpose redwood grades, for the deck and outdoor-living markets. Lumber is shipped in 2x8s, 2x10s, and 2x12s for joists, stringers, beams, and ledgers. The Pacific Lumber Co., Mill Valley, Calif.

142 Decorative laminate

Micarta has introduced a high-pressure decorative laminate with a luminous jewel tone designed for luxury and custom furnishings for executive suites, showrooms, restaurants, shops, clubs, and homes. Micarta Div., Westinghouse Electric Corp., Hampton, S. C.

143 Oak spiral stair

Available in diameters of 4 to 8 ft and to any height, the Mylen oak spiral has no visible steel. It has 5/4 oak treads, 1-in. oak balusters, and a choice of handrail profiles. Beneath the oak casing is a solid-steel stair that eliminates tread loosening. Stairs are custom-made and factory-assembled, and shipped knocked-down for easy assembly. Mylen Industries, Peekskill, N. Y.

144 Joist system

The Silent Floor is an engineered wood floor joist, a substitute for conventional sawn solid lumber such as 2x10s and 2x12s. This joist doesn't dry and warp after installation, says the manufacturer, and won't squeak for the life of a home. Available in lengths longer than typically offered for lumber. Trus Joist Corp., Boise, Idaho.

SHAKERTOWN SIDING: THE SIDING OF CHOICE

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As an architect you face many choices in specifying siding for your projects. You want a certain look at a certain price that can be installed cost-effectively on your specific project.

Hard to do sometimes? Well, take another look at Shakertown Siding.

Shakertown has expanded its product line to provide you with a wide range of choices in looks, application and price so you can create a home or building exactly the way you want.

1. Face. Shakertown has two popular shingle faces for you to choose from: Our **Colonial** panels provide you with a clear cedar shingle look while our **Cascade Classic** panels have a more rustic appearance with enhanced grain patterns and an occasional hand-sorted tight knot.



2. Shingle Spacing. We also offer a choice of spacing between each individual shingle to ensure you get the exact look you want. Choose between our traditional hand-applied **keyway** look or our tightly-jointed **contemporary** look.

3. Butt Line. You can also choose the butt line on our panels. Shakertown offers either an **even butt line**



for a horizontal emphasis or a **staggered butt line** to add a more rustic shadow line to a sidewall.

4. Backing. Some building codes require a one-hour firewall assembly. And that can get expensive when you consider materials cost (not to mention the cost of fire-treating each individual shingle). So we offer our Plywood Back panels: Nail direct to studs over gypsum and you've met the firewall codes in most areas. We can also save you money in those areas that require solid sheathing: Use our Single-Ply back panels and avoid the cost of duplicate materials.



5. Courses. The cost of labor is a major factor in every budget. That's why Shakertown provides you with a choice between our Two-course panel or our One-course panel. So you can select the panel that will be the most cost-effective based on the type of labor in your area.

6. Price. With all these choices you can get the premium Shakertown look without a premium cost. Shakertown has a **wide range of price points** to fit most budgets. Our prices vary approximately 35 percent within our product line which makes us more competitive than ever.



Now that you know the other reasons why Shakertown is called the Siding of Choice why wait any longer?

Call now toll-free 1-800-426-8970 for our free 12-page brochure as well as competitive prices. And we'll leave the choosing up to you.

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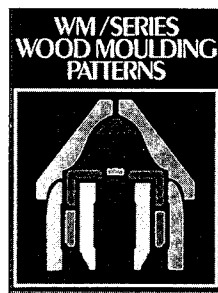
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6 Wood & Plastics Product literature

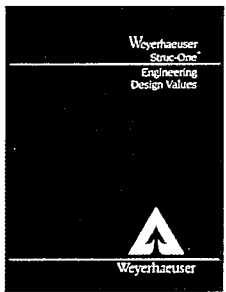
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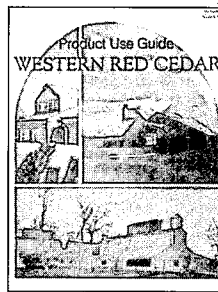
145 Fire-rated particleboard
The manufacturer has introduced a technical brochure on Duraflake FR, a Class I-rated fire-retardant particleboard. Duraflake FR is smooth, grain-free, and suitable for a variety of industrial and commercial buildings with stringent building codes. Willamette Industries, Albany, Ore.



151 Wood-molding patterns
Changing lumber sizes and designs in wood moldings are updated in a brochure. It features pictures of patterns of wood molding components and descriptions, including dimensions. References are given to literature, kits, and audiovisual materials. Wood Moulding & Millwork Producers Assn. Portland, Ore.



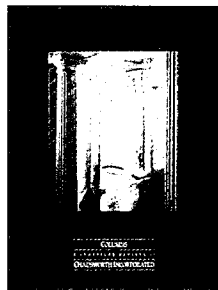
146 Beams and headers
A product description and tables are included in a brochure on Weyerhaeuser laminated beams and Stronglam headers used as framing members for ridge and floor supports, beams exposed to view, and garage or patio-door headers. Tables show uniform load, glulam conversion, and Stronglam headers. Weyerhaeuser Co. Winston-Salem, N. C.



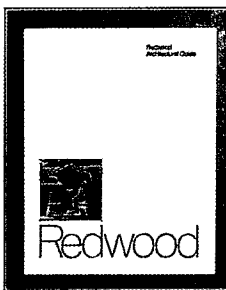
152 Western Red Cedar guide
Detailed specification and use information on cedar lumber, with charts on sizes, grades, and design values, are part of brochure. Also included: a coverage estimator to determine the amount of cedar needed for paneling and siding, and information on finishes. Western Red Cedar Lumber Assn., Portland, Ore.



147 Connectors for wood
A brochure describes the first of Simpson Strong-Tie's new line of Deck Tie products, used to fasten wood deck boards to joists without nails visible on the deck surface. The deck ties are designed to solve problems associated with deck construction and maintenance. Simpson Strong-Tie Co., Inc., San Leandro, Calif.



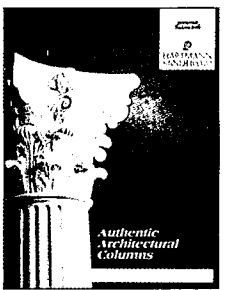
153 Classical-revival columns
Various orders of Greek and Roman columns are illustrated in this brochure. The manufacturer says its columns are inspired by the work of Giacomo Barozzi da Vignola, a 16th-century Italian regarded as an authority on Greek and Roman columnar orders. Chadsworth, Inc., Atlanta.



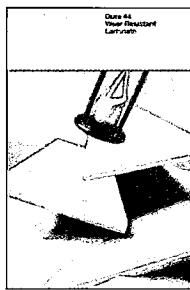
148 Redwood guide
A brochure describes different types of redwood and their characteristics, and has diagrams and charts that show dimensions of the product. Pictures of the architectural grades of redwood, and information on finishes are included. California Redwood Assn., Novato, Calif.



154 Colorful laminates
A brochure contains nearly 400 proposals for high-pressure laminates, with printed reproductions in true-to-life sizes of colors, décors, and finishes. Dimensions of each type of laminate are provided, as well as brief descriptions of the products. Abet Laminati, Edgewater, N. J.



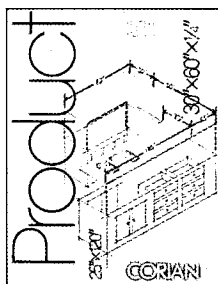
149 Architectural columns
Column design and type of materials, as well as detailed information on column selection by order, are described in a brochure. Also included are: data on construction details such as stave thickness and load-bearing capacity, and an explanation of installation. Hartmann-Sanders Co., Atlanta.



155 Newly named Formica
Formica has published a brochure with information about Dura 44, which is the new name for its Formica-brand wear-resistant laminate. Dura 44 has a new, superior matte finish that produces clarity of color and a smooth surface, the manufacturer claims. It is available in 25 colors. Formica Corp., Piscataway, N. J.



150 Wood finishes
A brochure contains numerous charts that detail the newly revised 5th edition finishing specifications by the Architectural Wood Institute, complete with finishing system recommendations and guidelines to spec or finish architectural wood products. Sherwin-Williams Stores Group, Cleveland.



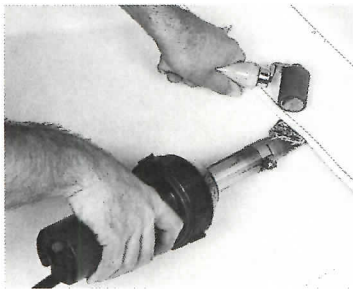
156 Solid-surface products
Detailed charts, illustrations, photographs, and descriptions of Corian decorative surfaces are provided in a booklet. Also included are explanations of practical application of the company's solid surfaces: sheet products; tub, shower and trim kits; lavatories; and sinks. DuPont Co., Wilmington, Del.

7 Thermal & Moisture Protection

Cladding/siding
Composite building panels
Insulation
Membrane roofing
Metal roofing
Roof accessories
Sealants & caulking
Shingles & roofing tiles
Unit skylights
Waterproofing & dampproofing



157



158



159

157 Metal-roof system

SRS standing-seam roof panels can extend uninterrupted from ridge to eave, eave to fascia, and fascia to soffit for weathertightness and clean, continuous lines. Full-length, factory-caulked, mechanically field-seamed battens defy water infiltration under high-wind and storm conditions. Steelite, Inc., Pittsburgh.

158 Roofing membrane

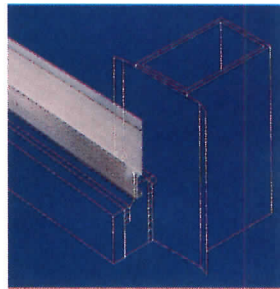
HyChoice membrane, based on Hypalon, a DuPont synthetic rubber, is resistant to corrosive chemicals, ozone, pollutants, acid rain, flame propagation, and many oils. It reflects nearly 80 percent of the sun's radiant energy. Seams can be welded by automated hot-air welding equipment. Carlisle SynTec Systems, Carlisle, Pa.

159 Skylight

A modular, self-supporting skylighting system for residential and light commercial buildings, the Class System rests completely on aluminum curbs and can be mounted on any roof having a minimum 4/12 pitch. It has thermally broken aluminum frames and insulated low-E glass. Wasco Products, Inc., Sanford, Me.



160



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160 Structural fireproofing

CAFCO Deck-Shield 460, 560, and 800 fireproofing products for exposed structural steel are formulated for areas prone to excessive mechanical abuse. They meet fire ratings of up to four hr. They are asbestos-free and contain no vermiculite. Isolatak International Corp., Netcong, N. J.

161 Internal gutter system

An interior secondary line of defense against condensation or moisture penetration, the Foamwall HG internal gutter system is designed for horizontal wall panel applications of Foamwall. It incorporates a continuous extruded aluminum gutter at each floor level. E. G. Smith Construction Products, Inc., Pittsburgh.

162 Fire-barrier caulk

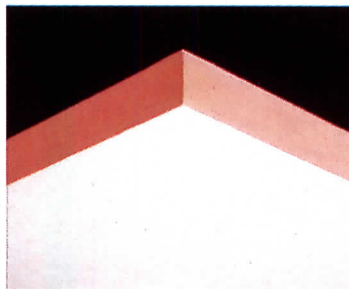
Two formulations of synthetic elastomer fire barriers that achieve a two-hr fire rating with only 1/2-in. depth and a three-hr rating with 1-in. depth have been introduced by 3M. Caulk CP 25N/S is a no-sag formulation for stopping smoke and fire in wall and ceiling applications. Caulk 25S/L is for floor applications. 3M, St. Paul, Minn.



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163 Elastomeric membrane

Roof-X Gold, a bronze extended urethane waterproof membrane for a variety of roofing systems, can be applied by brush, spray, or roller in one coat. It cures to a tough, reflective rubberlike finish, said to be resilient enough for normal foot traffic. Applicable to horizontal or vertical surfaces. Andek Chemical Corp., Moorestown, N. J.

164 Architectural panels

Alucobond 21 is a new version of this maker's aluminum-skin cladding panel, with a plastic core designed to meet more stringent codes. It can be used as cladding or exterior curtainwall on low- and high-rise buildings, and for signage. Alucobond Technologies, Inc., St. Louis.

165 Foam roof insulation

Manville's UltraGard Premier, a phenolic foam insulation, can be used with all major roofing membrane systems. It is a rigid insulation board with fiberglass facers laminated to each side. Thermal value is 8.33R in. Sold in 3- by 4-ft and 4- by 8-ft sizes. Manville Roofing Systems, Denver.



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166 Polystyrene roof insulation

Amoco roofing insulation products can be used with most types of single-ply membrane. Amfoam-CM (square edge) is suitable for most roofs. Amfoam-SL (shiplap edge) provides additional thermal protection at seams. Amfoam-DC (drainage channel) has channels notched in. Amoco Foam Products, Atlanta.

167 Air-sealed roofing

The Kelly System 2001 works on the principle of negative air pressure. Equalizer vents reverse the effect of wind uplift pressure to cause a single-ply membrane to adhere to monolithic decking. The membrane is air-sealed at the perimeter and all penetrations. Kelly Energy Systems, Inc., Waterbury, Conn.

168 Roof curb adapters

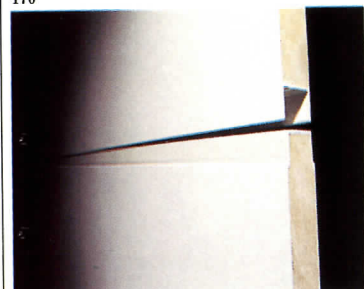
In retrofit projects where hvac units are replaced, Custom Curb Adaptor-Curb makes the exchange quick and economical. When the old hvac unit is removed, an adaptor is placed on the existing curb, duct connections are made, and the new hvac unit is lowered into place. Process saves time, money, and field labor. Custom Curb, Inc., Chattanooga, Tenn.



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169 Cedar siding

Cascade Classic Western Red Cedar siding panels create a rustic appearance with enhanced grain patterns, and offer a choice of traditional hand-applied keyway look or tightly jointed contemporary look. Siding comes in one- or two-course, plywood-backed 8-ft panels, with either a butt line or a staggered butt line. Shakertown Corp., Winlock, Wash.

170 Firestop material

Fyre Putty, a noncombustible, premixed ceramic-fiber firestop material, seals pipe, cable, and other penetrations in fire-rated walls and floors. It produces no fumes or odors under fire conditions, and has zero rating for flame spread and smoke production. The Carborundum Co., Niagara Falls, N. Y.

171 Foam-core panels

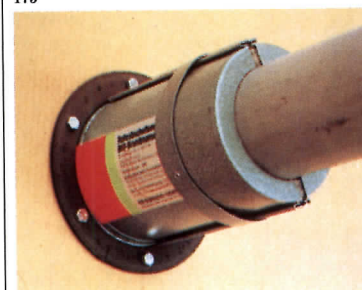
Durashield foam-core building panels are made of 4 lb/cu ft rigid, closed-cell polyurethane foam enclosed in fiberglass skin. Panels assemble tongue-and-groove and come in 1-in. and 3-in. thicknesses. Designed for use as walls and roofs, panels are corrosion-resistant and load-bearing. Morrison Molded Fiber Glass Co., Bristol, Va.



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172 Roof window

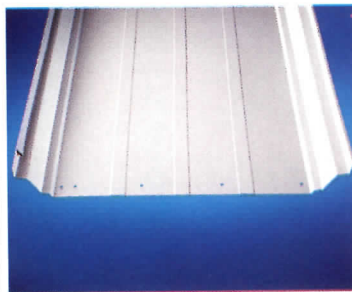
The Vision roof window has a pivoting top hinge that allows for complete cleaning of both glass surfaces from inside. They are fitted with low-E argon-filled glass and a wood sash and frame that accepts paint or stain, inside removable screen, and UV-resistant gasket for weathertightness. Roto Frank of America, Chester, Conn.

173 Curtainwall systems

Formawall 1000 curtainwall panels are available for vertical or horizontal applications. At 2.7 lb/psf, the lightweight panels save on frame-support costs. They are highly insulated and can be formed or curved to design. The 22-gauge galvanized-steel face sheets have an embossed texture. H. H. Robertson Co., Pittsburgh.

174 Firestop sleeves

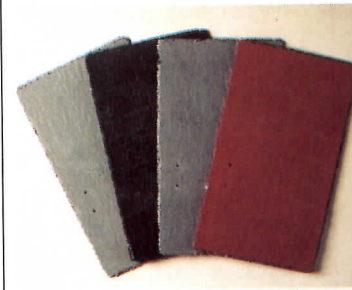
Bio Firestop Sleeves are asbestos-free prefabricated devices that firestop individual plastic pipe through-penetrations in fire-resistant walls or floor-ceiling assemblies. The sleeves are steel casings lined with a material that expands during the heat of a fire to seal a softening plastic pipe against smoke, toxic gases, and flames. Bio Fireshield, Inc., Concord, Mass.



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175 Metal roofing

Made for new construction or retrofit, WeatherSeam-24 structural standing-seam metal roofing has been enhanced by three small flutes to improve resistance to foot traffic. A weathertight, 3-in. industrial standing seam has movable concealed clips that allow for expansion and contraction. ASC Pacific, Tacoma, Wash.

176 Roof drain

The RetroDrain line of roofing equipment includes the Super Dome, a cast-aluminum strainer dome drain. It is produced to fit 3-, 4-, 5-, and 6-in. drains. A screw-down hatch allows drain access for normal cleaning and maintenance. The strainer dome is designed to be vandal-resistant. U-Flow, Inc., Buffalo, N. Y.

177 Shingles

Supra-Slate II, the first of Supradur's new asbestos-free fiber cement products, is a shingle that resembles quarry slate. Designed for roof applications on projects such as shopping centers, hotels, historic restorations, and luxury housing, it is now available in black and gray, with green and red to follow. Supradur Mfg. Corp., Rye, N. Y.



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178 Waterproofing membrane

The Miradri waterproofing system is a self-adhered sheet membrane designed to provide waterproofing protection for below-grade foundation walls, slabs, parking decks, plaza decks, tunnels, and similar structures. The sheet is made of rubberized asphalt laminated to a polyethylene film in a minimum 60-mil-thick membrane. Mirafi Inc., Charlotte, N. C.

179 Curtainwall insulation

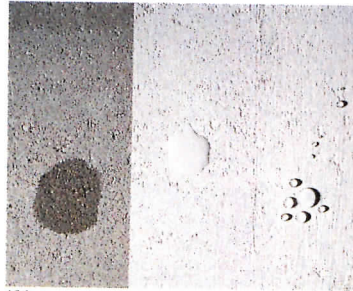
Roxul Curtain Wall is a water-resistant mineral wool insulation that can be applied in glass, metal, granite, or concrete systems. It can be installed in prefabricated systems or assembled in the field. Facings include ASJ, white or black mesh, and aluminum foil, which replaces the need for a vapor barrier; thicknesses are from 1 to 6 in. Roxul, Inc., Milton, Ont.

180 Urethane sealant

FC-2, a two-component polyurethane for in-plant caulking of prefabricated walls, provides a weathertight seal that accepts a +/- 25 percent cyclic movement. It can be formulated to a specific color and is nonstaining on natural stone, concrete, and metal surfaces. Tremco, Inc., Beachwood, Ohio.



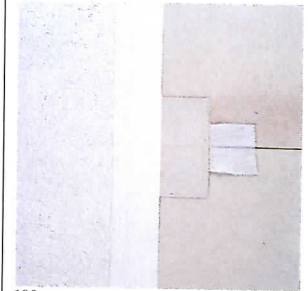
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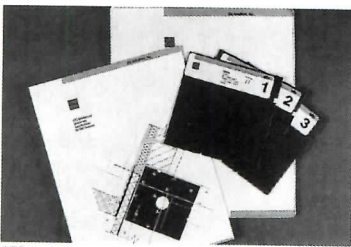
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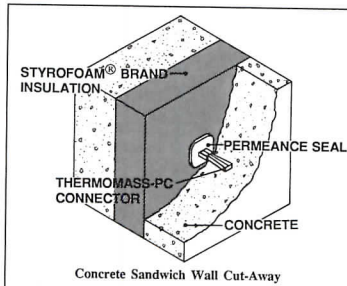
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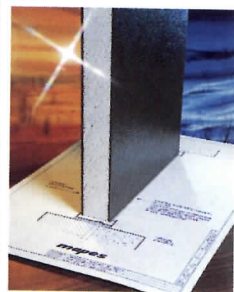
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181 Exterior finish

Stucco-like Durock Exterior Finish is applied over Durock Exterior Cement Board and Durock Exterior Basecoat, producing a fadeproof, weatherproof, and spall-resistant surface. The premixed finish comes in 20 colors; any custom color may be specified. United States Gypsum Co., Chicago.

182 EIFS design

STO-CAD is a PC-based design package that facilitates preparation of construction documents in the use of the STO line of exterior wall systems. Details and specifications are on three 5 1/4-in. floppy disks; a minimum 360K drive required. STO Industries, Inc., Atlanta.

183 Composite building panel

Reynobond FR curvable composite building panels combine a solid thermoplastic compound core with two sheets of aluminum and are designed to meet or surpass national model building codes for fire resistance. Available in a wide range of colors, lengths, and widths, these panels can be used for new construction or renovation. Reynolds Metal Co., Atlanta.

184 Cementitious surface coating

Isposil is a silicone emulsion-based coating for cementitious surfaces. It does not produce a film and it is permeable to water vapor. It is, however, water resistant. It does not soften in heat and airborne dirt does not embed in its surface. Comes in 129 colors that are resistant to mildew, algae, and UV-degradation. Ispo, Inc., Mansfield, Mass.

185 Sheathing

A paperless sheathing, Dens-Glass Gold is warranted to withstand six months of exposure to weather without delaminating, sagging, or buckling. It has a silicone-treated gypsum core penetrated front and back by inorganic fiberglass mats and sealed with an alkali-resistant coating. Suggested as a backing for brick, stone, wood, EIFS, and shingles. Georgia-Pacific, Atlanta.

186 Concrete roof tiles

Homestead Heritage, a new shake-look tile, is made with interlocking joints and weather checks to protect against wind-driven moisture. They measure 1/2 in. by 13 in. and weigh approximately 950 lb/sq. Freeze-thaw rated, the tile roofs are guaranteed for 50 years. Monier Roof Tile, Orange, Calif.

187 Curtainwall

The aluminum Alveus curtainwall has a rigid aluminum honeycomb core that assures high composite strength, an efficient strength-to-weight ratio, and an absolutely flat surface. The panels blend with glass to form a flush, monolithic surface. The material can be customized to form rounded corners or column covers. Kawneer Co., Inc., Norcross, Ga.

188 Concrete sandwich panels

For cast-in-place, prefabricated, or tilt-up walls, the Thermomass concrete panel uses Styrofoam as insulating material. The boards come with holes predrilled to accept the tie rods that link the inner and outer layers of concrete through the insulation. Composite Technologies Corp., Ames, Iowa.

189 Roof and wall panels

Pac-Clad panels come in a variety of forms for such applications as roofing, mansard, fascia, soffit, and framing. Panels, made of either .032 aluminum or 24-gauge-galvanized steel, are linked by standing, batten, or tongue-and-groove seams. Finishes include Kynar 500, anodized aluminum, or silicized polyester. Petersen Aluminum Corp., Elk Grove Village, Ill.

190 Finish system

Harditexure combines Harditex Australian-made fiber-cement sheathing boards with STO Flexfinish elastomeric texture coatings. The easy-to-apply finish comes in 15 colors and is resistant to weather and cracking. The system takes only three days for installation. James Hardie Building Products, Inc., Mission Viejo, Calif.

191 Architectural panels

A new 1/4-in. glazing panel features a tempered hardboard or cement-board substrate with 24-mil aluminum overlay and a Kynar 500 or anodized finish. Panels can be finished on one or both sides. Finish is guaranteed against crazing, peeling, cracking, or fading. Weyerhaeuser, Tacoma, Wash.

192 Fire-rated panels

A line of fire-rated foam-core panels has been introduced for use in curtainwall, storefronts, and windows in both new construction and retrofit. Within the panel is a 1/2-in. fire-code gypsum laminate that provides a 15-minute fire barrier. Thickness varies from 1 to 4 1/4 in. Finishes include porcelain, baked enamel, anodizing, and Kynar. Mapes Industries, Inc., Lincoln, Neb.

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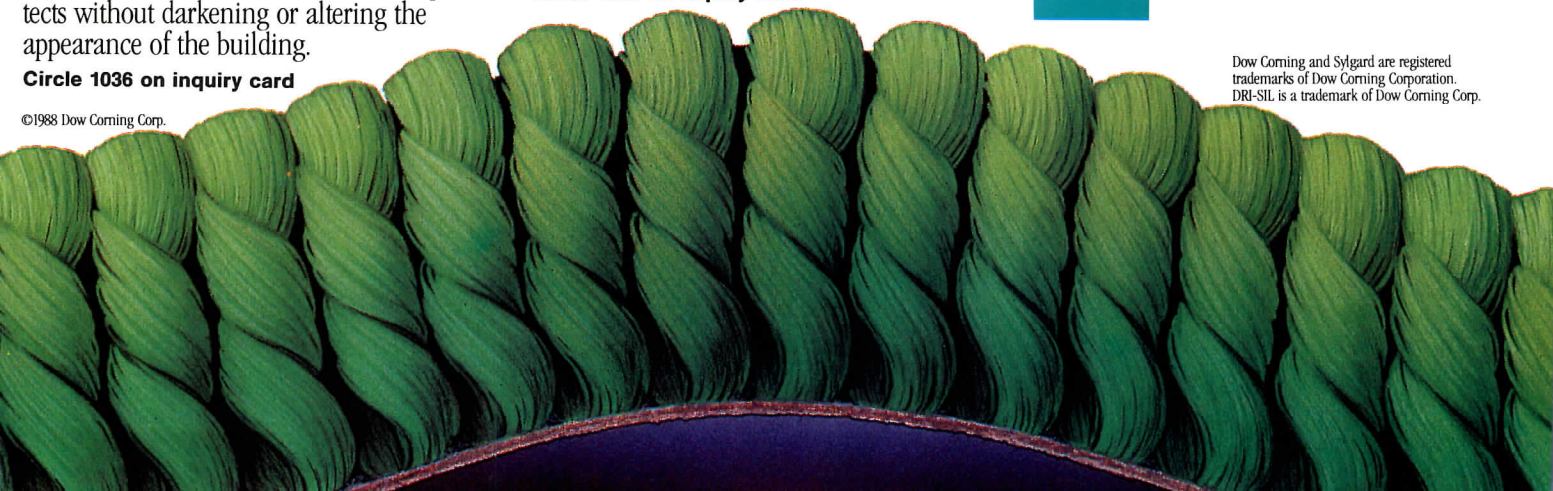
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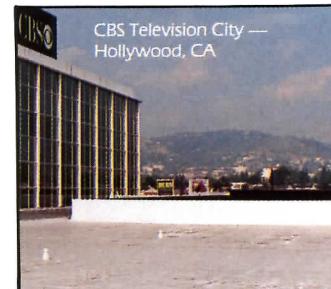
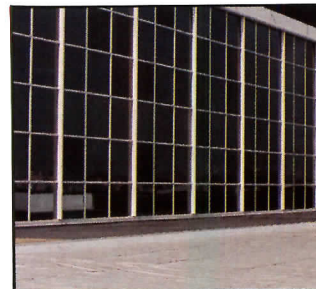
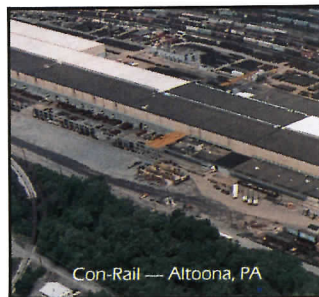
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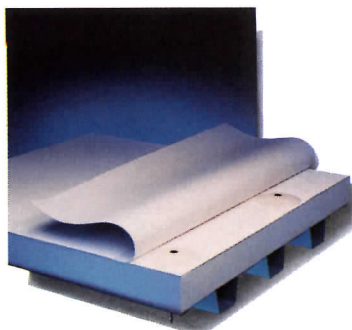


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Bristol Myers Research Facility, Wallingford, CT
Architects: The Stubbins Associates, Inc., Cambridge, MA
Roofers: Premier Roofing, W. Haven, CT
Photographer: Hay Photographers



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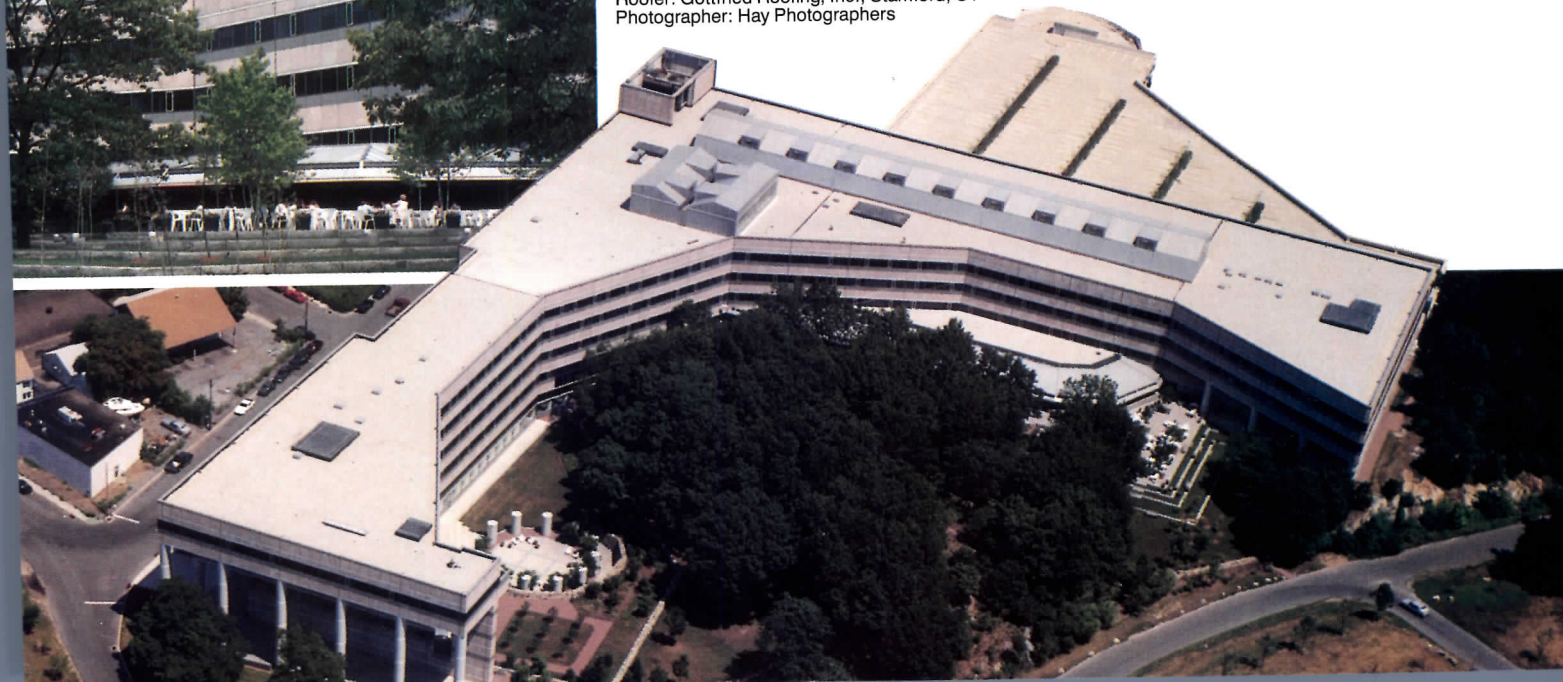
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Pitney Bowes, Inc. World Headquarters
Architects: I. M. Pei & Partners, New York, NY
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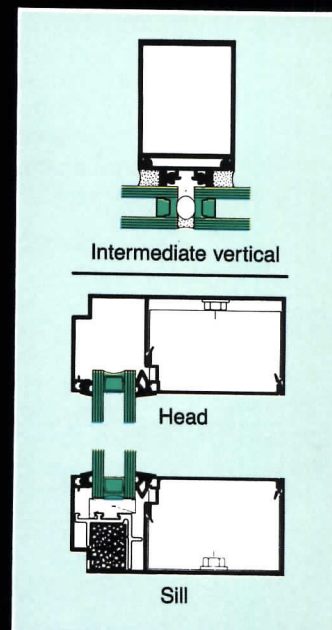
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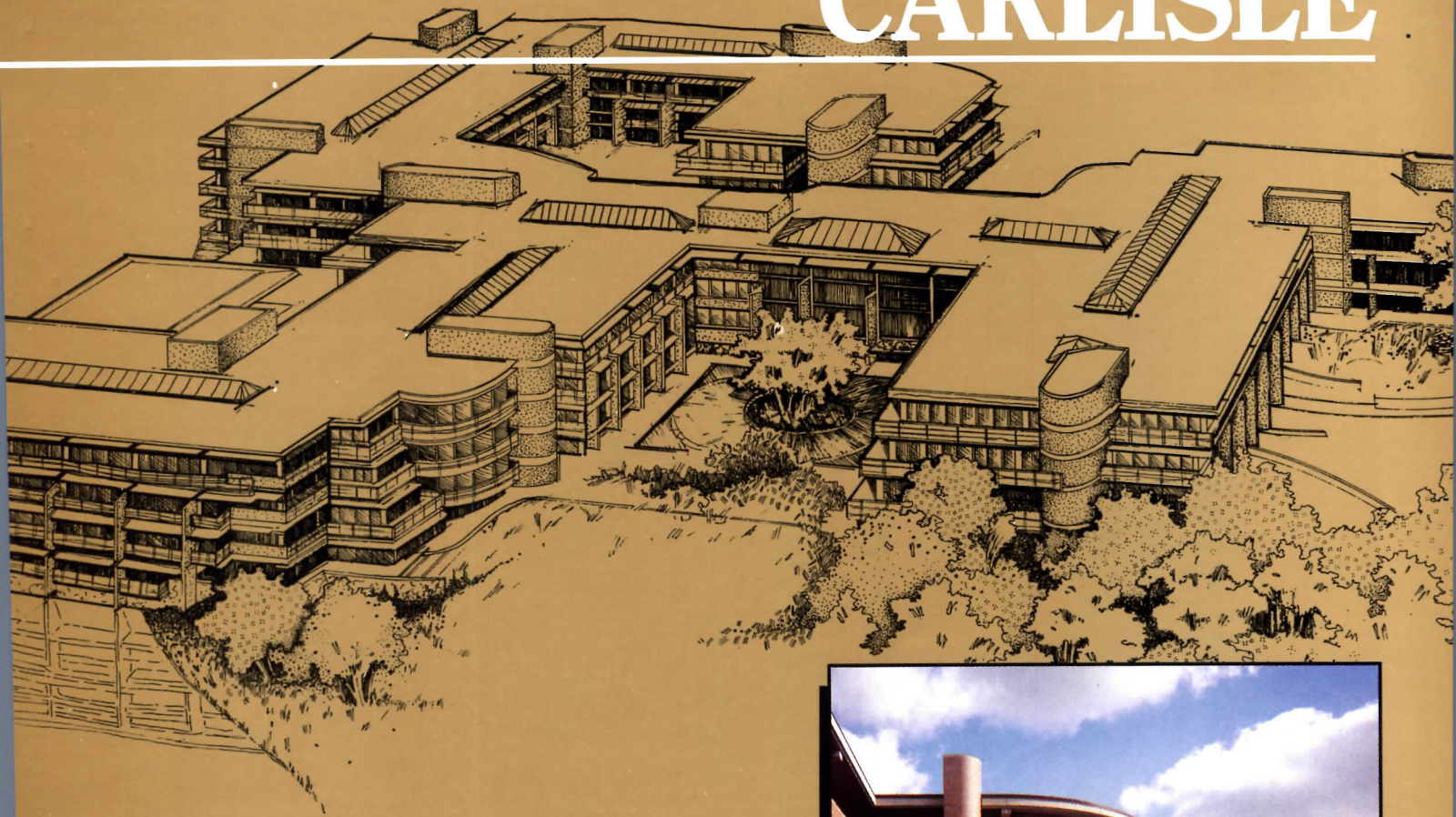
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This Carlisle ballasted system incorporates an inverted membrane assembly designed for flat or nearly flat roofs where ballast load is not a problem. It utilizes a .045 in. thick Sure-Seal EPDM membrane loosely laid over a post-tensioned smooth finished concrete deck. Splicing cement and In-Seam Sealant™ are applied to secure the field splices. Next, the perimeter is secured and insulation installed above the membrane. Finally, a protective fabric scrim and ballast are added.

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Architect: Lohan Associates
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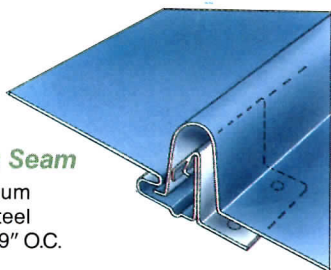
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PAC-CLAD Metal Roofing Panels



Integral Standing Seam

.032 aluminum
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11", 18" or 19" O.C.
1½" high

Project: Olde Schaumburg Medical Center
Owner: The Alexian Brothers Health Systems, Inc.
Designer & Builder: Marshall Erdman & Assoc., Inc.
Roofing Contractor: Rosenow Roofing Inc.
Color: Arcadia Green

See our catalog in Sweet's: file numbers
07610/PET, 07715/PET and 10426/CHC

PAC-CLAD Metal Roofing Panels figure prominently in the construction of the recently completed Olde Schaumburg Medical Center.

The owner, Alexian Brothers Health Systems, Inc., contracted the architect/developer, Marshall Erdman and Associates, Inc., to design a satellite primary care facility. Because the site was situated in an historic district, the building had to conform strictly to established building guidelines.

PAC-CLAD Integral Standing Seam Panels were selected for the extensive metalwork and detailing of the metal roof. The panels are coated with a PAC-CLAD Kynar 500® finish. The color, Arcadia Green, is one of eighteen standard PAC-CLAD colors and is provided with a twenty-year finish warranty.

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There is something new under the sun. Sarnafil mechanically attached and fully-adhered single ply roofing systems. In 21 vibrant colors. Discover how they can increase the potential for striking new designs. Call 1-800-451-2504 (In Mass. 1-800-451-2506), or call Sweet's Buyline.

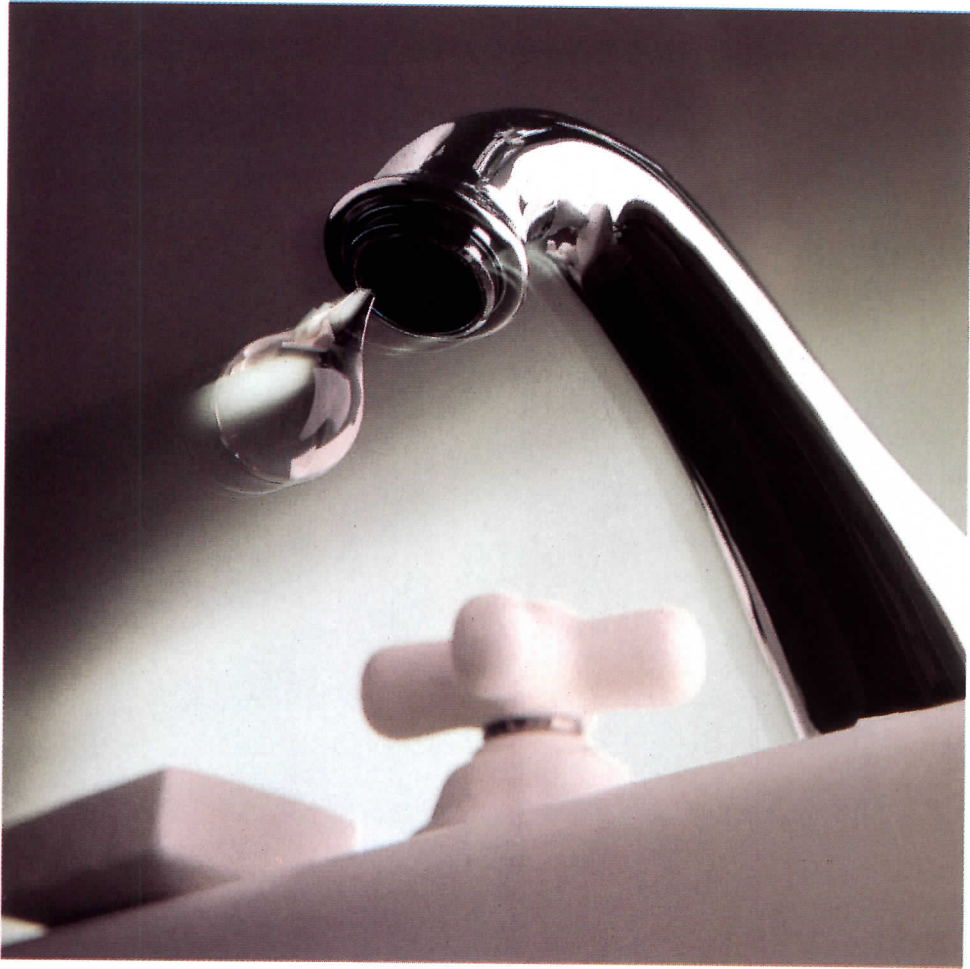
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ANNOYANCE

Portland cement board

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with high resistance to wicking, rot and other water-related problems. And *without* the extra vapor barrier required with Portland cement board. Dens-Shield is lighter and easier to

Properties	Dens-Shield*	Portland cement board
Weight, lbs/m sq. ft.	2060	3300
Surface water Ab. (Cobb test) ¹ grm.	.5	12.8
Vapor transmission, perms ²	1.2	8.9
Wicking, inches ³ after 30 minutes	.00	1.48
after 24 hours	.00	3.06

¹ASTM C473 ²ASTM E96, dry cup method ³CTI-T83

*Tests conducted at Georgia-Pacific Gypsum Laboratory, per ASTM guidelines.



ASSURANCE

Dens-Shield® tile backer

install, too. Plus, depending on the installation method used, it can provide a one- or two-hour fire rating *without tile*.

Dens-Shield tile backer from Georgia-Pacific gives you the assurance of high quality and exceptional reliability. And that's about the best performance you could ask for.

For more information including specifications and physical properties call Georgia-Pacific: 1-800-447-2882, Operator #2. Look for us in Sweet's Section #9390GEO.

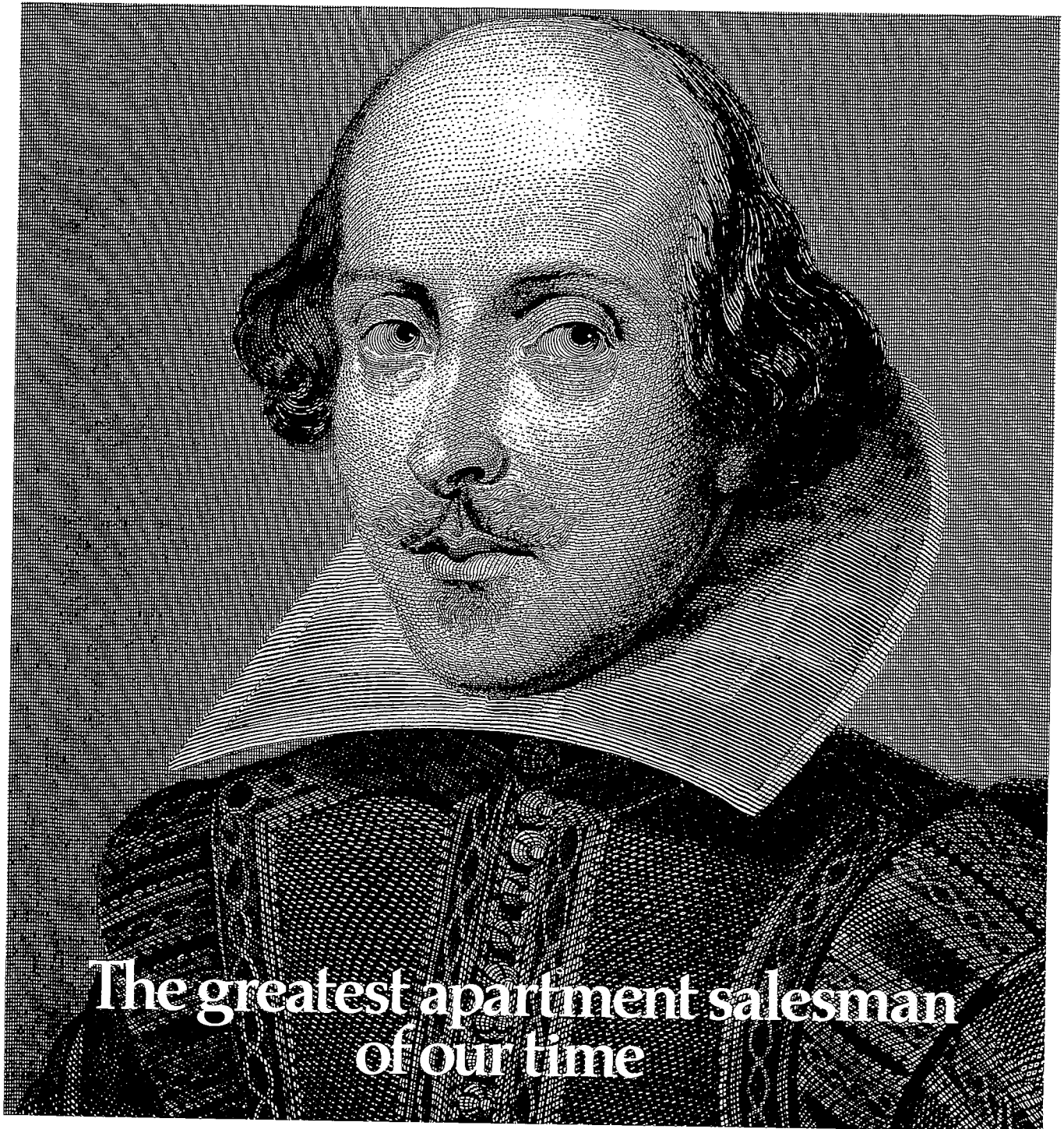
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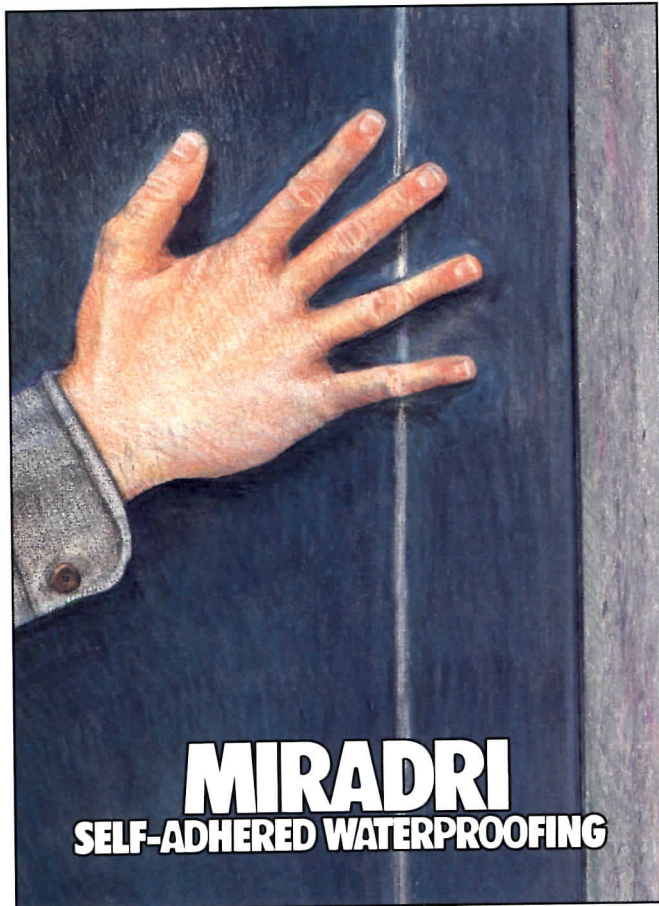


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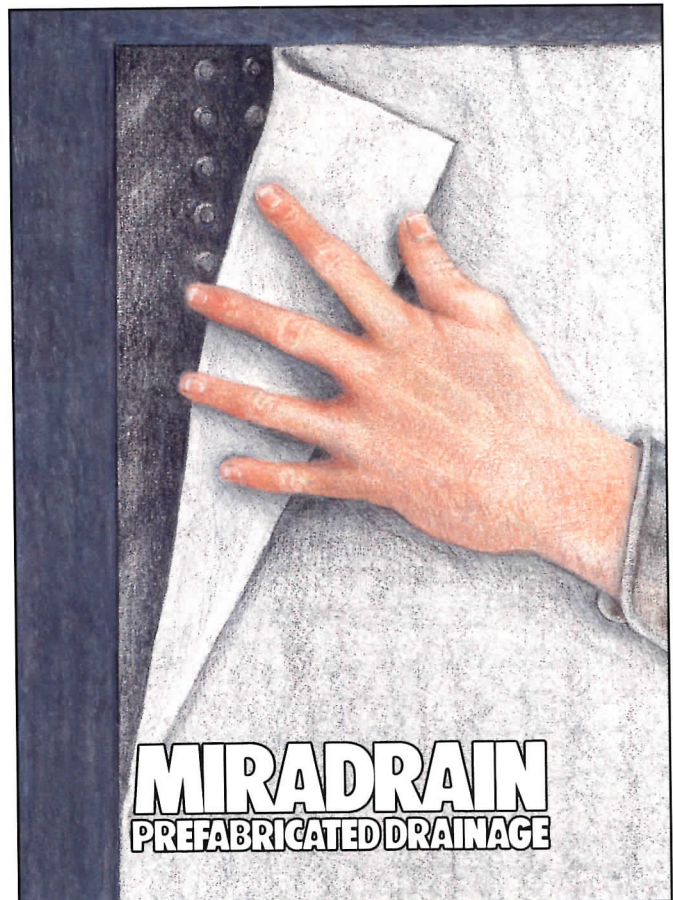
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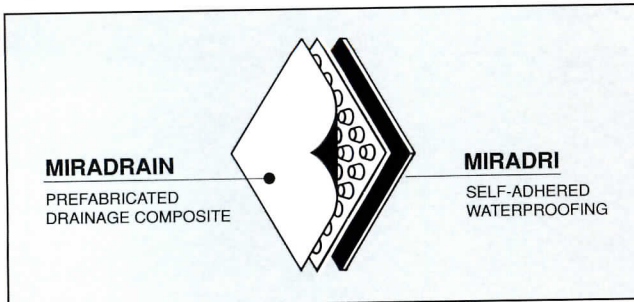


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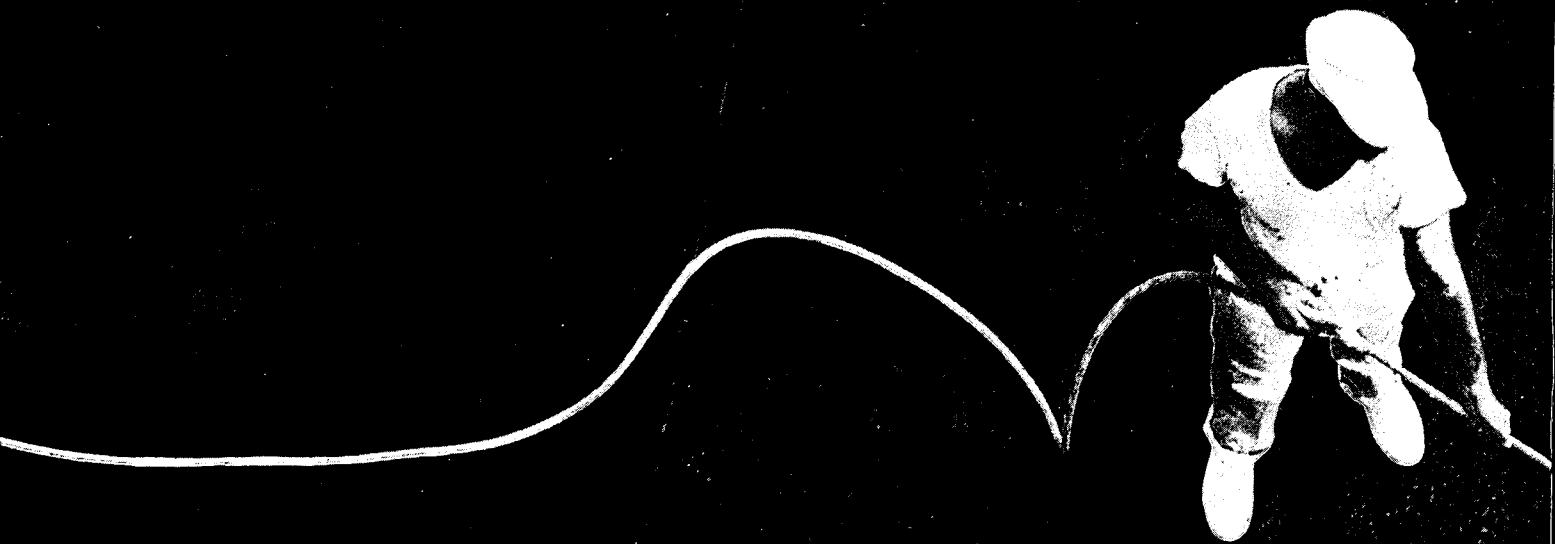
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White.



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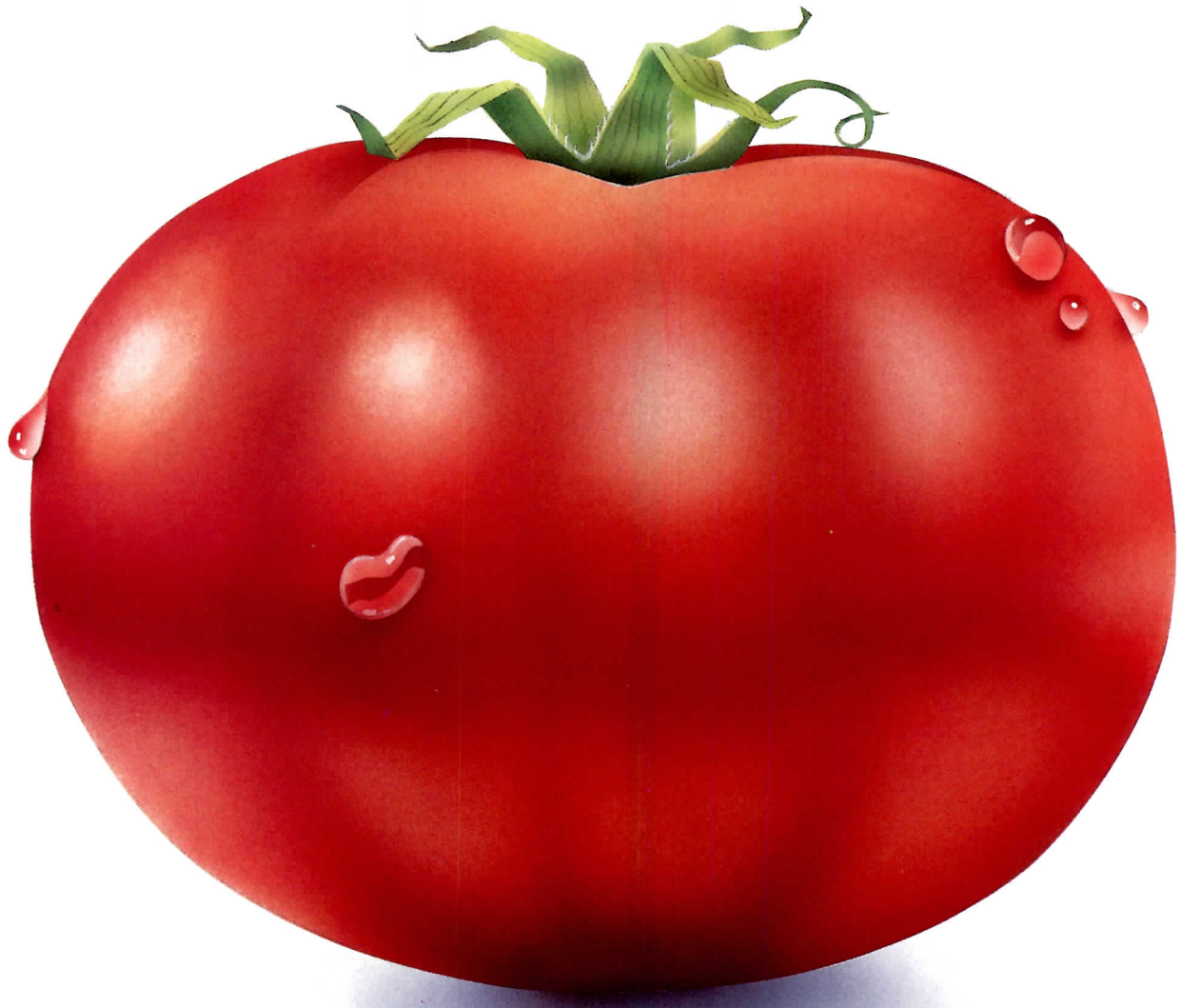
Other advantages of coatings based on Rhoplex EC acrylics are light weight and good adhesion to many roofing substrates. From new and aged BURs to asphaltics, modified bitumen, and metal.

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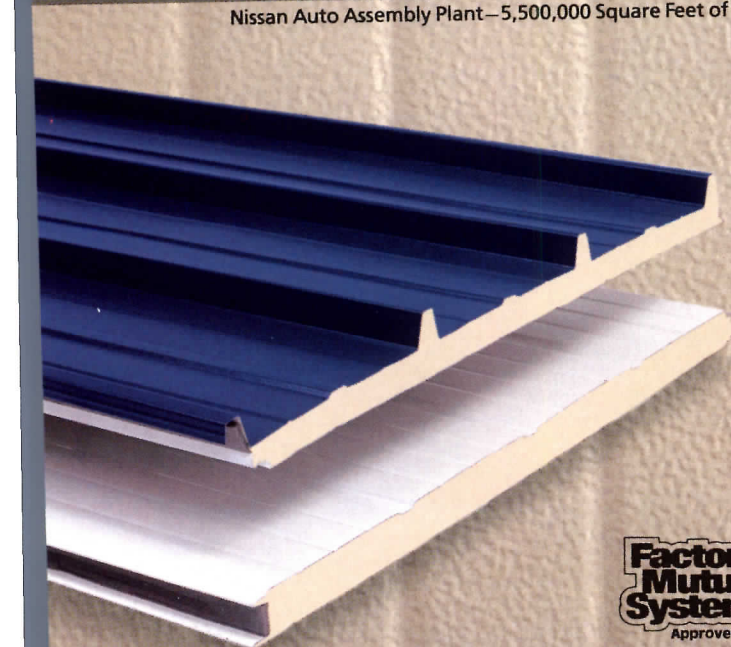
While Aluma Shield has operated a fully automated continuous line panel manufacturing system since 1983, the technology and equipment for producing our new line of panels is even better. Over 300 million square feet of complete buildings have been constructed in Europe utilizing this system... a system which is totally state-of-the-art and gives us the capacity to supply over 15 million square feet of panels per year.

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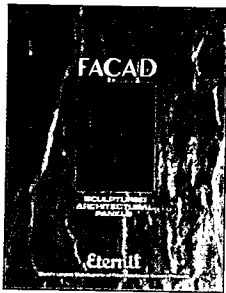
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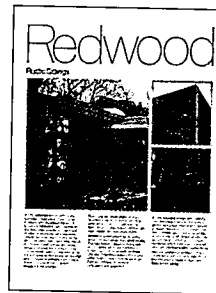
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193 Architectural panels
 Facad panels are sculptured exterior building panels with a textured-slate surface. Produced from fiber-reinforced calcium silicate, they are dense, non-combustible, and durable. Factory-coated in wheatstone, stone white, black, or pewter, or natural tan for on-site painting, panels are 7.5 mm thick, 47 5/8 by 95 5/8 in. Four pages. Eternit Inc., Reading, Pa.



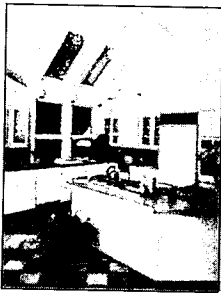
199 Rustic redwood siding
 Rustic redwood siding textured with streaks of heartwood and sapwood is carefully seasoned and saw-textured to provide dimensional stability and low-maintenance characteristics. Available in bevel, rabbeted bevel, board-and-batten, tongue-and-groove, channel, and shiplap patterns. Two pages. California Redwood Assn., Novato, Calif.



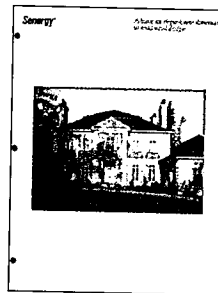
194 Cold-process roofing
 Thermo seamless cold-process systems incorporate elastomer-modified asphalts, elastomeric rot-proof polyester membranes, and reflective, colored surface coatings to provide a fully elastomeric roof for new and existing construction at any slope. Five-year performance warranty. Two pages. Thermo Materials, Inc., San Diego.



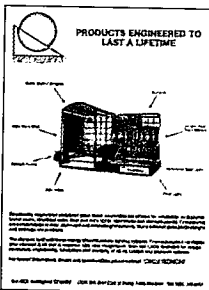
200 Bitumen membrane
 Derbigum, a modified-bitumen roofing membrane, has a tensile strength of up to 280 lb, puncture- and tear-resistance, and extended weatherability. Graphics illustrate applications and installation techniques and Derbigum's multireinforced construction. 12 pages. Owens-Corning Fiberglas Corp., Toledo, Ohio.



195 Roof windows and skylights
 Velux roof windows in six sizes pivot and open under manual control for cleaning from the inside. Six models of ventilating skylights are operated by manual or electric control. Fixed skylights come in seven models with or without a ventilation flap. Four styles of flashing for various roof styles. Eight pages. Velux-America Inc., Greenwood, S. C.



201 Exterior finish system
 Senerflex, a polymer-based EIFS, comes in a variety of sizes, from small columns to 8-ft by 40-ft panels. New home and remodeling applications are shown. Illustrations include cutaways of the four-component wall system and photographs of foam-shaped architectural detailing. Four pages. Senergy Inc, Cranston, R. I.



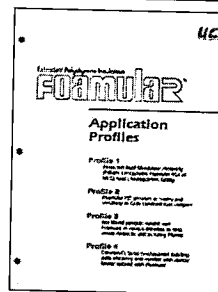
196 Glass-block panels
 Structurally engineered, preglazed glass-block assemblies may be installed as skylights, barrel vaults, structural walls, floor and deck lights, stair treads, and sidewalk panels. Components prefabricated in steel, aluminum, and concrete grid systems. A variety of glass-block designs and etchings available. Circle Redmont, Inc., Wallingford, Conn.



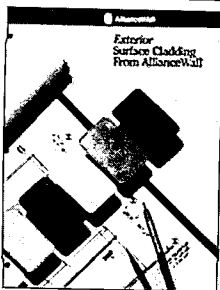
202 Insulated panel systems
 A metal wall and roof system has been developed for architectural, commercial, and industrial projects. Field-assembled composite wall systems, concealed fastener architectural wall panels, interior liner panels, and industrial roofing and siding are offered in heavier gauges with special coatings. 10 pages. ECI Building Components, Inc., Stafford, Tex.



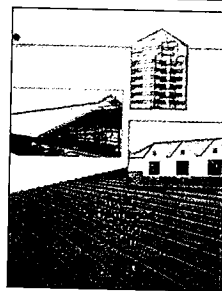
197 Copper
 A revised and updated edition of Copper and Common Sense contains state-of-the-art details on both the performance and installation of copper used in buildings. Designed for easy reference, the spiral-bound hard-cover book provides photographs, detailed drawings, specifications, and other useful data. \$15. Revere Copper Products, Inc., Rome, N. Y.



203 Rigid foam insulation
 Construction applications of Foamular, an extruded polystyrene insulation, are profiled in a series of 4-page technical guides. Masonry uses include placement between wall ties, against concrete block, poured concrete, or masonry walls, as a wall furring system, and as below- or on-grade insulation in perimeter and foundation walls. UC Industries, Inc., Parsippany, N. J.



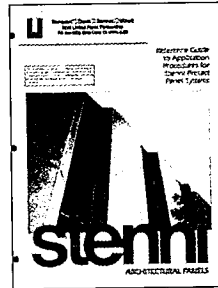
198 Exterior cladding
 A brochure on ColorFusion Ceramic-On-Steel Exterior Surface Cladding contains color photos, specifications, and lists test data. Both veneer and insulated panels are covered. Almost any color, as well as graphics and patterns, can be fused into the ceramic surface. 12 pages. AllianceWall Corp., Norcross, Ga.



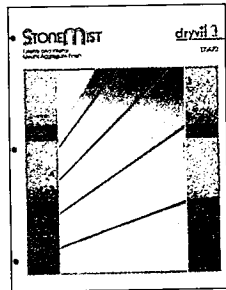
204 Steel roofing system
 The Total Performance Roofing System is attached by clips that remain positively secured, yet permit thermally induced movement of roof sheets in both directions. Heavily galvanized, 22- or 24-gauge steel sheets are protected with a 3-mil epoxy base coat and finished in urethane or fluoropolymer coatings. 12 pages. H. H. Robertson Co., Pittsburgh.



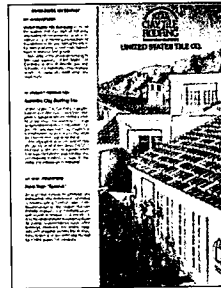
205 Roofing systems
A new Design Manual for use by building owners, facility engineers, and architects doing new or retrofit roofing. Full-color cutaway drawings show mechanically fastened system as well as adhered, IRMA, bar, and ballasted systems. Samples of roofing membrane included. 350 pages. Sarnafil Roofing Systems, Inc., Canton, Mass.



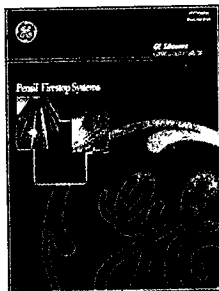
211 Architectural panels
A guide to application procedures for the Stenni precast panel systems. These are exposed aggregate panels of laminate construction combining stone embedded in a glass fiber reinforced substrate. Storage, trimming, drilling, attaching, expansion gaps, and caulking are described. Four pages. United Panel Partnership, Santa Clara, Calif.



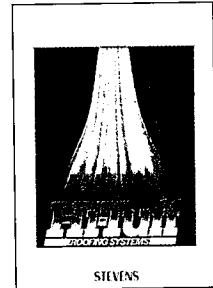
206 Exterior finish
Stone Mist is a spray-applied, ceramically colored, quartz aggregate finish in an all-acrylic binder for all Dryvit exterior systems. It may also be applied over exterior masonry, precast or cast-in place-concrete, cement block, and other approved substrates. Six granite-look colors. Two pages. Dryvit Systems, Inc., Warwick, R. I.



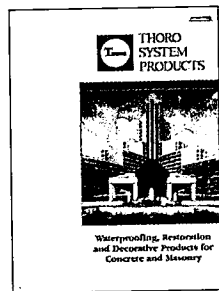
212 Clay roof tiles
Specifications and application directions for clay roofing tile in the two-piece mission style (1,000 lb per square), the S tile (900 lb per square), and a flat shingle tile (1,030 lb per square). Eleven shades each for two-piece and S styles, and three for the flat shingle. Eave closures, gable rake, and starter cover tiles available. Two pages. United States Tile Co., Carona, Calif.



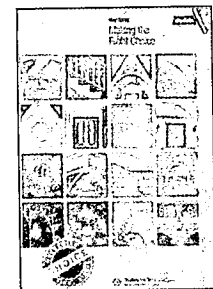
207 Firestop systems
Pensil 100 Firestop Sealant is a one-component, neutral cure, silicone rubber sealant for joints and apertures that need to be sealed to prevent spread of smoke, fire, toxic gas, and water. Pensil 200 Firestop Foam is a two-component silicone that expands to four times original volume. Two pages. General Electric Co., Waterford, N. Y.



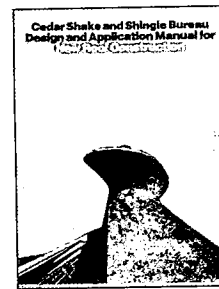
213 Single-ply roofing systems
Technical details about all components of the Hi-Tuff and Hi-Tuff Plus roofing systems, including the Hypalon-based scrim-reinforced Hi-Tuff membrane, Hi-Tuff pavers, Hi-Tuff colors, UL-labeled wood fiber, extruded polystyrene, and foil-faced isocyanurate insulations. 16 pages. JPS Elastomeric Corp., Northampton, Mass.



208 Waterproof coatings
Descriptions of a broad line of materials to waterproof, repair, and protect concrete and masonry structures. Among them are waterproof and decorative coatings, bonding agents, plaster mix, stucco, clear treatments, pointing and grouting, floor treatments, and exterior insulation. 10 pages. Thoro System Products, Miami.



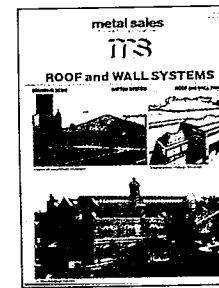
214 Vinyl siding
Information and photographs of the Restoration Collection and other residential vinyl sidings. The collection offers low-maintenance siding in low-gloss finish in historically accurate styles. Details include nine distinctive door and window system components. Available in a broad range of colors. Wolverine Technologies, A Certainteed Co., Dearborn, Mich.



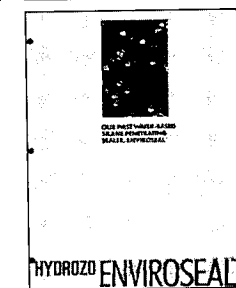
209 Cedar shakes and shingles
The New Roof Construction Manual describes the grades of cedar shakes and shingles, and illustrates application details for conventional, mansard, and low-slope roofs. Also included is information on flashing, junctures, hips, ridges, and ventilation. 20 pages. Cedar Shake & Shingle Bureau, Bellevue, Wash.



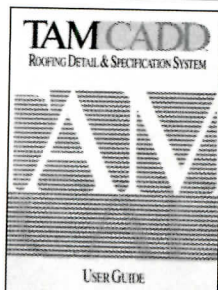
215 Membrane waterproofing
Performance information on Gacoflex IRMA (Insulated Roof Membrane Assembly), LM-60 liquid urethane applied directly to concrete or plywood flat roof decks and covered with a course of moisture-stable, expanded polystyrene boardstock insulation. The system has received a Class A fire rating. Two pages. Gaco Western, Inc., Seattle, Wash.



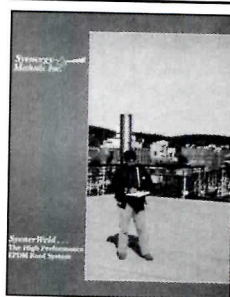
210 Metal roof and wall systems
Descriptions, illustrations, and specifications for a line of steel roof and wall panels, standing seams, batten systems, concealed fastener panels, and ribbed panels as well as secondary framing members. Finishes include zinc aluminum, galvanized with silicone polyester, and Kynar 500. 12 pages. Metal Sales Manufacturing Corp., Louisville, Ky.



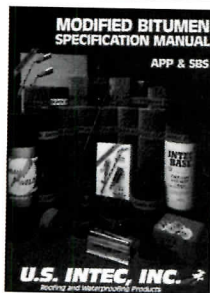
216 Concrete and masonry sealer
Performance and specifications for Enviroseal, a water-based alkylalkoxysilane sealer that penetrates concrete and masonry surfaces to protect against water and chloride intrusion, penetration of other water-borne contaminants, and freeze/thaw damage. Resists surface abrasion and the effects of sunlight. Four pages. Hydrozo, Inc., Lincoln, Neb.



217 Roofing detail program
Tam-CAD roofing detail and specification software is described as the first intelligent and interactive program offered for building materials, able to reduce drafting time by 90 percent. Users Guide illustrates screen displays and shop drawings produced by the IBM/compatible product. Tamko Asphalt Products, Joplin, Mo.



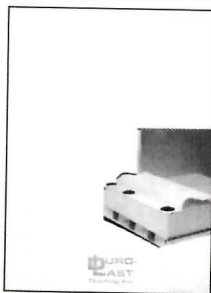
223 EPDM membrane roof
The SynerWeld roof, a thermoplastic EPDM, is heat-weldable, and is described as offering superior oil and chemical resistance. Puncture- and UV-resistant, the roof may be installed ballasted, loose-laid, fully adhered, or mechanically fastened. Four pages. Synergy Methods, Inc., Danielson, Conn.



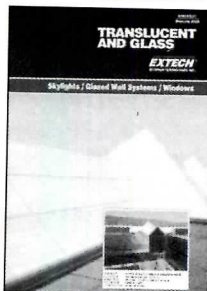
218 Modified bitumen roofing
The correct specification, detailing, and installation of both APP- and SPS-modified bitumenous roofing products is explained. Waterproofing membranes are designed for flat and sloped roofs, vertical walls, and in underground or protected applications. 72 pages. U.S. Intec, Inc., Port Arthur, Texas.



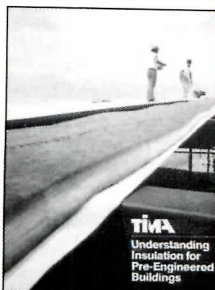
224 Light-diffusing panels
An architectural catalog demonstrates how the Kalwall translucent panel provides superior insulating values as well as diffused natural light. Large-scale curved, barrel, and sloped installations are featured. Eight pages. Kalwall Corp., Manchester, N..



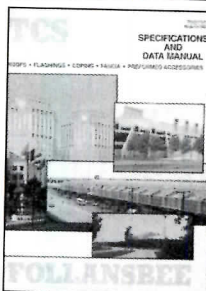
219 Single-ply system
Duro-Last offers a custom-made roof for each project, based on a non-wicking, UV-resistant polyester membrane. An information packet describes system features such as in-factory seam welding, site-specific flashings and curbs, and no-leak guarantees. Duro-Last Roofing, Inc., Saginaw, Mich.



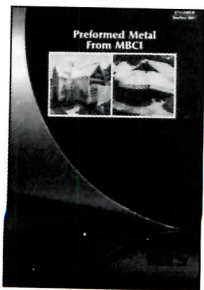
225 Skylight/wall systems
EXTECH is a source for both skylight, sloped-glazing, and barrel vault structures, and compatible glazing materials in glass, polycarbonate/acrylic, and translucent FRP sheet panels. The FRP product is offered in a range of light transmission and shading coefficients. Exterior Technologies, Inc., Pittsburgh.



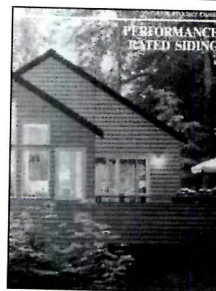
220 Metal building insulations
Understanding Insulation for Pre-Engineered Buildings discusses why and where to insulate, and compares the performance of the product types now available. Sectional drawings demonstrate how to install insulation in new and existing roofs. 16 pages. Thermal Insulation Manufacturers Assn., Alexandria, Va.



226 Terne metal products
Roofing and other architectural metal made of stainless steel coated with terne alloy will weather to an attractive warm gray color, even in the most severe industrial and marine environments. Standing- and flat-locked seam details are illustrated. Eight pages. Follansbee Steel, Follansbee, W. Va.



221 Metal components
Factory-finished, low-maintenance metal panels are shown used as an architectural roofing material, and as spandrels, canopies, and facades. The Ultra-Dek roof, fastened to structural members with a floating clip system, lets it respond successfully to extremes of temperature and foundation settling. MBCI, Houston.



227 Plywood siding
An updated Guide to the appearance, weathering characteristics, and finish options offered by Performance Rated plywood siding. Wood panel and lap siding projects illustrated; code acceptances are explained. Eight pages. American Plywood Assn., Tacoma, Wash.



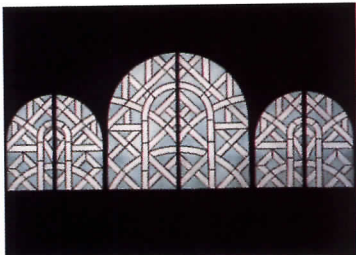
222 Exterior finish
Ful-O-Mite IDF, an exterior insulation finish, uses high-strength binder/adhesives to bond insulation board to code-approved substrates such as concrete, masonry, and exterior-grade gypsum sheathing. Available in 60 standard colors, as well as any custom shade. Four pages. TEC Inc., an H. B. Fuller Co., Palatine, Ill.



228 Metal roofing systems
Exterior building products of aluminum and steel include the Stand 'N Seam roof/fascia system, interlocking panels that remain watertight while allowing for thermal movement. Range of color and metallic finishes available. 12 pages. Alumax, Building Specialties Div., Mesquite, Texas.

8 Doors & Windows

Entrances & storefronts
 Glazing & accessories
 Hardware & specialties
 Metal doors & frames
 Metal windows
 Sloped glazing systems
 Special doors
 Special windows
 Window/curtain walls
 Wood & plastic doors
 Wood & plastic windows



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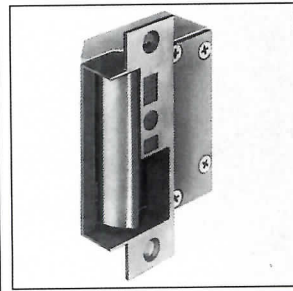
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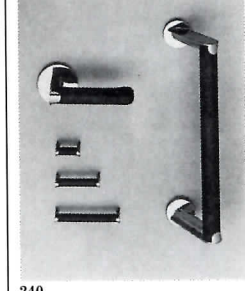
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229 Stained glass

Franz Meyer of Munich executes the work of independent designers and brings its studio to the service of the artist, interior designer, or architect for the production of stained-glass windows and artistic mosaics. Franz Meyer of Munich, Inc., Fairfield, N. J.

230 Laminated glass

Huslite double-laminated insulated glass is made with two laminated lights separated by an air space. An air space of 1/2 in. can attain a Sound Transmission Class rating of 42, and a 1-in. space, 46. Glass is available clear, or in a wide variety of tints that reduce solar-energy transmittance, control glare, and screen out UV rays. Laminated Glass Corp., Plymouth Meeting, Pa.

231 Fire-rated window

Hope's new casement ventilator fire-rated window, made from heavy intermediate hot-rolled steel sections, carries a 3/4-hour Factory Mutual label. Self-closing hardware permits automatic closing in a fire. The window can be designed to open in or out, and comes in a range of acrylic colors. Hope's Architectural Products, Inc., Jamestown, N. Y.

232 Glass corner blocks

Three new variations of the Weck corner glass block have been introduced. Clarity is a clear unit; Nubio matches the visual distortion pattern that admits light while protecting privacy; and Security is a heavy-duty block. These may be used with 6-in. block, or doubled at corners for use with 12-in. block. Glashauss, Inc., Elk Grove Village, Ill.

233 Circular window

The Tischler circular window is 5 ft in dia and constructed of solid hardwoods. It is completely operable and easy to clean on both sides. Available in several glass types, including laminated, and frame finishes. The glass and the window frame can both be bulletproof, depending on the type of system. Tischler und Sohn, Greenwich, Conn.

234 Electric strike

Adams Rite's 7900 series AC and DC electric strikes are designed to fit the ANSI spec location. The series includes five different cover plates to accommodate Adams Rite latches, LH Schlage latches, and RH and LH for other makes. Adams Rite Mfg. Co., City of Industry, Calif.

235 Casement windows

Etched-glass patterns complement the energy-efficient, weathertight wood casement windows in the Cathedral line. Decorative glass is furnished in a 1-in. insulated unit with optional low-E, or argon fill, or both. Various interior styles may be pine or oak; exterior aluminum cladding is available in nine colors. Weather Shield Mfg., Inc., Medford, Wis.

236 Lever door handle

The lever handle designed by Hans Hollein can be used either upside-up or upside-down. The design keeps the hand away from the door frame, protecting the thumb from injury. Offered with UL mortise locksets or tube latches for residential use. The Ironmonger, Inc., Chicago.

237 Glass walls

GlasWal IG (insulated glass) allows design of an all-glass wall without interior energy loss. These panels can accommodate expanses of glass as high as 50 ft and in virtually unlimited length. GlasWal CS (countersunk) eliminates all exterior face plates in installation. W & W Glass Products, Ltd., Spring Valley, N. Y.

238 Weatherproof window

Norwegian-designed and Minnesota-made, the H window is designed for frigid winters with gale-force winds, sweltering summers with high humidity, and extended periods of rain, sleet, and snow. Air infiltration is virtually eliminated. Wood-framed with exterior aluminum cladding, the unit comes with double- or triple-glazing in low-E glass with argon fill. The Window Co., Austin, Tex.

239 Divided-light window

Pozzi's line of true-divided-light windows feature a new 15/16 in. traditional bar in addition to an existing 1-11/16-in. bar. The narrow-bar model is available in casement, swing, standard double-hung, and horizontal sliding windows, swinging and wide-stile sliding doors, and all sashed geometric units. Pozzi Wood Windows, Bend, Ore.

240 Door and cabinet hardware

The Fusital line of door hardware and cabinet pulls includes equipment of genuine briar wood. The line includes the Model H313 sculpted door lever set and pull in brass or chrome accents. Valli & Colombo, Duarte, Calif.



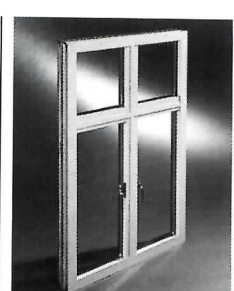
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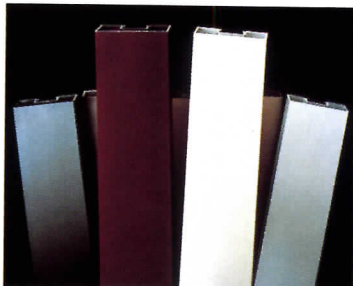
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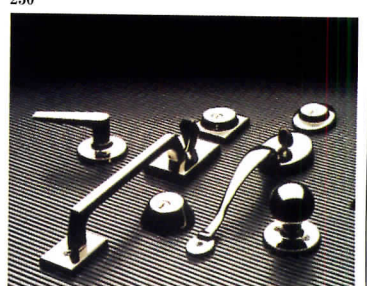
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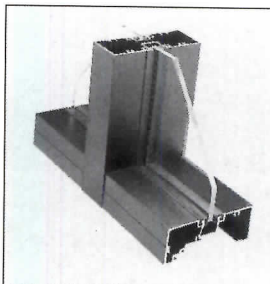
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241 Art glass

Elysian handles traditional or contemporary design projects from initial concept through production. It specializes in etched, sandblasted, and carved windows; stained, leaded, zinc, and copper-foil windows; etched, sandblasted, beveled, painted, and kiln-fired screens; and copper-foil and zinc lampshades and domes. Elysian Art Glass Co., Denver.

242 Trim casing

New Morning has added 12 standard curved interior and exterior round-top window trim profiles such as 2- and 1-in. exterior brick molds, for use with any size or *shape custom window*. Custom profiles can be up to 4 in. wide. New Morning Windows, Bloomington, Minn.

243 Access panel

The Model CFD fire-rated ceiling door provides access to utilities in a fire-rated floor/ceiling or roof/ceiling assembly. It carries the Warnock Hersey label for 1-hr-combustible and 1-hr-noncombustible floor/ceiling systems. The door is self-closing and self-latching. J. L. Industries, Bloomington, Minn.

244 Gold-coated glass

With its multifunction Ipasol Plus 24K gold coating, Interpane can produce high-performance IG units of gold color uniformity that achieve shading coefficients as low as 0.14 and U values as low as 0.24. The vacuum-sputtered coating helps reduce air-conditioning loads and retains heated or cooled interior air, reducing hvac costs. Interpane Coatings, Deerfield, Wis.

245 Anodized aluminum

Kawneer has added two new anodized finishes, Champagne and Burgundy, to the standard Clear, Bronze, and Black of its products. Kawneer produces anodized finishes with a two-step electrolytic process. The anodized finish is said to offer greater hardness and durability than painted finishes. Kawneer Co., Norcross, Ga.

246 French door

Atrium has redesigned the classic French door to add energy efficiency and security. The glass area has been increased. High-performance glass is 20 percent more efficient than regular insulated glass and screens out uv light. One turn of the door lever locks the door in five different places. The Atrium Door & Window Co., Dallas.

247 Shutters

The Vixen Hill cedar shutter line is available in five fixed louver or raised panel models. Made from clear Western Cedar, they have teak-pegged mortise-and-tenon joints. Standard widths begin at 2 ft, continuing in 4-in. increments to 3 ft 8 in. Heights rise in 4-in. increments from 2 ft 7 in. to 6 ft 11 in. Vixen Hills Mfg. Co., Elverson, Pa.

248 Glass-block grid system

The IBP Glass Block Grid System is a lightweight aluminum-alloy grid enclosing PC GlassBlock products to create easily installed windows, walls, and skylights. Wall and window systems fit most openings up to 144 sq ft; skylights may be as large as 16 sq ft. Available in white or metallic finish. Pittsburgh Corning Corp., Pittsburgh.

249 Storefronts

The FG 400 EZ and FG 450 EZ flush glaze-framing systems reduce installation time and labor on interior and exterior glazing, says Amarlite. The new elastomeric gaskets are identical on both sides of the glass. Amarlite Architectural Products, Atlanta.

250 Aluminum windows

The Designline 90 aluminum window series can duplicate existing steel-casement window profiles and sightlines. The series can reflect a variety of styles, including Tudor, Neo-Gothic, Deco, and Modern. Approved by the New York Landmarks Preservation Commission. Four-bar hinges permit interior cleaning of both sides. Wausau Metals Corp., Wausau, Wis.

251 Door hardware

Ebony, the first in the Weiser Lock Manhattan collection of door hardware, is a product of advanced nickel-plating technology. A variety of functions are available, including front/back lockset, bed/bath set, storeroom lock, and dummy trim. Weiser Lock, Huntington Beach, Calif.

252 Custom windows

Crestline can design and build any custom-designed window—big, small, round, square, angled—in a choice of single-glazing, standard insulating, or SmartR insulating glass. Crestline also has a broad assortment of standard window products. Crestline, Wausau, Wis.



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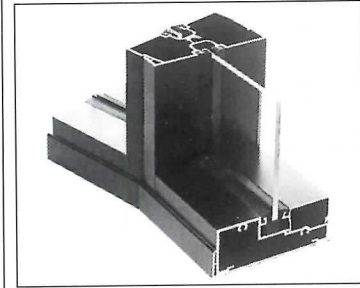
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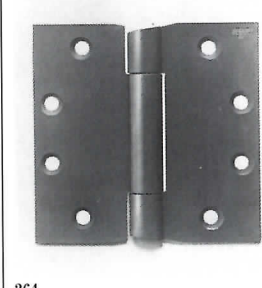
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253 Curved-glass bows

As an alternative to conventional angled bow or bay windows, Marvin offers curved-glass windows, available in single-hung, picture unit, or combination assemblies. Single-hung bow assemblies come in 27 sizes, including two-, three-, and four-wide units. Glass bows are manufactured to a 6-ft radius. Marvin Windows, Minneapolis.

254 Nylon handles

Hiawatha push-pull nylon handles are made for heavy wear in such applications as schools, factories, hospitals, and shopping malls. Made with color throughout. Available for back-to-back or through-bolt installation, in models for glass, metal, or wood doors. Hiawatha, Inc., Bloomington, Minn.

255 Acrylic glazing

Acrylite OP-2 acrylic sheet, shown used as magnetically attached interior insulating windows in the National Parks Service's restoration of the Lincoln Home, contains light-absorbing additives that filter out 98 percent of the UV radiation in sunlight, minimizing fading and deterioration in draperies, rugs, paint, and furniture. All visible light is transmitted. CYRO Industries, Mt. Arlington, N. J.

256 White flashed-opal glass

DESAG white flashed-opal glass provides uniform illumination and optimal diffusion for artificial and natural light. Even thickness of the flashing obscures the source of illumination without changing the color of the transmitted light. Applications include light partition walls and ceilings, illuminated signs, and lamp shades. Schott America, Yonkers, N. Y.

257 Garage doors

Overhead's line of garage doors is designed for a variety of needs. The 511 Series of aluminum doors, (shown) provides high light transmission. The 591 Series insulated door is for energy efficiency. The 424 Series 24-gauge steel door offers strong security. Overhead Door Corp., Dallas.

258 Mullions

YKK has introduced hinged and flexible mullions to its line of storefront systems. The hinged mullion adjusts up to 15 deg to allow such creative designs as curved and S-shaped walls. A flexible corner mullion is available for both insulated and single-glazed storefront framing. YKK Aluminum Products Div., Atlanta.

259 Fade-resisting glazing

HeatMirror glazing with UV-fade protection is now available in many Hurd products, including aluminum-clad and primed wood casements, awning and double-hung windows, and patio doors. HeatMirror windows block more than 99 percent of the sun's UV rays. Hurd Millwork Co., Medford, Wis.

260 Locksets

Lori Lock has added the Cameo and Medallion series to its line of residential and commercial brass door hardware. The locksets use elliptical escutcheons and pitcher, lever, and knob handles with either mortise or bored lockset functions; keyways match most U. S. hardware manufacturers. Lori Corp., Southington, Conn.

261 Custom doors

Vistawall offers custom extra-tall or-wide doors, or doors with intermediate stiles, muntins, and midpanels. All are built with welded, bolted, and shearblocked-corner construction. Doors can be designed for any service, such as heavy traffic of schools and auditoriums, barrier-free design and exit codes, or security. Vistawall, Terrell, Tex.

262 Glass blocks

For straight or curved walls, inside or out, Solaris offers 70 models of glass block. The latest of these is a pattern of diamonds. Glass blocks are an efficient insulating barrier against heat, cold, and noise. Easy to clean and maintenance-free, they have high impact-resistance. Solaris Glass Blocks, Coral Gables, Fla.

263 Fire-resistant doors

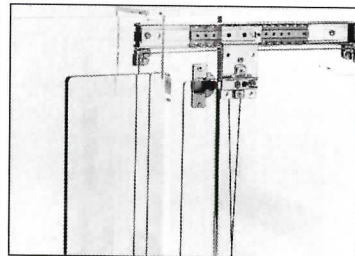
Eich transparent fire-resistant glass wall and door systems have been tested and approved by UL for 60- and 90-minute fire separations. Use of Contraflam glass allows door panels as large as 4 by 7 ft. Wall systems can be made of aluminum or stainless steel, as well as different solid hardwoods. Eich Corp., Los Angeles.

264 Institutional hinge

The Institutional Hinge was created to achieve higher performance and security in hollow-metal door and frame applications. It is made of heavy solid wrought steel or stainless steel. Pin line is invisible, and the pin is virtually impossible to pound out. Available in several finishes. Stanley Hardware, New Britain, Conn.



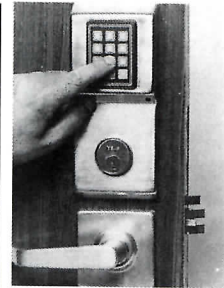
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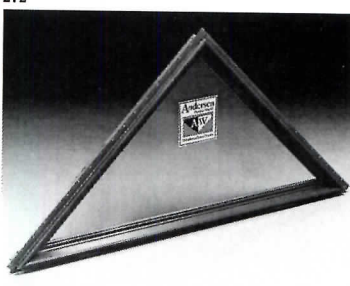
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265 Revolving doors

Revolving doors can be made to specification, permitting a wide variation in wing width, door height, and stile, rail, and canopy dimensions. Finishes may be painted aluminum, stainless steel, and bronze Muntz cladding. Also available are tinted glass enclosures, metal ceilings, and ceiling lights. Tubelite Architectural Products, Reed City, Mich.

266 Door pulls

The HD9500 Series continues the firm's exploration of the design opportunities inherent in the simple tube. With special fabrication techniques, door pulls are handcrafted from 1 1/2-in.-dia tubing to create a seamless finish. Engraved lettering in black infill is available on all door pulls. Forms + Surfaces, Santa Barbara, Calif.

267 Stile and rail doors

The Classic Collection's latest door is the Beaumont Place with matching sidelights. Triple glazing in either brass or zinc-patina came protects the decorative-glass insert. Simpson also makes a broad range of solid wood doors, thermal doors, standard house doors, french doors, and fire doors. Simpson Door Co., McCleary, Wash.

268 Door slides

The AntiRak solves the problem posed by large, heavy pocket doors, where extra weight could cause sagging. This system uses the door's own weight to hold it straight and firm, and can accept doors up to 60 in. tall and 1 1/4 in. thick. Slide is available in lengths from 12 to 28 in. Accuride, Santa Fe Springs, Calif.

269 Fire-rated oak door

A patented raised-panel oak door has attained a 60-minute fire rating as certified by Warnock Hersey, the first wood raised-panel door to achieve this rating. The company also makes 30-minute doors and a wide range of unrated doors for commercial and residential applications. Five-year warranty on doors. TruLine Mfg. Inc., Redmond, Ore.

270 Door saddles

The Traction Tread line of door saddles has added polished and unpolished bronze. Rubber inserts fit into profiled metal grooves in the saddles, providing good traction with a smooth, clean surface. The treads, also available in unpolished aluminum, can be customized as a stair nosing. Zero International, Inc., Bronx, N. Y.

271 Door closers

European TS and American DC door closers are now offered in a variety of colors to match the door hardware available from such manufacturers as Hewi, NormBau, and BBW. The color line includes bright yellows, green, blues, and red as well as softer shades and basic black. Dorma Controls Inc., Reamstown, Pa.

272 Heavy commercial windows

Model 685 (double-hung with take-out sash) and Model 684 (single-hung) aluminum frame windows have been introduced to accommodate the need for monumental-size windows. Thermal barriers provide condensation and conduction resistance. Season-All Industries, Inc., Indiana, Pa.

273 Triangular window

The newest model in the Perma-Shield Flexiframe line of windows is the Isosceles Triangle, an equal-sided window that can be custom-ordered to fit any rough opening up to 60 sq ft. Windows have a white- or Terratone-colored low-maintenance exterior and an unfinished white pine interior. Andersen Corp., Bayport, Minn.

274 Electronic locks

The Yaletronics Touchcode series of electronic locksets provide a keyless access. Door is unlocked by entering a six-digit number on the keypad. With the correct number, the lockset will unlock for an adjustable time, from 4 to 16 sec. Yale Security, Inc., Charlotte, N. C.

275 Glass security door

A line of glass doors protects against forced entry and ballistics up to .44 Magnum. Made of all-glass or glass-clad polycarbonate laminates, the doors are equipped with heavy-duty, solid-aluminum extrusions, and steel-reinforced framing members. Doors are sold as a system, including all hardware and equipment. Falconer Glass Industries, Falconer, N. Y.

276 Lever sets and deadlocks

The initial designs in the Continental series of leversets and matching deadlocks, the Barkley and the Esquire, come with an integral trim rose that repeats the design pattern of the lever. The deadlocks have police-recommended 1-in. deadbolts and specially formed turnpieces to allow easier lock operation. Kwikset Corp., Anaheim, Calif.



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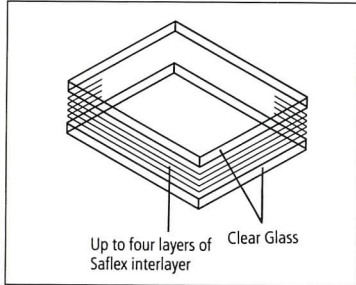
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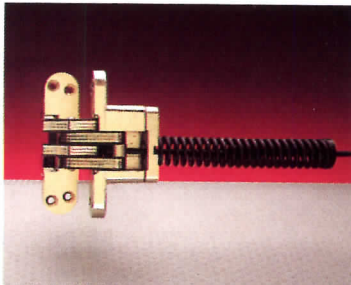


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Up to four layers of
Saflex interlayer
Clear Glass

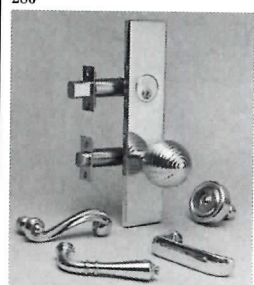
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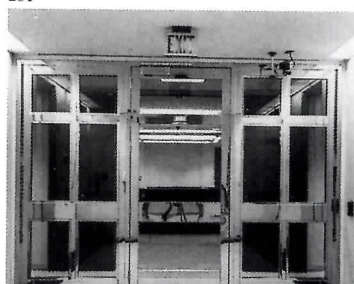
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277 Pre-engineered door

DesignerDoor is a factory-built entrance system available in either stainless steel or Muntz metal, in mirror or satin finishes. Components, precisely cut to specification, are shipped knocked-down; doors come fully assembled. Pre-manufacturing lowers in-place cost. Dawson Metal Co., Inc., Jamestown, N. Y.

278 Glazing colors

The Saflex OptiColor System laminates several polyvinylbutyral interlayers between glass panes to combine strength, safety, security, and noise control with custom colorations. Offered in 19 colors, the system varies interlayer thickness and color combinations to create hundreds of transparent colors of varying densities. Monsanto Chemical Co., St. Louis.

279 Door hardware

The International Guild Series of door and cabinet hardware includes six lever designs, matching door and cabinet pulls, a handleset, and six entrance-trim sets. Available in polished brass, polished chrome, or a combination of polished brass and chrome. Baldwin Hardware Corp., Reading, Pa.

280 Opening glass wall

The Opening Glass Wall is an exterior, wood-framed folding-door system that allows openings as large as 12 ft to provide more access, space, and light. Made in three, four, or five panels, it can be used as swinging french doors or as exterior folding doors. Nana Windows & Doors, Mill Valley, Calif.

281 Door closer

The Soss Invisible Closer functions as a hinge as well as a totally concealed door closer. It comes in three sizes and can be retrofitted to existing doors. Closure rate is adjustable with an Allen wrench. Available in dull brass and dull chrome finishes. Universal Industrial Products Co., Toldeo, Ohio.

282 Exit devices

The 80 Series of electrified exit devices provides remote control over doors, delayed opening of code-prescribed exits for permissible lengths of time, and signals a remote station when a door is being operated. A line of delayed-action accessories is available. Sargent Mfg. Co., New Haven, Conn.

283 Cylinder lock

The Primus high-security cylinder lock combines advanced cylinder design with a rigid key-control system. In addition to the conventional six-pin locking mechanism, the system has a secondary shear line activated by five fingerpins and a side bar. Hardened drill-resistant pins protect vital parts. Schlage Lock Co., San Francisco.

284 Lever handle

The 117 lever handle introduces a distinctive rectangular design styled for comfortable handling. The new rectangular design is also available in door pulls and cabinet hardware. HEWI, Inc., Lancaster, Pa.

285 Fire-rated glazing

FireLite, an alternative to polished wire glass in fire-rated locations, looks and feels like regular window glass. Because it is a ceramic, it has a low coefficient of expansion and can withstand fire and rapid cooling. Its 3/16-in. thickness fits standard fire-rated frames. Can be cut with a glass cutter. Sizes up to 48 by 96 in. Technical Glass Products, Kirkland, Wash.

286 Wood entry doors

The Pella line of wood entry doors has been expanded to cover a range of sizes from 2-ft 8-in. widths up to 8-ft door heights. Four styles of 8-ft entry doors are complemented with 8-ft sidelights. Built-in aluminum vapor barriers and cross-band construction eliminate warping and sticking. Rolscreen Co., Pella, Iowa.

287 Deadbolt lockset

New deadbolt locksets with solid brass trim have a flush-mounted cylinder for appearance and to protect the lock mechanism against tampering. Knob and lever handles come in 20 styles and four finishes, with coordinating escutcheon plates. Offered for single- or double-cylinder function with Schlage C keyways. Omnia Industries, Inc., Cedar Grove, N. J.

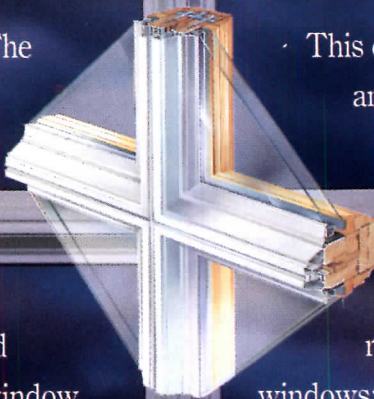
288 Molded nylon hardware

A line of tubular molded-nylon accessories includes door handles in a variety of sizes and shapes, cabinet hardware, hooks, and bath fittings such as towel bars and soap dishes. Comfortable to the touch, easy to clean, and durable, items are available in 12 colors. Normbau, Inc., Mt. Washington, Ky.

AND YOU THOUGHT ANDERSEN WAS JUST A HOUSEHOLD NAME.

Presenting Flexiframe® windows. The custom-made commercial window from the company you may have thought didn't even make one: Andersen.

Flexiframe windows offer a nice change from common aluminum. They're made with a glass-fiber-enhanced polymer, a version of our Perma-Shield® window.



This enhanced polymer material is so strong and corrosion-resistant, it's actually used along the seacoasts as a substitute for structural steel.

On the inside, Flexiframe windows offer yet another revolutionary material you don't usually find in commercial windows: wood. Our warm Ponderosa pine gives

office interiors a feeling cold aluminum can't match.

And since Flexiframe windows are custom-made, they can be built to your specifications in $\frac{1}{16}$ " size increments.

So if you believed we just made windows for homes, you may never think of us quite the same again.

For more information on using Andersen® Flexiframe windows in your next commercial project,

just call 1-800-635-7500 and ask us for the name of your local Andersen commercial representative.

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THE AMAZING ELLISON BALANCING ACT

ANOTHER GREAT
DOOR OPENING PERFORMANCE
WITH NO ACROBATICS



Opening large, heavy entrance doors can turn just about anyone into a first rate acrobat. We've all pulled and tugged with briefcase or packages or small children in hand. (This experience can be as frustrating in mall department stores as it is in high rise office buildings.) Ellison found a solution to the problem in 1928 and has been producing their amazing balanced doors ever since. Each one custom designed and beautifully crafted from bronze, stainless or aluminum, Ellison balanced doors operate effortlessly regardless of size or weight. As they are opened the hinge stile travels in an elliptical arc, not only reducing wind and pressure loading, but also saving sidewalk or lobby space. Long admired as the aesthetic answer to the difficulties created by heavy entrances, they can be found performing in the finest commercial high rises, hotels and department stores worldwide. The amazing act of balancing a door. From Ellison. For a complete catalog and technical support including design consultation, call or write:



ellison

Ellison Bronze Co., Inc.

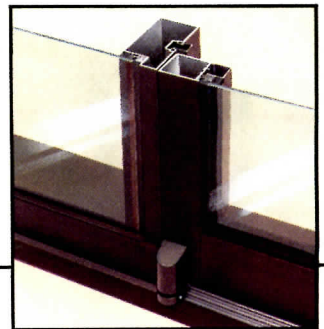
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Flushfront Entrance Systems, the beauty of uninterrupted Glass and Metal.

Flushfront Entrances offer for architectural consideration a silicone glazed, single plane entrance installation that results in a unique "ribbon of glass" visual effect. The glass plane is to the exterior and seems completely unencumbered by the systems interior framing profiles. See us in Sweets 08400 UMW.



For complete information call 1 (800) 627-6440, Fax 1 (800) 289-6440, or write

United States Aluminum Corporation

Manufacturing Facilities

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200 Singleton Drive
Waxahachie, Texas 75165
Telephone (214) 937-9651

6969 West 73rd Street
Chicago, Illinois 60638
Telephone (708) 458-9070

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

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Window Specification



Computer Aided Design System From Weather Shield Mfg., Inc.

Weather Shield, one of the country's premier wood window and door manufacturers is proud to announce the pending release of our QUIK-CAD computer product specification system. This quick and easy system will solve your existing window and door specification problems.

► How Does It Work?

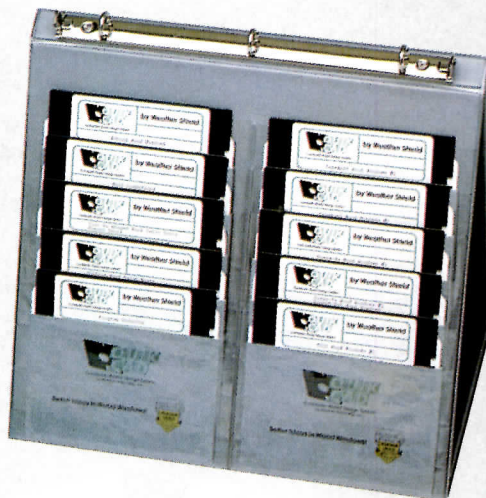
QUIK-CAD is a totally new system that provides an easy step by step selection process that allows the user to insert window and door specifications, plus elevations, into any CAD drawing.



Made QUIK-CAD Easy!

Weather Shield's QUIK-CAD has the following features:

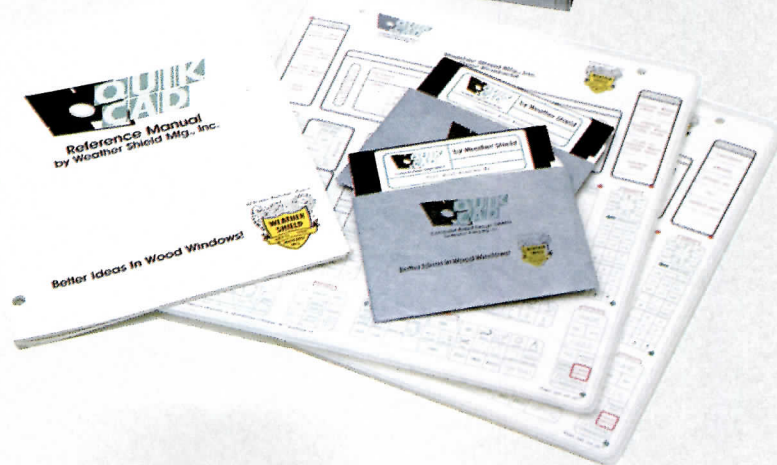
1. Simple, easy to follow step by step instructions.
2. Generation of a product schedule for insertion into a graphic file or a printed report.
3. Easy to use templates.
4. Pull down menus for specific functions.
5. Available "prompts" and extensive on-screen help.
6. High quality graphics.
7. Includes area for building conditions and notes.
8. Operates under AutoCAD® Release 10.
9. Selections can be placed, scaled and modified easily.
10. Operates on both a hard disk or floppy disk resident system.



The Benefits Are Obvious...

- Quick availability of product specific details and elevations.
- Instant product insertion into plans at the design stage.
- Easy viewing superior quality graphics.
- Significantly reduces shop drawing loop.

To reserve your copy circle the reader response number below and your personal registration form will be forwarded to you.



**QUIK-CAD from Weather Shield...
We've just made your job easier!**

Weather Shield Mfg., Inc.
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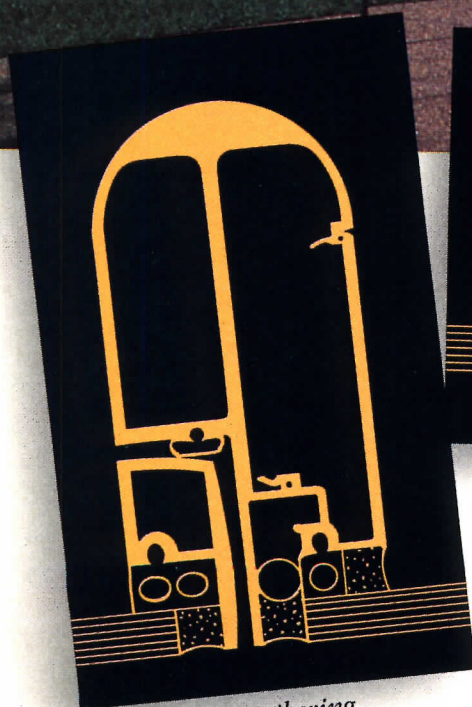
Better Ideas In Wood Windows!

All Weather Protection - Always!

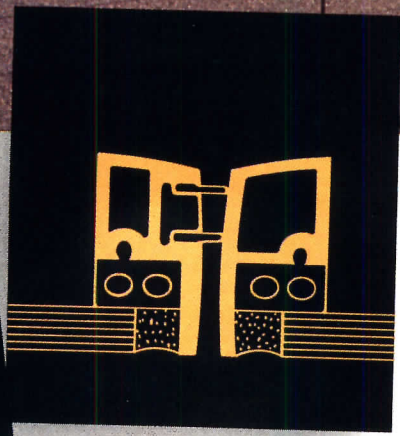


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CRYSTALLINE. IT'S MORE THAT MAKES IT WORTH IT



Sealair bulb weathering to reduce air infiltration at door perimeter.



Adjustable astragal at meeting stiles for thermal integrity.



A full palette of fluoropolymer paint finishes or dramatic non-fading Permaodic anodized finishes.

HAN THE LOOK



Crystalline is a smooth, continuous exterior of uninterrupted reflective glass. With no visible mullions or metal framing.

That's plain to see.

But what you can't see is how practical those good looks really are.

Our exclusive Sealair bulb weathering, for instance, greatly reduces air infiltration at the door perimeter.

In fact, it will not exceed .50 CFM/linear sq. ft. of perimeter crack at 6.25 PSF.*

An adjustable astragal for meeting stiles on pairs of doors cuts down on both air infiltration and heat loss. So it's more comfortable inside.

One-inch insulated glass increases thermal performance even more.

And a bottom rail weathersweep on the interior, along with the raised lip threshold, completes the weatherseal at the door perimeter.

Crystalline from Kawneer is a complete system for storefronts and one-story office buildings (even interiors) that proves good looks can be mundanely practical, too.

One look and it's easy to see why it's worth it.



Radiused horizontal and vertical framing members present a softly sculpted interior.

Kawneer

The designer's element.

*For more information contact:
Kawneer Product Information,
Department C, Technology Park-Atlanta,
555 Guthridge Court, Norcross, GA 30092.*

Planning a client's office is like designing a pressure cooker.

Even the file drawers will feel the stress. For example, a large drawer stuffed with folders has to absorb almost two hundred pounds of extra pressure.

Exactly the kind of office tension Accuride® drawer slides were made to handle.

Even when the pressure's on, our precision ball bearing movement remains sure and silent. With the solid feel that tells your client he's buying quality.

Our raceways are die-formed, made to closer

tolerances than conventional roll-formed steel could ever give you.

Perfectly straight, perfectly parallel.

For action that's always smooth and effortless.

So call 213/903-0373 and ask about Accuride's complete line of drawer slides for metal and wood furniture.

Every one is built to bear the stress and strain of the workplace with perfect composure.



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IN TODAY'S OFFICE, EVEN THE FURNITURE HAS TO SHOW GRACE UNDER PRESSURE.



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Arcadia sliding doors and windows give you complete freedom of expression, along with the confidence and collaboration you need to design bold, innovative, even provocative, structures. Arcadia products provide the strength, quality and aesthetic appeal you demand, while Arcadia personnel supply the extensive technical and detail experience you require. Architects & Arcadia—together we can generate the specifications for award-winning projects. Call or write Arcadia today *Free Sweet's brochure and architectural binder available.

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Our Final Exam.

Let's see if you can handle some simple arithmetic. Take 2500 energetic students. Multiply each one by several grand exits a day. Now multiply again by a 200 day school year. Finally, carry that figure out over years and years. The result: a cycle count as rugged as a climb up Mt. Everest.

To make the grade here, Von Duprin engineers had to design and build exit devices that didn't just meet industry standards but exceeded them. That's why we routinely test all our designs at more than twice the industry standard. Then run them through the gauntlet of fire tests, panic tests, salt spray/environmental tests and more.

It's all part of our redoubled effort to keep the customer satisfied. Responding to your needs with quality and service that's second to none. Not to mention offering you a complete product line which includes our new 900 stainless steel exit device series, the delayed exit system, electric strikes and the electromagnetic lock line.

In the long run, that spells value in a class by itself. For a short course in how Von Duprin can help you, give us a call at 1-800-999-0408. (In Canada 416-278-6128.)

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H O P E ' S

New Directions



Is there a time and a place for everything? For most things in life perhaps, but not everything. Some ideas break with conventional rules . . . like the steel window. It is an architectural element that proves an idea can fit anytime, any place. Why? Its lean, graceful lines belie enormous strength and durability. And those qualities — not possessed in like proportions by other windows — have for many designers become an important bridge from conventional thinking to the edge of new directions. One manufacturer has propelled steel window technology and aesthetics towards our future. Oddly, it is not a new company, but the oldest. Hope's. If the classic virtues of steel windows can become part of a new direction yet to be explored, Hope's can help forge your idea, bend the steel towards your future. Hope's since 1818.

Comprehensive literature, technical assistance and consultation are readily available.

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Don't make the same worn out choice.

ECLIPSE® reflective glass from Libbey-Owens Ford encourages individual expression.

The colors are deep and rich. The reflectivity subtle. Blue green. Grey. Bronze. And with the reflective coating glazed first surface, a distinctive silver.

Most vision applications don't require heat treating. Not even second surface in an insulated glass unit. So there's no tempering distortion. ECLIPSE reflective transforms solar control glass from stumbling block to focal point.

Good-bye black and white solutions.

Color your vision with ECLIPSE® reflective glass.



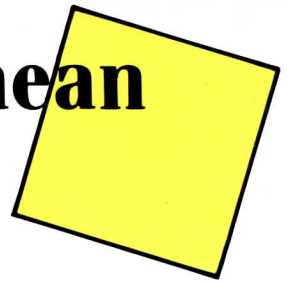
ECLIPSE® Reflective Glass



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404-242-8860 (in state)
- San Francisco 800-843-8552 (out of state)
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When we say special, we mean "SPECIAL"!



We hesitate to say that special is commonplace, because every Weather Shield wood window and door is given the same attention to detail and craftsmanship while it is being made. But when you have been producing first quality wood windows and doors for over a quarter of a century, producing a special window for a unique project is easy.

Our entire business philosophy has been built around supplying the building community with distinctive wood windows and doors. Creative products built from the finest quality materials and assembled by dedicated craftsmen who understand that every window or door, even a standard one, is "special" to someone.


Weather Shield... Where special really means "SPECIAL"!

All Weather Protection - Always!



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"Better Ideas In Wood Windows!"


Products described are available using SUNGLAS HRp (heat reflective) Low E glass. A product of  Glass Division.

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Clean, contemporary planes. Smooth, flush surfaces in wood, metal or plastic. Design uncompromised by intruding hardware. Uncluttered, unblemished, totally invisible hinging.

SOSS INVISIBLE HINGES®



They do the extraordinary, but you never see them doing it. A family of 25 sizes. Polished or satin, brass and chrome, also unplated provides architects, builders and manufacturers with multifunctional versatility, adaptability and esthetics. Invisible door closers, too. And for perfect mortises every time, a router guide installation template.



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IT'S TOUGH TO SEE EXACTLY HOW GOOD WE REALLY ARE.

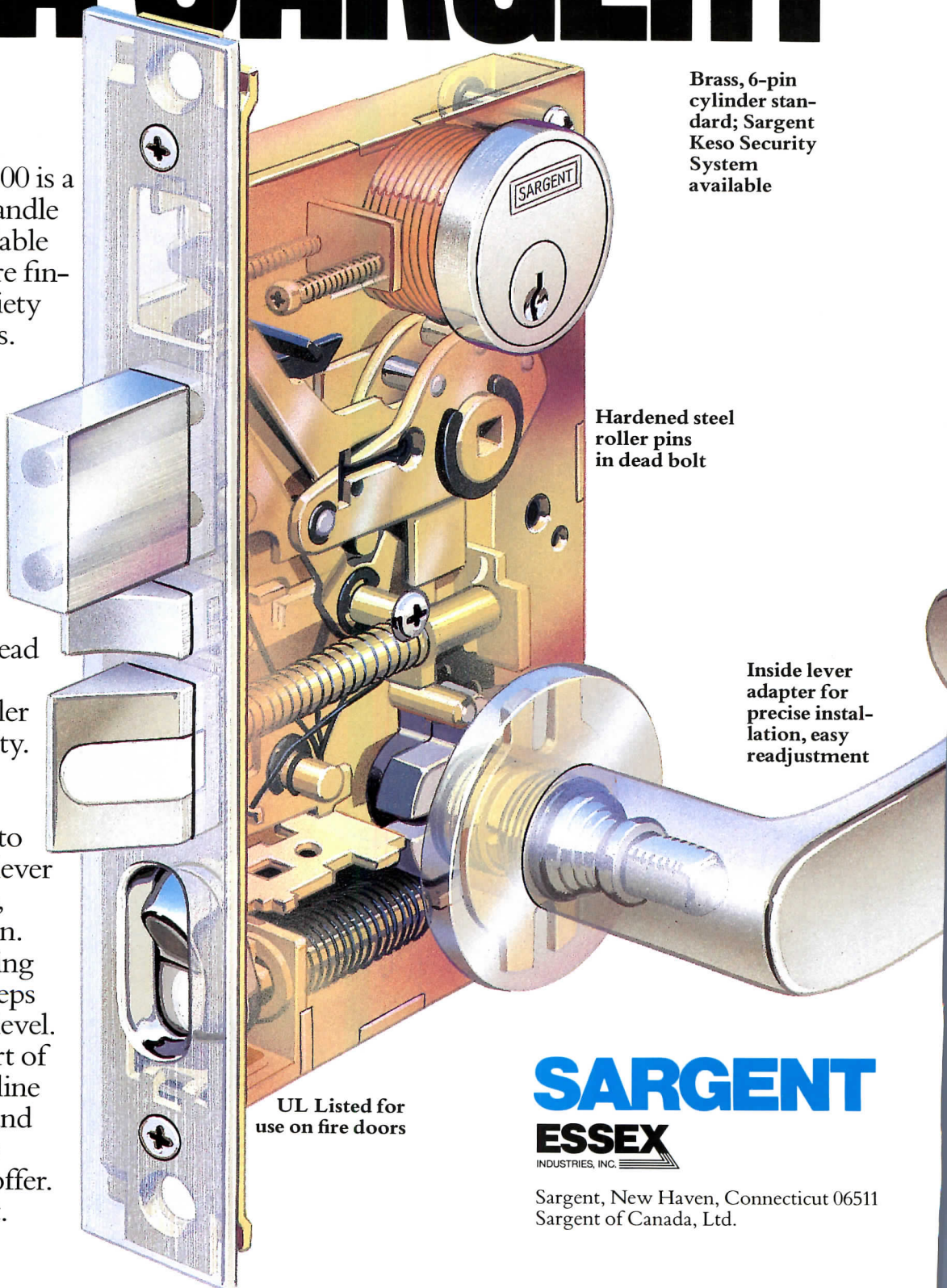
THE HEART OF A SARGENT

On the outside, the 8100 is a cleanly styled, lever handle mortise lock. It's available in all popular hardware finishes, with a wide variety of lever handle designs. The 8100 offers you lasting beauty and years of flawless performance.

Inside, the 8100 is a fortress.

It has three separate bolt mechanisms—a dead bolt, latch bolt and guard bolt. The dead bolt's one-inch throw and hardened steel roller pins enhance its security. The 8100 mechanism easily withstands the excess torque applied to lever handles. A new lever adapter means precise, trouble-free installation. And a heavy duty spring inside the lock case keeps handles permanently level.

The 8100 lock is part of the complete Sargent line of locks, exit devices and door closers. Each has what no one else can offer. The heart of a Sargent.



Brass, 6-pin
cylinder stan-
dard; Sargent
Keso Security
System
available

Hardened steel
roller pins
in dead bolt

Inside lever
adapter for
precise instal-
lation, easy
readjustment

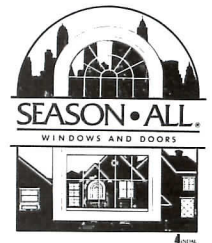
UL Listed for
use on fire doors

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Sargent, New Haven, Connecticut 06511
Sargent of Canada, Ltd.

HOW SEASON-ALL GAVE A BUILDING WITH A COLORFUL PAST A COLORFUL FUTURE.

We have to admit, it wasn't easy. In fact, it wasn't even our idea. □ The architectural firm, Levenson, Meltzer, Neuringer, thought of it. They asked us to create a custom color for the windows that would pick up the blue in the terra cotta tiles on the building's facade. We offered Crystal Cave Blue. □ After all, they had to put some color back in a structure with such a colorful past. Built in 1905, this building was a foster home to thousands of boys. □ But the architects insisted on more than just a perfect color match. You know how demanding good architects can be. □ They wanted custom pannings and bending made to fit the building's many curved architectural sections. They even insisted that we match the moldings and muntins of the original windows, using heavy commercial double-hung tilt and fixed lite windows. 225 windows in all. Each and every one installed by Skyline Windows. While the building was fully occupied. □ It was no ordinary task. But this was no ordinary building. □ Thanks to the careful work of a great architectural firm, with a little help from Season-all, this building is assured of a long and colorful future. □ So next time you've got some colorful ideas for a rehab or new design project, call Season-all Architectural Windows at 1-800-999-1947, ext. 219. No matter how tough the assignment, we'll make it easy on you.



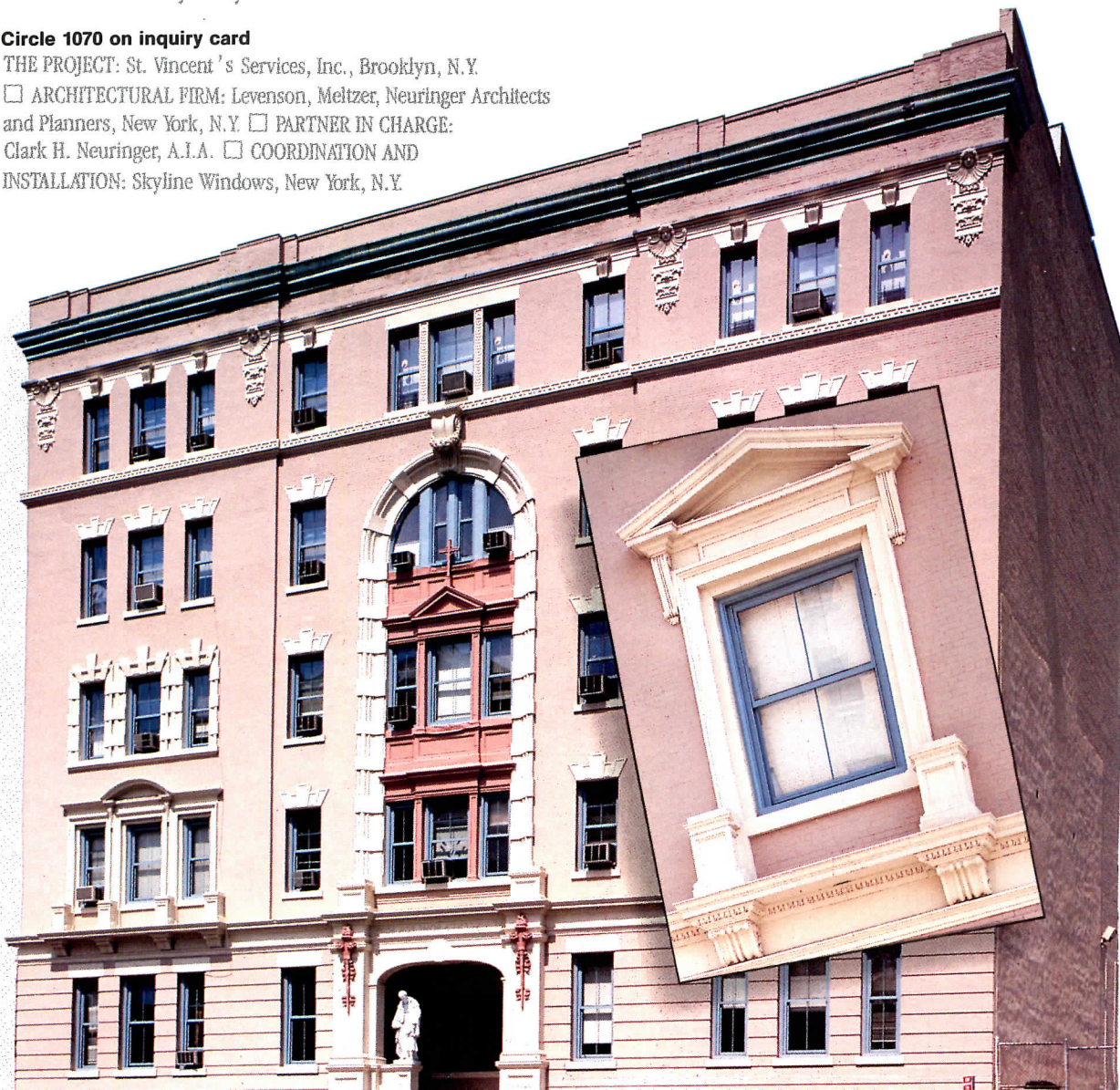
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THE PROJECT: St. Vincent's Services, Inc., Brooklyn, N.Y.

□ ARCHITECTURAL FIRM: Levenson, Meltzer, Neuringer Architects and Planners, New York, N.Y. □ PARTNER IN CHARGE:

Clark H. Neuringer, A.I.A. □ COORDINATION AND

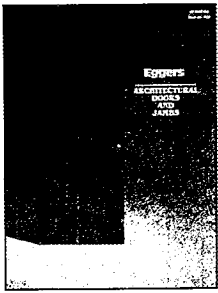
INSTALLATION: Skyline Windows, New York, N.Y.



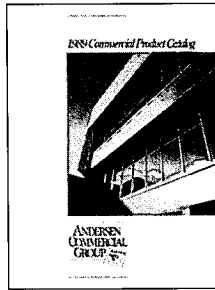
8

Doors & Windows Product literature

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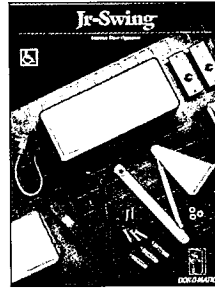
289 Architectural wood doors
Stile-and-rail and flush-type doors are shown in constructions for all commercial uses, including fire-ratings of up to 1 1/2-hr and acoustically sensitive openings. Standard woods are oak, walnut, teak, and mahogany. 16 pages. Eggers Industries, Two Rivers, Wis.



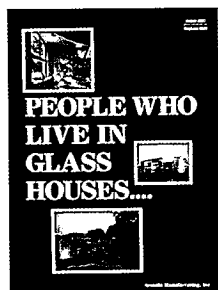
295 Commercial wood windows
Specialty glazings, CAD-assisted design, and custom muntin profiles are among the product features discussed in a 72-page, full-line commercial catalog from Andersen. Windows and doors are wood-framed with an aluminum exterior cladding. Andersen Corp., Bayport, Minn.



290 Wood doors
Weyerhaeuser will supply doors with cores for any structural requirement, to fit openings of up to 16 ft. The Santa Rosa architectural door series shown is available in standard and exotic woods, and offers a wide range of veneer-cuts and stain options. 50 pages. Weyerhaeuser Co., Architectural Door Div., Federal Way, Wash.



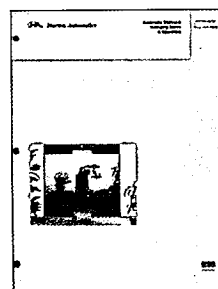
296 Interior-door operator
The Jr-Swing electric swing door operator, a new device, is described in a 4-page booklet as an economical way to meet changes in building-access-code requirements. Without needing additional closers or a remote power source, the unit operates manually for all traffic other than handicapped. Dor-O-Matic, Harwood Heights, Ill.



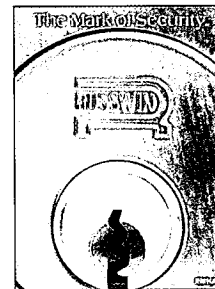
291 Custom aluminum windows
Sliding doors and windows, available to fit any architectural specification and opening dimension, are made with an extruded-aluminum frame. Dramatic residential applications are illustrated in a color catalog. 12 pages. Arcadia Mfg., Inc., Bridgeport, Conn.



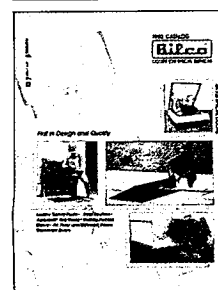
297 Veneered panel doors
An architectural catalog explains the importance of veneer and panel matches in the appearance and function of commercial wood doors. Cores meet most label and code requirements. Wood selection goes from Afrormosia to Zebra Stripe. 12 pages. Eagle Plywood & Door Mfgs., Inc., South Plainfield, N. J.



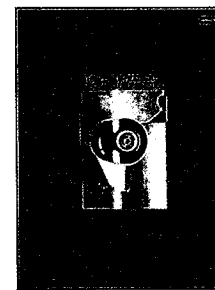
292 Automatic doors
Electrically operated swinging and sliding doors and revolving entrances meet a variety of traffic requirements, including retail stores, hospitals, and transportation facilities. Operators, controls, and finish options are explained in a 20-page brochure. Horton Automatics, Corpus Christi, Texas.



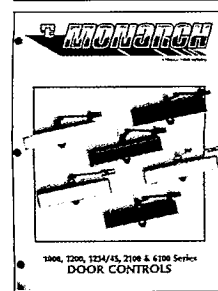
298 Hardware
Mortise, cylindrical, and lever locksets meet or exceed applicable UL, Federal, and ANSI specifications for ease of use and security. Russwin architectural hardware is shown in brass, bronze, and stainless steel. Russwin Div., Emhart Hardware Group, Berlin, Conn.



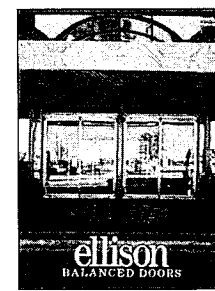
293 Special service doors
Literature describes horizontal access doors and automatic fire vents available for any standard or site-specific application. The LadderUp safety post, a telescoping extension offered for fixed ladders in new and existing construction, facilitates use of doors, hatches, and roof scuttles. 24 pages. The Bilco Co., New Haven.



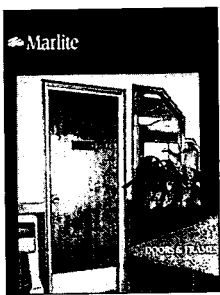
299 Structural glazing
A jointly developed structural technique, the Pearce-Pilkington space-enclosure system is described. It uses the flush-mounted Planar connection to glaze space frames of almost any configuration. A continuously flush exterior surface is possible on any angle of slope from vertical to horizontal. Pilkington Glass Ltd., Don Mills, Ont.



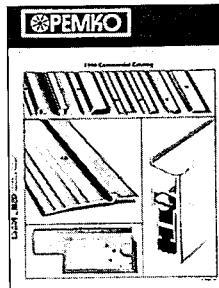
294 Door controls
Specification catalog features hydraulic door controls that offer backcheck, delayed action, and adjustable arm-leverage options. Rack-and-pinion devices are UL-listed to function within smoke- and fire-control systems and meet all ANSI requirements. 8 pages. Monarch Hardware & Mfg., Shepherdsville, Ky.



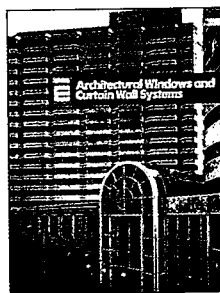
300 Entrances
The balanced door works functionally and esthetically in many types of architectural settings. Color photographs of installations from Carnegie Hall to the Chicago Transit Authority are included; engineering details and elevations are shown. 16 pages. Ellison Balanced Door Co., Inc., Falconer, N. Y.



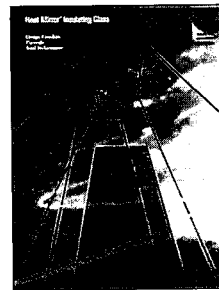
301 Steel doors and frames
All Marlite doors and adjustable frames for commercial construction are shown. A new frame is introduced, one said to be easily adjustable to fit any wall thickness from 3 3/4- to 7 3/8. 12 pages. Marlite, Dover, Ohio.



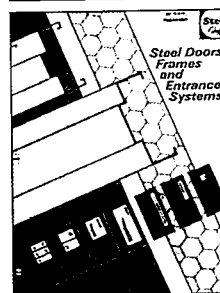
307 Weatherstripping
A full-line catalog covers door-frame products for commercial and residential use, including threshold/cover-plate assemblies, solid-brass trim, and fire-labeled SiliconSeal door gasketing. 32 pages. Pemco, Inc., Ventura, Calif.



302 Aluminum windows
High-performance commercial, monumental, and architectural windows, for both new construction and retrofit, are included in a 24-page design catalog. The Shadowline ribbon system and a thermally improved stick-system curtainwall are featured. EFCO Corp., Monett, Mo.



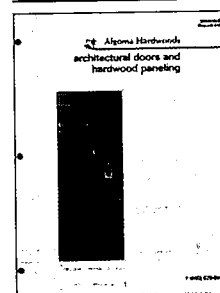
308 High-performance glazing
Offered by 24 international glass and window manufacturers, Heat Mirror wavelength-selective glass can achieve superior insulation and solar control while maintaining a clear, colorless appearance. A 12-page color brochure gives performance data and illustrates applications. Southwall Technologies, Palo Alto, Calif.



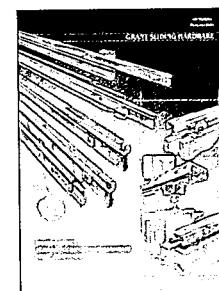
303 Entrance systems
Steel doors, frames, and entrance systems, built with a number of thermally efficient cores, are described. Product range includes decorative, architectural, and labled doors for all wall types. 8 pages. Steelcraft, Cincinnati.



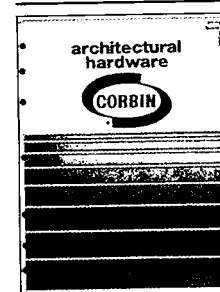
309 Low-emittance films
LLumar E-series window films, available in scratch-resistant silver and bronze, will save energy and reduce UV-fading. Adhesive-applied films can be used on new or existing glass, with products for either interior or exterior lights. 4 pages. Martin Processing, Inc., Martinsville, Va.



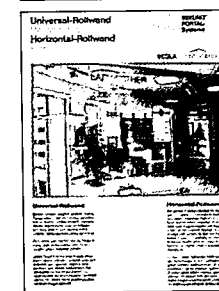
304 Architectural doors
Wood doors for a wide range of exposures and performance requirements, including lead-lined, composite-core, and acoustically dampening. Featured new product is an all-wood-look glazed fire door, with a veneer-finished rated frame holding FR-labeled glass. 8 pages. Algoma Hardwoods, Algoma, Wis.



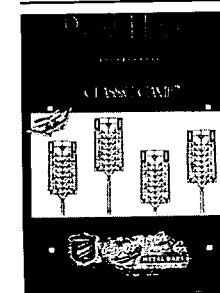
310 Functional hardware
All Grant products—door and cabinet slides, pulls, sliding and bi-fold door hardware, and sheaves—are highlighted in an illustrated catalog. A featured new product is the Retrac-Dor flipper-door slide. Grant Hardware Co., A Mobex Co., West Nyack, N. Y.



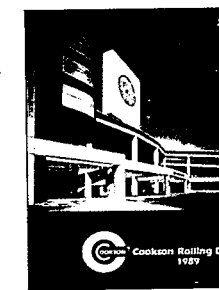
305 Security hardware
Bolt, unit, mortise, and cylindrical locksets are illustrated, along with architectural hardware, door closers, and exit devices. Full dimensional and ANSI data is given in a 16-page catalog. Corbin Div., Emhart Corp., Berlin, Conn.



311 Movable glass wall
The German-made Rollerwall is a system of laminated-glass top-hung panels that fold back upon themselves to create unobstructed entrances for shops, restaurants, etc. Installation details are illustrated. 6 pages. O'Keeffes, Inc., San Francisco.



306 Art-glass design
Prairie House Classic Came is a newly reintroduced line of authentic zinc came products, suitable for modern art-glass installations in windows, doors, lamps, skylights, and recessed lighting. All came profiles are shown. 6 pages. Chicago Metallic Corp., Chicago.



312 Special doors
The Cookson Grille is featured in a color catalog illustrating both custom and standard installations of steel and aluminum rolling doors. Applications include service and industrial doors, fire doors, and counter doors. 24 pages. The Cookson Co., Gastonia, N. C.

9 Finishes

Acoustical treatment
 Carpeting
 Ceiling-suspension systems
 Painting materials
 Prefinished panels
 Resilient flooring
 Special flooring
 Tile
 Tile setting materials
 Wallcoverings
 Wood flooring



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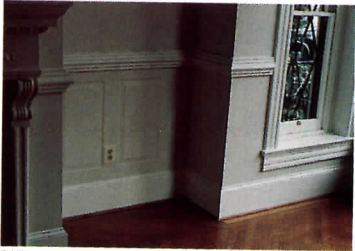
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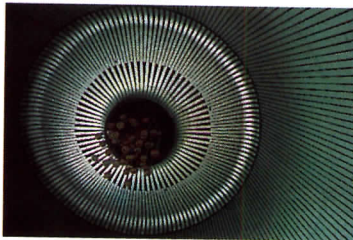
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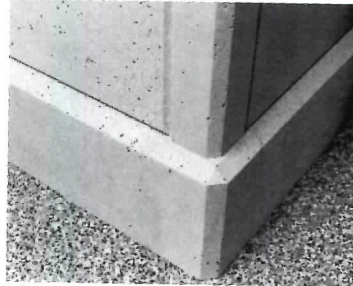
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313 Parquet flooring

Hartco has expanded its line of urethane-finished solid hardwood parquet flooring to include 11 decorator colors, eight wood stains, and three shades of white. Two coats of polyurethane and one of wax create a sturdy surface durable enough for kitchen floors. Tibbals Flooring Co., Oneida, Tenn.

314 Silk-pattern wallcoverings

The Genon Versailles III collection of vinyl wallcoverings is drawn from many countries of the world and many historical periods. Categories include hand-woven Japanese silks, natural silk effects, and woven and jacquard textiles. Recommended applications include healthcare and hospitality. GenCorp, Hackensack, N. J.

315 Metal wall coverings

A process that fuses precious metal to wallcovering surfaces produces a range of flexible metal wall treatments ranging from earthen reds and azure blue patinas to tones of bronze and milled steel. Each wallcovering is fabricated in a series of panels with design continuity from panel to panel. Metal Surfaces, Inc., Hackensack, N. J.

316 Carpet tile

The Shadows collection of carpet tile by Interface is made to give corporate, healthcare, and institutional users high performance combined with the appearance of contemporary contract interior surfaces. Solution-dyed fibers are tufted and tip-sheared. Interface Flooring Systems, Inc., LaGrange, Ga.

317 Paneled drywall

The classic raised panel appearance of Softforms Drywall is the result of 3/16-in. debossment below the surface of 5/8-in.-thick gypsum wallboard. Panels are sized for use as a ceiling or wainscot. The 48-in.-wide panels are designed for installation on wood or metal framing. Pittson Industries, Inc., Riverdale, Md.

318 Metal ceiling systems

The new line of Hunter Douglas ceiling systems comes in 75 colors and finishes and in cell, baffle, linear, tile, and curved patterns as well as soffit, solar shading, and cladding panels for exterior use. All are made from aluminum or steel. Hunter Douglas Architectural Products, Inc., Atlanta.

319 Ceramic tiles

The Gallery Collection of handmade ceramic tile comes in 15 different sizes and colors that include aquamarine, lavender, violet, pink, cranberry, burgundy, peach, black, sea green, and teal. The manufacturer will create tiles in colors to match fabrics, wall coverings, and other design appointments at no charge. Epro, Inc., Westerville, Ohio.

320 Floor tiles

Verona offers tiles in marble or granite, as well as precast assimilated and conglomerated tiles produced from marble or granite chips bonded together with special resins. Tiles are designed for heavy commercial use. All tiles come in a broad range of colors. Verona Marble Co., Inc., Dallas.

321 Wall panels

Paleo, a system of prefinished panels and base, crown, and corner moldings, has the appearance of natural stone material. It is manufactured from glass-reinforced mineral materials and weighs only 2.4 lb/sq ft. Applied with construction adhesive to any smooth, dry surface. Forms + Surfaces, Santa Barbara, Calif.

322 Rubber flooring

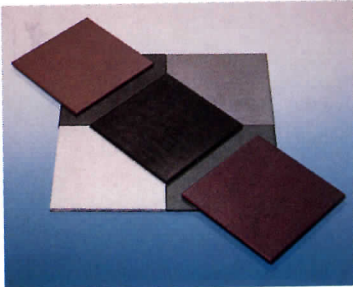
In addition to its familiar studded rubber floor tiles, Pirelli has introduced a product said to be more durable in a wider range of color, more than 30 shades. The line now includes several patterns in studded tiles and smooth-surface tiles in solid colors and a marbled design. Pirelli Rubber Flooring, Teaneck, N. J.

323 World-map mural

A meticulously detailed world map in eight colors has been produced by Environmental Graphics. The 8-ft 8-in. by 13-ft mural is appropriate for a wide range of public and private spaces. The eight-panel mural is washable and strippable. Environmental Graphics, Inc., Minnetonka, Minn.

324 Healthcare carpet

The Med-Care carpet system produced with BASF fibers is designed for healthcare applications. The face yarn and the secondary backing have anti-microbial and antifungal protection. Face fiber is solution-dyed to retain color under heavy cleaning. The system also features permanent static control. BASF Fibers, Williamsburg, Va.



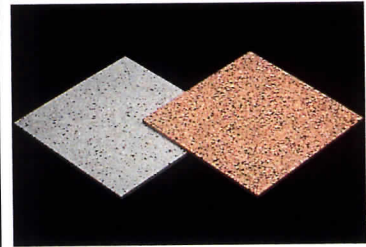
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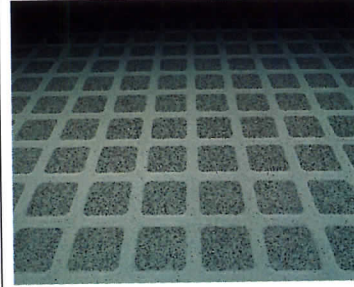
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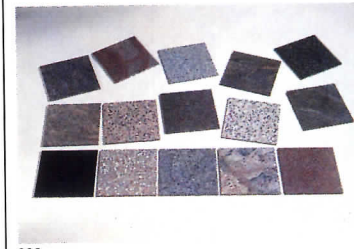
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325 Glazed ceramic tile

Performa is a sturdy but attractive glazed ceramic tile designed for heavy-traffic commercial applications, such as shopping centers, offices, hotels, and hospitals, as well as residences. It has a hard, dense, frost-resistant body that is impact- and slip-resistant. The 8- by 8-in. tiles come in seven colors. American Marrazzi Tile, Sunnyvale, Tex.

326 Acoustical wall system

Monowall is an acoustical wall system that provides a monolithic appearance, without joints or seams, for surfaces up to 9 ft 6 in. high by an almost unlimited length. It leaves no reveal at ceiling junctures and accommodates building irregularities. It is constructed of aluminum framing with an infill of fiberglass board. Decoustics, Rexdale, Ontario.

327 Tile flooring

Three types of white-body tiles are included in a new sample program. Traditions Series, in 11 colors, has either a high-sheen or skid-resistant surface. Contemporary Designer tiles have a bright and deep color range, and Heritage Series floors have a natural granite appearance. KPT, Inc. Bloomfield, Ind.

328 Acoustical ceiling

Intersections is a decorative acoustical suspension-ceiling system installed at a slight angle to walls and corners. Hubs formed by the angled installation of 2-ft-sq panels are filled with matching 5-in.-sq panels. These smaller squares may also be used to recess sprinklers, sensors, lights, and speakers. USG Interiors, Inc., Cedar Rapids, Iowa.

329 Rubber flooring

Noramment Stone has raised, stone-look squares that contrast with a lighter-colored smooth base. Comfortable underfoot, it is slip-resistant, cigarette-burn resistant, easy to clean, and statically dissipative. Stone comes in moonstone, granite, travertine, and coral colorways. Freudenberg Flooring Systems, Inc., Lawrence, Mass.

330 Wood-panel ceiling

A suspended ceiling made of Western Hemlock, Paneline comes in 1-ft-wide sections, each made up of four 2 1/2-in. boards separated by 1/2-in. spaces. Dowelclip clips are designed to secure panels easily to the tees of most major steel-grid systems. Howard Mfg. Co., Kent, Wash.

331 Nylon carpet system

Coordinate Textures carpeting features 16 solid-color cut piles and 14 tricolor textured loops, each available in 18-in. modular tiles, 12-ft broadloom, and 6-ft roll goods. The ANSO IV nylon carpets have permanent built-in soil-, static-, wear-, and crush-resistance. The fiber producer offers a 10-year commercial-wear warranty. Allied Fibers, New York City.

332 Handcrafted ceramic tiles

Richard Keit has recreated old production techniques to develop a collection of handcrafted ceramic tiles that range from Art Deco styles to vine-and-leaf motifs and circular patterns in border tiles. They are available in squares from 4 to 12 in., and rectangular trim pieces. Hastings Tile & Il Bagno Collection, New York City.

333 Granite tiles

New natural granite colorations offered from stock include absolute black, silver blue, sillon-red, rosa porrino, luna pearl, and vermillion. Stone is available in square tiles up to 24- by 24-in. International Granite & Marble Co. Inc., North Bergen, N. J.

334 Cast-marble tiles

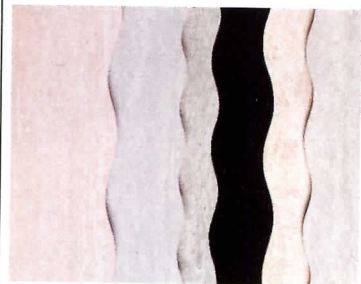
Armstrong cast-marble floor tiles and wall panels offer 15 colors in polished tile and 13 in honed tile. Homogenous tiles are composed of more than 90 percent marble and a proprietary polymer binder. Sizes range up to a 48- by 48-in., 3/4-in.-thick slab. ArmStar, Lenoir City, Tenn.

335 Unglazed tile

A new product line, unglazed quarry-type floor tiles come in a bright, contemporary color system. Properly installed tile can be used indoors or out. The through-body-colored tile will not show wear, and is easily maintained with oil-based cleaners. American Olean Tile Co., Lansdale, Pa.

336 Carpet

Parquet de Versailles is an elaborate carpet version of the Japanese tatami mat. It is made of stain-resistant Marquesa Lana polypropylene yarn. Area rugs are finished with a monk's cloth binding. For wall-to-wall installations, hems will be left open on sides and ends. Carpets are all custom made, to any size. Scalmandré, New York City.



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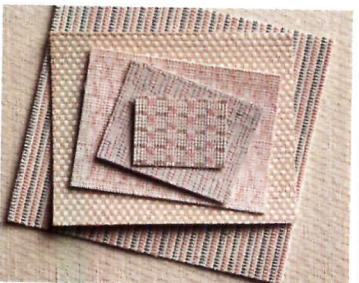
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337 Contract wallcoverings
Several new vinyl patterns are available from Vicrtex, all of which are Class-A rated. Among the newest patterns is Marbre, a multicolored faux marble design that resembles polished stone, the manufacturer says. Vicrtex, Wharton, N. J.

338 Tiles: color bars and dots
Wenczel's new ceramic tile line called Color Bars and Dots is available in various colors. Dot and bar combinations can be created that complement kitchen appliances and bathroom fixtures. Wenczel, Trenton, N. J.

339 Frieze wallcoverings
Crown Relief Decorations reintroduces six Lincrusta friezes, relief wallcoverings that the manufacturer says are delicately sculptured and reminiscent of earlier esthetic styles. Lincrusta is Class-A flame rated. It is produced exclusively by Crown in England. Crown Relief Decorations, New York City.

340 Cube open-cell ceilings
Square open cells separated by prominent 3/8-in.-thick channels comprise the Chicago Metallic Cube System. The cell panels come preassembled in a range of sizes, and are available in a variety of colors and reflective metal finishes. Chicago Metallic Corp., Chicago.

341 Asbestos enclosure
After extensive in-use testing, the manufacturer determined its wallcovering to be an effective barrier to contain asbestos. Plaster in a Roll can be applied over asbestos in walls, ceilings, and hvac systems. It is being used for asbestos abatement in a variety of commercial buildings. Flexi-Wall Systems, Liberty, S. C.

342 High-tech design tiles
Matico says its newest luxury flooring product, Hi-Tec Design, emulates the natural textures of wood and stone. The highly durable solid-vinyl tile is designed for commercial and residential use. It comes in different styles, including Lightstone, pictured, which looks and feels like granite and sandstone. Matico, Commack, N. Y.

343 New vinyl wallcoverings
Koroseal's new borders and vinyl wallcoverings come in a selection of colors and textures unavailable previously. The wallcoverings and borders are lightweight, Type I, Class A, and contain mildew inhibitors and antimicrobials. Koroseal Wallcoverings, Akron, Ohio.

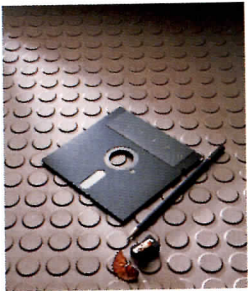
344 Wood display rails
Quiet Concepts introduces Wood Accents—wood display rails in oak, pine, or walnut that serve as accents in an office and can be used to hang graphics for a presentation. Quiet Concepts, Oak Park, Mich.

345 Woven wallcoverings
OJVM Dobby Weave wallcoverings, a collection of yarn-dyed geometric designs, come in a variety of patterns and textures. Each cloth is woven in OJVM's Belgian mill from multitonned blends of premium-grade linen and cotton yarns. OJVM, Marlboro, N. J.

346 Exotic carpet designs
Milliken introduces Spacescapes, modular carpet that comes in a variety of patterns, textures, and colors suitable for commercial buildings with curves and contours. Among the designs are exotic vistas, modern art forms, and images of parched earth. Milliken, LaGrange, Ga.

347 Ceramic tiles
Recently introduced to the American marketplace, the Shop line of ceramic tiles by Monoceram comes in 12 colors and a wide range of sizes. Features include: extremely hard surface, high-abrasion resistance, and a matte finish. Tile Group Italia, Elk Grove Village, Ill.

348 Designs in stone mosaic
To decorate surfaces including tables and floors, Lodestar offers a line of marbles and both semiprecious and naturally hard stones. Mosaics can be worked into more than 50 stock designs, such as florals and geometrics. Lodestar, New York City.



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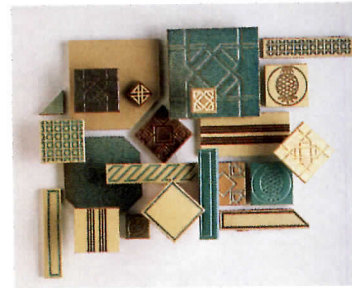
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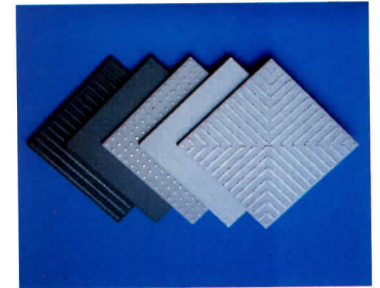
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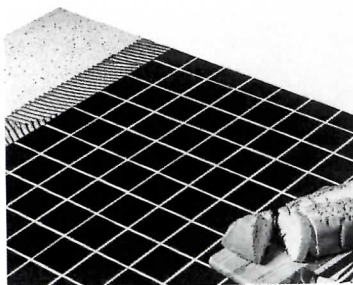
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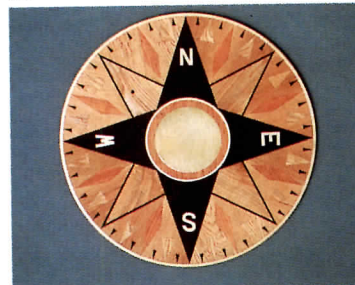
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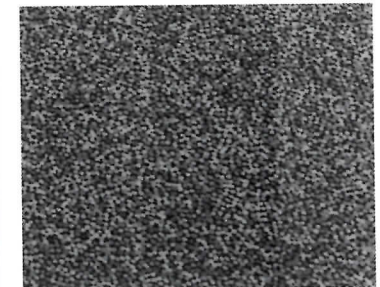
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349 Rubber flooring

The choice of colors available in Rubber Radial tile has been expanded. Mauve, forest green, royal blue, teal, and terra cotta now join black, brown, tan, bone, and pewter. Designed for use where safe footing is essential, the raised, 1-in.-dia studs allow dirt and spilled liquid to drain off walking surfaces. Flexco Co., Atlanta.

350 FRP panels

Symmetrix nonporous FRP panels are designed for surfaces where demanding sanitary standards must be met, such as restaurants and supermarkets. Vertical and horizontal scoring in 2- and 4-in. squares adds detail to the slate-textured surface. Marlite, Dover, Ohio.

351 Epoxy grout

Latapoxy SP-100 bright white epoxy grout and adhesive for installing ceramic and masonry flooring can't be stained by most foods, is resistant to most acids and corrosives, and won't peel, powder, or crack. Latapoxy may be cleaned with cold water and can withstand steam cleaning. Laticrete International, Inc., Bethany, Conn.

352 Cut-pile carpet

Chromatics II, a multicolor graphics cut-pile carpet, has three program options: a stock pattern in 16 colorings; 28 patterns in 16 standard colorings; and custom colors in any of 29 patterns. J & J Industries, Dalton, Ga.

353 Glossy resilient tile

Made in Switzerland, Ceramiflex PVC-based tile has a shiny, ceramic-look top dressing of wear-resistant Raytan vinyl. For use on both floors and walls, the tile is flexible enough to easily curve over sharp edges or into corners. The Class 1 tile provides a high degree of thermoacoustical insulation. Extensive range of colors. Mondo America, Inc., Northfield, Ill.

354 Inlay wood flooring

Kentucky Wood Floors produces custom inlay floor treatment for residential or commercial entry areas in combinations of wood and metal. A broad range of designs, species, and scales are available to provide accent areas for custom hardwood flooring. Designs are shipped preassembled. Kentucky Wood Floors, Louisville, Ky.

355 Textile wallcovering

The Bolta Weaves Two wallcovering collection for hospitality, corporate, and healthcare applications now includes bold and soft contrasts, wide random stripes, and Southwestern motifs and colorations. GenCorp, Hackensack, N. J.

356 Glazed ceramic tile

Meredith hand-glazed tiles can be used as an accent to unglazed ceramic tile and brick floors, as a tub surround, chair rail, table tops, or as a doorway or window frame. Available in 13 high- or low-gloss glazes. Meredith Collections, Inc., Canton, Ohio.

357 Tile-setting software

Mapei's PC-based architectural specification program is formatted on two disks. Disk One provides a CSI-format data sheet on each Mapei tile-setting product. Disk Two guides the architect through a series of questions about the project that lead to the selection of the right product and TCA-recommended installation. Mapei Corp., Oak Grove Village, Ill.

358 Decorative tile

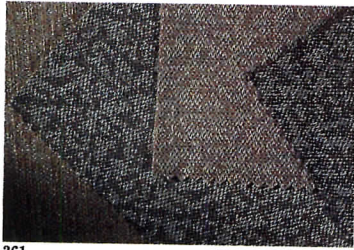
Italian tile is available to meet any architectural specification. New tile designs, such as those pictured, incorporate deep colors and metallic glazes. Ceramic products come in a variety of shapes and sizes, including glass inserts, thin accent pieces, inserts, and cornices. Italian Tile Center, New York City.

359 Porcelain stoneware

Fiandre Ceramic Granite is a fully vitrified porcelain stoneware that is stronger and more resilient than granite. Color is fired throughout. It is impervious to water, frostproof, acid-resistant, and fireproof. Available in a wide range of color and textures. Trans Ceramica, Elk Grove, Ill.

360 Vinyl flooring

A new commercial floor with brighter colorations, Commerce has a random-chip design for a natural, textured look. It is available in graphite, oyster, hemp, steel blue, coral sand, and steel green. Congoleum Corp., Lawrenceville, N. J.



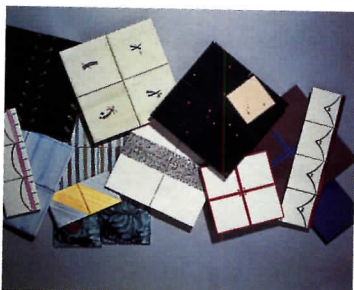
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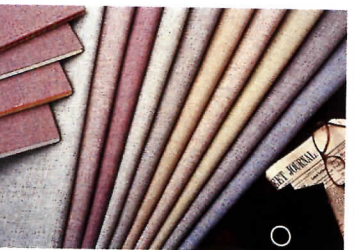
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361 Wallcovering

Laura Deubler Mercurio, designer of the Lynnescape II Collection of wallcoverings, sought to combine the appearance of Belgian linens and cotton with the durability of man-made fibers. The 10 Polyolefin fibers offered are available in 116 colorways. J. M. Lynne Co., Inc., Smithtown, N. Y.

362 Nonslip resilient tile

Step Master Premium Excelon vinyl floor tile has a raised texture designed to provide a secure walking surface and lessen the chance of injuries in supermarkets, cafeterias, and institutions. The 12- by 12-in. tiles come in buckskin, mushroom, and slate. Armstrong, Lancaster, Pa.

363 Movable-wall system

A new panel line, Designer's Touch floor-to-ceiling movable walls provide a wide range of acoustic and finish options. A fiberglass/honeycomb/fiberglass composite that can achieve a STC of 33, and a one-side NRC of 0.90, panels offer 10 multidimensional finish colorations. Gold Bond Building Products, Charlotte, N. C.

364 Terra-cotta tile

Modo, a 12- by 12-in. terra-cotta tile, is designed for stack type installation, which eliminates the need for grouting. It is available in polished (pictured) or honed finish, in a true terra-cotta henna color. Modo resists freeze-thaw damage, heavy traffic, salts, and acids. Tile Group Italia, Elk Grove Village, Ill.

365 Ceramic tile

This line of ceramic tile offers 68 colors and 30 patterns. Tile sizes are ASTM standard from 2 1/8 to 8 in., as well as a full line of trim shapes. The company will match samples of carpet, wall covering, and old tile for a small fee. Liza Allen Tile & Clay Co., Oakley, Calif.

366 Vitreous tiles

Pro Architectura tiles offer an extensive range of colors, new modular formats, trims, and rugged, antislip textures. The color-grouped line is intended for heavy-use commercial floors and walls, as well as for swimming pools, patios, and other outdoor areas. Villeroy & Boch (U.S.A.) Inc., Pinebrook, N. J.

367 Unglazed mosaic tile

Porcelain Blends offers nine combinations of unglazed tile that incorporate two to four nominal 1- by 1-in. mosaics in a variegated pattern. Tiles are back-mounted on 13 1/8- by 13 1/8-in.-sq sheets for ease of installation on interior and exterior walls and floors. United States Tile Co., Sparta, Ohio.

368 Ceiling system

Dampa-100/200/300 is a modular ceiling that can be integrated with lighting, ventilation, and acoustic control functions. By using either plain or perforated units, or combining them, sound absorption levels can be obtained in accordance with design requirements. Wide color range available. Dampa, Inc. Scarborough, Ontario.

369 Wall tile

Suggested for residential walls, Parthenon is a waterfall-glaze granite-look product offered in a new 8- by 10-in. size. The installation pictured includes matching border and medallion insert tiles, all in graphite. Other colors are fleece, blush, and pewter. International American Ceramics/Laufen, Tulsa, Okla.

370 Resin-reinforced tiles

Permétage is a tile that is 96 percent marble or granite reinforced with resin. Because it is stronger than natural stone, it can be made thinner—3/8 in. It doesn't have the pores and tiny fissures of marble that absorb stains, so it needs no sealing. Damp mopping and buffing maintain high gloss. PermaGrain Products, Inc., Media, Pa.

371 Commercial carpets

The VersaTec collection draws on a bank of 176 yarn-dyed colors to produce carpets for business use. Graphics tufting technique assures a clear, defined pattern. Weave is tufted, and the surface is patterned cut pile. Lees Commercial Carpets, King of Prussia, Pa.

372 Exterior cladding tiles

Specifically for use as an exterior cladding, polished porcelain tiles can be installed on-site or used with factory-built panel systems. Japanese-made tiles have minimum water-absorption percentages, are freeze-thaw resistant, and easily maintained. Keyback design maximizes adhesion. INAX Corp., West Hollywood, Calif.

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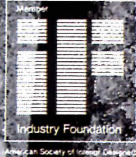
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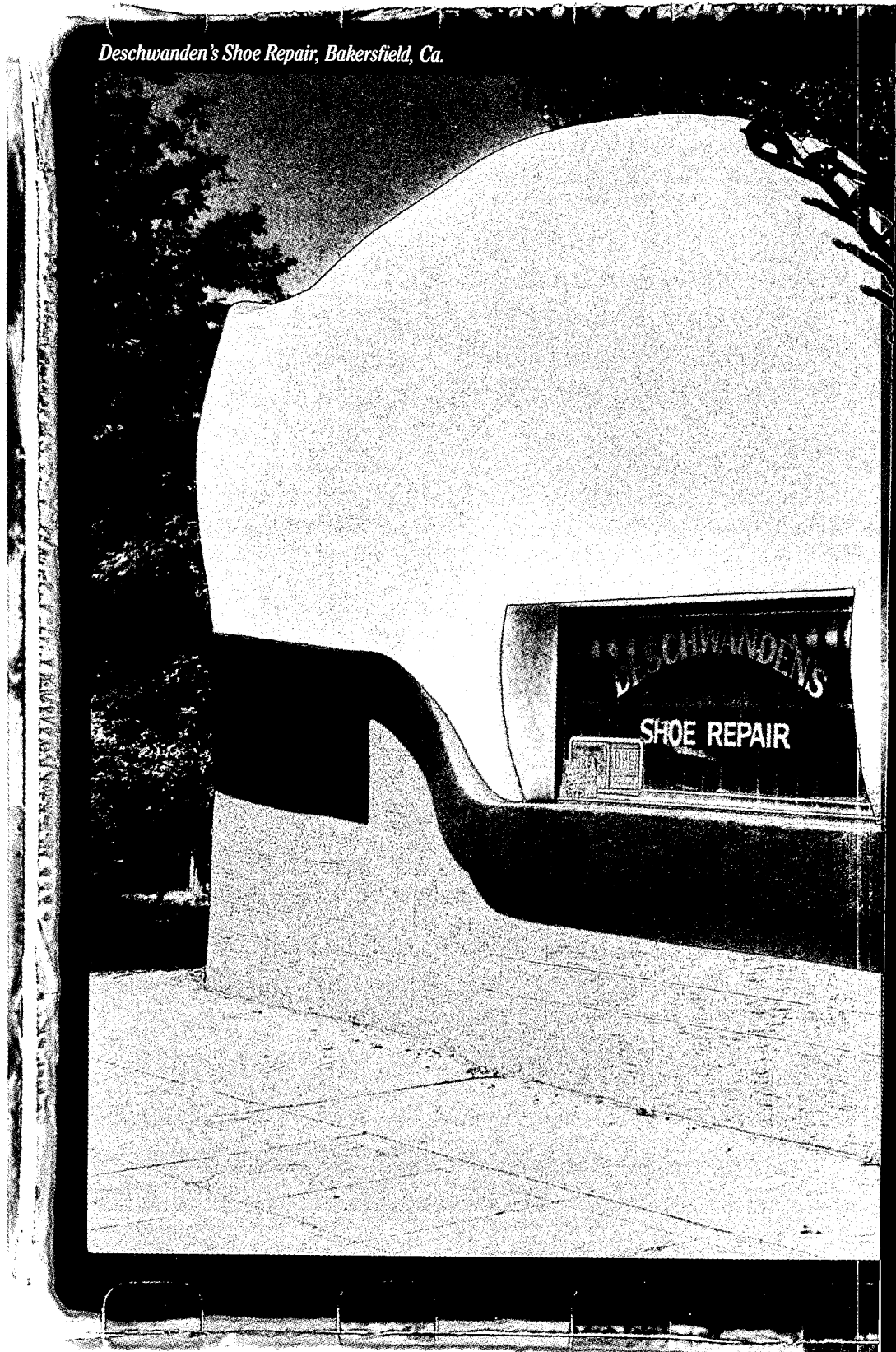
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Flooring Systems

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Summitville Olde Towne Quarry



10 Summitville Red



64 Bone



74 Harbor Blue



95 New Bedford



84 Wintergreen



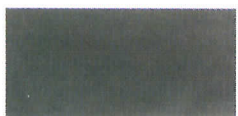
96 Williamsburg



87 Cadet Gray



97 Valley Forge



88 Confederate Gray



89 Charcoal Gray



94 Colony

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Now Olde Towne Quarry gives you 11 tough color options including 7 NEW colors.

Olde Towne has long been the right choice for indoor or outdoor use, thanks to its trouble-free maintenance and its rugged appearance. Making Olde Towne ideal for patios, sunrooms, lobbies, walks and parking areas.

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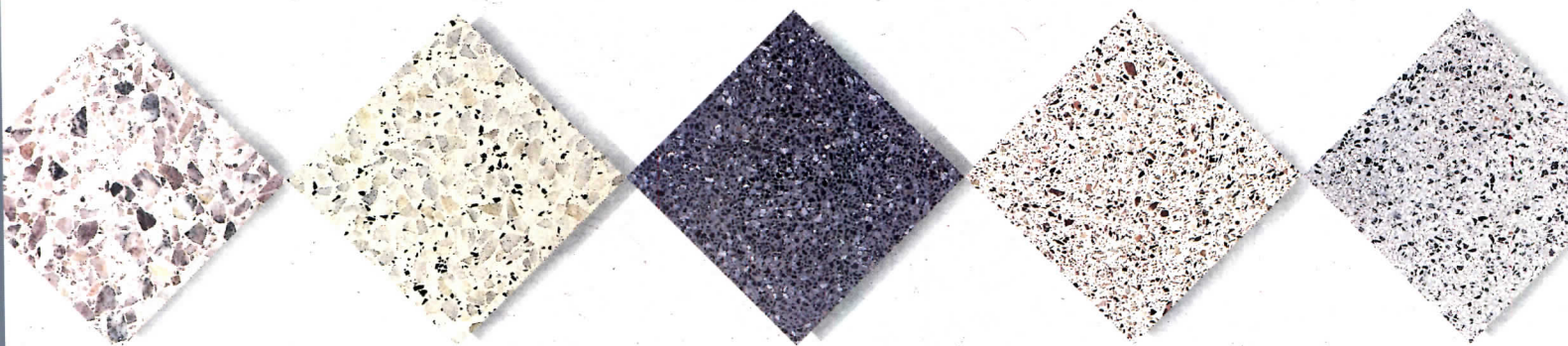
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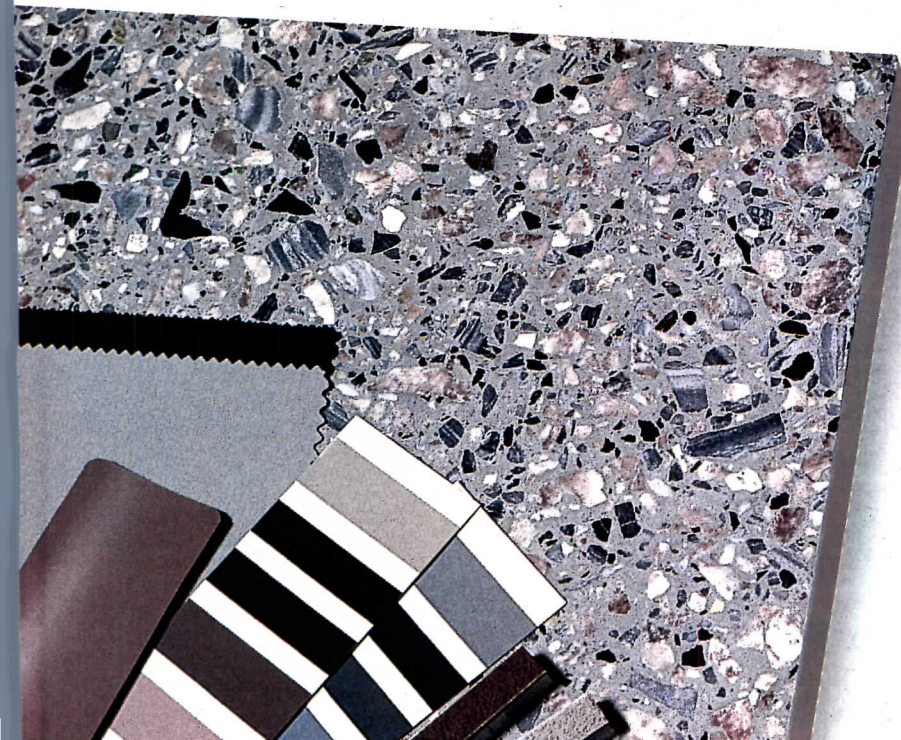
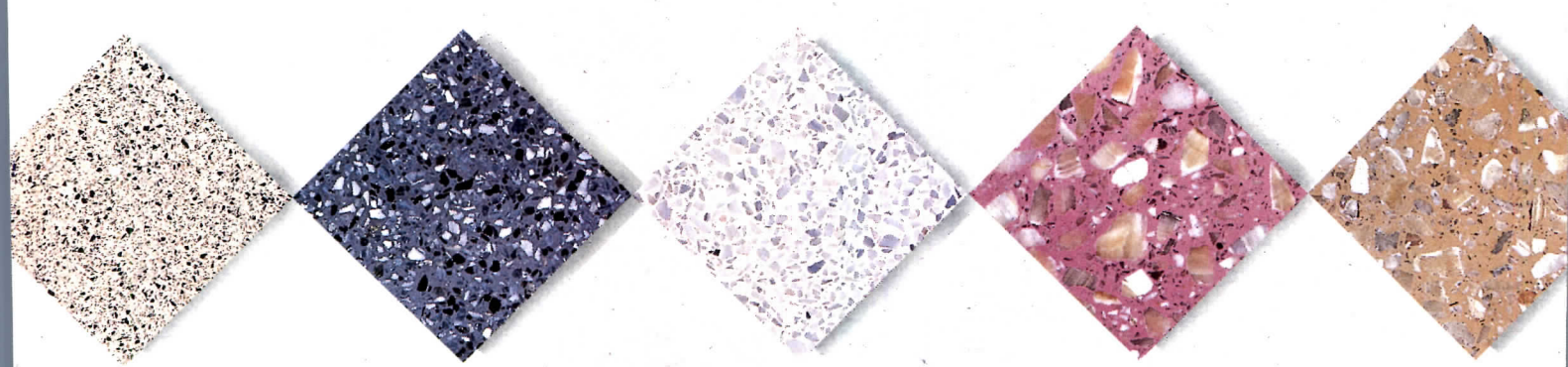
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We would need all the pages of this magazine



to show you the rest of our colors & textures.



New Wausau Terrazzo Tiles

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9

Finishes Product literature

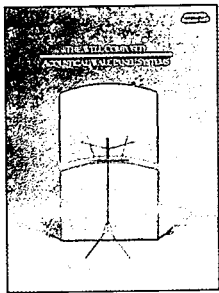
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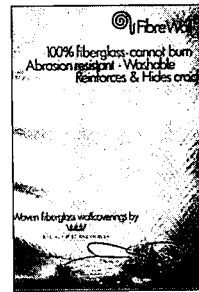
373 Sheet-rubber flooring
Flexi-Flo homogeneous rubber flooring is comfortable underfoot, long-wearing in heavy-traffic areas, and needs only buffing to maintain a glossy surface. Both sheet and tile are offered, in 15 marble-pattern colors. 16 pages. The R. C. A. Rubber Co., Akron, Ohio.



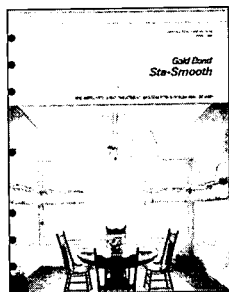
379 Porcelain tile
Shopping-center installations of Genesis porcelain tile are featured in a 6-page color brochure. Durable tile has a slip-resistant textured finish, with a through-body coloration that will not fade, even in direct sunlight. Crossville Ceramics, Crossville, Tenn.



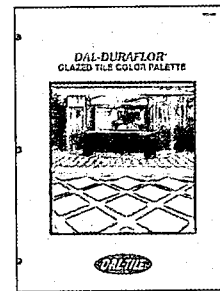
374 Acoustical wall panels
An expanded line of acoustical wall panel systems includes Design Series 90, with custom-fabric options, and an aluminum-framed Applique panel. New Hard Side noise-control products are introduced in a color catalog. Eight pages. Peabody Noise Control, Inc., Dublin, Ohio.



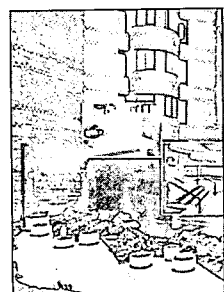
380 Fiberglass wallcovering
Paintable FiberWall textiles can be used over nearly all surfaces, including concrete, masonry, drywall, wood and composition panels, and ceramic tile. It is particularly suitable for covering damaged walls. Color brochure contains sample swatches. Regal of Scandinavia, Inc., Los Angeles.



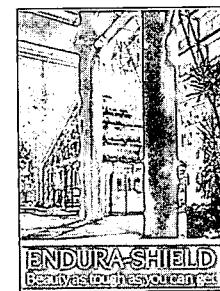
375 No-ridge wallboard
The Sta-Smooth joint-finishing system is said to produce nearly flawless drywall surfaces. The 1/2- and 5/8-in. gypsum panels have a tapered edge that forms a V at butted edges; a special setting-type taping compound dries quickly even in humid conditions. Four pages. Gold Bond Building Products, Charlotte, N. C.



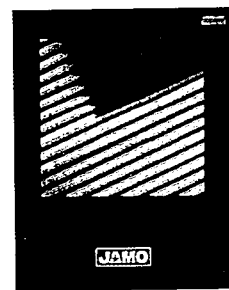
381 Glazed tile
Four types of Duraflor tile are illustrated in a design guide. For both residential and commercial use, vitreous-body tiles are made by a single-fire process that produces an extremely hard glaze. Matte-finished surfaces are smooth, slightly textured, or mottled in a leather-like effect. Dal-Tile, Dallas.



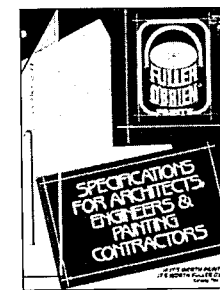
376 Tile-setting products
A 1990 architectural catalog features over 75 mortars, grouts, adhesives, and sealants for ceramic tile. All 47 colors of Polyblend nonshading grout are illustrated. A selection chart matches each product with the correct use. Custom Building Products, Bell, Calif.



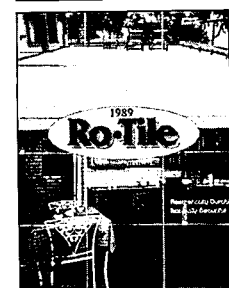
382 Polyurethane coatings
Endura-Shield high-performance architectural coatings are said to retain their gloss and color, and be corrosion-resistant even in the harshest of coastal environments. The line offers a wide range of colors, and a choice of gloss levels. Eight pages. Tnemec Co., Inc., Kansas City, Mo.



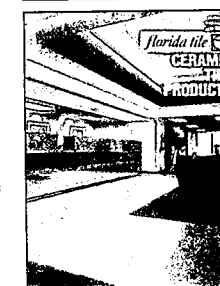
377 Mortars and grouts
A Selection Guide describes all Star Brand pastel and deep-tone grouts, thin-set mortars, tile adhesives, and latex additives. Products are keyed to the applicable TCA-recommended installation. 12 pages. Jamo, Inc., Miami.



383 Paints
Specification Guide to Fuller-O'Brien Paints discusses substrate preparation, product finish and type, and includes a finishing schedule for both interior and exterior applications. The recommended paint is matched to more than 40 surface types. 24 pages. The O'Brien Corp., S. San Francisco, Calif.

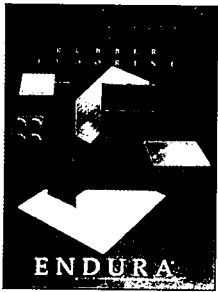


378 Cementitious tile
Full-line architectural catalog illustrates stone- and slate-look tiles for floors and walls. Ro-Stone, finished with a penetrating sealer, has a granulated texture and can be used indoors and out; semigloss Ro-Tile is for interior use. A compatible veneer brick is included in the line. 12 pages. Ro-Tile, Inc., Lodi, Calif.



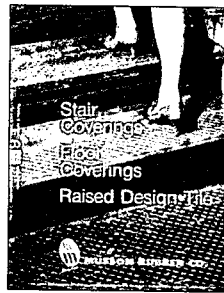
384 Ceramic tile
Florida Tile's 1990 catalog pictures all colors and sizes offered in 20 ceramic-tile lines, illustrating many of them in colorful on-site photography. Complete dimensional and trim information is included. 48 pages. Florida Tile, Div. of Sikes Corp., Lakeland, Fla.

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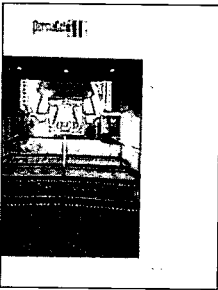


385 Rubber flooring

A 4-page product sample folder contains chips of all Endura rubber-flooring patterns, including the Specifier's Standard Series and the Specifier's Design Series. Also offered is a Chain Set with 3- by 3-in. tile samples of all profiles and 15 colors, and larger pieces of stair-tread styles. Endura Flooring, Div. of Biltrite Corp., Waltham, Mass.



391 Rubber floor covering
Illustrations and specifications on fire-rated and other rubber-floor and stair-tread systems are given in a 16-page brochure. Tiles are marbled or solid-color, with smooth or raised-surface designs. Also included are rubber landing and riser materials, vinyl treads and risers, fluff cord, and traffic tiles. Musson Rubber Co., Akron, Ohio.



386 Commercial carpets

Information about PermaColor commercial carpets made from polypropylene yarns is described in a 20 page-brochure. Areas discussed include stain-resistance, colorfastness, density, twist rate and retention, friction burns, soil and static resistance, and life-cycle cost. Carpets have a five-year stain- and fade-resistance warranty. Amoco Fabrics and Fiber Co., Atlanta.



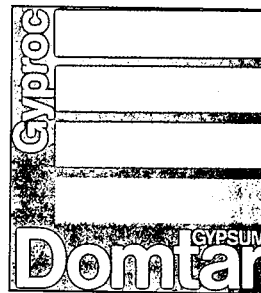
392 Acoustic panels

On-site photos, specifications, and installation for a line of acoustic ceiling and wall panels, ceiling baffles, and banners are given. Standard PCF 1-in. panel has a NRC of 0.80. Combinations of various thicknesses, composites, and facings can fine-tune most interiors. Class A fire rating for all panels. Ten pages. Interior Acoustics, Inc., Somerville, N. J.



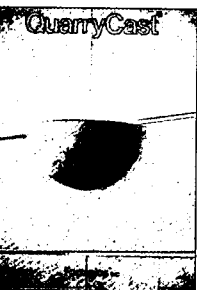
387 Reflective surfacing

A-Look, a 6-page booklet, details an unbreakable, reflective aluminum-alloy material suitable for walls, ceilings, columns, and other interior surfaces. It has good static-bleed properties and will not attract dust. Available in gold, bronze, and chrome, A-Look meets FAA and ASTM-E84 requirements. Mitsubishi Kasei America Inc., South Plainfield, N. J.



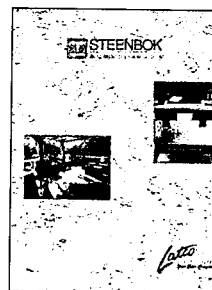
393 Gypsum board

Product and performance details are shown in a 36-page booklet for 13 kinds of gypsum board designed for standard and extreme environments. Detail drawings and installation instructions are given for correct use of gypsum products with various framing systems. Domtar Gypsum, Oakland, Calif.



388 Molded stone

Pigmented ceramic cements combined with glass fiber-reinforced minerals form veneer panels that have the appearance of natural stone. Three surface textures—natural, machined and broken-ribbed—and four colors are shown in a 6-page brochure. Panels can be cut on-site. Formglas Interiors, Inc., Concord, Ont.



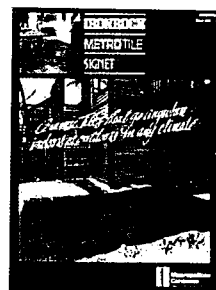
394 Ceramic floor tiles

Three styles of Steenbok ceramic tiles are illustrated in 6 pages: FourPlus, Crystalite, and Univers. All are designed for service in high-traffic areas, and resist extremes of heat and cold. Available in three square sizes, and a 12- by 12-in. octagon, all are compatible in the same field. Los Angeles Tile Co., Inc., Los Angeles.



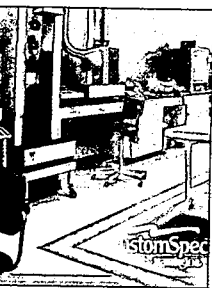
389 Wood stains

A 6-page brochure gives descriptions and recommended application of a line of water-repellent stains for exterior wood such as siding, fences, shakes, and shingles. Alkyd- and acrylic/latex solid stains are for both new and weathered wood; semitransparent and weathering stains are for new wood. Devoe & Reynolds Co., Louisville, Ky.



395 All-weather ceramic tile

Color photographs, color listings, and specifications for hand-crafted, hand-glazed ceramic tile for floors, walls, and counters in commercial and residential use are shown in 4 pages. Low-moisture absorption (less than 3 percent) permits use anywhere, indoors or outdoors. Finish eliminates need for sealers. Metropolitan Ceramics, Canton, Ohio.



390 Vinyl flooring

The CustomSpec program, described in a 24-page brochure, lets the architect create a unique floor for a particular school, laboratory, or hospital at a standard cost. The custom line has 22 small-figured field patterns, and 18 complementary accent colors. Five-year limited commercial wear warranty. Mannington Mills, Inc., Salem, N. J.



396 Rubber flooring

Illustrations of standard colors and patterns include Travertine, Marble, Argonaut, and Rouleau, a raised-disk. Also shown are base and stair treads, and cove base. Specifications and detailed information on application and maintenance methods are described in 12 pages. Burke Industries, San Jose, Calif.

10 Specialties

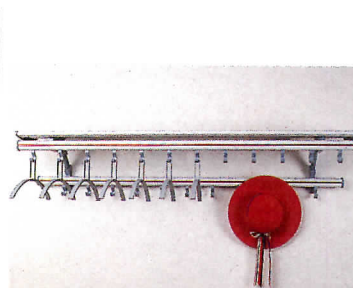
Access flooring
Exterior sun control
Fireplaces & stoves
Firefighting equipment
Identifying devices
Lockers
Partitions
Pedestrian-control devices
Service wall units
Storage shelving
Toilet & bath accessories



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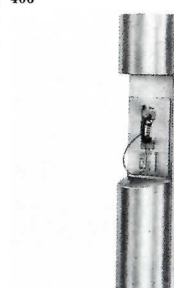
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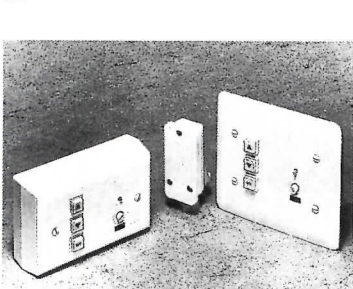
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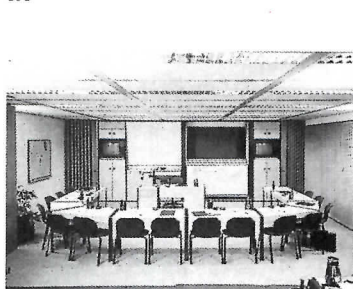
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397 Sign system

Seton outdoor post and panel signs are ready to install with standard wordings, such as "enter," or customized wordings and graphics. Face panel and frame are of weather-resistant aluminum. Lettering and graphics are vinyl characters applied to signs and sealed with a clear vinyl film. Seton Name Plate Co., New Haven, Conn.

398 Fireplace

The steel Prisma fireplace is 80-percent efficient and produces up to 50,000 Btu. A three-sided glass door conserves heat and tucks away when not in use. It meets UL standards for installation next to wood flooring and walls, and can be faced with marble, tile, or brick. Unit includes a built-in ash bucket. Rüegg Fireplaces, Bridgewater, N. J.

399 Wall panels

SystemsWall full-height, demountable steel wall panels come in widths from 12 to 60 in. and ceiling heights to 120 in. They adapt to irregular floor and ceiling conditions, and are prepunched for wiring. The panels accept glass lights from 8 to 60 in. wide and 120 in. high. KI, Div. of Krueger International, Green Bay, Wis.

400 Shelving

Steel shelving that offers rigidity, but eliminates sway bracing, the Aurora Quik-Lok is available in five furniture-quality finishes and can also be ordered with laminate or decorative-fabric end panels. For library or filing use, the four-post system offers space savings, says the manufacturer. Richards-Wilcox Mfg. Co., Aurora, Ill.

401 Cubicle system

The melamine-coated, solid-core HPL cubicle systems produced by Kemmlit carry a five-year guarantee against rust, rot, warp, and hinge pullaway. Panels are fitted with solid-core nylon hardware. System is designed for use where hygiene, moisture, and hard use are considerations. W & W Sales Ltd., Spring Valley, N. Y.

402 Window shade control

Comfort Control II is a motorized system that provides optimum window shading when needed and maximum sunlight as desired. Sun sensor measures the amount of light entering a window and maintains it at a preset rate by adjusting its blind. It can operate manually or automatically. Somfy Systems, Inc., Edison, N. J.

403 Hat and coat racks

Wall-mounted coat and hat racks produced by Peter Pepper come in three basic models, hooks—only, or coat-and hat-rack combinations in 40-in. and 60-in. lengths. Custom lengths to 15 ft. are available. Racks are made of extruded aluminum in gray or anthracite powder-coated finishes. Peter Pepper Products, Inc., Compton, Calif.

404 Ventilating louvers

American Warming and Ventilating offers louvers in extruded aluminum or galvanized steel in virtually any size, shape, or color specified by an architect. These include adjustable or stationary louvers in conventional, drainable, and acoustical models. American Warming and Ventilating, Inc., Maumee, Ohio.

405 Presentation panel

The Visuwall integrates all audiovisual and video media. It is available with both front- and rear-projection screens, and chalk and dry-marker boards. Writing boards move vertically and can be had in one-, two-, or three-nested configuration. Rear projection takes only 5 1/2 ft. of back space. Weyel International, Delray Beach, Fla.

406 Mirrors

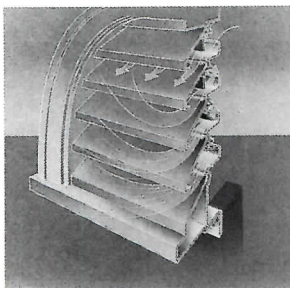
The RE:Flect wall mirror system introduced by Robern allows the total integration of arched or rectangular beveled mirrors with the Robern B and C line of cabinets. The mirror systems may be recessed or surface mounted. A concealed and fully adjustable mounting device holds the mirrors. Robern, Inc., Bensalem, Pa.

407 Telephone booth

The Mark Series of cylindrical telephone enclosures are designed for use in lobbies or shopping malls. They offer a flush-front appearance with most box-type telephones. Made of heavy-gauge stainless steel, units are also available in bronze and various color finishes. RedyRef-Pressed & Welded, Inc., Long Island City, N. Y.

408 Four-sided sign

The system 2/90 Quad Sign, a four-sided sign for intersection use, is designed for easy change of displays. Removal of a corner cap allows inserts to be taken out and replaced quickly, without the use of tools. The Quad sign comes in a variety of colors and materials, including brushed aluminum. System 2/90, Inc., Grand Rapids, Mich.



409



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411

409 Weatherproof louvers

A new louver design reduces water infiltration problems. When winds reach 35 mph, a flap moves upward to deflect rain, yet allows air to ventilate the interior. At 55 mph, the flap closes off the air intake port. When the wind subsides, the flap returns to its normal position, allowing air flow to resume. Webb Mfg, Inc. Conneaut, Ohio.

410 Movable wall system

The GB-350 wall system has a double-web steel stud, pre-punched for horizontal routing of utilities, and has knockouts that allow cross channels to be slipped in by hand. A 13-in. stud extension eliminates the need to field-cut studs to accommodate uneven floors and ceilings. Walls offer a wide variety of vinyl finishes. Gold Bond Building Products, Charlotte, N. C.

411 Bathroom cabinet

Made of injection-molded reinforced acrylic resin in a clean white accented by trim strips, the Systeme 4000 RE is designed to be wall-hung. Available in four mirror assemblies, two with tri-view designs. Allibert Inc., Stanley, N. C.



412



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412 Walls for hang-on furniture

The DONN full-height wall system is designed for use with hang-on furniture from Steelcase. Backed with gypsum board, the steel panels can be painted or covered with vinyl or fabric to match Steelcase upholstery. Panel clips attach to standard steel studs with telescoping extensions. Furniture adapters attach to studs. USG Interiors, Inc., Chicago.

413 Gas fireplace

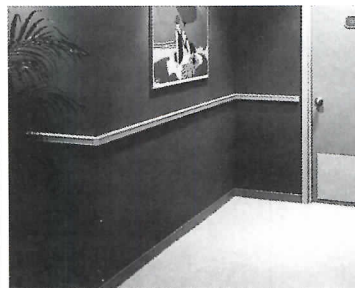
The GDV-5000 gas fireplace directly vents through any outside wall instead of using a chimney system, making it easy to install in high-rise condominiums and multilevel apartments. It burns at 75 percent thermal efficiency. Brass and stainless-steel finishes available. Superior Fireplace Co., Fullerton, Calif.

414 Signs

The Exterior 500 aluminum-based sign system is designed for several different mounting configurations, with fittings for posts, wall surfaces, projections, or ceilings. Available in 50 standard and any custom colors. Standard panel sizes run from 4 1/2 by 4 1/2 in. to 80 by 80 in. Modulex Inc., Racine, Wis.



415



416



417

415 Wall service units

Modular Space Systems centralize architectural, mechanical, and service facilities in symmetrical groupings in a single station. They conserve space, reduce isolated wall cut-outs, and lower installation cost. Available in brass, bronzetone, bright stainless steel, or painted steel. American Specialties, Inc., Yonkers, N. Y.

416 Wall protectors

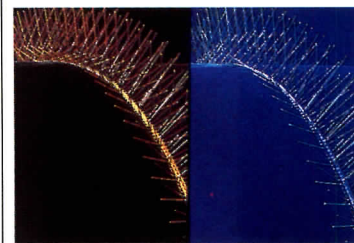
Decrovin is a line of wall protection that includes rub rails, corner guards, crash rails, handrails, and wall and door coverings, all made from Class I vinyl/acrylic materials and color-coordinated to work with popular interior finishes. Door protection includes pushplates, kickplates, and knob protectors. The C/S Group, Muncy, Pa.

417 Cast-iron fireplace

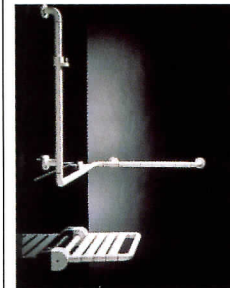
The Sunburst fireplace has a solid cast-iron, 3-cu-ft firebox and a double heat-convection chamber to provide 60,000 Btu per hour. A 25-in. clear ceramic-glass panel has an air-wash system to keep it clean. The fireplace accepts most surround options. It meets EPA and energy-efficiency codes. Dovre, Inc., Aurora, Ill.



418



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418 Fireplace surrounds

Four new wood or stone mantel styles, designed to fit all Temco fireplaces as well as site-built hearths, include Nero-Bianco, which has a shelf and surround of fluted white Carrara marble, and a Nero Marquina facing and hearth extension. Temtex Products, Inc., Nashville, Tenn.

419 Bird barriers

The Bird Barrier repels birds ranging in size from sparrows to vultures, including pigeons, by denying them a place to perch. Stainless-steel needle strips attached to roofs, ledges, air conditioners, and under-eaves make landings impossible. Barriers are now available in any color, in an oxidized nonfade finish. Nixalite of America, East Moline, Ill.

420 Shower seat and grab bar

Support Program for the elderly and handicapped includes a fold-up shower seat and easy-grip textured grab bars made of steel-reinforced, tubular nylon. Comfortable and warm to the touch, grab bars are available in both wall and wall-floor mounted units. Components come in 12 colors for easy coordination. Normbau, Inc., Addison, Ill.

Introducing Dowcraft's Integral Wall

Movable floor to ceiling steel walls
designed for integrated use with Haworth® Systems

Integral Wall extends the possibilities for creative work space design by offering problem-free integration with Haworth hang-on components and Haworth open office panels. Create a fully enclosed floor to ceiling office environment incorporating Haworth components, without disturbing the original concept.

Integral wall requires no special adaptors or bracketing. Everything interfaces with Haworth's fabric and finish program, and Integral Wall permits un-

limited use of glass. This system was created for plenty of reuse. Unlike gypsum panels that have to be reinforced and customized for hang-ons, unitized steel Integral Wall panels can be moved over and over with minimal loss to panel inventory. Building maintenance personnel working with standard hand tools can handle office relocations as they're needed.

If your design project requires versatility and the

freedom to change, add on and grow, Integral Wall is the aesthetic and dependable extension of your Haworth systems creativity. For a brochure and complete technical support, call or write:

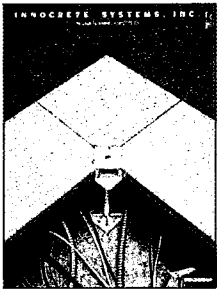
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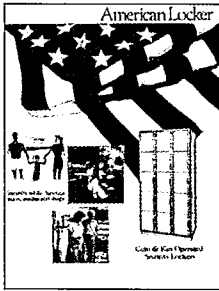


10 Specialties Product literature

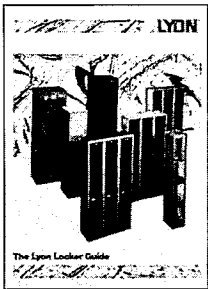
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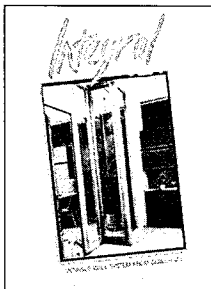
421 Access flooring
The S-Floor, designed for electronic offices, is a 2- by 2-ft structurally reinforced slab torque-fastened to a stringer-less pedestal system. The I/S Series steel panels meet load ratings of 1,000 psi, 1,250 psi or 1,500 psi. The SC-100 Woodcore is 1 in. of particle board between heavy-gauge steel sheet and bottom pan. Six pages. Innocrete Systems, Inc., Cranford, N. J.



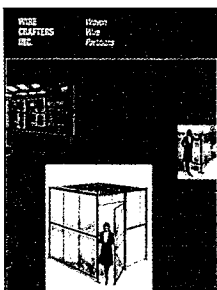
427 Security lockers
Illustrations and descriptions of a broad range of lockers for coin or key use. Available from one tier to six tiers in height. Specialty lockers designed for pistols, evidence, skis, small valuables, and computer printout distribution. Factory-controlled key cutting enhances security. 12 pages. American Locker Security Systems, Inc., Jamestown, N. Y.



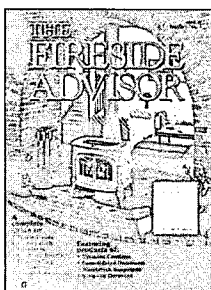
422 Lockers
The Locker Guide is designed for custom ordering of lockers and accessories in a wide range of styles and colors. Locker styles include single-tier, double-tier, multiple-tier, two-person, and expanded metal lockers and a selection of specialty lockers in a range of colors and finishes. Wide array of accessories available. 20 pages. Lyon Metal Products, Inc., Aurora, Ill.



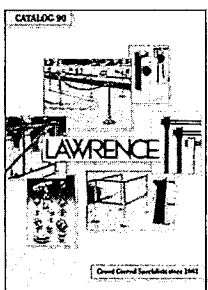
428 Reusable wall system
The Integral Wall floor-to-ceiling unitized movable wall system has been engineered to integrate with the Haworth hang-on components and Haworth open office panels. The system requires no special adaptors or bracketing. It permits unlimited use of glass. Walls are designed for removal and reuse. Four pages. Dowcraft, Corp., Falconer, N. Y.



423 Woven wire partitions
Open wire partitions are made of modular panels of 1- by 2-in. mesh welded into angle frames for easy, rapid erection. Panels of 4 and 5 ft height are stacked to form any height partition. Panels are secured between 2-in.-sq. 14-gauge steel posts. Two hinged and 12 sizes of sliding gates available with padlock lugs. Eight pages. Wire Crafters, Inc., Louisville, Ky.



429 Fireplaces and wood stoves
A buyer's guide to fireplaces, fireplace inserts, parlor stoves, and freestanding fireplaces. An installation planner offers guidelines. Information about various stove categories. Reference information on clean-burn technology and Environmental Protection Agency regulations. 120 pages. Vermont Castings, Inc., Randolph, Vt.



424 Crowd control
The Lawrence line includes portable posts, ropes and accessories for traffic control; lobby accessories; utility and decorative rail systems; specialty items and components, and exhibit booths and barriers. All equipment and furnishings manufactured in a wide range of styles, metals, finishes, and colors. 64 pages. Lawrence Metal Products, Inc., Bay Shore, N. Y.



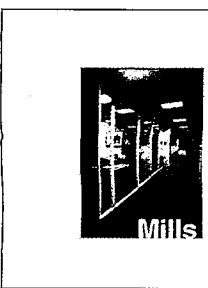
430 Washroom equipment
Descriptions and photographs of a complete line of washroom equipment and accessories, and Maximum Security Accessories, designed for prison bathrooms and public washrooms subject to high vandalism. Includes guidelines to product mounting heights for the handicapped. 52 pages. Bobrick Washroom Equipment, Inc., North Hollywood, Calif.



425 Fire protection equipment
The Continental Series of cabinets for fire extinguishers and valves comes with tubs of white epoxy-coated cold-rolled steel and trim and doors of the same material or of anodized aluminum or satin stainless steel. Glazing runs from full to narrow panel, and break-glass inserts. Vinyl letters or decals available. 12 Pages, J. L. Industries, Bloomington, Minn.



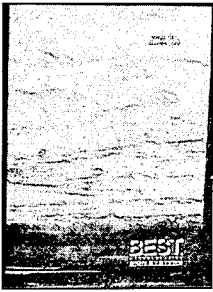
431 Louver systems
An overview of fixed and operating louver systems: standard-mullion and architectural line, drainable, roll-formed, thinline, insulated, acoustical, and sightproof models. Also outlined are penthouses, brick and block vents, operators, and controls. Finishable in Kynar 500, Tri-X, clear anodic, and duranodic coatings. 28 pages. Construction Specialties, Inc., Cranford, N. J.



426 Movable walls
A range of all steel and steel and glass floor-to-ceiling movable walls that can be quickly taken down and reerected without disturbing office routine. Since Forecast walls are non-progressive, individual panels or door frames may be taken down without disturbing adjacent units. Finished in baked enamel in any color. 12 pages. The Mills Co., Inc., Wickliffe, Ohio.



432 Bath accessories
The Sovereign line of bath accessories combines chrome and brass finishes. Crafted of hot-forged solid brass, each piece is protected by a clear lacquer surface. Pieces are accented with creamy white ceramic. Included are paper holders, urn and brush set, towel rings, soap holder, tumbler holder, and robe hook. Two pages. NuTone, Cincinnati.



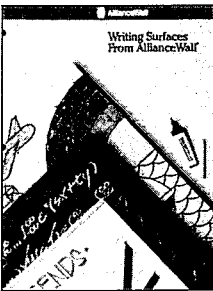
433 Sign systems

An extensive range of interior and exterior plaques, dedications, signs, and ID systems in wood, brass, plastic, tile, fiberglass, and enamel are illustrated. Signs include 34 graphic-blast typefaces and 21 machine-engraved faces. OEM uses and sign furniture are provided from stock or on custom order. 24 pages. Best Mfg. Co., Montrose, Colo.



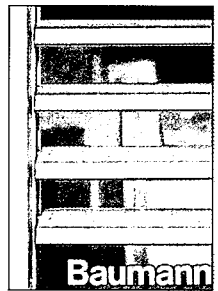
439 Sunscreens

Sun screens and sight screens in extruded aluminum, formed aluminum, and formed steel enhance exterior building design, deflect glare from sun or headlights, or combine concealment and ventilation. Face patterns may be continuous, egg crate, in-line, and staggered. Chevron blades are available. Four pages. Air Louvers, Inc., Pico Rivera, Calif.



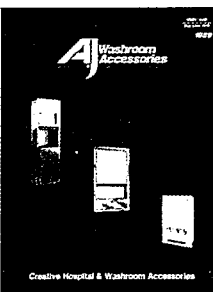
434 Ceramic writing surface

Color photos illustrate ColorFusion (ceramic fused to light-gauge steel) whiteboard and chalkboard writing-surface panels used in conference facilities, classrooms, laboratories, and offices. Surfaces are said to be durable, easy to maintain, reduce glare, magnetic, easy to write on, and projectable. AllianceWall Corp., Norcross, Ga.



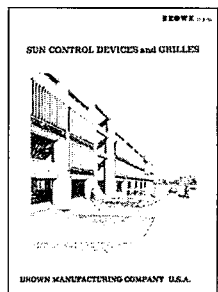
440 Security blinds

Described is a combination security shutter/solar blind that is installed on the outside of the window, and controlled from the interior. Slats stay at set angle regardless of wind speed. Vinyl plastic seal keeps out noise and weather. Recommended as hurricane shutters. Specifications and illustrations are included. Eight pages. Baumann, Inc., Barrington, Ill.



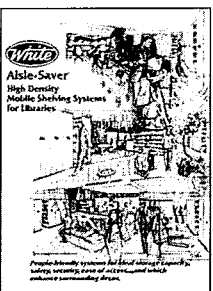
435 Washroom accessories

A 40-page guide is for users involved in the construction and redesign of residential, nonresidential, and commercial buildings. A complete line of washroom products is depicted in detailed photographs and line drawings. Products are primarily in stainless steel for durability and low maintenance. A & J Washroom Accessories, New Windsor, N. Y.



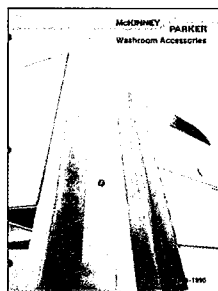
441 Sun controls

To get the most out of sunlight, external louvers may be horizontally or vertically mounted to respond to shade or illuminate interior space. Adjustable skylight shutters are included, as well as a line of grilles that can also reface old buildings, conceal mechanical equipment, and divide space. 18 pages. Brown Mfg. Co., Oklahoma City, Okla.



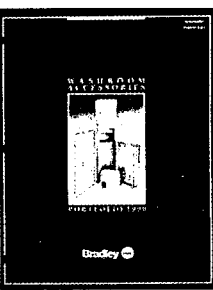
436 Movable shelving

The space-management concepts, safety features, and functional attributes of movable, high-density shelving are described. The system has more than doubled book storage space in many libraries, while still allowing easy access to books. Six pages. White Storage & Retrieval Systems, Inc., Kenilworth, N. J.



442 Restroom accessories

Four-color photographs, line drawings, and specifications detail a complete range of accessories for washrooms where traffic is heavy, the demand for durability is high, and the money for maintenance is low. Fixtures are designed for hospitals, schools, factories, hospitality, and commercial establishments. McKinney/Parker, Scranton, Pa.



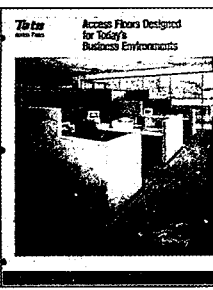
437 Washroom equipment

Shown are illustrations and descriptions of the total range of washroom equipment, such as hand dryers, waste receptacles, dispensing units, mirrors and shelves, grab bars and corridor rails, and security accessories, as well as modular telephone units and booths. Precise dimensions for all equipment and warranty information are given. Bradley Corp., Menomonee, Wis.



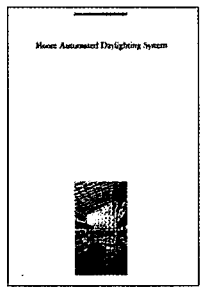
443 Ventilating louvers

The Architectural and Engineering Manual gives specifications for a wide range of louvers and dampers. They are 1- to 6-in. deep, made of extruded aluminum and fabricated steel; stationary and operable; horizontal and vertical; special-purpose louvers, and mechanical dampers. 72 pages. Penn Ventilator Co., Inc., Philadelphia.



438 Access floors

Photographs and specifications on four access-floor systems are given: particle board rimmed in galvanized steel; all-steel with a formed-steel bottom pan; cementitious fill bonded by steel; and die-cast aluminum. Understructures include snap-on stringer, bolted stringer, stringerless, and cornerlock components. 16 pages. Tate Access Floors, Inc., Jessup, Md.



444 Automatic louvers

Electronically controlled louvers respond automatically through exterior and interior sensors to the movement of the sun and the shading preferences of a building's occupants. Linked to energy management computers or hvac controls, this system can cut a lighting load by 70 percent and cut cooling loads by half. Eight pages. The Moore Co., Marceline, Mo.

11 Equipment

Bank & vault equipment
 Conference room & audiovisual
 Food-service equipment
 Kitchen & bath cabinets
 Laboratory equipment
 Library equipment
 Loading dock equipment
 Medical equipment
 Merchandise display
 Residential equipment



445



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447

445 Frameless cabinets

Avia cabinets contain no center stile, which permits greater use of interior space. White laminate-faced wall cabinets are equipped with adjustable shelves. Base cabinets come with one roll-out tray and the option of adding trays. Accessories include a flatware drawer, organizer, spice-tray insert, sink tilt-out tray, and lazy Susan. Merillat Industries, Inc., Adrian, Mich.

446 Cooktop

A commercial-type cooktop is designed for installation in residential cabinetry. The 48-in. model shown has six burners and a 12-in. griddle. Finishes are stainless steel, black, or white. A maple cutting board is an optional accessory. Viking Range Corp., Greenwood, Miss.

447 Kitchen cabinets

The Deco collection of cabinets is all-laminate, frameless one-piece construction. Models come in white, gray, or almond in matte or high-gloss pigmented varnish finish. Options include a curved range hood over an angled cooktop cabinet, open shelving and tray storage, wine racks, and combinations of cabinet heights. Quaker Maid, Leesport, Pa.



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448 High-density storage

A new graphics program enables designers to enhance the functionality and visual appeal of mobile storage and filing systems with new laminate colors, over two dozen lettering styles, and custom logos. The Spacesaver Group, Ft. Atkinson, Wis.

449 German kitchens

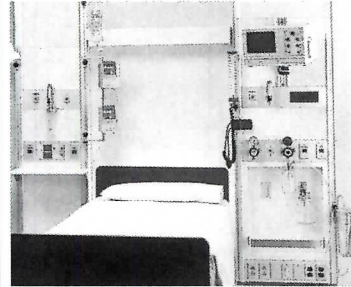
Formed by the merger of two long-established firms, Star Beka makes kitchen components said to combine efficiency with an elegant, sophisticated appearance. Pictured is the Yvonne kitchen, which features high-gloss white laminate fronts with fine vertical stripes, edged in silver or gold. IDI North, Inc., Long Island City, N. Y.

450 Stove combination

The Designer White collection offers a combination of gas cooktop, mountable on counters, and an electric oven designed for installation in a cabinet system. The oven's automatic time control makes it possible to preprogram baking time. Magic Chef Co., Cleveland, Tenn.



451



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451 Kitchen furnishing

The Form 2000 PE line of kitchen cabinetry, an extension of the SP/PB range, now offers wood finishes in black stained ash, rose stained and limed ash, and light oak. Framed glass-door wall cabinets with or without lattice framework are available to display items of interest, as are mirrored doors. Poggenpohl U. S., Inc., Tampa, Fla.

452 Medical headwalls

The Flex-A-Wall hospital headwall system accommodates medical gas, electric power, communications, and all other patient-care equipment. Vertical mounting track allows components to be fixed and removed without disturbing existing accessories. Delivered completely assembled, prewired, and prepiped. Post Glover Medical Products, Inc., Erlanger, Ky.

453 Steel cabinets

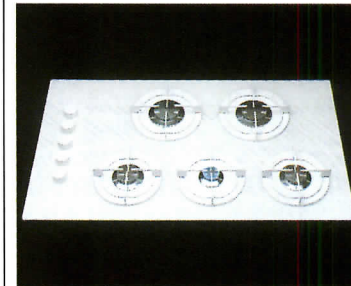
Designed for families that spend more time in the kitchen on food preparation and entertaining, steel cabinets are spacious and easily accessible. Features include built-in wine racks, easy-care laminate surfaces, and wall cabinets with glass doors. The St. Charles Companies, Chesapeake, Va.



454



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454 Veneered cabinets

The Castell cabinets by Tielsa of West Germany have a framed front with an angled edge of maple inlaid with cherry wood, and a center panel of book-matched yew. The handles are made in classic-style, of gold-treated solid brass. All interiors are fully laminated. Contemporary Systems, Inc., Woburn, Mass.

455 Kitchen appliances

The Architect Series is distinguished by monochromatic styling, which allows consumers to coordinate equipment in all-black, all-white, or all-almond. The completely built-in line includes refrigerators, trash compactors, cook tops, wall ovens, hot-water dispensers, and microwave ovens. KitchenAid, St. Joseph, Mich.

456 Gas glass cooktop

The Quintessence gas glass cooktop is available in black, white, and almond, and in 30-in. and 36-in. models. The 36-in. model offers a fifth, low-heat burner designed for melting butter, cheese, or chocolate without scorching, and for preparing sauces and other delicate cooking. Grates on both models are of matching tempered glass. DACOR, Pasadena, Calif.



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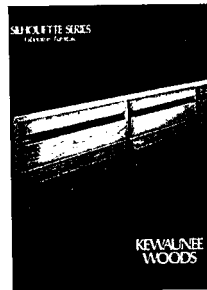
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11 Equipment Product literature

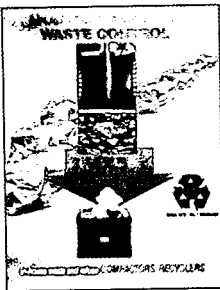
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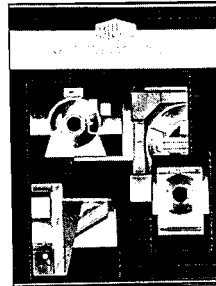
457 Kitchen stove
The AGA II, a smaller, two-oven version of the British AGA stove, is illustrated. It cooks with a system of heat-storage and transfer that automatically provides the optimum for each oven and hot plate and will operate on natural gas, liquid propane, or coal. Made of cast iron in seven enamel colors. 18 pages. Cooper & Turner, Inc., Stowe, Vt.



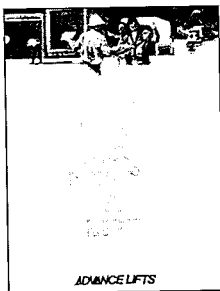
463 Laboratory furniture
The Silhouette Series of red oak laboratory furniture has a contoured look with machined, recessed pulls spanning the face of each drawer. Doors are made of five layers of hardwood and anchored to cabinets with five-knuckle stainless-steel hinges. Comes in a wide range of finish colors. Kewaunee Scientific Corp., Statesville, N. C.



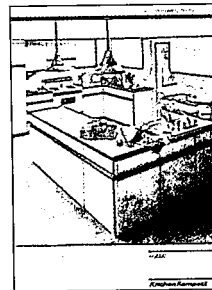
458 Trash-handling equipment
Brochure on the Pollution Packer line of waste compactors/recyclers and systems tries to answer the problem of too much trash in too little space. Accessories include the Bio-Kleen/99 air-filtering system, the Model 3600-B baler-crusher, waste security-storage systems, and chute-fed compactors. Eight pages. TFC Corp., Minneapolis.



464 Laundry machines
Forty-five different commercial laundry machines ranging in capacity from 35 to 700 lb are explained. Also described is a continuous-batch washing system, a fully automated washing/transport system that handles 4,620 lb/hr. The company also offers laundry-planning services. Four pages. Pellerin Milnor Corp., Kenner, La.



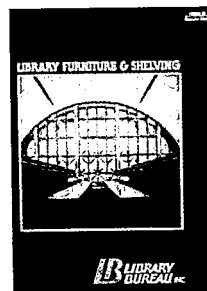
459 Dock lift
Hydraulically powered dock lifts provide a safe loading platform that adjusts to truck-bed heights within a 58-in. range. May be pit-mounted and flush with grade, or floor-mounted indoors. Capacities range from 5,000 to 20,000 lb and platform sizes from 6- by 8-ft to 8- by 12-ft. Eight pages. Advance Lifts, Inc., St. Charles, Ill.



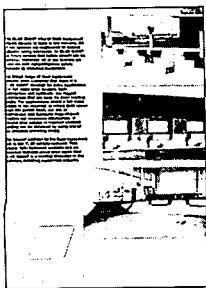
465 Cabinets
A new line, KK2000 kitchen and bathroom cabinets combine American technology and European styling. Door and drawer fronts are finished in almond melamine laminate over warp-proof chip cores. A solid-oak accent strip serves as a finger grip for easy opening. Four pages. Kitchen Kompact, Inc., Jeffersonville, Ind.



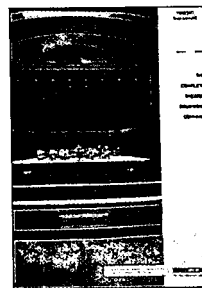
460 Kitchen-range hood
Color photographs and descriptions show kitchen-range hoods made of copper, steel, or enameled steel. Powered by built-in dual-centrifuge exhausters rated at 450 cfm and 900 cfm. Wall-mount and island models in 36-, 42-, 48- and 60-in. lengths. Custom hoods a specialty. Four pages. Abbaka, San Francisco.



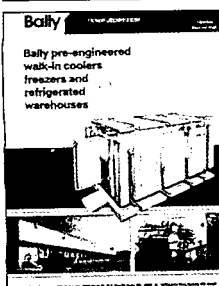
466 Library furniture
A complete range of library furnishings is illustrated and described. Elements include steel shelving and wooden technical furniture, charging desks, carrels, tables, chairs, magazine racks, and atlas stands. Book stacks and four-post shelving are made of light structural steel. Eight pages. Library Bureau, Inc., Herkimer, N. Y.



461 Dock equipment
Specifications, photographs, and charts detail mechanical and hydraulic dock levelers designed for safety and ease of operation; a hydraulically powered truck latch; and a line of hydraulic elevating docks. Devices are aimed at safer loading and unloading of trucks. Eight pages. Blue Giant Equipment Corp. Pell City, Ala.



467 Theater equipment
Stage equipment from the curtain through backstage is described. Rigging is designed, manufactured, and installed. Lighting installations draw on leading suppliers and local manufacturing. Draperies and curtains produced to design needs. Acoustical enclosures and orchestra-pit lifts also available. Four pages. Secoa, Minneapolis.



462 Cold storage
Design information is given on pre-engineered walk-in coolers, walk-in freezers, and refrigerated warehouses. They are assembled of lightweight modular panels of urethane insulation between metal skins. Buildings may be assembled in a wide variety of sizes. Eight pages. Bally Engineered Structures, Inc., Bally, Pa.



468 Wood laboratory furniture
Cabinets, fume hoods, laboratory tops, and other standard products for schools, research labs, and institutions are shown. Hardwood inner framework is the basis for tables and cabinets. Equipment includes freestanding tables, peninsular tables, and evolute tables. Eight pages. Taylor American Desk Mfg. Co., Taylor, Tex.

12 Furnishings

Artwork
Blinds, shades & shutters
Cabinets & storage
Fabrics
Furnishing accessories
Furniture
Rugs
Seating



469



470



471

469 Wool rug

Groundswell, designed by Frank Conte, can be dyed and woven to client specifications in any color palette of 100 percent virgin New Zealand wool, as a one-of-a-kind area rug, or as wall-to-wall carpeting. Edward Fields Inc., New York City.

470 Chairs and sofas

Spatz, an upholstered modular sofa and chair system, has a distinctive arm that defines individual space in group seating or creates club chairs and sofas. Wedge-shaped tables make possible the creation of continuous arrangements. Vecta, Grand Prairie, Tex.

471 Plank tables

John Coleman's plank furniture is appropriate to both office and home. The line includes mirrors, coffee tables, a console table, and a desk/dressing table. Mirrors and tables are available in gray, pear, olive green with sycamore edges, and oak, lacewood, and bird's-eye maple with American walnut edges. John Coleman, London.



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472 Adjustable side table

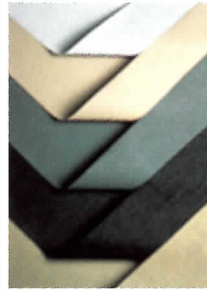
The Apprendista adjustable side table has a 20-in.-dia top; its height can be raised from 23 in. to 35 in. through operation of a crank handle. Weighted metal base is covered with ABS. Base, enameled steel post, and top are in white or black, with crank and gear in contrasting red, yellow, white, or black. The Ironmonger, Inc., Chicago.

473 Decorative textiles

The Suzanne Tick collection of textile designs for Brickel consists of three products: Calla, an all-wool floral-pattern damask; Scintilla, a textured pucker weave of silk and rayon fibers on a polyester warp striped; and Alchemy, an iridescent, solid-color textured warp weave of rayon and cotton. Brickel Associates, Inc., New York City.

474 Elbow-support chair

Pain, tension, soreness, and fatigue in the back, neck, shoulders, arms, and wrists of persons who work at keyboards can be eliminated by use of the Grahl/Litewka elbow-support chair. The chair is completely adjustable to individuals, including padded elbow supports. Grahl Industries, Chicago.



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475 Window coverings

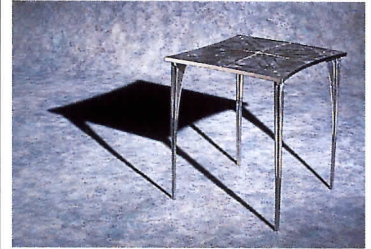
CastleVeil, a vinyl-covered fiberglass fabric, retains its shape and weave in extreme temperature conditions. Colors will not fade. The fabric is resistant to most chemical pollutants and salt-air spray, and is said to be inherently flame-retardant. Newcastle Fabrics Corp., Brooklyn, N. Y.

476 Office suites

Canon and Cambria office suites, extensions of the Canon and Cambria executive desk series, offer pedestals, credenza shelves, overhead storage, returns in racetrack or square shapes, desk tables, and storage cabinets. All surfaces available with power-supply grommets and raceways. Tuohy Furniture Corp., Chatfield, Minn.

477 Office system

The System Seven workplace offers efficient and economical answers to office organization problems. The system's universal hinge connector for all panels is said to make the components easy to order and reconfigure. Domore Corp., Elkhart, Ind.



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478 Cast-aluminum tables

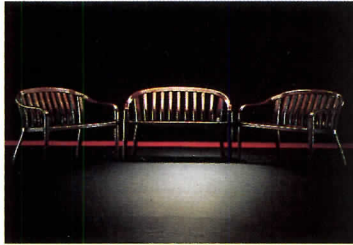
Bob Josten tables work with many different styles of furnishings, from corporate offices to modern metal-based environments. The tables' cast aluminum makes a good backdrop for colors. ICF, Inc., Orangeburg, N. Y.

479 Seating

The fully upholstered Phoenix collection was designed with proportions and interior construction that maximize seating comfort. The line includes a lounge chair, two-seat sofa, conference chair, and a high-backed swivel-tilt chair. Brueton Industries, Springfield Gardens, N. Y.

480 Italian design

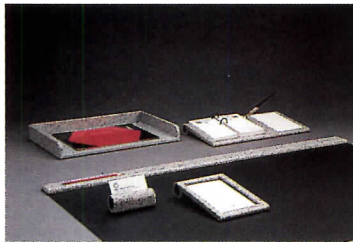
Both the solid-beech cane/spindle back chair and the Ingot table were designed in Milan for conference use. The chair comes in oak, walnut, mahogany, and black-lacquer finishes. The cast-iron-based Ingot table comes in round, rectangular, and racetrack shapes. Atelier International, Inc., Long Island City, N. Y.



481



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481 Wooden chair

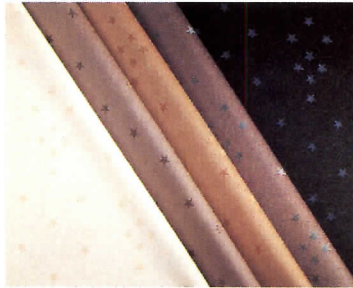
Inspired by the Bank of England chair, the Courthouse chair produced by Gunlocke is a design classic. The chair's steambent curves are offered in solid maple or walnut. An all-wood two-seat bench version is shown above. The Gunlocke Co., Wayland, N. Y.

482 Secretary bureau

The Privé secretary, designed by Jurgen Lange, is a new version of a traditional piece that combines the advantages of a cabinet with those of a high desk. It has space for all the necessities of writing and communicating. Available in black lacquer finish only. Leather inlay desk top is optional. It is 39 in. high, 30 1/3 in. wide, and 20 in. deep. Casaform, New York City.

483 Desk accessories

A comprehensive desk accessory collection, Strata items are made of Avonite, a man-made composite that resembles natural stone. Among the Strata products are a utility tray, calendar, pen base, pencil cup, single and double file trays, and bookends. Items come in flannel gray, Belgium black granite, and adobe brown. Peter Pepper Products, Inc., Compton, Calif.



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484 Decorative fabrics

Starry Night and Stepping Out are two similar but different patterns in 100-percent worsted-wool jacquard designed by Gretchen Bellinger. In Starry Night, the stars are in random, galaxy patterns. In Stepping Out, the stars are in a linear pattern. Fabrics come in low-contrast natural shades. Gretchen Bellinger Inc., New York City.

485 Children's chairs

The Childform chair, derived from the Danko Bodyform chair, is made from a single piece of molded plywood that contributes to strength and durability, because there are no joints to break or wiggle loose. The chair is easily cleaned and stackable, with a cutout in the back that facilitates handling. Peter Danko & Associates, Inc., Clinton, Md.

486 Furniture collection

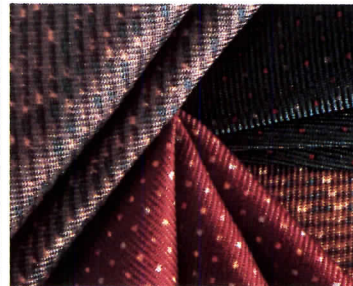
The broad line of Dennis Miller furniture includes heavily upholstered living-room elements; upholstered lounge and dining chairs; side tables and coffee tables in decorative woods, glass, metal, and PVC; and wall lighting in nickel or brass-plated steel. Dennis Miller Associates, New York City.



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487 Two-position chair

Designed for both work and relaxation, the Adden two-position chair may be used in its upright position for working at a desk or tilted backward for lounging or reading. It is made of solid red oak, fully upholstered and with a 20 1/4-in.-wide seat. Adden Furniture Inc., Lowell, Mass.

488 High-tech office system

Dynamix office space planning combines the space-saving advantages of circular workstations with the linking ability of rectilinear systems. Simple stations can be ordered in two- to six-station groupings. Cylindrical connecting system offers easy installation. Rosemount Office Systems, Inc., Lakeville, Minn.

489 Nylon upholstery

From a new upholstery collection by Culp for the hospitality market, Persuasion and Pennant are woven of Du Pont's Cordura nylon fiber. Dot and diagonal patterns are created by heat-transfer printing on the twill weaves. Both fabrics are offered in a number of bright colors. Culp Contract Fabrics, High Point, N. C.



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490 Occasional tables

Designed by Alan Jay Paull, Taylor occasional tables are made of either American black walnut or white oak solids and veneers. Five distinctive table groupings are produced in traditional, transitional, and contemporary styles. Taylor Desk, A Taylor Co., Lynwood, Calif.

491 Office planters

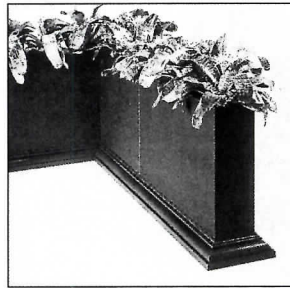
The Design Planter series offers panel-mounted, leakproof planters made of fiberglass in four channel widths to fit over most panel systems. Planters are 8 in. high and 8 in. wide and come in 30- and 24-in. lengths. Pouliot offers 30 colors and faux marble and granite finishes. Pouliot Designs, Inc., Shakopee, Minn.

492 Executive furnishings

Myrtle Desk introduces the Focus series, a complete line of executive office furnishings. The new line includes desks, credenzas, executive groupings, secretarial and reception stations, support pieces, and an extensive line of executive tables. The Focus series is manufactured in fine mahogany solids and veneers. Myrtle Desk Co., High Point, N. C.



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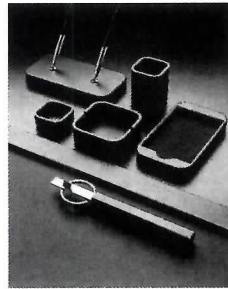
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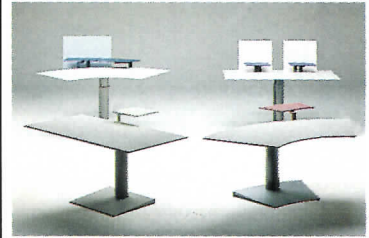
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493 Modular workwall

The Spec-Wall Collection uses 72-in.-high, 22-in.-deep, and 30-in.-wide anchor cabinets in conjunction with 72-in.- or 84-in.-long cube credenzas and 72-in.- or 84-in.-long overhead storage cabinets to create work walls in a wide variety of configurations. Desk runoffs and spacers can form L- or U-shaped work centers. Dar/Ran Furniture Industries, High Point, N. C.

494 Fabrics

Calling upon the world of literature, Hendrick has produced the End Papers Collection, which has five cotton patterns—Dante, Wilde, Rousseau, Wordsworth, and Voltaire—each of which is available in six to eight colorings. Hendrick Textiles, Ltd., Grand Rapids, Mich.

495 Modular workstation

Janine James designed this showroom workstation as an example of Spec'built's custom craftsmanship. All joining details are exposed and are integral parts of the design. Charcoal gray Polane finish and matching laminate are used with black steel and perforated metal detailing. Spec'built, Carlstadt, N. J.

496 Planter wall

The Planter Wall was developed as a way to frame open areas and direct traffic flow while using the decorative properties of plants. It comes in 28- and 36-in. heights to allow for maximum visibility. It is made in a black crinkle finish and in custom colors. Architectural Supplements, Danbury, Conn.

497 Office furniture

The Metta One line of chairs and settees is designed in a slightly exaggerated Neoclassic style. Woods include maple, mahogany, walnut, and light and medium cherry. Pieces are made with either a wooden slat back or an upholstery back. USFI Carolina Seating Co., High Point, N. C.

498 Office accessories

SmithBlack is a durable black matte coating for metal office accessories that is highly resistant to surface scratches. This finish is available in the Radius One, Radius Two, and Rectilinear lines. Clocks and bookends are included in the line. Smith Metal Arts, Buffalo, N. Y.

499 Office panels

Trendway adds to the privacy of office environments with a broad range of integrative panel heights for private and open office arrangements. They range from floor-to-ceiling partitions for private offices to space-management systems that define open offices and reception areas with panels from 42 to 84 in. high. Trendway Corp., Holland, Mich.

500 Upholstery textiles

New designs by Andrée Putman include Longchamps, a material similar to horsehair in texture and appearance. It is 50 percent cotton and 50 percent polypropylene with an acrylic backing for stability. It changes character and color intensity as point of view changes. Stendig Textiles, New York City.

501 Office chairs

Chairs designed for KI by Giancarlo Piretti employ advanced passive ergonomic concepts to provide comfort for individual physical requirements. Concealed lever mechanisms adjust seat and back angles based on the occupant's weight. KI, Div. of Krueger International, Green Bay, Wis.

502 Hospitality chairs

Additions to the Lübke line of chairs include Novea, a multifunctional chair offered with and without arms. The posture-supportive design may be stacked and ganged. Novea comes in several colors with matching tables. Lübke International Design, High Point, N. C.

503 Office furnishings

A freestanding furniture system, Context is desk-based, as opposed to panel-based. The core unit supports a curvilinear work surface; boundary walls set onto the basic element provide major space division. Storage needs are met by freestanding units, such as towers, pedestals, and lateral files. Steelcase Inc., Grand Rapids, Mich.

504 Computer stands

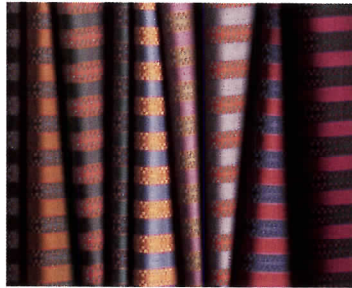
Satelitti furniture is designed specifically to accommodate computers and their peripheral equipment. Special metallic tables in different colors are adjustable in height and overall dimensions, and are built with a high level of stability and capacity to absorb vibration. Unifor, Inc., Long Island City, N. Y.



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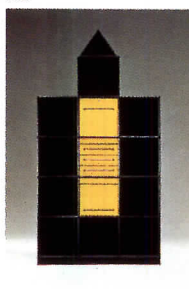
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505 Adjustable chair

Klober Caddy, a line of high-tech seating designed by Eckhard Hansen, has a front pivot-point tilt mechanism, tilt-lock, and a flexible back that follows and supports the user in dynamic seating operations. Allsteel, Aurora, Ill.

506 Reception station

The Sorrento series reception station comes in oak, walnut, or mahogany. Eight other designs are available, ranging in style from traditional to contemporary. The work space provides double-pedestal drawers, pencil drawers, and an optional computer-keyboard pullout. Custom Executive Office, Inc., Palos Park, Ill.

507 Management chair

Geoff Hollington's executive chair was designed for the professional manager at home or in the office. The line includes a high- and low-back work chair with arms, a high- and low-back side chair with arms, and a lounge chair and ottoman. Herman Miller, Inc., Zeeland, Mich.

508 Desk collection

The Millennium desk collection was designed by Berry & Clark Design Associates for executive, managerial, and clerical applications. The collection includes executive desks, credenzas, returns, conference tops, lateral files, vertical storage, and book cases, all made of sepele veneers and solid mahogany. Davis Furniture Industries, High Point, N. C.

509 Seating fabric

A line of contract seating fabrics features a blend of solution-dyed nylon in combination with wool for colorfastness, resistance to abrasion, color-lot uniformity, and endurance. Preliminary Wyzenbeek tests show the Berwyck pattern can withstand 100,000 double rubs. Eastland Woolen Mills, New York City.

510 Office furniture system

The Grey/Charcoal line of freestanding office furniture provides storage with suspended accessories and pedestals, as well as overhead carrels and screens to keep work surfaces uncluttered. Surfaces are laminates over steel; construction details include ChannelBar top protection. The Marvel Group, Inc., Chicago.

511 Furniture fabric

The Biedermeier Stripe, a 100 percent worsted-wool satin weave, comes in 14 colorways ranging from black and white to subtle tonal gradations. This cloth is appropriate not only for executive office furniture, but for hospitality and residential applications. Unika Vaev USA, Orangeburg, N. Y.

512 Panel options

New trim colors and an enhanced line of fabrics, laminates, and vinyls are now offered on office panels. The manufacturer suggests that the Pebble trim bridges the gap between gray and beige, and that Cordovan, a deep red tone, will replace the browns that were recently popular in private- and open-office configurations. Trendway Corp., Holland, Mich.

513 Storage system

Inbox is a freestanding storage system, a structure basically made of just two components: a plastic cross-joint in L and T variations and a steel-sheet panel with rounded edges that connects to the cross-joint. The panels function as shelves and sides. Elements such as doors, drawers, and filing frames are installed as needed. Palazzetti, Inc., New York City.

514 Lightweight chair

The Studio X chair, says its manufacturer, is an answer to furniture gridlock that plagues offices and homes. Modest in scale (19 in. wide, 22 in. deep, and 32 in. high) and light in weight, the chair can be easily moved about. Donghia Furniture, New York City.

515 Upholstery

Rusling, Sedgfield, and Highland, three new fabrics woven in the U. S. of 60 percent wool and 40 percent nylon, are available in periwinkle, bluejay, rosewood, smoke, blackberry, and paprika. Made in a 54-in. width. Schumacher, New York City.

516 Task chair

The Criterion line of task chairs is designed for workers in data entry, laboratory, and light assembly functions. The chair may be adjusted to lean forward or backward. Easy-to-use levers alter seat height, seat and back tilt, back height, and arm height. The chair maintains a proper angle between the body and legs. Available as a stool. Steelcase, Inc., Grand Rapids, Mich.



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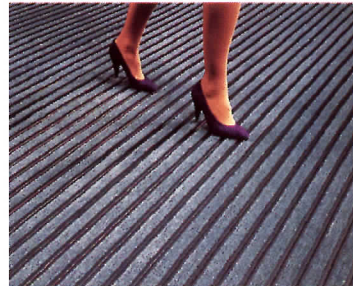
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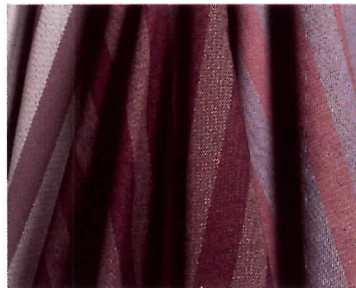
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517 Lounge furniture

David Wheeler's Archer seating has spare, dramatic lines drawn by welded steel framing. Seat and back are upholstered over molded plywood; arms are curved laminated wood. Metal parts are finished with a choice of six powder-coat colors. Ambient, Inc., Chicago.

518 Executive storage

A custom look at standard prices is the aim of the Geneva Wall System. Components include wood- and glass-door cabinets, wardrobes, files, and storage drawers. I. M. Rosen designed the pieces with details such as an ebonized top-beveled edge and drawer reveal. Cumberland Furniture, Long Island City, N. Y.

519 Teutonic ergonomic

Burkhard Vogtherr designed the Cassys chair to perform appropriately across a broad spectrum of office functions. The contoured lines are accented by diagonal welting. Lounge seating is included in the Cassys line. Brayton International, High Point, N. C.

520 Rated upholstery

The four patterns offered in the new Safety Series/3 collection are said to be inherently flame-resistant and able to pass the most stringent fire codes. Contract fabrics, woven 54-in.-wide, come in 80 colorways. Maharam/Vertical Surfaces, Hauppauge, N. Y.

521 Systems sofa

A panel-hung sofa is now available as a standard component in the Morrison Office. The sofa comes in 60- and 72-in. lengths, each 30-in. deep; seat height can be adjusted in one-in. increments. Knoll International, New York City.

522 Contract textile

New fabrics designed by Orlando Diaz-Azcuy include Galen, an all-wool twill that merges the feel of a tweed with a plaid-like stripe. Described as affordable, all fabrics meet wear- and fire-test criteria. HBF Textiles, Hickory, N. C.

523 Classic style

Based on a squared-circle design element, Acanthus Collection chairs, tables, and cabinetry display the beauty of hand-rubbed cherry or walnut wood. Pictured are the Acanthus side chair and conference/dining table. Stow & Davis, Grand Rapids, Mich.

524 Entrance mat

The TreadLine mat has a flexible ball and socket connection that allows the mat to adapt to floor irregularities without noisy clatter. Rails are co-extruded of integrally-colored vinyl and acrylic; carpet inserts can be printed in custom logos or other graphics. The C/S Group, Muncy, Pa.

525 Italian stack chair

Designed by Sottsass Associates for Bieffeplast, the Creek Chair is made of painted tubular steel with a polypropylene seat and back. Frame colors are gray, white, red, yellow, and black, with a matching storage dolly for 10-high stacking. Gullans International, Long Island City, N. Y.

526 Architectural accessories

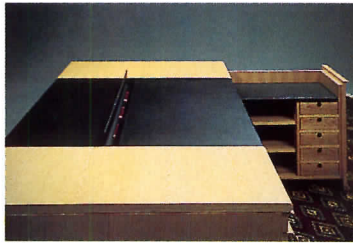
New faux-stone finishes are available on containers, table tops, urns, fireplace surrounds, and other elements made of Magnalite lightweight glass fiber/concrete material. Magnalite Systems, Inc., Belmont, Calif.

527 French flair

Architect Jean Nouvel used contemporary industrial materials—an aluminum frame, molded polyurethane foam—to give his Profils sofa and chair modern comfort as well as a futuristic appearance. The tilt of the back adjusts just like the front seat of a Buick. Ligne Roset, New York City.

528 Open-office system

Trianon is CenterCore's attempt to save expensive office floor space while at the same time providing a larger and more accessible worksurface area to each employee. The system can be configured in two- to six-workstation clusters with more of the feel of a private office. CenterCore, Inc., Plymouth Meeting, Pa.



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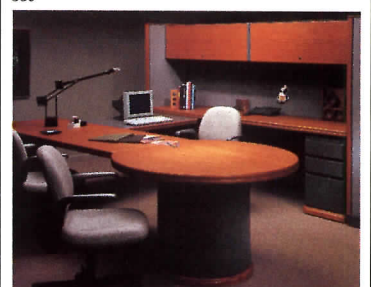
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529 Management furniture

Mobilia Series desks are designed to reduce office clutter, with storage space that keeps computer equipment out of sight when not in use. Desktops have wood, leather, or marble inserts. Credenzas are available with a knee space for an auxiliary work surface. Geiger International, Atlanta.

530 Office accessories

The Milano Collection of plastic office accessories has the look and feel of marble. The collection includes letter trays, calendars, memo boxes, pencil cups, and wastebaskets in a range of faux marbles: Lava, Perugia, Voltera, Alpi, and Dolomiti. Knoll International, New York City.

531 Glazed sateen

The Textures Collection's Slate and Granite fabrics, designed by the Neo III group, are all-cotton glazed sateen. Slate comes in shell, silver, pink, stone, aubergine, and charcoal, and Granite in gray, banana, mauve, and ash. The 53-in.-wide fabrics exceeded 35,000 double rubs when subjected to the Wyzenbeek Test. Scalamandré, Ronkonkoma, N. Y.

532 Chair collection

A stacking chair made with elastomeric fabric stretched over a lightweight metal frame has been added to the System 28 seating line. Intended as storable seating in offices, schools, and meeting rooms, the metal frame is designed and finished to withstand chipping and scratching. Comforto, A Haworth Co., Holland, Mich.

533 Upholstery leather

The Rainbow Collection of full top-grain aniline-dyed leather introduces 25 colors for upholstery application, the first in a projected series of 98 colors. The leathers offer durability, resistance to fading, and soap and water cleanability, says the manufacturer. American Leather Mfg. Co., Rahway, N. J.

534 Swivel chair

The Aileron swivel chair is made with a cantilevered frame and fully upholstered seat and back. Designer Timothy de Fiebre made the curved maple arms look and function as part of the chair itself. Adjustments are made by a Kneest control. Brickel Associates, Inc., New York City.

535 Contract fabrics

From the Homage Collection comes Edition Gaudi, a group of four jacquard tapestries woven as an interpretation of the exterior and interior broken-tile surfaces of the Barcelona structures of Antonio Gaudi. The designs are Micarda, Campana, Cardella, and Campeon, intricately woven in four tone-on-tone colorways. Architex International, Chicago.

536 Furniture system

The new Equation line of office furniture has a contemporary look. Worksurfaces have a radiused edge. Overhead cabinets have a refined edge detail and concealed hardware. Tackboards and slatboards accommodate paper storage. Westinghouse Furniture Systems, Grand Rapids, Mich.

537 Sueded fabric

Giltmore-pattern Ultrasuede is a metallic print imposed upon grounds of platinum, pewter, dawn, teal, and black. The material will not pill, crock, fray, or fade, says the manufacturer. Inherently stain-resistant, it can be machine-washed or cleaned with soap and water. Springs Industries, New York City.

538 Wire management

An improved version of the Prism System includes a metal panel and new components to manage the influx of wires at workstations. The panel has a wire-concealing raceway on all sides. A bulk storage tray can be added under a work surface to regulate extensive computer wiring. Corry-Hiebert Corp., Irving, Tex.

539 Guest chairs

A versatile collection of occasional seating designed by Michael Farrer Coston is framed in solid hard maple in any of 14 finishes, with a choice of two slat-back panels and one upholstered back. Upholstery is detailed in welting. Mueller Furniture Corp., Grand Rapids, Mich.

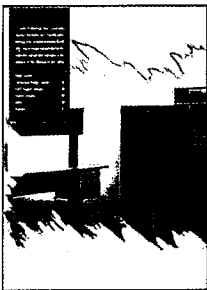
540 Wood office furniture

Invitation, a new Venetian veneer-clad wood furniture system, was developed to enhance the overall quality of a workplace. The veneer achieves a consistent grain even over differing substrates. Seven finish tones and complementary fabrics are offered. American Seating Co., Grand Rapids, Mich.

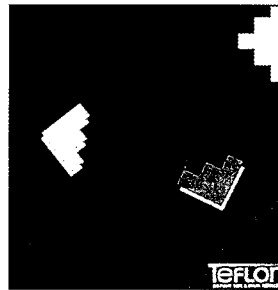
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Furnishings Product literature

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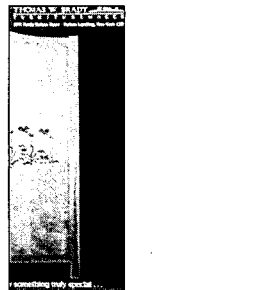
541 Office files
Attractive, functional solutions for most workplace paper-storage problems are suggested in Borroughs' Office Concepts catalog. Also included are coordinated wardrobe units, workstation furniture, and EDP support accessories. Borroughs Mfg. Corp., Kalamazoo, Mich.



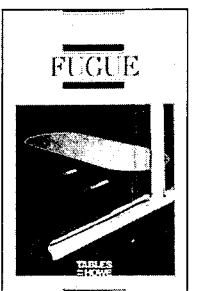
547 Fabric protectant
Manufacturers of interior-design textiles describe their experience with Teflon topical stain repellent in a contract environment. Treated fabrics and applications are illustrated, including offices, hotels, and healthcare facilities. DuPont Co., Wilmington, Del.



542 Contract seating
Colorfully illustrated brochure from Harter reviews the evolution of the office chair, from a metal posture-back secretarial model introduced in 1927 to the Allegro active-ergonomic seating system of 1990. Classic upholstered pieces are also shown. The Harter Group, Chicago.



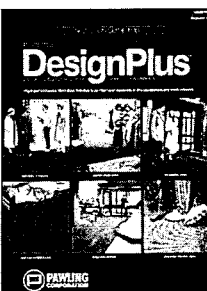
548 Custom furniture
Examples of both limited edition and custom-design furniture are shown. Handcrafted with traditional dovetailed construction in cherry, walnut, and figured maple, featured pieces include tables, bureaus, and an unusual three-panel wood screen reminiscent of the Crafts style. Thomas W. Brady, Furnituremaker, Bolton Landing, N. Y.



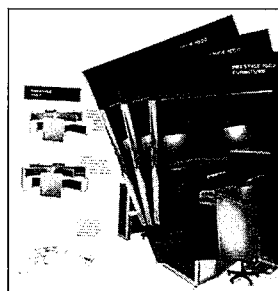
543 Table collection
Updated brochure shows how the different top options for the Fugue table work in conference, dining, and office settings. Available in four shapes and many sizes, Fugue tops can be marble, glass, wood, laminate, or a new surface, Finesse, with matching- or contrasting-edge treatments. Eight pages. Howe Furniture Corp., Trumbull, Conn.



549 Insulating fabric shades
Architectural catalog features Duette dual-pleated window shades. Interlocking cellular construction eliminates seams or cord holes, and produces a fabric shade strong enough to span widths of up to 14 1/2 ft in one expanse of material. Vertical, curved, and skylight styles are also shown. Eight pages. Hunter Douglas, Inc., Broomfield, Colo.



544 Floor protection systems
Applications for European-styled walk-off and protective carpet systems include lobbies, entrance areas, and all-weather exposures. Densely constructed materials, made of natural coir, nylon, and polypropylene, are shown in a 12-page architectural catalog. Pawling Corp., Pawling, N. Y.



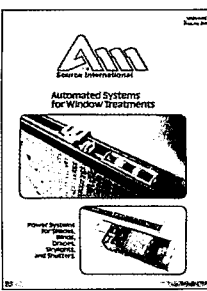
550 Modular workstations
Color brochure on the Prestige 1000 office line highlights the stability of the panel system, the density of the cluster configuration, and the versatility of the modular workstations and casework. Eight pages. Prestige Systems, Div. of TAB Products Co., Palo Alto, Calif.



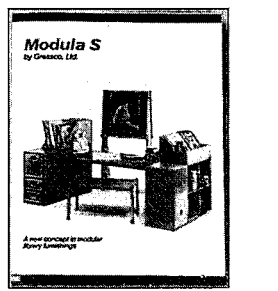
545 Electronic office
The versatility of the Teknion Office is based on its unconventional panel system, a stackable unit that allows users to create workstations of variable heights based on individual needs for privacy or openness. Power and data wiring are accessible from desk-level horizontal raceways. 36 pages. Teknion, Inc., Marlton, N. J.



551 Architectural tableware
Shown are silver teapots, clocks and watches, bar fittings, and cookware created by an international roster of industrial designers and architects that includes Ettore Sottsass, Aldo Rossi, and Michael Graves. Color catalog illustrates "design-creations" made in Italy by Alessi. 36 pages. The Markuse Corp., Woburn, Mass.



546 Motorized window blinds
The Am-Source blind places a compact mono-drive inside a 2 1/4-by 2 1/4-in. headrail. Controlled by switch or wireless remote, the motor can both lift and tilt the aluminum or wood slats of the blinds. A computerized sun sensor can direct both lift and tilt operations as the sun moves. Four pages. Am-Source International, Wauconda, Ill.



552 Book display
The Modula S system of interconnected wooden cases can be used to create distinct book display environments that invite children to browse. Kinder-size work tables, stools, easels, and cupboards are included. A free model kit of wooden blocks is offered to inspire layouts. Six pages. Gressco, Inc., Madison, Wis.

A determined team of seating experts spent the last two and a half years in an interesting position.

Together, they put in more than 30,000 hours at the drawing board, bent on building a new kind of task chair.

Task force.

As they worked, it became painfully clear that what was needed was a highly adjustable, yet totally stable chair. One that would provide maximum support through a broad range of task-intensive postures.

Their extensive research into the

*Larry DeKraker, Dan Slater,
Mike Mercier and Russ Holdredge,
four members of our task force,
finally relax after 30 months of work on
the new **Criterion**™ chair.*



work being performed and the ergonomic needs of the person performing it resulted in a chair that allows users to “customize” their task chair with a minimum of effort. With instantly adjustable seat, back and arms, as well as visually obvious controls.

For all its sophisticated ergonomics, this chair offers a long list of low-maintenance features. Snap-on-snap-off cushion upholstery, scratch-resistant plastics and 30-second pneumatic cylinder replacement, to name a few.

The new Criterion™ chair from Steelcase®MR


It puts Steelcase in a position to offer a line of economical, yet ergonomically exact task seating that no one else can.

Which is a very comfortable position to be in, indeed.



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*Our horizontal blinds come in three styles:
Mini, Micro and the new MidSize!SM
All are available in
140 colors.*

*Our light-softening pleated shades—in
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14 unique fabrics and an array of colors.*





BALI DOES SO MUCH FOR A ROOM, YOU MIGHT WONDER IF IT NEEDS ANYTHING ELSE.

It's the way the lines break up the window space, and the way the light falls over the floor and walls. You can choose from hundreds of different colors, shapes and textures. Because our blinds and window treatments come in such astonishing variety, there's sure to be one to fit your particular vision. For a Bali commercial window treatment brochure, call 1-800-433-7138.



SofTrims® fabric overtrements are available in 42 colors, in antique satin or chintz.

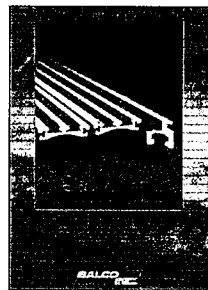
Bali verticals come in 38 fabric styles in a wide range of colors, 10 vinyl styles, and 60 colors of aluminum.

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553 Casual furniture
French-made Stamp outdoor furniture, designed by Henry Massonnet in a durable, lacquer-look plastic resin, comes in a variety of sculptural forms and distinctive table-top contours. Chairs may have a decorative color insert integrally cast in the plastic. 32 pages. Stamp/Contract & Liesure Seating, New York City.



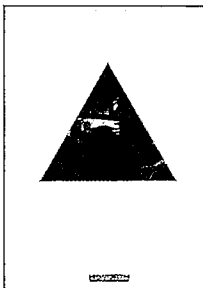
559 Entry walk-off mat
Recessed and surface-style AirTron floor mats have a cushioned vinyl tread that eliminates metal-to-metal contact. Flooring rolls up for easier maintenance. Shallow- and deep-pit fixed mats are available. Color photos and installation details included. Eight pages. Balco, Inc., Wichita, Kan.



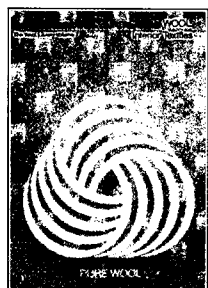
554 Institutional seating
Catalog insert features the PlyLok two-position chair, with an upward bend in its laminated-wood sled base that offers a stable, tilt-back seating angle. The cushioned, contoured seat may be covered in fabric or vinyl. Sauder Manufacturing Co., Archbold, Ohio.



560 Office seating
Omnic is a unique desk chair with dual-function arms that flip down out of the way as needed. The full line includes managerial, operational, technical, conference/guest, and multiple-seat models. Dimensional, finish, and ordering information given. 24 pages. Panel Concepts, L. P., Santa Ana, Calif.



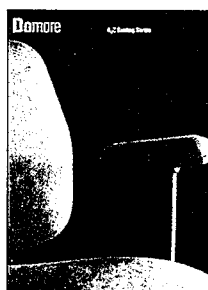
555 System options
The Places Office system offers new individualizing components, including privacy blinds, "street lights" cantilevered from partitions, and grid-glazed panels. Profusely illustrated with color photographs and detail drawings. 32 pages. Haworth, Inc. Holland, Mich.



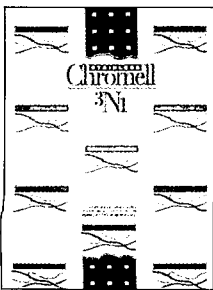
561 Wool upholstery
One of a series, a technical publication written for the architect and interior specifier describes the advantages of wool as used in contract upholstery, wallcoverings, and casements. These characteristics include inherent fire-resistance, design potential, and comfortable hand. 12 pages. The Wool Bureau, Inc., New York City.



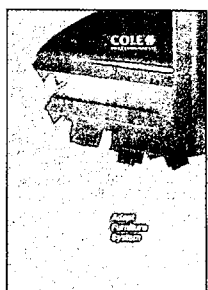
556 Architectural crafts
An overview of the unique design and crafts studio operated by Rambusch. Recent examples of architectural decorative arts schemes, including lighting and restoration projects, are photographed in color. Six pages. The Rambusch Co., New York City.



562 Full-function task chair
The A2Z is the latest and most advanced of this maker's long line of comfortable and posture-supporting chairs for the office environment. All 16 models are illustrated. Features include easy-to-reach adjustment levers and a locking 5-deg forward-tilt position. Domore Corp., Elkhart, Ind.



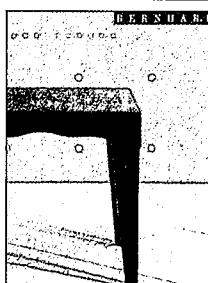
557 Stain-resistant carpet
Brochure describes a new-technology nylon carpet fiber, Stainless Chromell 3N1, specifically formulated to withstand stains, fading, and the abrasive cleaning procedures of healthcare facilities. Carpet is guaranteed not to stain from any substance normally found in a hospital, home, or office. Dorsett Carpet Mills, Inc., Chatsworth, Ga.



563 Versatile office
Wood, metal, and fabric can be combined in the Adapt System to create distinct surface, panel, and component finishes. Executive, professional, technical, and support functional groupings are illustrated; close-up photos highlight veneers, fabrics, and edge details. Cole Office Environments, York, Pa.



558 FR window treatments
Fiberglass fabrics for vertical blinds are available in linen-like, homespun, and tweed textures; nine standard colors include grays, peach tones, navy, and several naturals. Design folder contains sample swatches and technical data. 3G Mermet Corp., Cincinnati.



564 Occasional table
From Brian Kane's new furniture collection for Bernhardt, the Paramus table has a top that seems to flow over the sides like a tablecloth. High- and low-height versions and all top options are illustrated. Six pages. Bernhardt, Lenoir, N. C.

13 Special Construction

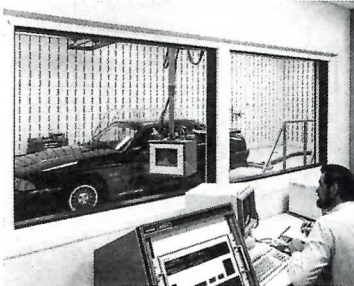
14 Conveying Systems



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565 Modular dormitory

Steel-and-concrete prefabricated units combine to create a two-story, 64-bed dormitory in a fraction of the time needed for conventional construction. Erection is speeded by installing plumbing and hvac equipment in the modules off-site. Noncombustibility of the modules meets building code requirements. Designed for schools and prisons. Besteel Industries, Irvine, Calif.

566 Soundproof windows

The Noise-Lock All-Con Windows combine full visibility and noise reduction, and are compatible with most wall constructions. Windows are custom-made with modular steel frames; glazing is set in neoprene gaskets. Available in bullet-resistant, laminated, tempered, and reflective glazings. Industrial Acoustics Co., Bronx, N. Y.

567 Sunrooms

The elements that make up this line of sunrooms are designed to simplify installation and to prevent water from entering. Laminated 3- by 4-in. beams are strengthened with steel plates, and accommodate special glazing panels. A channel on the top surface of each beam diverts water to a concealed head gutter. Pella/Rolscreen Co., Pella, Iowa.

568 Custom ceilings

Ceilings beyond the ordinary, produced to meet architects' designs for specific spaces, are available through imaginative use of special construction elements and lighting equipment. Recommended for hospitality and retail installations. Integrated Ceilings Div., USG Interiors, Inc., Chicago.

569 Solariums

New structures, the Heavy Jamaican and the Heavy Sundance series come in kneewall, glass-to-ground, and double-high configurations. They use the 575 Bar glazing rib, which allows room depth to be increased from 14 to 22 ft. Available in the Woodborough Edition, using thermally broken aluminum. SSI/Sunshine Rooms Inc., Wichita, Kan.

570 Conservatories

A broad selection of conservatories, in either an all-aluminum system or a wood/aluminum composite frame, can stand alone or be attached to a structure of any size. Features include polycarbonate double-glazed roof, tempered insulating-glass walls, thermally broken frames, removable screens, and concealed wiring chases. Machin Designs (USA) Inc., Wilton, Conn.



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571 Escalators

The SWE Series of escalators is designed for rises of almost 37 ft; heavier, higher-rise units are available. An Up-Over-Up configuration features a horizontal midsection. Design includes an accessible external drive and a band brake for smooth stopping. Schindler Corp., Morristown, N. J.

572 Moving walkways

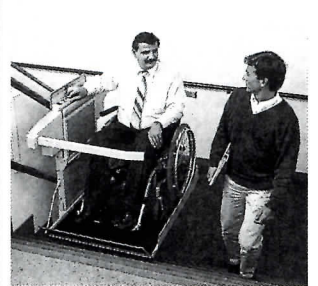
The Speedwalk/Speedramp is a self-contained assembly designed to move people in a continuous, controlled manner between two points or between two levels. Treadways have no steps and are usable by the handicapped and such small-wheeled vehicles as wheelchairs and strollers. Westmont Industries, Santa Fe Springs, Calif.

573 Residential elevator

The Elevette 2100 is built with an aluminum frame that reduces energy costs. Available in sizes up to 12 sq ft. Standard capacity is 450 lb, but 700-lb capability can be arranged. Paneled in walnut, cherry, birch, or three shades of oak, with a finished hardwood floor. Inclinator Company of America, Harrisburg, Pa.



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574 Elevator

The new Classique elevator needs no more space than a normal closet and can accommodate up to 40 ft of vertical travel. Available in platform sizes to 12 sq ft; load rating is 450 lb. Interior paneling in oak, cherry, or walnut, brass panel and rail accents, and bronzed aluminum gates are available. The Cheney Co., New Berlin, Wis.

575 Wheelchair lift

The Stair-Lift travels along turning or straight stairways, stopping at each floor. Suitable for retrofit or new construction, indoors or outdoors. Has easy-to-use hand controls, emergency alarm, electrically controlled ramps, obstruction-sensitive surfaces, and safety arms. Garavanta (Canada) Ltd., Blaine, Wash.

576 Elevator maintenance

U. S. Elevator will customize a maintenance plan for any kind of elevator or escalator, taking into account the specific building type, elevator system, and traffic patterns. The firm will also assist in renovation projects, supplying new hardware and controls designed to interface with most older equipment. Cubic Corp., San Diego.

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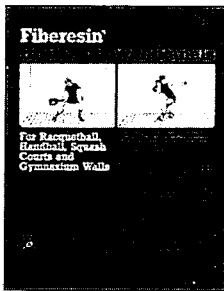


Building the best

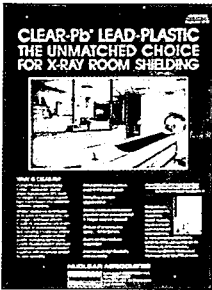
13 Special Construction Product literature



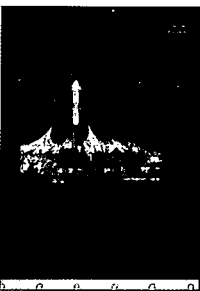
577 Freestanding booths
The B. I. G. building system can incorporate a range of architectural concepts. Structures pictured include a solar-powered bus shelter, a Victorian-era kiosk complete with gingerbread trim, and a bullet-resistant glass and chrome parking lot booth. 12 pages. B. I. G. Enterprises, South El Monte, Calif.



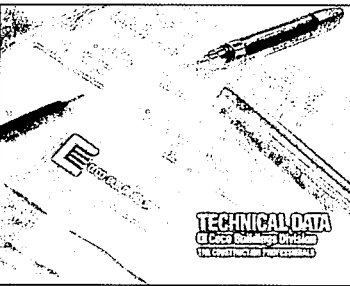
578 Impact-resistant panels
The Fibersin Hi-Density wall panel is rigid enough for freestanding or intermittently attached installation. Suggested applications include gymnasiums and clean rooms. Durable, Class A-rated panels come in a wide range of colors. Fibersin Industries, Inc., Oconomowoc, Wis.



579 X-ray shielding glazing
A Clear-Pb Planning Guide illustrates site-specific installations in hospitals, radiation therapy centers, and medical schools. Diagrams show the product used in barriers and large viewing windows. Samples of the clear, lead-impregnated plastic are available. Nuclear Associates, Div. of Victoreen, Inc., Carle Place, N. Y.



580 Tensioned structures
An architectural design catalog highlights the exotic shapes, bright fabric colors, and versatile engineering possible with Soft Shell Structures. Applications illustrated range from a simple sunshade to a 7-acre air-supported roof in Tokyo. Computerized design and wind-testing capabilities are explained. Helios Industries, Inc., Hayward, Calif.

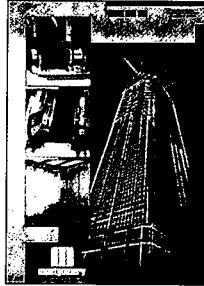


581 Pre-engineered buildings
A development aid for architects describes state-of-the-art building systems for industrial, commercial, institutional, and recreational facilities. Load, span, and other technical data are given for open web, tapered beam, lean-to, clear-and-multispan-rigid frame, and other structural members. The Ceco Corp., Oakbrook Terrace, Ill.

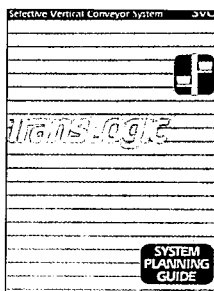


582 Prefabricated sunroom
The Sunbilt enclosure is pre-engineered for the different functional and esthetic needs of commercial, residential, and restaurant spaces. The new Kleertek glazing technique, without exterior cross caps, creates the look of one sheet of glass top to bottom. Eight pages. Sunbilt Solar Products by Sussman, Inc., Jamaica, N. Y.

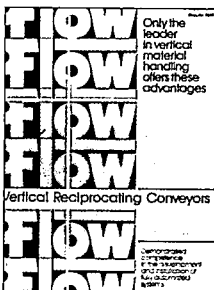
14 Conveying Systems Product literature



583 Vertical transportation Planning Guide provides dimensional data on a full range of people- and freight-moving equipment, including traction and hydraulic elevators, escalators, and powered walks and ramps. Cab and balustrade features are illustrated. 16 pages. Montgomery Elevator Co., Moline, Ill.



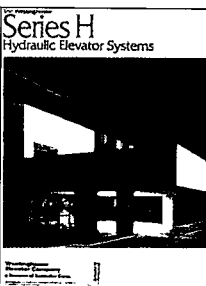
584 Conveyor systems
Computerized selective vertical conveyor systems, used for materials handling in hospitals, industrial plants, and large office buildings, are discussed in an architectural planning guide. The system can meet the internal transport needs of buildings of any height. TransLogic Corp., Denver.



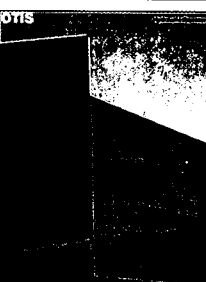
585 Reciprocating conveyors
A capabilities brochure explains why the Pflow conveyor will meet code requirements in any state. Fully automated systems are discussed, and typical in-plant systems are illustrated. Pflow Industries, Inc., Milwaukee.



586 Elevator planning
A Planning Guide for architects and owners illustrates a cost-efficient range of pre-engineered elevator options, as well as custom-designed cabs and other features. The guide recommends size and capacity for different layouts, and lists minimum pit and overhead dimensions. 16 pages. Dover Elevator Systems, Inc., Memphis.



587 Retrofit elevator
Series H hydraulic elevators need no jack hole for travel of under about 10 feet. Suitable for difficult-foundation projects, the design is said to provide a solution for existing buildings where code requirements or a change in use mandate elevators. Eight pages. Westinghouse Elevator Co., Div. of Schindler Corp., Morristown, N. J.



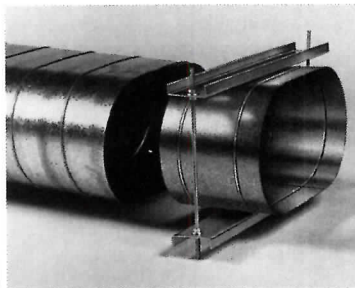
588 Hydraulic elevators
A brochure explains how updated standardized design and electronic controls have shortened the installation time and reduced the space requirements for Otis hydraulic elevator systems. New maintenance services are discussed. Otis Elevator Co., Farmington, Conn.

15 Mechanical

Air-distribution equipment
Convectors & radiators
Fire-protection equipment
Heat generation
Heat pumps
Hvac equipment
Mechanical devices
Plumbing fixtures & trim
Registers & diffusers
Water coolers & drinking fountains



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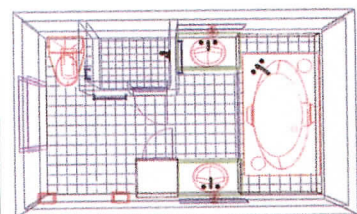
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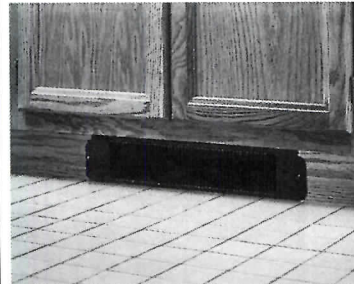
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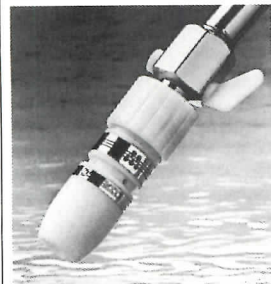
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589 Environmental controls
Employees in open-office settings are able to control air temperature and flow, lighting, and the aural environment in their workspaces with the Personal Environment system. Conditioned air, routed through partitions or a raised floor, emerges from vents at each workstation. Johnson Controls, Inc., Milwaukee.

590 Bathroom-design software
BathCAD, 3-D CAD software developed by American Standard, lets the residential designer prepare drawings in various perspectives of proposed layouts for client presentation. A large symbol library includes all bath fixtures, tile, and other finishes—even plants. American Standard Inc., Piscataway, N. J.

591 Showerhead
The Shower Spa 2000 showerhead uses a Venturi action that increases flow velocity to produce a massage sensation while reducing water use. The head uses only 2.5 gal./min compared to 6 gal. for conventional heads. Heads have lifetime nonclogging guarantees. Energy Technology Laboratories, Modesto, Calif.

592 Ductwork connector
Installation of flat oval ductwork is simplified by United McGill's reinforced connector. Metal channels welded to the flat sides of the connector help the duct retain its shape and prevent sagging during assembly, holding it in place while screws are inserted. United McGill Corp., Groveport, Ohio.

593 Bathroom fixtures
Triamid is the newest line of ceramic disk cartridge fittings by Bathroom Jewelry. Acrylic handle trims accompany polished brass or polished chrome fittings. Accessories are available for widespread lavatory faucets, deck-mount tub, shower, tub and bidet fittings, and wall accessories. Bathroom Jewelry, Los Angeles.

594 Kitchen sinks
Sculptura kitchen sinks are made by Elkay with nonporous, glass-reinforced polyester in a granite-like finish, a material said to resist cracking, rusting, staining, and discoloring. Sides are smooth for easy cleaning, and bottoms are textured to keep pots and dishes from skidding. Elkay Mfg. Co., Oak Brook, Ill.

595 Undermounted sinks
The Elements line of sinks made by Franke can be mounted below counters of marble, granite, or man-made solid surfacing materials. The sinks come in large circular bowls or in oval, square, and rectangular models. Sizes range from full-kitchen to salad sinks appropriate for bar installations. Franke, Inc., Hatfield, Pa.

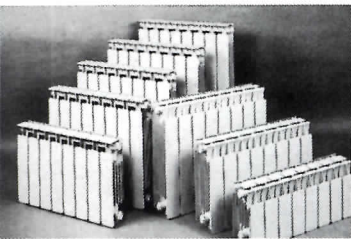
596 Electric heater
Where vertical space is limited and additional heat is needed, the Kickspace Heater provides warmth. The unit needs only 3 5/8 in. of vertical space and is designed to fit under bathroom vanities and kitchen cabinets. Models operate on 120 volts or 240 volts at either 750W or 1,500W, with thermal reset protection. NuTone, Cincinnati.

597 All-in-one sink
Romeo self-contained sink unit includes mirror, wrap-around towel bar, and accessory shelf. Its paperclip-shaped frame comes in baked-enamel colors of red, white, black-gray, and polished chrome; plumbing traps match. Basins are steel in red, white, yellow, or black. Watercolors, Inc., Garrison-on-Hudson, N. Y.

598 Low-flush toilet
A maximum of 1.6 gal. of water is needed by the TurboFlush toilet, and only one flush is needed to remove waste from the bowl. Compressed air forces water through the bowl at high speed, emptying the toilet in less than 6 seconds. Water and sewer bills are cut. Available in white and decorator colors. Briggs Industries, Tampa, Fla.

599 Whirlpool tub
The Fiore whirlpool bath, made of high-gloss acrylic reinforced with fiberglass, is designed to stand in the corner of a bathroom, offering homeowners efficient use of available space. Four adjustable jets provide hydrotherapy. The bath has underwater interior lighting. Jacuzzi Whirlpool Bath, Walnut Creek, Calif.

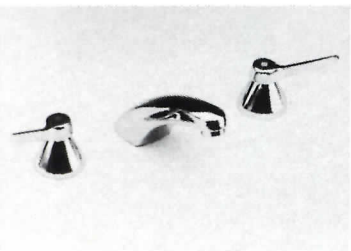
600 Kitchen faucet
The Studio series of Delta faucets has an extra-long swing spout, made for oversized or three-bowl sinks, and an optional base plate. Features include a washerless valve, all-brass construction, all-brass escutcheons, and all-copper tubing. Two-year limited warranty offered. Delta Faucet Co., Indianapolis.



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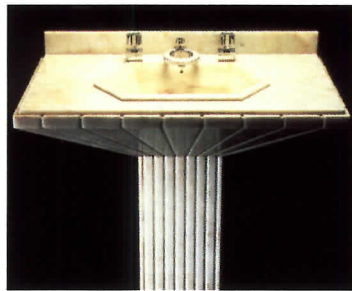


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601 Aluminum-alloy radiators
Radiators for hydronic heating systems are made of die-cast aluminum alloy, Grade BSML2, to take advantage of aluminum's high conductivity. They have a narrower profile than conventional radiators. Available in three styles, two element widths, and six heights. Finished in epoxy stove enamel in a wide variety of colors. FARAL USA, New York City.

602 Wash basin
Alien, a bathroom vanity, incorporates washbasin and mirror. A white acrylic basin is semi-encased in a glossy black lacquer countertop. Tubular legs extend upward to support an arched mirror. Additional components are a pivoting makeup light and a towel ring. Hastings Tile & Il Bagno, New York City

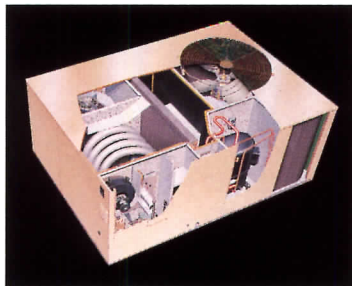
603 Institutional faucets
A wide-set lever-handled lavatory faucet is one of the solid brass, chrome-finished fittings now available for commercial and institutional specifications. Water flow is angled toward the center of the bowl for minimum splash. Six different handle sets available. May be had with a pop-up waste assembly. Krohe America, Inc., Wood Dale, Ill.



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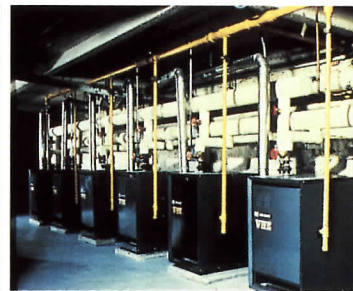


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604 Pedestal lavatory
A pedestal lavatory hand-carved from a single stone block may be ordered in a number of different marbles. The hardware is polished chrome, whose open sphere knobs are complemented by the circular shaping of the faucet. All knobs and levers available as door hardware. Sherle Wagner International, Inc., New York City.

605 Bathroom faucet
The Mayfair faucet comes in a number of finishes, including a polished brass that is guaranteed for five years. The set's lever handles are made of French porcelain. The inner ceramic cartridge facilitates proper positioning of the levers and eliminates the need for rubber washers. Kraft Hardware Inc., New York City.

606 Heating/cooling
The GCS16 gas/electric unit has a new heat exchanger, and operates at 1993 national energy standard efficiency levels. The single-package product achieves up to 78 percent annual fuel-utilization efficiency in its heating capacities, and up to 10.0 seasonal energy-efficiency ration in its cooling capacities. Lennox Industries Inc., Dallas.



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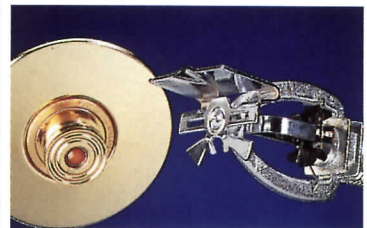
607 Multiple boiler systems
Multiple boiler systems are two or more residential or commercial systems that work together to provide the same total Btu output as one large boiler. Boilers are sequenced so that only those needed are fired, reducing standby losses and increasing seasonal operating efficiency. Weil-McLain, Michigan City, Ind.

608 Shower stalls
A line of barrier-free showers and combination bath/shower units are compatible with residential settings, while meeting requirements for institutional use. Made of acrylic to meet ANSI standards for interior dimensions, strength of grab bars and seats, and slip-resistance. Kohler Co., Kohler, Wis.

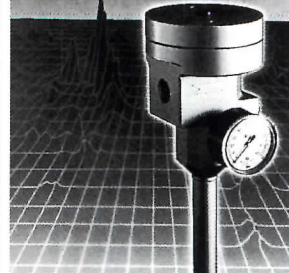
609 Sanitary fittings
Classic single-control fixtures designed by Arne Jacobsen now incorporate a small ceramic cartridge to regulate both flow volume and temperature. Two ceramic disks ensure tightness and no other moving part is in contact with water. Fittings come in 12 epoxy colors, polished brass, and brushed and polished chrome. Kroin Inc., Cambridge, Mass.



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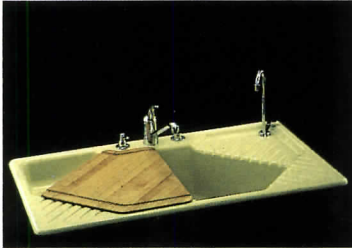


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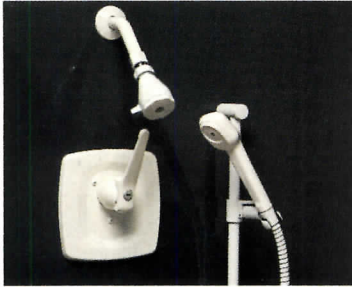
610 Kitchen faucet
The Domani kitchen faucet, designed by Dieter and Michael Sieger, combines sprayer and spout in a single-handle unit. Color options are white, chrome, black, almond, red, and Durabronze, a no-tarnish, no-polish surface. Santile International Corp., Houston.

611 Sprinkler heads
Available in both standard and extended-coverage (20- by 20-ft) versions, the Aquarius low-profile flush mounting sprinkler is now UL-listed for residential and NFPA light-hazard occupancies. The horizontal sidewall sprinkler is listed for similar applications, including sloped-ceiling areas. Grinnell Corp., Exeter, N. H.

612 Gas shut-off valve
A gas shut-off valve functions only in a severe earthquake, halting the flow of gas into a structure. It is designed to withstand wide temperature fluctuations, impact of falling debris and uneven torque pressures. Easily reset to restore gas flow. Can be installed quickly by a certified plumber. Quake Master, Inc., Anaheim, Calif.



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613 Kitchen sink

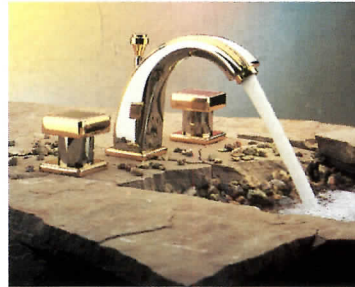
The Juliette kitchen sink is designed for serious chefs. Measuring 38 by 22 in., it combines a large hexagonal basin with a small triangular one. The large basin is 8 1/2 in. deep, to wash pots and pans. The small basin is a disposal compartment. A wooden cutting board covers half the large basin. Kohler Co., Kohler, Wis.

614 Shower system

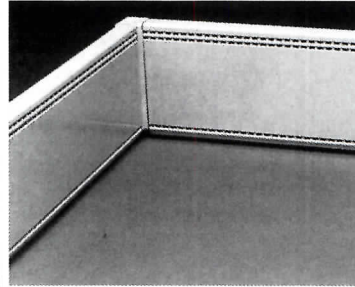
The Neodomo pressure-balanced shower system provides stabilized hot and cold water pressure regardless of fluctuations in the water supply. Water flow is maintained at a constant temperature when other outlets are turned on. A restrictor controls the volume of water flow. KWC/Western States Mfg. Corp., Costa Mesa, Calif.

615 Lavatory bowl

Vitreous china bowls come in five sculpted shapes—scalloped, Euro, undercounter, rectangular, and octagonal—and in 14 colors, such as black, raspberry frost, pearl, sandstone, seafoam, natural bone, and twilight pink. Self-rimming design assures a good fit between bowl and countertop. Epic, Indianapolis.



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616 Faucet set

The Golden Gate faucet combines a round spout with square levers. The hand-polished set comes in nickel/gold, black chrome/gold, and dull nickel/gold. It is offered with either a smooth or a diamond-cut finish. Coordinating cabinet hardware and accessories are available. Jado Bathroom & Hardware Mfg. Corp., Camarillo, Calif.

617 Baseboard radiator

The Vanpan hot-water radiator measures only 1 in. thick by 5 3/8 in. high, about the same profile as a standard wooden baseboard. It acts primarily as a radiant heating source, and will not restrict furniture placement. Danish-design radiators are made in Vermont of extruded aluminum. Zoned installation possible. Danex, Inc., Acra, N. Y.

618 Bath/shower retro kit

The Europa bath/shower retrofit trim kit permits colorful and watersaving redecoration of tub/shower combinations without changing valves and other behind-the-wall plumbing. Water-control knob, shower head, tub faucet, and drain switch come in 12 colors. Resources Conservation, Inc., Greenwich, Conn.



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619 Bathroom fixtures

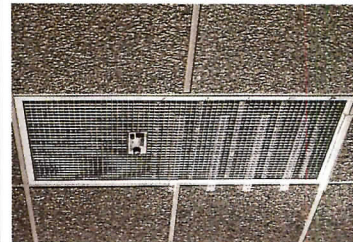
French designer Maggy Champsaur based the octagonal lines of Opera bath fixtures on styles reminiscent of the 1930s. The vitreous china line includes a pedestal sink, bidet, and water closet. Colors are white, manhattan (a gray), and edelweiss. Matching accessories are available. Villeroy & Boch (U.S.A.) Inc., Houston.

620 Lavatory faucet

A line of single-handle lavatory faucets have finishes resembling marble or onyx. No two are alike. Fittings have an all-brass body; finishes are marble/chrome trim, marble/polished brass trim, onyx/chrome trim, and onyx/polished brass trim. Moen Group, Elyria, Ohio.

621 Air-control plenum

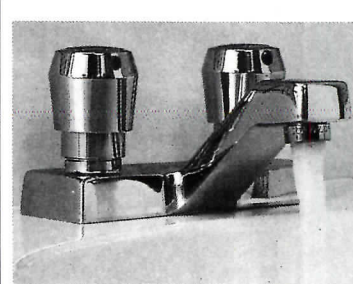
The Control Plenum System supplies air to office areas through an access-floor pressurized plenum. Conditioned air is introduced into the workspace through floor-level high-induction diffusers that generate high turbulence, mixing incoming air quickly with room air. Upward air movement carries pollutants to ceiling extractors. USG Interiors, Inc., Chicago.



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622 Lay-in air cleaner

The UltraPure Model CT-1150, one of the UltraPure 2000 line of electronic indoor air cleaners, effectively removes 99.9 percent of all submicron pollutants without restricting air flow rate. These invisible contaminants include bacteria, viruses, cooking and tobacco smoke, dust, smog, pollen, and mold spores. American Filtrona Corp., Richmond, Va.

623 Pedestal lavatory

The Concorde pedestal sink by Porcher, a china fixture available in white, pastels, and shaded colors, is designed for remodeling of multiunit projects. The bowl is 28 in. across, with an ample back ledge for toiletries and soap. Porcher, Inc., Chicago.

624 Water-saving devices

Twelve faucet models feature the MVP self-closing metering cartridge, which adjusts externally to cycles of from one to 20 seconds. Other water-conserving devices are the Econo-Flo, which regulates water supply regardless of pressure, and the Stedi-Flo inlet valve, which controls supply-side water. The Chicago Faucet Co., Des Plaines, Ill.



Unrestricted Area

Freewill™ Barrier-Free Shower. Unrestricted showering. Plus unrestricted design options. Both make Kohler's Freewill Shower an attractive choice for commercial use. A roomy design allows greater bathing mobility and easier transport from wheelchairs. The one-piece, easy-to-install seamless acrylic shower comes in six beautiful Kohler colors. Along with color-contrasting, nylon-coated safety bars and fold-up seat. And with five barrier-free models (including a bath), there is a Kohler® shower to fit virtually any special application. So why go "institutional" when the Freewill Shower gives any area a distinctively residential look?

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It's just meant to be *felt*.

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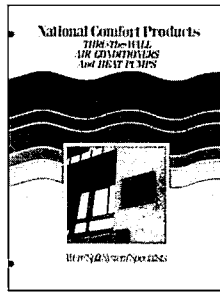


15 Mechanical Product literature

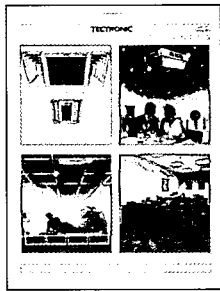
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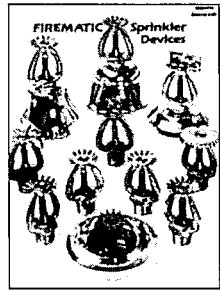
625 Plumbing control
The Quick Guide To Electronic Plumbing Control, shown in 18 pages, has details of a broad line of touch-activated and infrared-activated electronic plumbing controls and the many applications for these integrated controls in washrooms and shower rooms. Information on barrier-free code compliance is included. Bradley Corp., Menomonee Falls, Wis.



631 Air conditioners, heat pumps
The Thru-the-Wall split system is an air-conditioning unit installed through a wall and linked to another unit in some central indoor location. Both units are identical in size. System reduces cost of tubing kit runs, saves space, and eliminates ground clutter. Four pages. National Comfort Products, King of Prussia, Pa.



626 Air cleaners
Flush-mounted electronic air cleaners, models FM-500 and FM-1400 remove 96 percent of air pollution, smoke, dust, pollen, bacteria, soot, and large viruses. Cleaners replace a 2- by 2- or 2- by 4-ft ceiling panel with no below-plane profile. Seven other cleaners are available. Four pages. Tectronic Products Co. Inc., Syracuse, N. Y.



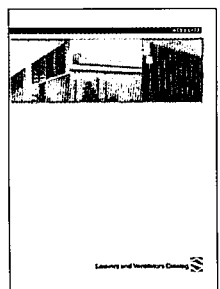
632 Fire sprinklers
Four-page booklet has descriptions and photographs of standard spray sprinklers, decorative bulb sprinklers, matchable-ceiling-pattern concealed sprinklers, vertical sidewall sprinklers, rack-storage sprinklers, wall-mounted horizontal extended-coverage sprinklers and valves and dry-pipe maintenance devices. Firematic Sprinkler Devices, Inc. Shrewsbury, Mass.



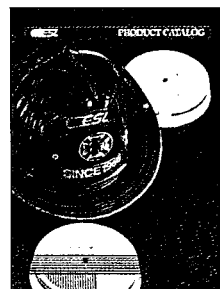
627 Towel warmers
Electric towel warmers are used in bathrooms, kitchens, and coatrooms to dry towels or clothing and also to add heat to the room. Warmers come in an attractive range of baked enamel colors and nickel-chrome, brass, and antique brass metal finishes. Hot-water heated warmers are also available. Two pages. Runtal North America, Inc., Ward Hill, Mass.



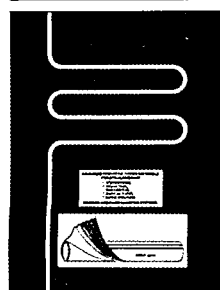
633 Electrostatic air cleaner
A high-efficiency, permanent, electrostatic air cleaner for office, light manufacturing, and other commercial applications is described. It can be installed in as little as 15 minutes indoors, on a rooftop, or with individual air registers. 12 pages. Newton Products Co., Cincinnati.



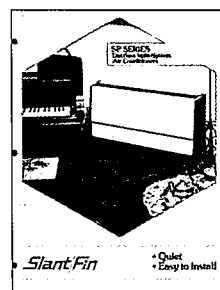
628 Louvers and ventilators
Illustrations, charts, and specification sheets describe a line of fixed and adjustable louvers and gravity ventilators for architectural and industrial building applications. Fixed louver depths are 2-, 4-, and 6-in.; adjustable types are 4 and 6 in. Continuous clamshell ventilators with throats range from 8 to 16 ft. 20 pages. Steelite, Inc., Pittsburgh.



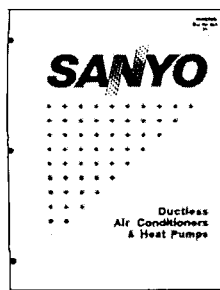
634 Fire-safety devices
Brochure gives product descriptions, specifications, operational data, and ordering information for a complete line of system smoke detectors, heat detectors, fire alarm control panels, and accessories for industrial, commercial, and institutional applications. 24 pages. Electro Signal Lab, Inc., Hingham, Mass.



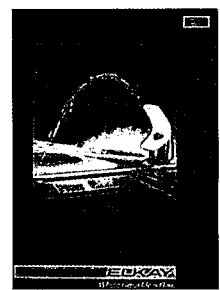
629 Radiant heating
Applications for crosslinked polyethylene (PEX) tubing in radiant hydronic underfloor heating systems are explained. This tubing is durable over a wide range of temperature and pressure. Text and illustrations demonstrate PEX systems in wood, prestressed and poured concrete, and lightweight concrete floors. Four pages. Wirsbo Co., Apple Valley, Minn.



635 Ductless air conditioners
The SP Series split air conditioner offers a reverse cycling system, cooling and heating, by heat pump or electric resistance heat. The condenser is installed outside; the indoor section may be wall-mounted or free-standing. Built for domestic and commercial use. Four pages. Slant/Fin Corp., Greenvale, N. Y.



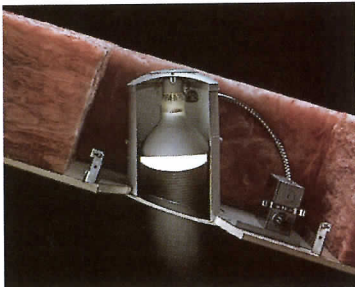
630 Split systems
A line of split-system air conditioners and heat pumps is made up of evaporators mounted inside the conditioned space and linked with refrigerant tubing and interunit wiring to a condenser outside. This installation removes operating noise from the conditioned room, and needs no large wall opening. 20 pages. Sanyo Fisher (USA) Corp., Little Ferry, N. J.



636 Water coolers
Photographs, descriptions, and capabilities of a complete line of water coolers. Units include barrier-free wall and fully recessed models, one and two-level wall-mounted coolers, freestanding fountains, hot-water dispensers, and bottled water coolers. Broad range of finishes. 24 pages. Elkay Mfg. Co., Oak Brook, Ill.

16 Electrical

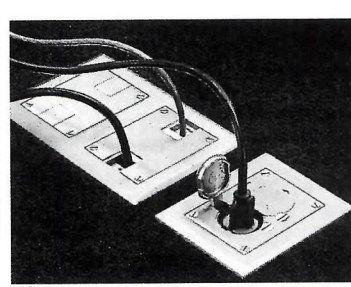
Alarms & detection systems
 Communications
 Electrical heating-cooling
 Lighting
 Power generation
 Protective systems
 Raceways
 Wiring devices



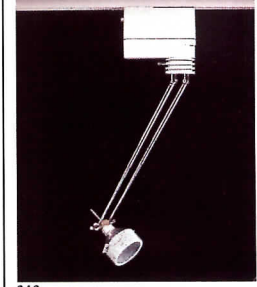
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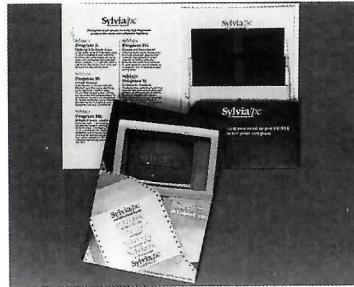
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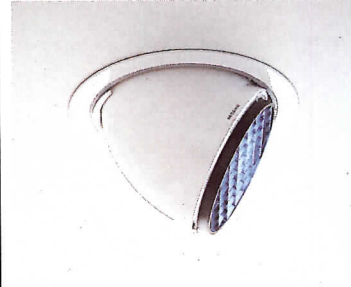
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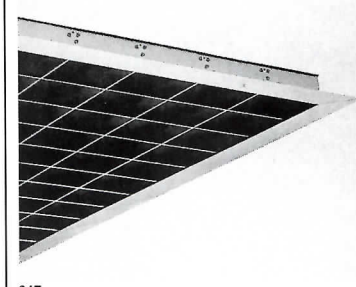
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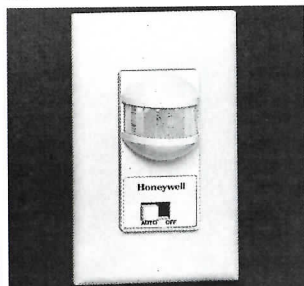
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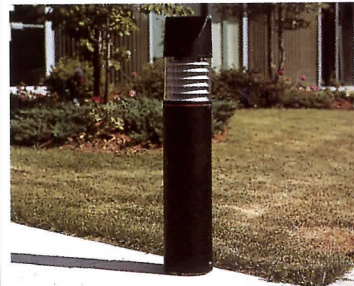
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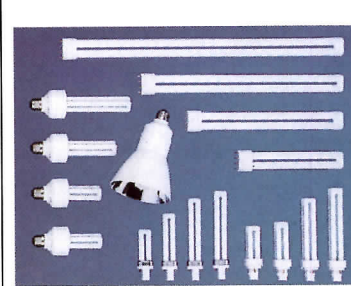
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637 Downlighting

Downlights designed for sloped ceilings, and sloped ceilings with compound angles, have multiadjustment socket plates capable of moving in two directions. This allows the lamp and housing to be aimed straight down in a compound sloped ceiling with a pitch as steep as 6-ft per 12-ft. Halo Lighting, Elk Grove Village, Ill.

638 Lighting system

The V-Lume Lighting System has models in pendant, cove, cove sconce, arm sconce, and across sconce in either indirect (two-lamp) or direct/indirect (three-lamp) configurations. Units may be ordered individually or in continuous runs, in any of 792 colors. Architectural Lighting Systems, Inc., Taunton, Mass.

639 Occupancy sensor

The EL7650 infrared sensor recognizes body heat and motion when someone enters or leaves a room, turning the lights on or off. It follows a full 180-deg field of view with a coverage area of 2,700 sq ft. Also included is an ambient light sensor that keeps lights off if sunlight attains a predetermined level. Honeywell, Inc., Golden Valley, Minn.

640 Open-area lighting

Pole-top luminaires for parking areas, roadways, and public landscape areas have optical systems that deliver asymmetrical distribution from H.I.D. light sources. They can be rotated for beam orientation. Available in single-, double- and triple-configurations. BEGA/FS, Santa Barbara, Calif.

641 Lighting software

SYLVIA is a software program for IBM-compatible computers that analyzes a variety of lighting situations including selecting the most efficient lighting system, finding the most economical relamping procedure, and determining yield on investment. For architects, lighting engineers, distributors, and end users. GTE, Danvers, Mass.

642 Outdoor fixture

The Terralux Bollard BT1A provides either square or asymmetric distribution of light for low-level outdoor use. Made with an extruded aluminum housing and a die-cast mitered top cap, it has a polycarbonate refractor shield to guard against vandalism. Holophane, Newark, Ohio.

643 In-floor distribution

The Source I single-service in-floor activation system can be used as an after-set insert in both existing and new floor decks. For either flushed or recessed installation, it offers the choice of power or low-potential service, and is fully adjustable after concrete pour. Available in brass, black, or brown polycarbonate. Walker Div., Butler Mfg. Co., Parkersburg, W. Va.

644 Recessed lighting

Downspot, designed by Fabio Reggiani, works as both a downlight and a directional spotlight. The fixture is recessed, but its spotlight effect can light an entire wall as well as part of a ceiling. Adjustable vertically from 0 to 60 deg and horizontally from 0 to 356 deg. Reggiani USA Inc., New Windsor, N. Y.

645 Compact fluorescent lamps

The Dulux line of compact fluorescent lamps uses trichrome phosphors to give excellent color renditions ranging up to CRI 86. They have lightweight electronic ballasts that guarantee flicker-free starts, energy cost savings up to 75 percent, and long service life. OSRAM Corp., Trenton, N. J.

646 Track and surface mounts

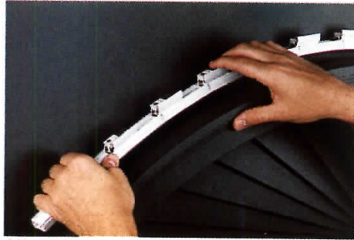
The Lightdance series is four different track- and surface-mounted fixtures using MR-16 lamps. Instead of wires, telescopic and bendable arms of various lengths carry 12-volt current. The fixtures are made of nickel-plated brass and molded plastic in matte white or black. Broad range of accessories available. Lazing Lighting, New York City.

647 Aluminum ceiling louvers

A full range of louvers and baffles for fluorescent fixtures is available in both parabolic and straight-blade configurations, finished in semispecular silver or semispecular gold. Glare-reducing parabolic baffles come in 90-, 135-, and 45-deg angles. A. L. P. Lighting and Ceiling Products, Inc., Niles, Ill.

648 Lamp standard

Large municipal street standards feature an 18-ft height in polychrome with optional banner bracket, flower-basket bracket, and trash-receptacle attachment. Custom casting allows placement of name or city seal on the post base. A large, lockable access panel provides for easy service and installation. Robinson Iron Corp., Alexander City, Ala.



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649 Linear light system

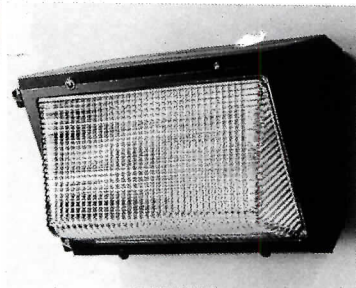
A flexible, low-voltage lighting system, Lumiflex can be field-cut to fit into coves, hide under shelving, or edge a display case. Replaceable 3.75W lamps provide bright illumination, and segmented and continuous reflectors concentrate directed light in curved or straight patterns. Litelab, Buffalo.

650 Pendant luminaire

An 18-in.-dia white glass bowl, suspended within a 20-in.-dia rounded edge rim from three stainless-steel cables, delivers indirect uplight and diffused downlight. Equipped for either fluorescent or incandescent sources, the fixture comes in a range of colors. TSAO Designs Inc., New Canaan, Conn.

651 Task light

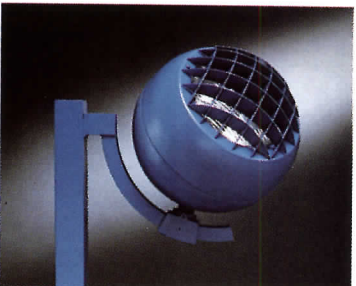
Offered in new colors, the Lyra articulated task light has a translucent shade surrounded by a decorative metal grip ring that may be used to position the lamp. The shade remains parallel to the work surface throughout the lamp's articulation. Lyra comes in both freestanding and furniture-supported models. Steelcase Inc., Grand Rapids, Mich.



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652 Wall-mounted luminaire

Wallmount 175 is suitable for such lighting applications as entrances, walkways, building perimeters, residential yards, and loading docks. The dark-bronze fixture uses high-pressure sodium lamps of 50 through 150W or metal-halide lamps of 100 or 175W. GE Lighting Systems, Hendersonville, N. C.

653 Emergency lighting

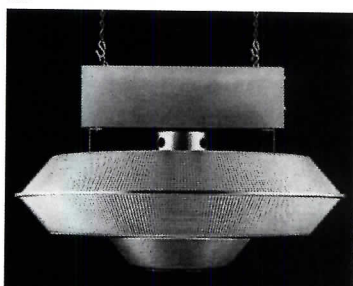
Self-contained emergency light is completely automatic with float voltage regulator and heavy-duty transformer. Recharges batteries fully within 12 hours of discharge and maintains them at full charge. Mounts to either ceiling or wall and pivots 90 deg. Enclosure is molded from Noryl resin. Yorklite Electronics, Inc., Austin, Tex.

654 Floodlight

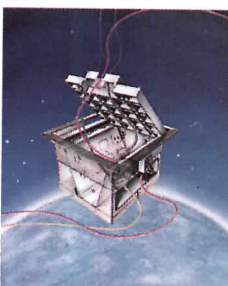
The Infranor 175 precision floodlight offers a beam that fits square and rectangular shapes. Only the relevant light in a beam pattern is defined, producing uniform illumination. The floodlight is spherical, with a cast-aluminum rear housing. Sterner Lighting Systems, Inc., Winsted, Minn.



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655 Healthcare communication

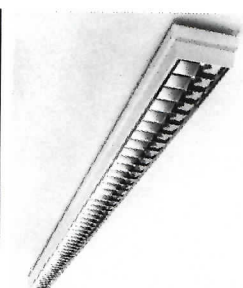
The ProCare nurse call system can handle up to 80 hospital beds. Sensitive speaker/microphones at each patient station provide accurate communication at the push of a button. The modular system can be built up in increments of 20 beds. Existing wiring can be used. Dukane Corp., St. Charles, Ill.

656 Industrial lighting

The Tri-Glo fixture radiates prismatic controlled light over a 28 1/2-in. spheroid body. It produces widespread downlight, specific vertical light, and widely diffused uplight. Designed for manufacturing spaces, supermarkets, storage without aisles, and discount emporiums. Voight Lighting Industries, Inc., Leonia, N. J.

657 Floor-electrification unit

An all-metal access floor electrification unit, the Floor-Mate contains four duplex knockouts that are activated as needed. These include standard duplex, isolated ground, surge suppressor, and one for optional service. A cable exit encases wires in a protective well to preclude accidental shearing of the cable. Raceway Components, Inc., Paterson, N. J.



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658 Ceiling luminaire

The SiDEKO line of fluorescent luminaires permits the implementation of many different styles of lighting through use of a few exchangeable and multipurpose components. The housing depth of 96 mm makes it easy to recess in shallow ceilings and attractive in surface-mounted arrangements. Siemens Corp., Iselin, N. J.

659 Floor lamp

The F3108 cobalt floor lamp, designed by Piotr Sierakowski, has a black Nextel flat aluminum finish and an insert of cobalt blue or cased white glass. The 42-in.-high lamp has a 14-in.-dia, 23-in.-high table of sandblasted glass. Koch + Lowy, Long Island City, N. Y.

660 Wall lighting

The LWW is a true dedicated wall wash. It is available in custom lengths from 16 1/2 in. to continuous runs of any length. A short section can accent a piece of art. A long section can give a corridor an even wall of light. Pendant and bracket options allow use of LWW where a wall slot won't work. Peerless Lighting Corp., Berkeley, Calif.



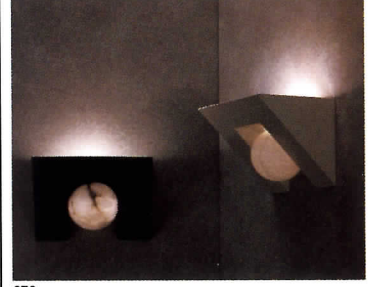
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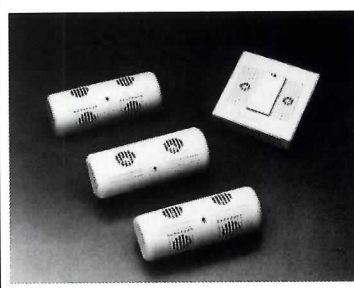
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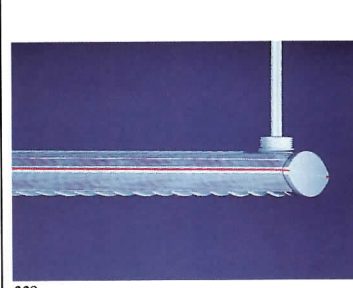
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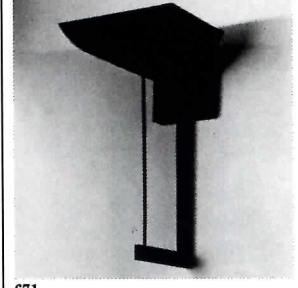
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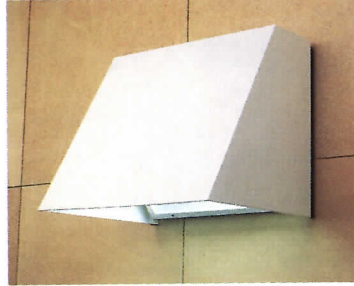
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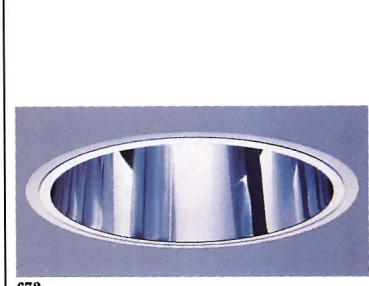
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661 Wall fixture

The Acheo, designed by Gianfranco Frattini, is a halogen sconce in clear Pyrex glass mounted on a die-cast aluminum stem. Metal parts are finished in a gray lacquer. Artemide Inc., Long Island City, N. Y.

662 Outdoor lighting fixture

Series 400 laminated redwood bollard light fixtures are designed to accommodate the new family of ED-17 medium-base metal halide H.I.D. Sixteen styles are available in heights from 37 to 84 in. Fixtures are made from kiln-dried, clear, all-heart California redwood treated with a water-repellent preservative. WoodForm, Inc., Portland, Ore.

663 Building-mounted lighting

An asymmetric reflector provides lighting that is spaced, uniform, and controllable. Designed for H.I.D. sources, the Ensconce can be aimed downward for area lighting with an adjustable cutoff. Directed upward, it reflects light from canopies and awnings. Elliptipar, Inc., West Haven, Conn.

664 Pendant lamp

The Broadway is a solid-brass Mission-style pendant suitable for a dining room, study, or library. It comes in a variety of finishes and lantern shades in caramel white, green, blue, or pink art glass. Standard length is 36 in. Rejuvenation Lamp & Fixture Co., Portland, Ore.

665 Automatic light control

The Light-O-Matic turns off lights in unoccupied areas automatically, lowering the cost of electricity for illumination and air conditioning. The device comes in three models to accommodate different-sized spaces. Product life expectancy is 12 to 15 years. Novitas, Inc., Santa Monica, Calif.

666 Indirect lighting

LiteWedge, an indirect fluorescent pendant, combines wide lighting distribution with high efficiency in an innovative and functional new shape. Especially suited to VDT areas and open office plans, it achieves uniform lighting suspended from ceilings as low as 8 ft 6 in, with 91.4 percent efficiency, says manufacturer. Coast Light Systems, Santa Ana, Calif.

667 Street lamp

The Connecticut Luminaire was designed by landscape architect Johnson & Richter Inc. to light the 6-mile Riverfront development along the Connecticut River in Hartford. The top of the luminaire is a gold dome bound by dark detailing. Lamp uses H.I.D. bulbs. Sentry Electric Corp., Freeport, N. Y.

668 Suspended luminaire

Spheros, designed by Helmut S. Engel for office use, comes in models for either direct or indirect lighting. Fixture is made of extruded aluminum, with end plates finished in white acrylic. Side panels are red, yellow, green, blue, or clear. Accommodates T8 triphosphor fluorescent lamps. Zumtobel Lighting, Inc. Garfield, N. J.

669 Track lighting

The Spacebird is adjustable in all horizontal and vertical planes. An integral transformer powers it for all MR 16 lamps from 20 to 75W in a complete sweep of beamspreads. Finished in black, white, or silver, the aluminum fixture accepts light-blocking screens, beam shapers, and rotating spread lenses. Lighting Services Inc., Stony Point, N. Y.

670 Wall bracket

The Palla fixture provides ambient upward lighting with filtered downward illumination. Triangular in profile, the lamp is made of steel satin-finished in white or black, with a natural alabaster sphere. It is available for either fluorescent or incandescent lamping. Boyd Lighting Co., San Francisco.

671 Lamps

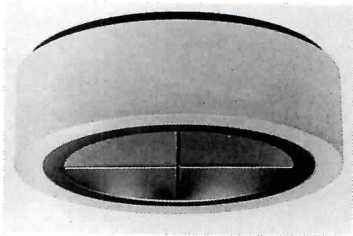
The Silhouette line of lamps features finely perforated metal shades perched on contrasting thick and thin stems. It comes as a torchiere, and in desk, table, wall and floor-lamp versions, all black or white. The desk lamp is also offered in bright yellow, red, and black combination. George Kovacs Lighting, Inc., New York City.

672 Fluorescent luminaire

PolyQuad downlights have eliminated any objectionable rainbow effect by using reflectors made from vacuum metalized polycarbonate. For corridors, reception areas, conference rooms, and restaurants, the lamps use twin-tube compact fluorescent luminaires. Socket assembly simplifies relamping. Staff Sales Corp., Highland, N. Y.



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673 Indoor and outdoor lighting

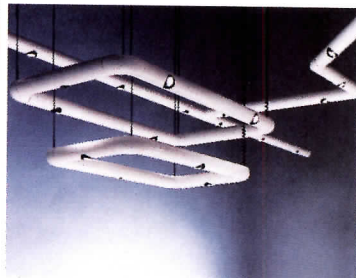
The outdoor lighting standard pictured, designed by Fisher Marantz for the Underground Atlanta retail/entertainment complex, is an example of the custom-lighting capability offered by TrimbleHouse. Both indoor and outdoor luminaires can incorporate custom architectural features and site-specific paints. TrimbleHouse, Norcross, Ga.

674 Surface-mounted downlights

Baflux fixtures are surface-mounted compact fluorescent downlights with a low overall profile of only 3 11/16 in. Designed for 9 or 21W, 10,000-hour-life bulbs, Baflux fixtures offer substantial energy savings. Edison Price Inc., New York City.

675 Exterior lighting

Seven series of Postmodern and contemporary outdoor lighting fixtures in wall, path, post, and bollard styles offer light sources in incandescent, fluorescent, and high-pressure sodium. Contemporary fixtures are made of laminated California redwood. Postmodern fixtures are steel or aluminum finished in polyurethane enamel. Liteform Designs, Portland, Ore.



676



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676 Modular track lighting

Inner Spaces is a track-lighting system in which all 16-volt lamps and components are contained within a 3-in.-dia aluminum skin. Standard modules of different lengths permit assembly of fixtures in any lighting configuration: squares, hexagons, multiple tier, and straight runs. Lamp spacings are 12, 18, 24, and 36 in. U. S. Powerbeam, Inc., Little Ferry, N. J.

677 Lay-in fixtures

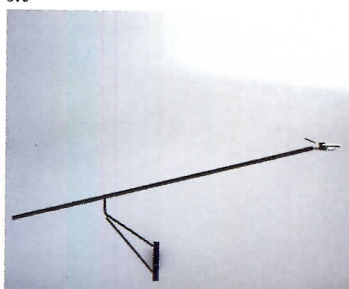
Optimax has been designed with a specular aluminum louver and unique shielding angles to eliminate reflections from VDT screens, regardless of the position of the terminal. Although it produces 70 fc of ambient illumination, it meets both state and federal energy-efficiency guidelines at 1.5W/sq ft. Lithonia Lighting, Conyers, Ga.

678 Pendalier

The Metro hanging lamp conceals its light source in a shallow, 20-in.-dia cone of etched glass. Total length is 36 in. Similar model has a down-turned shade for direct lighting. Also available in a close-to-ceiling model and as a wall bracket. Lightolier, Inc., Secaucus, N. J.



679



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679 Area lighting

Catalina II luminaires permit color-coordination between housing and pole paints and illuminated color glow rings or opaque accent bands. Metal components come in 10 enamel colors; the translucent ring accent offers six color choices. Spaulding Lighting, Inc., Cincinnati.

680 Wall lamp

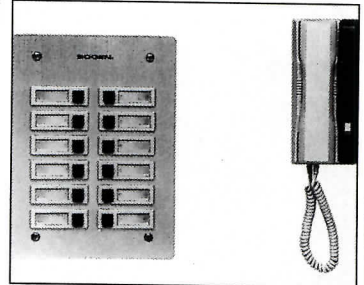
The Halley wall lamp, designed by Mario Barbaglia and Marco Colombo, has a movable arm that extends 96 in. The lamp comes in black wood and is made for either a 100W incandescent bulb or a 12-volt halogen bulb. PAF, Long Island City, N. Y.

681 Task lamp

The Tango task lamp, designed by Stephen Copeland, emphasizes flexibility and versatility. The wireway of swaged aluminum tubing has articulated joints at the base and midsection, with a molded polyurethane spacer to keep wires parallel. The pivoting lamp head is shielded by an external diffuser in green, white, or blue. Atelier International Lighting, Long Island City, N. Y.



682



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682 Desk lamp

Philippe Starck designed the elfin Arà desk lamp for reading, working, or area illumination, using a beam of white light from a low-voltage 35W tungsten-halogen lamp. The lamphead can be moved to direct the light. Finishes are mirror-polished nickel and black chrome. Flos, Inc., Huntington Station, N. Y.

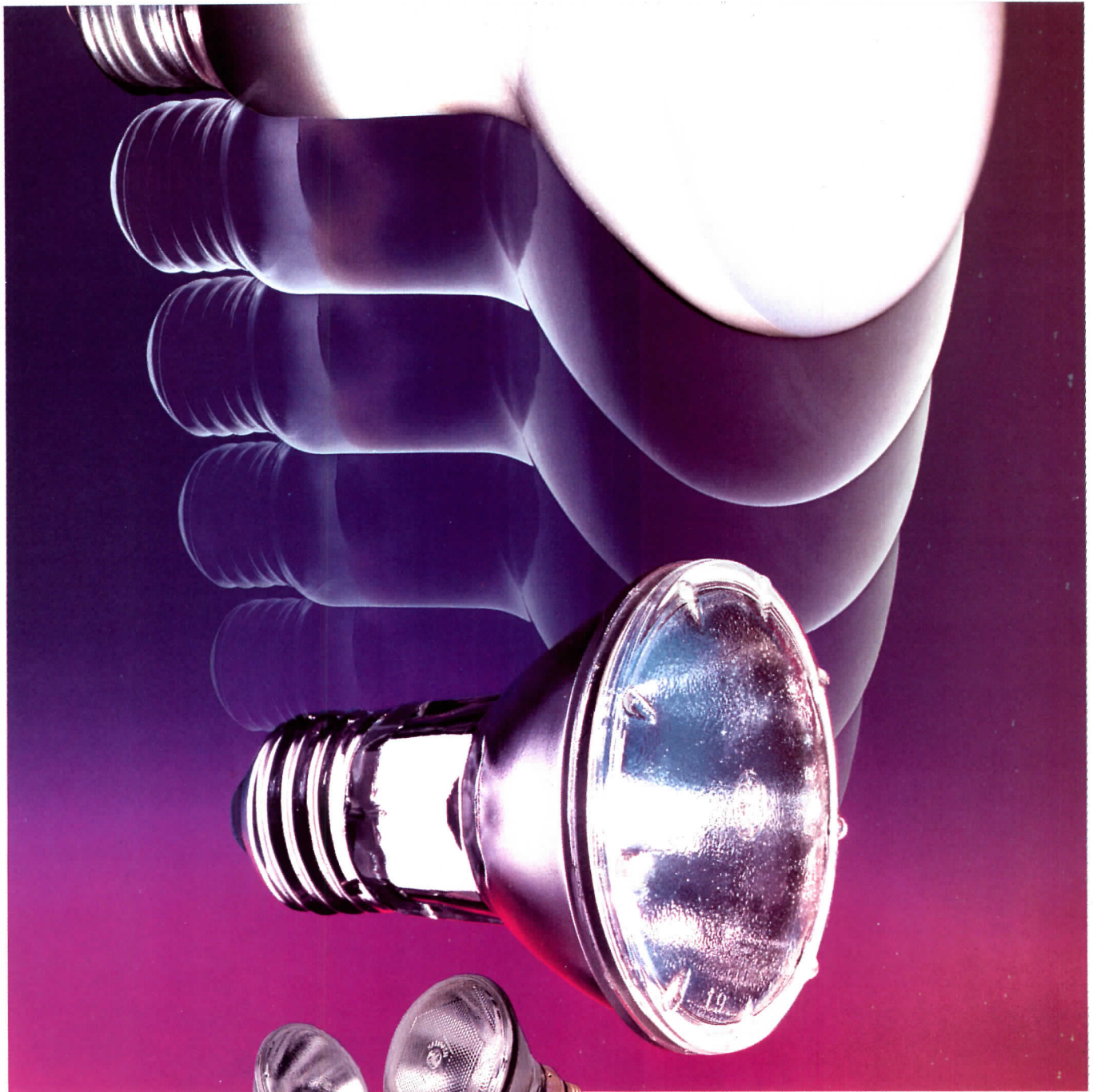
683 Entry intercom

A weatherproof apartment house entry/communications system lets the outside door stay locked. Visitors call an apartment by pushing a button and enter when a tenant at a telephone-type station pushes a button to release the door. Suitable for retrofit. Bogen Communications, Inc., Ramsey, N. J.

684 Corridor light

The Solo and the Solo GlowFront are designed to be the primary source of light in a corridor. The Solo fixture uses either Biax-40 or Curvalume lamps. Solo is designed to hide a battery-powered emergency ballast in order to meet code requirements with only one system. Litecontrol Corp., Hanson, Mass.

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So how did this situation occur?

Back in the hula-hoop days, when test procedures were created for Poke-Thru's, Underwriters' Laboratories examined fittings with one or two receptacles (hence the assumption that three #12's would be adequate). Then

came open offices and smart offices with Poke-Thru's supporting demountable partitions, electrified modular furniture and the sophisticated work station. The once conventional single receptacle and phone connection was left behind with the hula-hoop. A false sense of security was introduced by the generous raceway capacities provided by manufacturers. Yet, tests conducted to industry standards* demonstrate that the number of power conductors utilized in common field practice often generates and traps excessive heat in confined Poke-Thru space. Under these conditions,

the fitting will not meet U.L. Standards.

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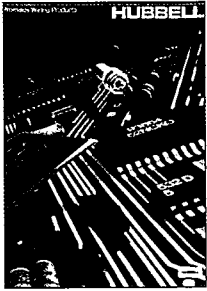
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16 Electrical Product literature

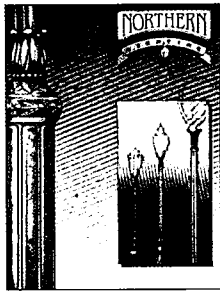
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685 Premises wiring
An 18-page full-color brochure contains details of data connection devices, including fiber-optic and under-carpet types, one-gang wall outlets and plates, communications connections, and raceways and other power distribution equipment. Insight items such as poke-throughs come in satin-anodized metal or painted. Wiring Device Div. of Hubbell, Inc., Bridgeport, Conn.



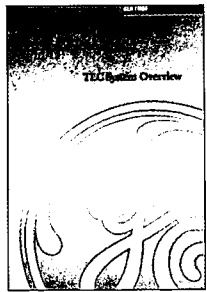
691 In-floor systems
The Q-Floor/Taproute System not only provides cellular raceways for distribution, delivery, and management of wiring, but serves as a composite metal deck for a concrete slab that is cast directly on it. The system adapts to either steel or concrete buildings. 16 pages. H. H. Robertson Co., Pittsburgh.



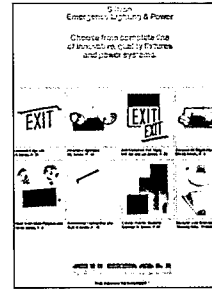
686 Lamp posts
A line of lamp posts includes a reproduction of the 1910 Central Park cast-iron post, and light standards in combinations of cast iron and polymer concrete, fiberglass and polymer concrete, and all-fiberglass. Use incandescent, fluorescent, and H.I.D. sources. 11 pages. Northern Lighting Div. of AMI, Deep River, Conn.



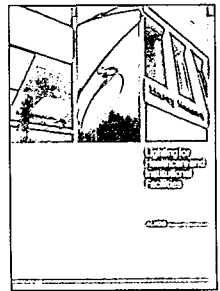
692 Solar-powered light
The AreaLite is a self-contained, fully automatic, solar-powered exterior light. Photovoltaic panel produces electricity and stores it in a battery. Light goes on at dusk for a programmed length of time. Ten models in wattages to 18W. Baked enamel finish. Four pages. Chronar Corp., Princeton, N. J.



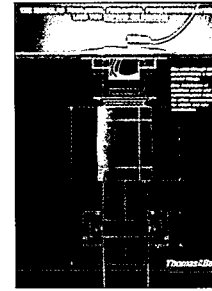
687 Lighting automation
A line of easy-to-add intelligence slots upgrade the automation functions of the TLC lighting control system. Designed for simplified installation in new construction, low-voltage TLC switches can control can link lighting with hvac, fire, security, and card access. Four pages. GE Wiring Devices, Warwick, R. I.



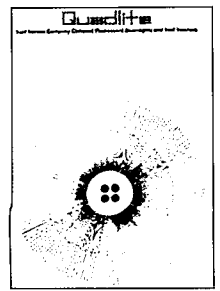
693 Emergency power and lighting
A 76-page booklet includes photographs, dimensional drawings, and descriptions of emergency lighting fixtures and exit signs, architectural fixtures for emergency and regular lighting, hazardous-area lighting, central inverter systems, central DC power systems, and power systems for protection of office computers. Siltron, Cucamonga, Calif.



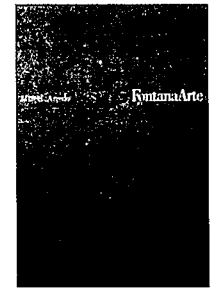
688 Hospital lighting
Product-application photographs of RFI-shielded supplemental surgery lighting, sealed ceiling troffers, X-ray illuminators, examination lights, darkroom safe-lights, overbed and cabinet lighting for patient rooms, and other hospital fixtures illustrated. 20 pages. Alkeo Lighting Co., Franklin Park, Ill.



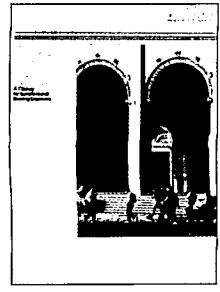
694 Poke-through fittings
A line of larger-capacity, interchangeable service fittings for fire-rated poke-through devices provides for unlimited combinations of power, voice, and data distribution. Fittings accept communication service for IBM Type 2 token ring networks, 25-pair voice, and modular voice jacks. Six pages. Thomas & Betts, Bridgewater, N. J.



689 Compact-fluorescent fixtures
A comprehensive series of downlights are designed for optimal performance of compact fluorescent sources. It includes products for general area lighting, task lighting, and wall washing. All have matching aperture size, color, and uniform low brightness. Available in seven finishes. Kurt Versen Co., Westwood, N. J.



695 Nouveau Art Deco lamps
A full-color booklet presents more than 60 table, wall, pendant, and floor lamps by European designers, characterized by geometric shapes and unusual colors. Most have translucent glass shades in white or pastels. Floor lamps have narrow standards and shades or reflectors. 12 pages. FontanaArte, Los Angeles.



690 School and museum wiring
Wiring devices for schools, universities, museums, and similar institutions are detailed in 40 pages. Sections on switches, wall plates, and locking devices, and listings of straight-blade plugs and connectors, lamp holders, and appliance devices for retrofit applications are included. Leviton Mfg. Co., Inc., Little Neck, N. Y.



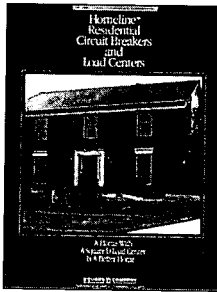
696 Utility lighting
The Versamates task/utility light is said to withstand abuse in indoor/outdoor applications; suggested for general illumination for stairwells, hallways, and entrances, as well as task lighting in dorm rooms. Prismatex film refractor efficiently distributes the light from two 13W twin-tube fluorescents. Six pages. Kenall Mfg. Co., Chicago.

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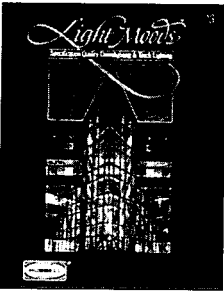


697 Luminaires

Fixtures for restaurants, offices, stores, showrooms, and other commercial interiors are made of polished brass with prismatic-glass shades. Also cited are the Edmund Stevens collection, without brass, and Liberty sconces and stem-mounted lights. Eight pages. Holophane Co., Inc., Newark, Ohio.

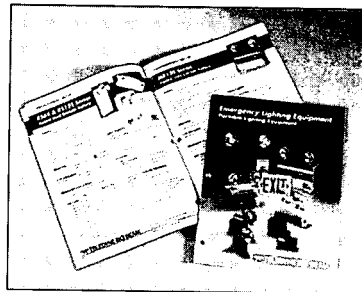


703 Circuit-breaker load center
Bulletin SD409 describes a residential circuit breaker load-center line that has a 1-in. format circuit breaker; available in 100 amp and 200 amp only. Load center has an interrupting capacity of 10,000 amp, a split branch neutral, and tangential main service knockouts. Square D Co., Lexington, Mass.



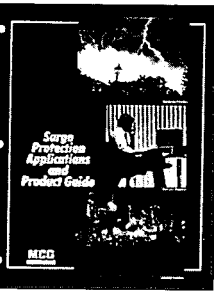
698 Downlighting

Downlight fixtures for incandescent, compact fluorescent, and H.I.D. sources come in four sizes and two shapes, with a variety of trim styles, shapes, finishes, and functions for recessed, accent, or general lighting. A similarly styled range of track-lighting fixtures is included. 48 pages. Hubbell Lighting, Christiansburg, Va.



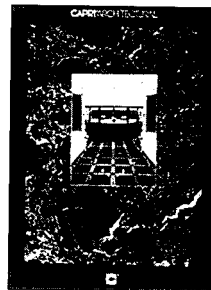
704 Lighting equipment

Reviewed in detail are commercial and industrial emergency light units, special-usage emergency power, exit signs, remote fixtures, portable lighting, and options and accessories. Dimensions, unit information, and illumination time in hours are included. 40 pages. Teledyne Big Beam, Crystal Lake, Ill.



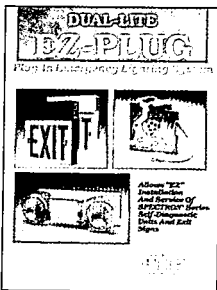
699 Surge protection

A 40-page guide gives selection, application, and technical specification of a line of both AC and data-line lightning protection devices. AC protectors range from wall plug-ins to computer room and complete facility protectors. Data-line protectors are for RS-232 and 422 and coaxial cable. MCG Electronics, Inc., Deer Park, N. Y.



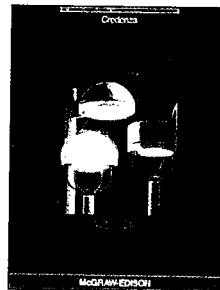
705 Architectural lighting

Presented are incandescent, H.I.D., and low-voltage recessed downlights. Also, a wide range of reflector systems, including multipliers, ellipsoidals, baffled open downlights, lensed downlights, adjustable retractables, wall washers, and compact fluorescent downlights are shown. Capri Lighting, Los Angeles.



700 Emergency lighting

A 4-page pamphlet describes installation, maintenance, and service of the Spectron Series of self-monitoring lighting equipment and exit signs. Units unplug for cleaning, repair, and maintenance. Rewiring reduces installation costs and allows removal or installation by non-technical persons. Dual-Lite, Newtown, Conn.



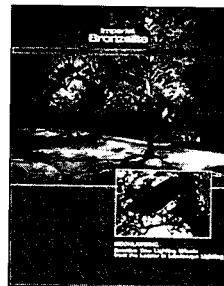
706 Outdoor lighting

The Credenza line of outdoor lighting standards comes in a hemispherical dome top, a luminous dome top, and a cylindrical low profile top. Ten colors and five beam patterns in yoke-, spider-, or arm-support systems are available. Tops come in 20 1/2-, 24-, and 28-in. diameters. 12 pages. McGraw Edison Lighting, Vicksburg, Miss.



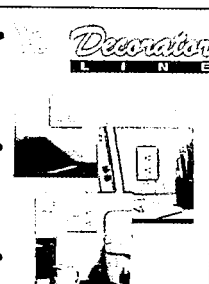
701 Tiffany-style lamps

Full-color photographs show a line of Tiffany-styled stained-glass pendant and table lamps with bronze-finish art nouveau standards. A new line is Original Tiffany Reproductions, which recreates in detail, pattern, and color the originals by Louis Comfort Tiffany. 16 pages. Meyda Stained Glass Studio, Utica, N. Y.



707 Tree lighting

The line features specification-grade tree lights for mercury vapor and tungsten halogen lamps for creative tree lighting. Available in two fixture sizes in die-cast aluminum housings with weatherproof powder-coat finish and in low voltage or 120 volts. Application guide included. Six pages. Imperial Bronzelite, San Marcos, Tex.



702 Switches and receptacles

The Decorator Line of electric wall hardware includes rocker switches, switch-receptacle combinations, receptacles, wall plates, and dimmers. Switches come in single-pole, double-pole, three-way and four-way models. White, ivory, brown and gray. Eight pages. Eagle Electric Mfg. Co., Inc., Long Island City, N. Y.



708 Wire management

Underfloor wire management products include the Multi-A-Cell, which provides modular zone layout; Multi-A-Zone, a high-capacity in-floor trench system with four separate compartments; and concealed service-floor boxes that deliver both power and communication service. Eight pages. American Electric, Memphis.

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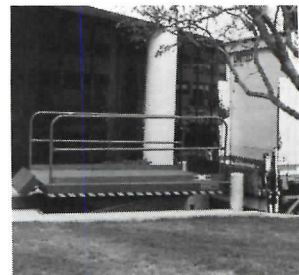
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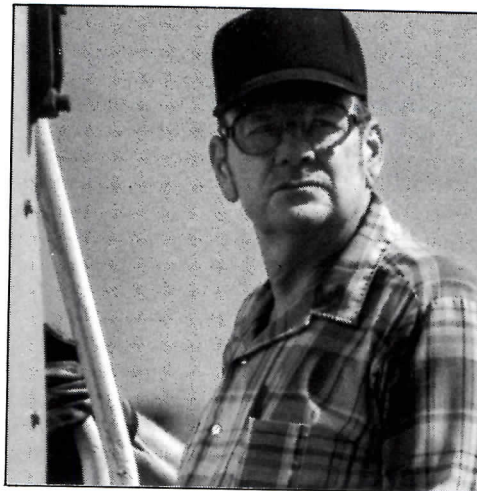
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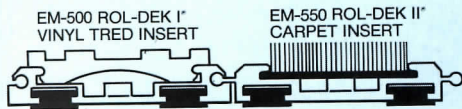
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Rol-Dek I & II®

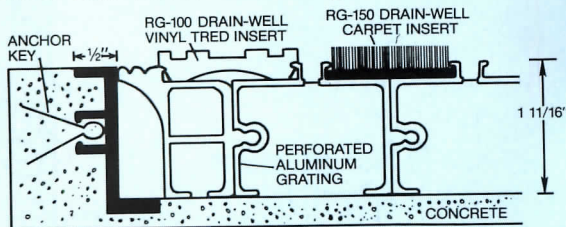


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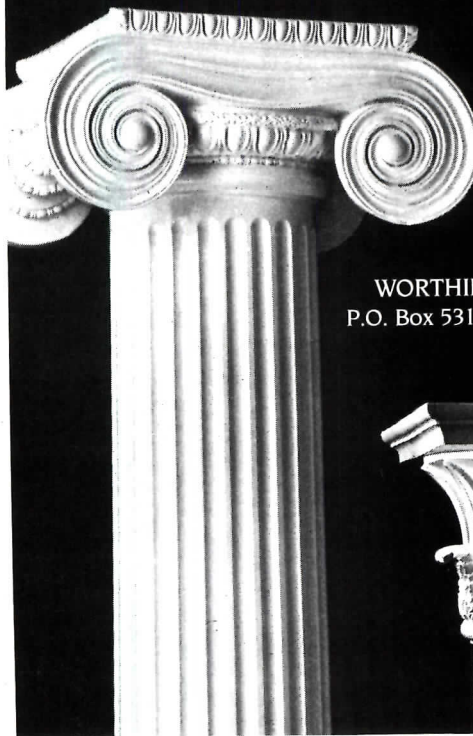
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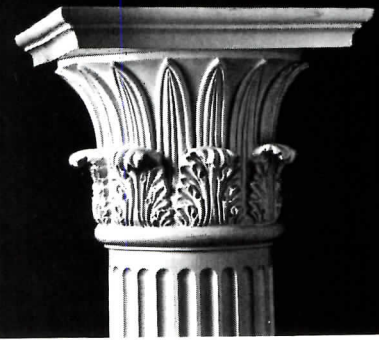
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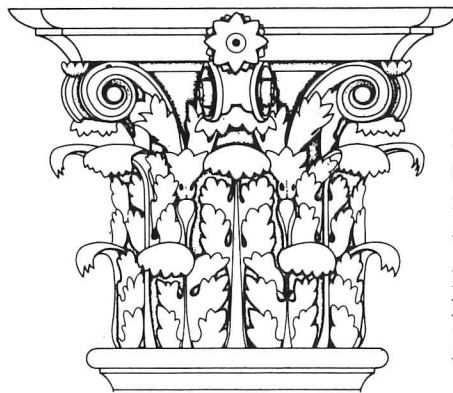
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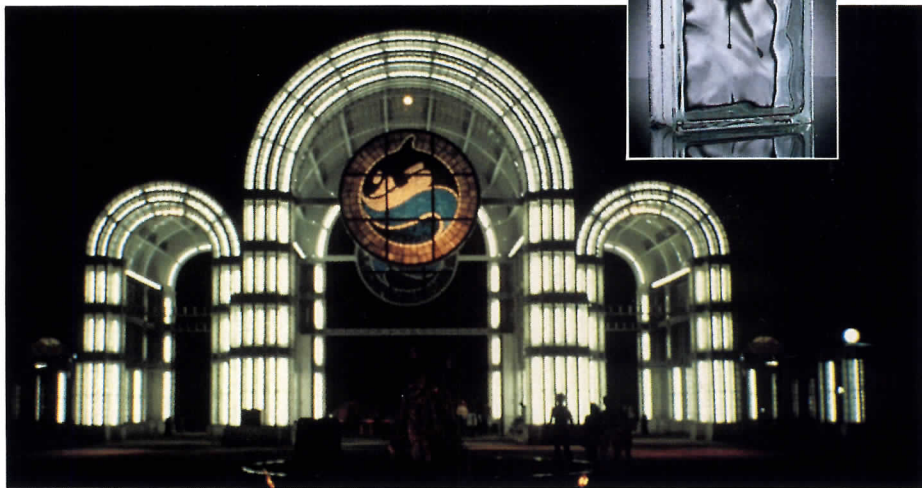
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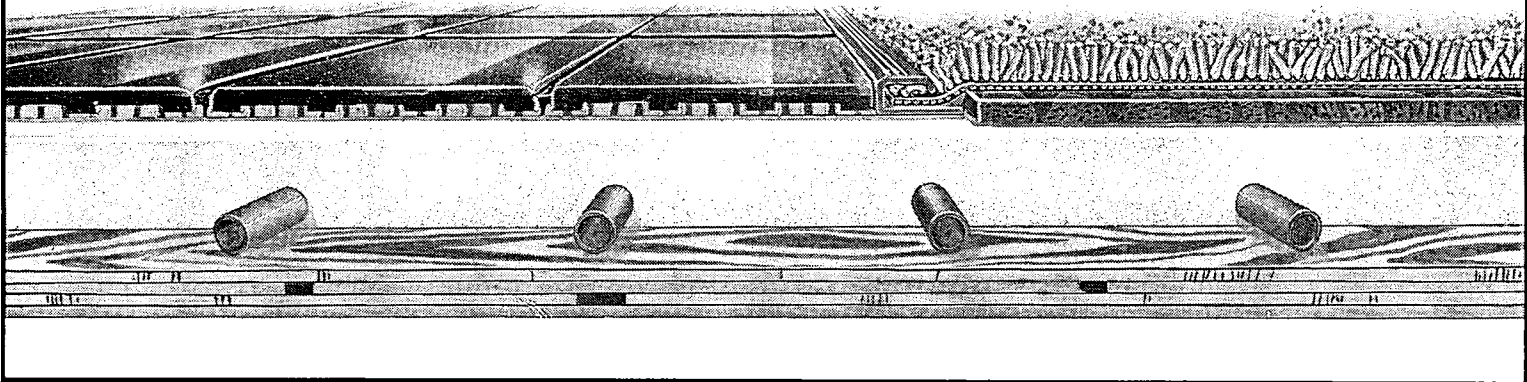
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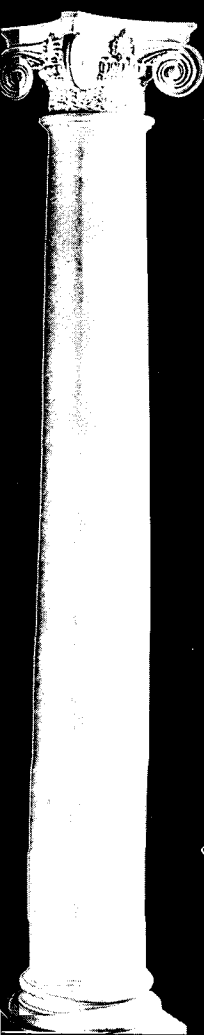
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Help Wanted: Architectural Designer. Send Resume to: Employment Security Department ES Division, Attn: Job No. 172195-Y, Olympia, Washington 98504 by: January 1, 1990. Job Description: Provide professional design services in research, development, construction, design, alteration, or repair of residences, office buildings, public buildings, manufacturing and industrial buildings. Consultation with clients to determine functional and spatial requirements and prepare information regarding design specifications, materials, equipment, cost of estimation, and code compliance. Plan lay-out of projects and integrate engineering elements into unified design. Prepare scale and full time drawings, contract documents for construction contractors. Furnish sample recommendations, review shop drawings for contracts. Work with the other design disciplines, such as civil, structural, mechanical and electrical engineering to integrate their design in the construction documents. Supervise administration of construction contracts and conduct periodic on site observation of work in progress. Travel domestically 25% of work time. Train draftspersons and technicians. Update and maintain a drafting standard manual. Perform quality assurance on all projects to satisfy the clients. Requirements: BS or equivalent in architecture plus one year of experience in architectural and structural design of residential, commercial and educational projects. Must have proof of legal authority to work in the United States. Salary: \$22,860.00 per year. Position Offers: Prevailing working conditions, 40 hours per week, 8:00 a.m. to 5:00 p.m., position in Seattle, Washington. On the job training not offered. Equal Opportunity Employer.

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The New York City Transit Authority ("The Authority") is seeking responses to identify experienced vendors interested in providing technical information for the availability of Mosaic Tessera and setting guides for subway station restoration work. This information will be used to develop a generic specification for a competitive test procurement. The first subway station to receive this restoration tile work will be 86th Street and Lexington Avenue.

The Authority's goal is to restore historically significant Mosaic Tessera tile work, throughout the subway system, to an aesthetically acceptable (and as close to original as possible) level.

Interested firms are requested to submit a letter of interest, including detailed information about their experience and qualifications. For further information please contact Daniel Cameron, at (718) 330-5221. Said letter must be received at the address indicated below not later than 4:30 P.M. Local Time December 20, 1989.

Responses are to be submitted to:
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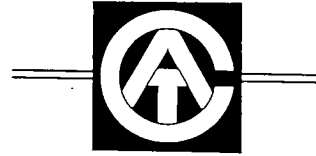
Project Manager wanted — Duties: Providing professional services in research, development, design, construction, alteration and/or repair of real property, primarily multiplex movie theaters, including using VERSACAD software for Computer Aided Architectural Design and Drafting (CADD) of proposed multiplex movie theaters and other structures in conformity with building codes and preparing construction and bid documents using designs. Preparing feasibility and energy conservation plans and comply with the energy codes. Requirements: Master's in Architecture, 1 yr exp in the job offered or 1 yr exp as Intern Architect. Related experience must include designing theatres. Must have university courses and/or related experience involving CADD using VERSACAD or AUTOCAD, designing structures to comply with building codes, architectural structures and energy in architecture. Must be willing to relocate anywhere within the Southeastern United States. Pay is \$26,674 per year. 40 hr/wk. Resumes to South Carolina Employment Security Commission, 706 Pendleton Street, P.O. Box 328, Greenville, SC 29602. Job Order #SC0925427.

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Monday, December 11, 1989
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Attendance will be limited to a maximum of one or two persons per organization, depending on space availability. Reservations and information can be obtained from Susan Bleistift at (617) 951 - 6186, until 5:00 p.m. December 4, 1989.

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Dean School of Architecture

Applications and nominations are sought for the position of Dean of the School of Architecture; the position is available effective July 1, 1990. The School, located in Newark, New Jersey, was established in 1974 and responds to a need for State-supported professional education in architecture. The School offers NAAB-accredited Bachelor of Architecture and Master of Architecture degrees, as well as a Master of Science in Architectural Studies; total enrollment numbers 400 full-time students.

The School is one of four colleges of NJIT, the largest comprehensive technological university in the New Jersey/New York metropolitan area. The Dean is the School's chief administrative officer and reports to the Vice President for Academic Affairs. The Dean will manage the School's resources and administer its institutional, research, service, and development programs.

Qualifications include: professional master's degree in architecture; professional registration; demonstrated executive or administrative capabilities; academic qualifications suitable to the rank of Professor; a demonstrated and active involvement in design through practice, scholarship, or theoretical inquiry.

NJIT does not discriminate on the basis of sex, race, color, religion, handicap, national or ethnic origin or age in employment.

The Committee will begin evaluating candidates by January 31, 1990. Inquiries, nominations, and applications accompanied by detailed resume should be sent to:

Prof. Peter C. Papademetriou, Chair
School of Architecture Dean Search Committee c/o Personnel Box D-SOA



**New Jersey
Institute of Technology**

Newark, New Jersey 07102

University of Illinois at Urbana-Champaign School of Architecture. Design Teaching Division seeks applicants for one or more full-time nine-month tenured Associate Professor or tenure-track Assistant Professor faculty positions to begin August 21, 1990. Candidates should be highly motivated and dedicated individuals who can take advantage of the unique resources at the University of Illinois for teaching and research. These resources include personal computer-based studios, a major reference library, and access to associated research programs (Housing Research & Development Program, the Building Research Council, The U.S. Army Construction Engineering Research Laboratory). These positions will involve both studio and lecture/seminar/teaching activities. Applicants with professional, teaching and/or research experience in Architecture and Urban Design; Theory and Criticism; Housing or CAD, and who are interested in developing and/or pursuing innovative approaches to teaching design studios, are especially encouraged to apply. Rank and salary will be determined by candidates' qualifications and experience. Minimum requirements are: Architectural registration plus a Masters Degree or a Ph.D., or similar and equivalent experience. Previous experience in teaching, research or national recognition for design excellence is desirable. To receive full consideration, curriculum vitae, including a statement expressing educational/professional philosophy and the names of three references must be received by February 15, 1990. Send to: R. Alan Forrester, Director, School of Architecture, Design Search Committee, 608 East Lorado Taft Drive, Champaign, IL 61820 (217) 333-1330. The University of Illinois is an Equal Opportunity/Affirmative Action Employer.

The Department of Architecture is seeking candidates for a faculty position within the Architecture Program to be filled by January 1990. * Appointment Conditions: Full-time contract, tenure-track position. Academic rank and salary will be commensurate with the applicants' qualifications and experience. * Qualifications: Candidates should (a) have a graduate degree in Architecture, (b) be qualified to teach architectural design, architectural presentation techniques and light construction. Prior teaching experience is desired but not required. * Application Procedures: Applicants should submit letter of application, resume, and names and phone numbers of three references, to: Charles V. Raine, Associate Dean and Department Head, Department of Architecture, Tuskegee University, Tuskegee, Alabama 36088, (205) 727-8329.

The University of Wisconsin-Milwaukee is seeking a Dean of the School of Architecture and Urban Planning beginning July 1, 1990. The School has over 1,000 students and 35 faculty and offers a B.S. in architectural studies, a Master of Architecture, a Master of Urban Planning, and a Ph.D. in Architecture. Candidates should have administrative and teaching experience, an active background in architecture and/or planning, and a research orientation. Send resumes to: Prof. James M. Kuist, Chair, Search and Screen Committee, Curtin Hall 439, University of Wisconsin-Milwaukee, P.O. Box 413, Milwaukee, WI 53201, by February 1, 1990. UWM is an Equal Opportunity/Affirmative Action University/Title IX Employer.

Director, School of Architecture, Montana State University. Administrative position (academic tenure track). Begin July 1, 1990. Responsibilities: normal obligations of management (fiscal administration, long-range planning, curriculum development), and academic teaching. Candidate must be a registered architect with a Masters or Ph.D. in architecture as a second professional degree; the first professional degree is the degree qualifying the recipient for licensure. Demonstrated excellence in professional practice, administration, teaching, leadership and a demonstrated willingness to participate in professional societies is required. Rank is dependent on qualifications and experience. Salary range is \$53,000-\$56,000; negotiable depending on education and experience. To apply, send a letter of application, current vita, and the name, address and phone number of three references. References should mail letters directly to the chair of the Search Committee by the deadline for application. A portfolio of individual creative and scholarly achievement will be required of finalists. Send materials to Willem Volkersz, Chair, Architecture Search, College of Arts and Architecture, Montana State University, Bozeman, MT 59717. Screening begins on February 1, 1990. MSU provides preference in employment to eligible veterans. For information, contact HR/AA, 201C.MH, MSU, Bozeman, MT 59717. MSU is an AA/EO institution, and encourages applications from women and minorities.

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Senior Architect For Purdue University — Purdue, a Big Ten Midwestern University, is seeking a Senior Architect to direct and manage a professional staff in the planning, programming and budgeting of the West Lafayette campus facilities construction and renovation projects. Requirements include a Bachelor's Degree in Architecture, professional registration in State of Indiana or NCARB certification with eight years' post-registration design experience, preferably with institutional facilities, including project budgeting, design and client contact. Five years' experience in a university environment desired. Purdue offers a comprehensive benefits package and a competitive salary. Interested candidates should send a resume by January 1, 1990 to: Tom Schmenk, Director, Facilities Planning & Construction, Purdue University, Freehafer Hall, 401 S. Grant Street, West Lafayette, IN 47907. Purdue University is an Equal Opportunity/Affirmative Action Employer.

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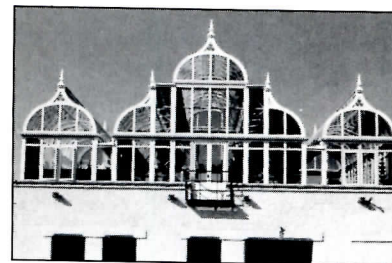
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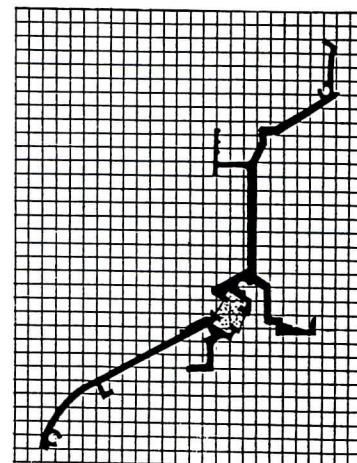


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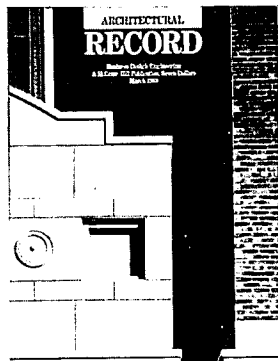


After you get the slate out of the ground, you have to break it to find the grain, and then someone like J.J. Beayon, with me in the picture, starts to split it, by hand, dividing by two over and over again. The machine hasn't been invented

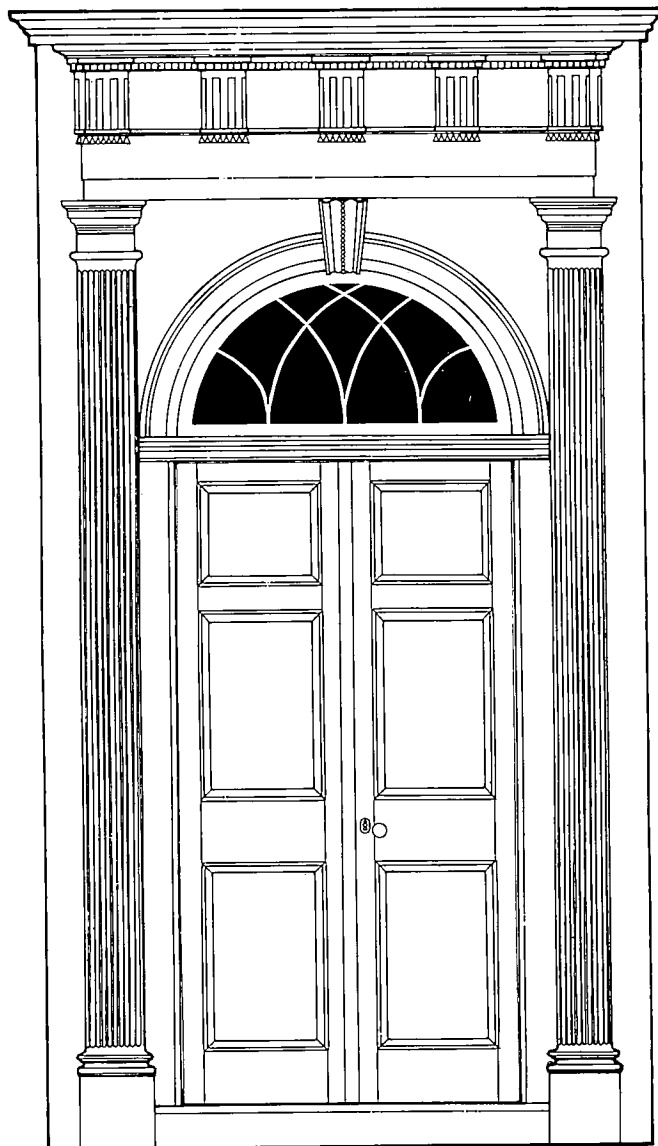
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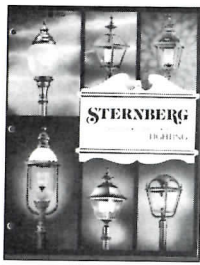
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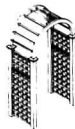


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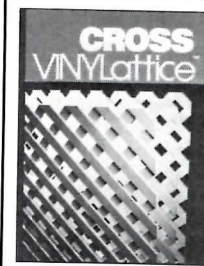
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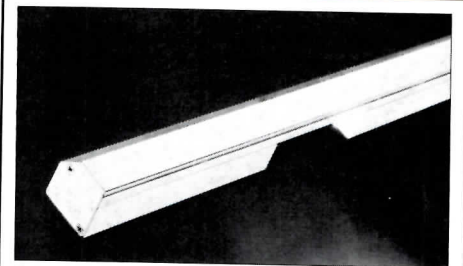


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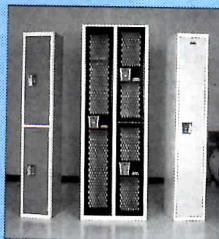
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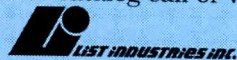
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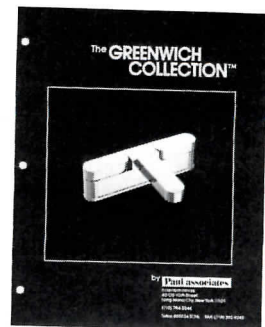
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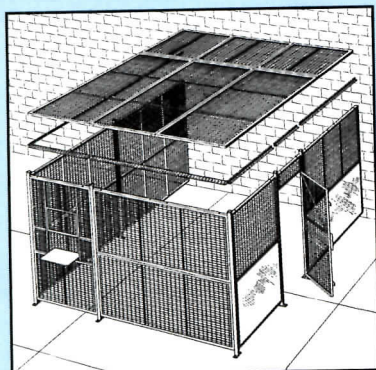


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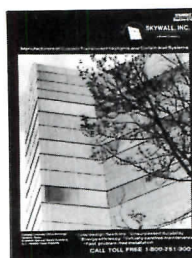
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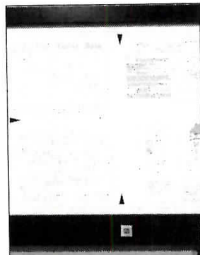
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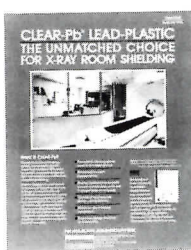
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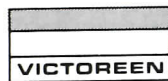


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Exterior insulation and finish systems (EIFS) are growing in popularity among architects because of cost savings, thermal performance, and the stucco look they achieve.



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Christopher Little

Sticking with stucco

In a recent RECORD survey of exterior insulation and finish systems (EIFS), 76 percent of architects responding indicated that they have specified the system in new-construction projects, and of those, 94 percent expressed satisfaction with the results.

What is it about EIFS that has made the system so popular in recent years? The EIFS exterior has the look of stucco at considerably less cost than stucco and with a more uniform coloring. Because of its light weight, about 7 1/2 lb/sq ft, EIFS can be supported by a comparatively light building frame. The reduced structural dead load can produce substantial savings in framing cost. The light weight and ease of application also reduce labor costs. The basic element of EIFS is a layer of expanded polystyrene board insulation usually either 1 in. or 2 in. thick, but sometimes as thick as 4 in. These panels are attached by adhesive or mechanical fasteners to the sheathing of a new building or almost any cladding of a renovation project. Expanded polystyrene can be cut to accommodate almost any design detail—rounded or fluted columns, reveals, cornices, pediments, or spandrels. Over the polystyrene panel goes a reinforcing mesh usually made of fiberglass. That fabric is coated with a portland cement and acrylic polymer base coat. Over the base coat is a finish coat that may have a troweled, sand, or aggregate finish.

"We used it on a hospital in northern Maine and created a refrigerator inside-out," says John Wilson, an architect with Payette Associates Inc. in Boston. "It filled the bill perfectly in Maine in cost and thermal performance."

The Anchorage Performing Arts Center is also sheltered by EIFS. "The most economical way to build the center was poured concrete and the best way, the preferred way in Anchorage, was to insulate the building on the outside, to keep the entire building warm," says Harris Feinn, an architect with Hardy Holzman Pfeiffer Associates in New York City. "EIFS was a reasonable way to insulate the building."

EIFS's were imported from Europe about 20 years ago and since then have accounted for more than 150,000 new and retrofit projects. Most commonly used for offices, and next most frequently for industrial buildings, schools, stores, and houses, EIFS's are most often put on buildings of less than 10 stories.

The popularity of stucco and the expense and difficulties of stucco have contributed to the increasing use of EIFS. "I used EIFS on a house in the Berkshires, in Massachusetts, because I wanted the appearance of stucco and there was no technology for stucco there," says Warren Schwartz of Schwartz/Silver Architects in Boston. "The house has been up for three years and it's been holding up fine. The house stands on a hill and is under enormous siege from the elements the year round, not only extremes of temperature, but high wind vibration."

A bright, butter-colored cladding of EIFS covers the main entrance of the Children's Museum in Indianapolis. It was used, in part, because of the weight of stucco. "We wanted a smooth look of traditional stucco for the main entrance of the Children's Museum," says Kalevi Huottilainen, an architect with Woollen, Molzan and Partners in Indianapolis. "We liked the clean lines that EIFS would give us and also the color we could get. There was an added advantage in that it was easier to support for the steel frame."

The choice of EIFS as a cladding for the Disney Casting Center, Buena Vista, Fla., was a matter of time. Robert A. M. Stern Architects, New York, designed the office building in stucco, but the contractor didn't have enough time to build in stucco. "We had a tight budget, a tight schedule," says project architect Barry Rice. "The client suggested EIFS and it was an absolute decision."

*Recent projects featured in
RECORD using EIFS on
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5. *Bethany Lutheran Church,
Englewood, Colorado, by
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5

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buildings entered in two ways: by
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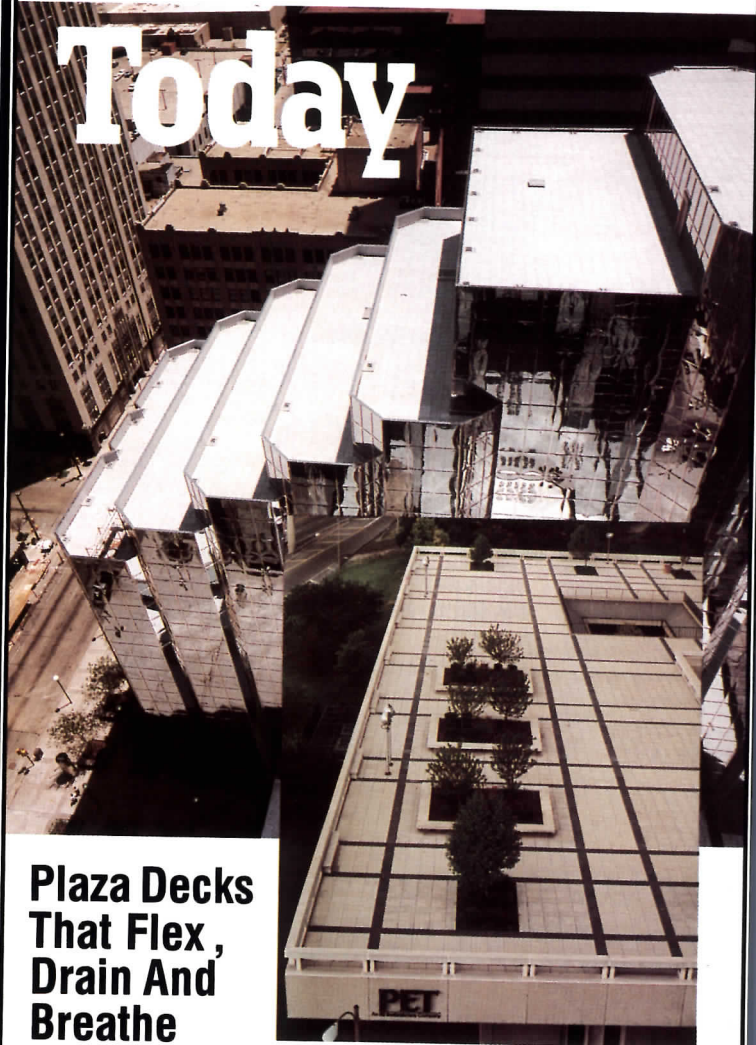
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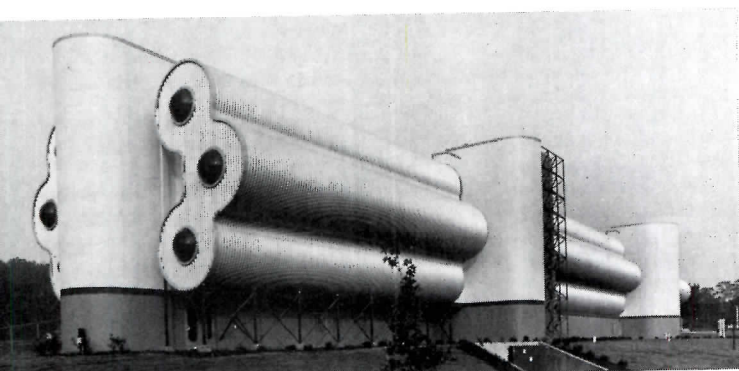


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17.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	#	#

END STAC SESSION:

7. When you have entered all your Inquiry Selection Numbers and the recording prompts, "Enter next inquiry number," End the call by entering:

#

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A FEW REASONS WHY A 350 TUFFLINE ENTRANCE LIVES UP TO ITS NAME.

A 3/16" minimum wall thickness in door and frame

High performance welded door corner joinery

Security interlocks at door jambs

Rugged 2" deep stile sections

Heavy duty standard hardware designed for high abuse areas

Thru bolt and direct hardware attachment where applicable

Heavy duty frame to complete the entrance package

Katy O.

Joe S.

James W.

Rocco D'

Betsy G.

Sam S.

Ken T.

Julie L.

AND A FEW REASONS WHY IT HAS TO.

350 Tuffline. Educational tool for the 80's. And beyond. For new and replacement doors at schools, college campuses, and in other high traffic and abuse-prone installations. Tuffline entrances are all their name says they are. Tested in the educational market,

Tuffline is offered as single-acting entrances in both singles and pairs to 8' heights. With durable butts, pivots, closers and panics to resist vulnerability and increase security when school's out. And design options such as Paneline® to customize without compromise.

Tuffline. At the head of the class.



For technical specifications contact: Kawneer Company, Inc. Department C, Technology Park-Atlanta, 555 Guthridge Court, Norcross, GA 30092

Circle 1133 on inquiry card

Stop \$75 million from going up in smoke.

Money seems to be no object when it comes to making a high rise impressive. Yet, too often, budgets seem to run dry when it comes to fire containment systems that improve occupant safety.

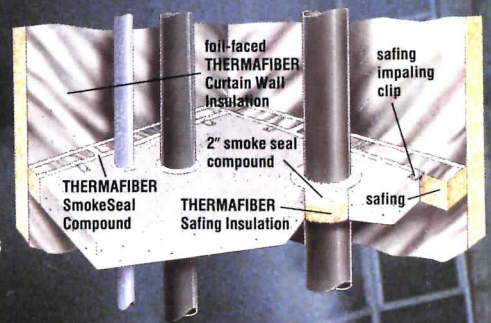
Cut corners by specifying low-melt-point foam or glass fiber insulations, and risk the spread of fire and deadly gases when they break down. Install sprinklers to improve fire safety, but smoke and fire still might not be effectively contained, causing fatalities away from the source.

A tested, reliable method for containing fire and smoke to the floor of origin is the THERMAFIBER™ Fire/Smoke Stop System. By sealing off all perimeter openings with foil-faced THERMAFIBER® curtain wall insulation, safing insulation and SMOKE SEAL™ compound, and filling poke-through openings as well, fire and smoke can be effectively contained.* The added protection costs little more than assemblies using insulations that are not fire resistant.

Experts agree that the first line of defense against fire and smoke is containment.

It's also the most sensible way to keep a lot more than property from going up in smoke.

*Test results and system information are published in our brochure "THERMAFIBER Life Safety Insulation Systems." For a copy, write USG Interiors, Inc., Thermafiber Division, 101 South Wacker Drive, Chicago, IL 60606-4385, Dept. AR1289



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