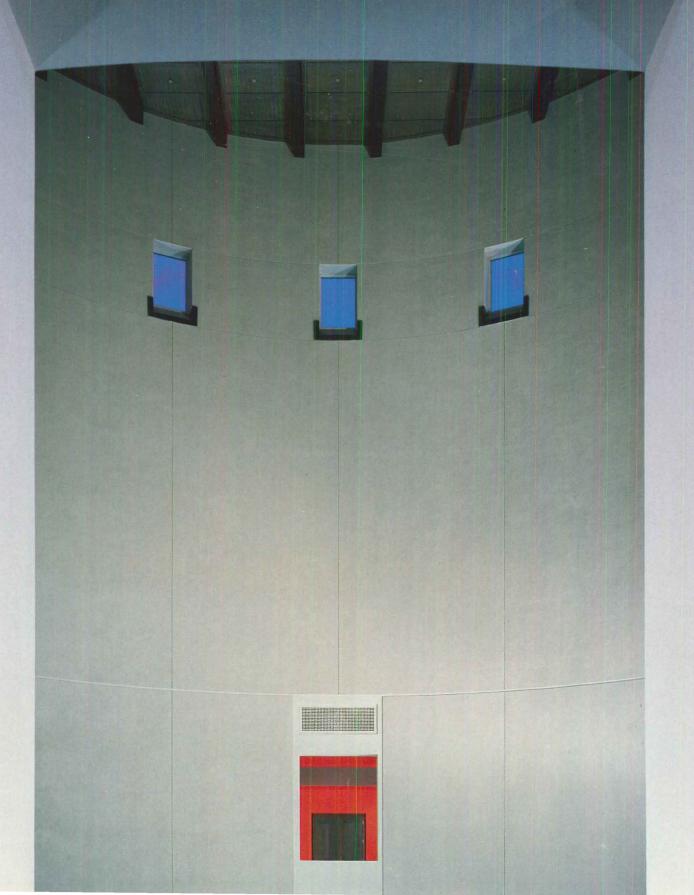
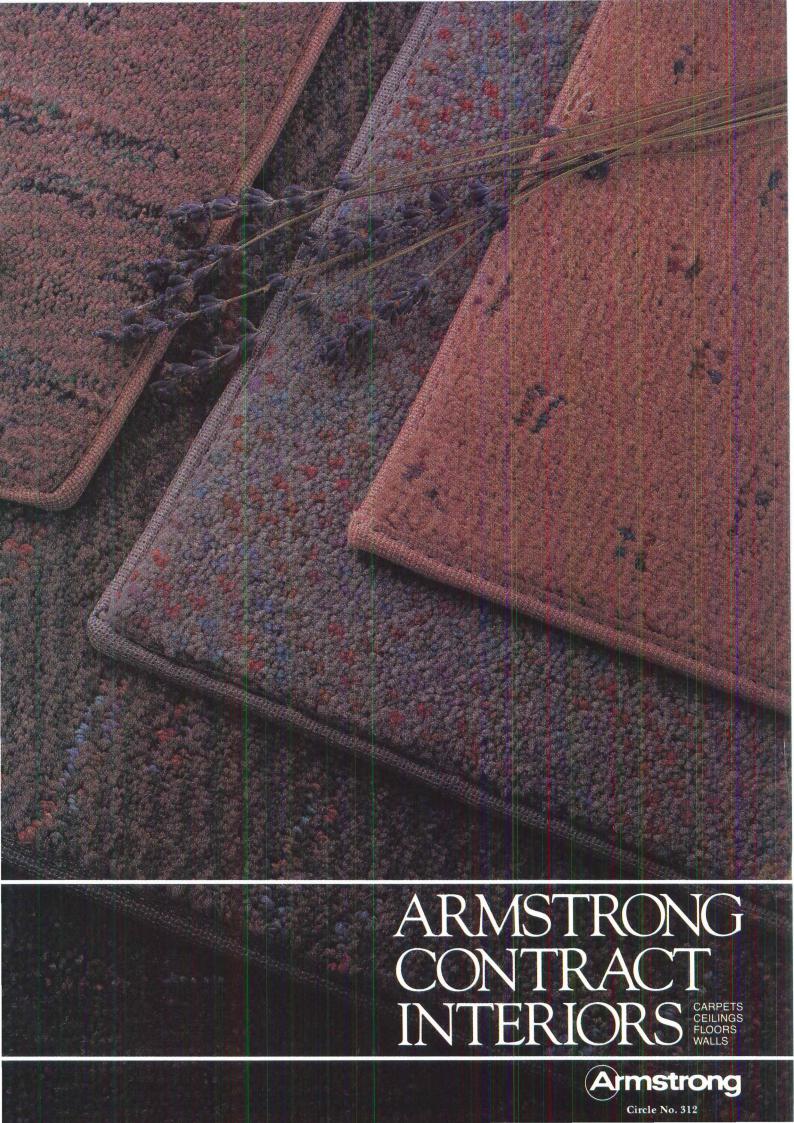
Progressive Architecture



CEILING ACCENTS

Grid accessories for new ceiling systems. Stepped or beveled edges complement ceiling detail. Four colors. For our brochure, call 1 800 233-3823 and ask for Ceiling Accents.



Stock Options

Alterna[™] Faucets. Choose the faucets with all the options — Alterna faucets by Kohler. And create color coordination between faucets, fixtures, and decor with unique ceramic inset options available in 24 Kohler colors. Plus the new secure inset system comes in a wide array of additional materials including woods, metals, onyx, and semi-precious stones, exclusive Champlevé and custom monogram. Choose from a variety of spouts and five beautiful finishes. Kohler's System C[™] ceramic washerless cartridge assures years of dependable performance. With Alterna faucets by Kohler only two things are not optional — Kohler quality and dependability.



See your Kohler[®] distributor or write: Kohler Co., Dept. TW5, Kohler, WI 53044. © 1989 by Kohler Co.

Circle No. 346

1989

Progressive Architecture

- **ditor** hn Morris Dixon, FAIA **xecutive Editor** homas Fisher inomas risher rofession and Industry Editor imes A. Murphy, FAIA ianaging Editor alerie Kanter Sisca
- anior Editors aralice D. Boles, Features ernon Mays, Technics vva Freiman, Interior design ssociate Editor (ark Alden Branch, News our Editor
- opy Editor amela Van Zandt Gillmor ssistant Editor ssica Elin
- ditorial Assistants ndrea E. Monfried laxine Konrad
- bby Bussel

rt Director erek Bacchus ssociate Art Director ssistant Art Director ristin L. Reid

ontributing Editors orman Coplan, Hon. AIA Villiam T. Lohmann, AIA, FCSI /illiam T. Lohmann, AIA, FCSI //alter Rosenfeld, AIA, CSI orrespondents sther McCoy, Los Angeles arbara Goldstein, Los Angeles ally Woodbridge, San Francisco eter Papademetriou, AIA, Houston 'homas Vonier, AIA, Washington Ionica Pidgeon, Hon. FAIA, London Ionatella Smetana, Milan onatella Smetana, *Milan* ane Holtz Kay, *Boston* oel Warren Barna, Austin

ice-President and Publisher obert J. Osborn Susiness Manager Daniel H. Desimone dministrative Assistant Carol Zezima Promotion Manager ebra L. Jones **romotion Director** ack Rudd **roduction Manager** Very Lynch Katz roduction Assistant Velyn S. Blum Vice President–Circulation Joria Adams **Circulation Manager** Dan Cochran **Circulation Marketing Manager** oanne M. Improta

BP 😑 MPA

Penton Publishing Trogressive Architecture (ISSN 1033-0752) is published monthly, xcept semimonthly in October, y Reinhold Publishing, A Divi-ion of Penton Publishing, 1100 iuperior Ave., Cleveland, OH 4114: Philip H. Hubbard, Jr., Tresident; Robert J. Osborn, /ice-President; Penton: Thomas ... Dempsey, Chairman; Sal F. Marino, President; James K. Sillam, N.N. Goodman, Jr., Paul Rolnick, Executive Vice-Presi-lents. Go0 Summer St., P.O. Box 361, Stamford, CT 06904 203-348-7531). 7AX 203 348 4023 BP

ARCHITECTURAL DESIGN/PLANNING

Editor in charge: Daralice D. Boles

65 Civil Center

In Boston's Back Bay, architects Kallmann, McKinnell & Wood have expanded and transformed an ungainly 1960s exposition hall into the elegantly crafted Hynes Convention Center. John Morris Dixon

78 Reordering the Suburbs

New solutions to pressing problems of suburban sprawl are examined in a package that ranges from particular building types to town plans. Daralice D. Boles

92 **Comfortable Challenge**

> Addressing several site and circulation conditions, a design by Eric Owen Moss is among those that comprise UC Irvine's ambitious building program. Pilar Viladas

TECHNICS

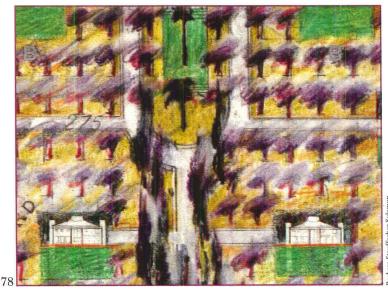
98 Building in an Electronic Age

As the use of electronic systems becomes more pervasive in modern buildings, architects find themselves having to anticipate new issues during design. Vernon Mays

SPECIAL SECTION

125 NEOCON® 21

This section lists seminars and workshops at NEOCON® 21 in Chicago, June 13-16, and previews some of the products being introduced.



DEPARTMENTS

9 Editorial Jefferson's Suburban Model

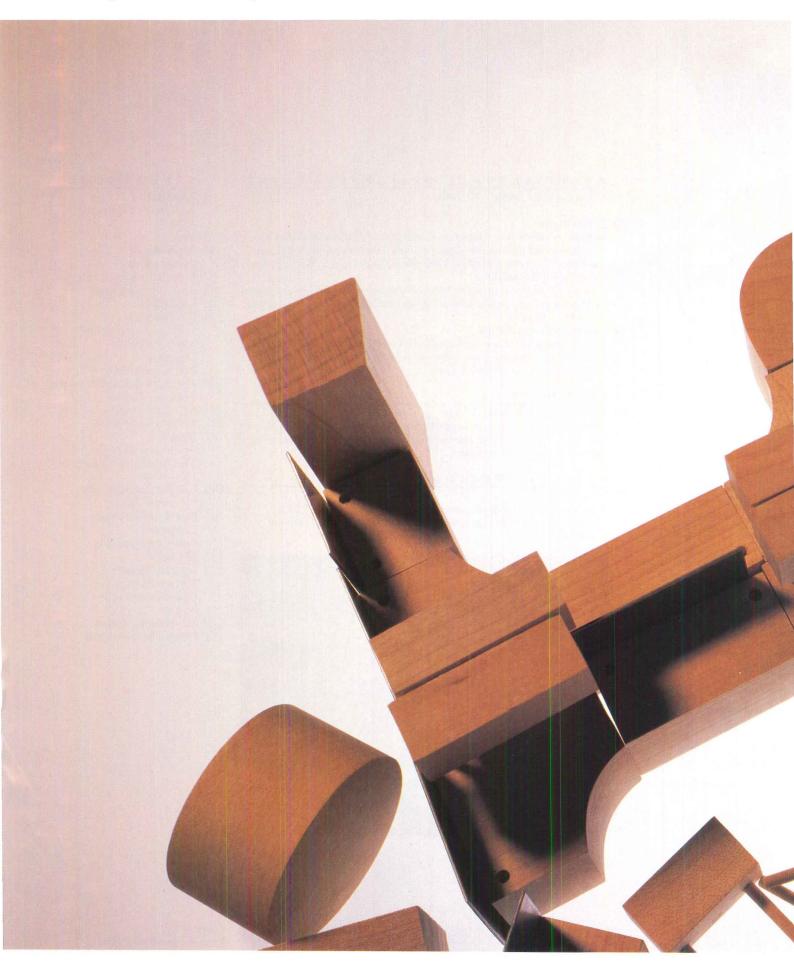
- 13 Views
- 23 News Report Perspectives
- 37 French Furniture Fair
- 43 Report from China
- 51 Calendar
- 55 P/A Practice Project Documentation; Management by Delegation; Part-time Architects
- 102 Technics-Related Products **Technics** Topics
- Post office design 111
- 117 Retrofit bathrooms
- 121 Books Borderland: Origins of The American Suburb, 1820-1939
- 160 Call for Submissions P/A houses issue
- 165 New Products and Literature
- 171 Building Materials
- 173 Job Mart
- 175 Selected Details **Entrance Canopy** Hynes Auditorium Boston
- 176 Advertisers' Index
- 177 Reader Service Card

Subscription information: Send all subscription orders, payments and changes of address to Progressive Architecture, P.O. Box 95759, Cleveland, OH 44101 (216-696-7000). When filing change of address, give former as well as new address and zip codes, and include recent address label if possible. Allow two months for change. Publisher reserves right to refuse unqualified subscriptions. Professionals include architectural-enderchitectural-engineering firm personnel and architects, designers, engineers, and draftsmen employed in allied fields. Subscription rates for U.S. professionals are \$32 for 1 year (\$40 in Cnanda, \$75 for foreign); \$55 for 0 regres; \$65 in Cnanda, \$130 for foreign); \$75 for 3 years (\$95 in Cnanda). U.S. student subscriptions for 1 year is \$32. Subscription rate for U.S. nonprofessionals is \$45 for 1 year (\$60 in Canada). U.S. for foreign), Single copies are \$7 in the U.S., \$8 in Cnanda, and \$12 for foreign except Information Sources issue; \$12 in U.S., \$12 in Canada, and \$20 for foreign. Permission to photocopy is granted for users registered with the Copyright Clearance Center (CCC), provided that the base fee of \$1 per copy of the article plus \$0.50 per page is paid directly to CCC, 21 Congress \$1, Salem, MA 01970. Indexed in ArchiText Construction Index, Architectural Index, Prainted in U.S.A. Copyright © 1989 by Penton Publishing Inc. POSTMASTER: Send address changes to PROGRESSIVE ARCHITECTURE, 1100 Superior Avenue, Cleveland, OH 44114.

Cover:

View across rotunda, Hynes Convention Center, Boston, Kallmann, McKinnell & Wood, Architects (p. 65). Photo: Wolfgang Hovt.

"A traditional panel-based system is a two-dimensional planning concep This system invites you to think in the third dimension."





ontext.[™] he most complete freestanding furniture system ever. See it at NEOCON.[®]

Progressine Architecture 5.89 7

FORMS+SURFACES

Hotels,

Stores,

Banks,

Offices,

Restaurants,

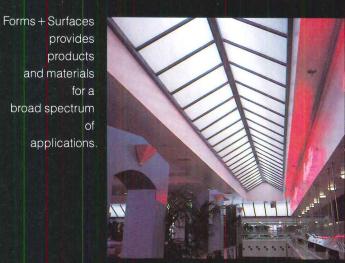
Transportation

Terminals,

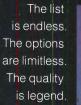
Urban Spaces,

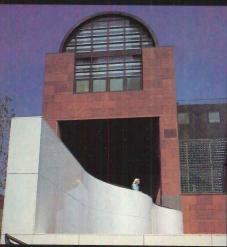
Residential

Forms + Surfaces Box 5215 Santa Barbara, CA 93150 (805) 969-7721 Circle No. 335



















Environments.

Jefferson's Suburban Model

n this guest editorial n suburban sprawl, obert Geddes rgues that architects nould model their ctions on Thomas efferson, eintegrating the esign of buildings nd landscapes.

I live in an unintended city.

It wasn't always this way. Twenty-five years ago, my "town," Princeton, New Jersey was a place with less than 25,000 people. Now, it is part of a "corridor," with at least 250,000 people, stretching 25 miles along Route 1.

The change in Princeton is not unique. Indeed, there are eight other "corridors" growing in New Jersey, and probably 100 nationwide. For developers, these burgeoning settlements are a huge success. As architecture and urbanism, they are a disaster. Why are they so bad?

They lack form.

I do not mean form in an autonomous way. In purely visual terms, as graphic images seen from the highway, the buildings along these growth corridors are often engaging, or at least amusing. Rather, I mean form that is useful and meaningful; form that serves as the stage and container for everyday life. And, if the biological concept of "growth and form" can be accepted, form that is a principled basis for development.

These new settlements, plowing haphazardly through rural and suburban communities, cannot accurately be called cities or suburbs. They have no core. They lack linkages among their fragments. They do not have a continuous fabric or a coherent structure of buildings and landscapes.

It's easy for architects to point the finger at others, especially developers and public officials. But, architects must share the blame.

For too long architects have not been fully engaged in urbanism. With the growth of landscape architecture and urban planning as separate professions, architects tended to see the shape of the landscape and cityscape as someone else's problem. At best, the collaborative model of the three professions, encouraged in both design education and professional practice, promoted a tripartite subdivision of concerns.

Cities were not always designed and constructed this way. Nor need they be. Indeed, the new formless corridors growing across the country make it imperative to reconsider our current methods of citybuilding. We must change both our schools and our professions. We must grasp this opportunity, born out of disaster, to reunite the design of buildings, landscapes, and cities.

For an appropriate model, we should turn to the example of Thomas Jefferson. For Jefferson, the landscape and the building were both parts of a single composition. Consider his design for the campus of the University of Virginia. Is it landscape design or building design? The two merge seamlessly; it is impossible to separate one from the other.

Jefferson, admittedly, was philosophically anti-urban in disposition, and one might argue that his vision of an agrarian America is no longer valid for a predominantly industrial culture. But, on closer inspection, Jefferson's pastoral vision holds the key to bringing order to our chaotic new settlements.

We still tend to see the city and the country as two separate entities, adhering to different design imperatives. While we see the city as a physical fabric and spatial structure, in envisioning the countryside we cling to picturesque romanticism, imagining a landscape that is still wild. But the new components of metropolis are neither city nor country. Faced with this new entity—urban in scale and economic connections, rural in myth and location—we must abandon our picturesque, romantic view of the countryside and reconsider Jefferson's potent imagery.

Jefferson's ideal for a pastoral America—shown by his National Survey, his city plan for Jeffersonville, Indiana, and his academical village in Charlottesville, Virginia—was based on grids. The grid, as an intellectual structure, gave form to the building and landscape. The grid, as a public form, created the new landscape, and guided its future growth.

These two aspects of the Jefferson legacy should be our model. Not only in form, but also in practice, architecture and landscape architecture should be reunited. The new urbanism—the Green Apple—is our task. *Robert Geddes*

The author is design principal of Geddes Brecher Qualls Cunningham in Princeton and Philadelphia. He was urban design consultant for the Plan for Center City, Philadelphia. Dean of Princeton School of Architecture from 1965 until 1982, he was recently appointed New York University's Luce Professor of Architecture, Urbanism and History—in the Big Apple.

his guest editorial offers the perpective of a prominent architect and educator. The opinions are not ecessarily those of P/A's editors or nanagement.

Only Dover E with th





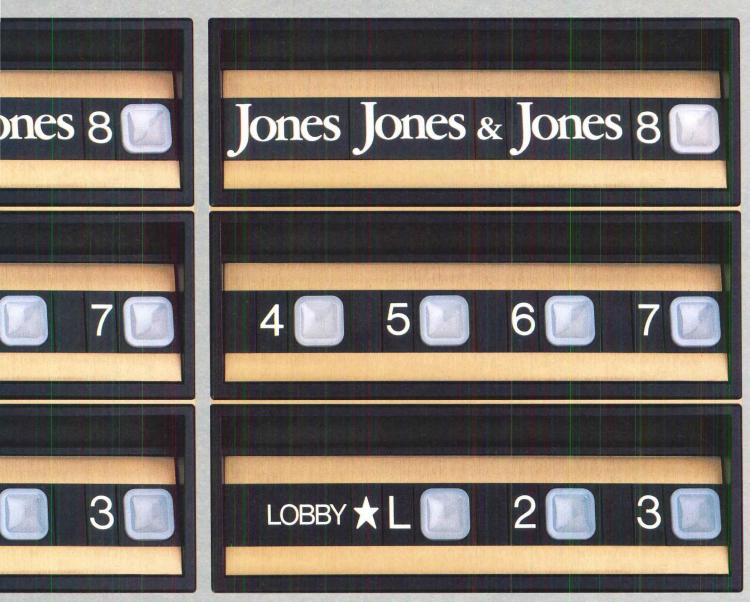
LOBBY 🗙 I

In a changing world, count on Dover to keep you current. With an innovative and flexible approach to elevator signal fixtures—Impulse.

LOBBY 7

Impulse[®] is the first system that lets you integrate signage directly into the cab operating panel. So tenants' names (or any other kind of ID) can be right there by the button. Even better, it's completely modular. You can add to, delete, re-arrange elements as needed.

ator keeps up meses.



Signage and buttons are recessed at a 20° angle facing up, so they're easy to read, easy to use.

Since it's pre-engineered, Impulse can be assembled and delivered quickly. Which can be important when you're keeping up with the Joneses.

For more information on Impulse signal fixtures, call your local Dover office or write Dover Elevator Systems, Inc., P.O. Box 2177, Memphis, TN 38101.



Making more elevators makes Dover No.1

REGGIANI. ORIGINE DI LUCE



SPACE LIGHT Versatile luminaire for use with Metal Halide, HQI, High Pressure Sodium (70-250W), and Quartz Halogen (Max 500w). Features variable beam control and, adjustable horizontal positioning. Available in direct, indirect, or direct/indirect models. Enhances interior spaces of all sizes. Design by: Luigi Manzoni

Reggiani - your international resou for outstanding designs in engineered lighting products for Low Vallage,

Circle No. 362



ORIGINE DI LUCE

REGGIANI USA INC. ILLUMINATION P.O. BOX 4270 65 RIVER ROAD, NEW WINDSOR, N.Y. 12550 PHONE (914) 565-8500 FAX (914) EXPERIENCE THE ART OF REGGIANI AT LIGHTING WORLD BOOTH

Views

lli Kudos

u are to be complimented for insightful commentary and tructive presentation of the rk of the Pelli office. Like his ro, Hood, Pelli seems to find approach suitable to the time d place of each job. There is a nderful sense of balance and traint coupled with wit and nache to be found here. The rk is a refreshing middle path ween the present day exmes of cynical historicist cariure and uninhabitable straction.

emy Scott Wood, AIA eston, Mass.

reat to Licensing

ae article "Law: A Threat to censing" in the March issue, age 61) touches on a delicate oblem. Architectural services rough a contractor have been adered for many years, and it perplexing to understand why, ddenly, in recent years, the ofession has claimed it is egal.

To begin with, government encies who write turnkey conacts are parties to the practice. he contractor is responsible for e architectural design. Design/ ild firms have been advertisg, naturally, for years. Some ars ago our A.I.A. Chapter d a seminar on the subject in der to introduce us to a viable proach to projects. There ere two speakers: an architect d a contractor. Each managed lesign/build firm.

Far more threatening to the ofession are the drafting serves who get a professional to eal" the drawings. We have d a frustrating experience nvincing the state that this is couraging illegal practice. So r, the state contends, it is legal the professional reviews the awings even though the serve presented itself to the client legally qualified to do the ork.

on Rosenthal, AIA cchitect ıbylon, N.Y.

Education and Practice

I wish to compliment you and above all the authors, Gordon Brown and Mark Gelernter, on their timely and interesting analysis of the present problems of architectural education in the "P/A Practice" department of the March, 1989 issue (page 61). *Giorgio Cavaglieri Architect New York*

Mr. Brown and Mr. Gelernter propose an interesting restructuring of the architectural education system ("Education: Veering from Practice," P/A, March 1989, page 61) but may have overlooked some key points:

1. The suggested split between the pre-professional and professional graduate tracks may increase the growing schism between "theorists" and "pragmatists." This effect could be similar to the plight currently experienced by students emerging from design-oriented programs without enough pragmatic knowledge to insure that design concepts can be fully realized. Students earning the pre-professional Masters degree could have difficulty stepping into the profession within their specialization, and would not be equipped, in most cases, to go beyond their expertise into other areas. The authors comment that the market will decide which specializations will flourish, but a danger exists that the professional degree track would be much more desirable under this structure.

2. The proposed professional license route would take seven years, as opposed to the current five, and give students *less* preparation in the technical disciplines such as structures, ECS, lighting, and construction materials/ methods. Even if students were following this track with an internship program, it seems unlikely that this experience could take the place of technical coursework.

3. The status associated with earning the license carries tremendous weight both within the profession and in the eyes of clients. It is a level of credentialing equated with the CPA, PE, JD, and MD, and those who do not earn it are often viewed as "less credible"; in fact, by law, the title "architect" can not be used by an unlicensed person. The validity and possible inequities of the significance of the architectural license can be argued, but the fact remains that many students would think twice before embarking on an educational track that would lead to a nonprofessional degree and ineligibility for licensing.

4. There is a need for form generation exercises at the undergraduate level. Students must study and analyze cultural, social, and behavioral influences, historical precedents, design theory, and all the other important components that affect architectural design, but they must also be given the opportunity to try it themselves. To severely limit or otherwise hold back design opportunities would be frustrating and could short circuit the creative processes necessary to think expansively about what architecture is and can be.

I believe that the primary purpose of undergraduate architectural education is to prepare students to function effectively within the profession and establish a basis for deeper, special interest exploration at the student's discretion. This preparation should include the opportunity to enter the licensing process, if desired.

There is a strong need to strengthen undergraduate curriculums in general regarding critical thinking, analysis, and verbal/written communication, and in particular, the areas of behavorial/sociological analysis and professional practice/business processes. It should be possible to do this within the current five year B. Arch structure. I further believe that the graduate level of architectural study requires much review because of the tremendous disparity of requirements that currently lead to the M. Arch degree. Alan J. Horwitz, M. Arch, RA Livingston, N.J.

Elevator tower credits

The architects for the Otis Elevator research tower, shown in the February P/A (page 107) should have been identified. They were Hellmuth, Obata & Kassabaum, St. Louis.

NCNB plaza credits

For the landscape architecture of the plaza at NCNB Plaza (February issue, p. 66) Peter R. Schaudt should have been credited as an associate of the Office of Dan Kiley.

Correctly placing Pelli

In P/A's March 1989 coverage of Cesar Pelli & Associates work: Carnegie Hall Tower (p. 51) is between W. 56 and W. 57 Streets and the photo shown is a mirror image of the actual model; the reference to "Pelli's World Trade Center in New York" (p. 74) should have read "World Financial Center."

Pelli photo credits

The photograph of Society Center, Cleveland (March 1989, p. 48), by Cesar Pelli & Associates was taken by Wolfgang Hoyt, while those of Yerba Buena Tower, San Francisco, by the same architects, on the same page, were not Hoyt's.

Calatrava author correction

On the Contents page of the April P/A, the author of Technics article "Crossing Boundaries" on Santiago Calatrava should have been identified as Tom F. Peters. He was correctly identified in the article itself. Esplanade Condominium Toronto, Canada Owner: The Avro Group Architect: Matsui-Baer-Vanstone Inc.

517

+

-

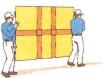
1

WE

Dryvit creates a super fast-track panel technique very kind to tight budgets.

Innovation '89 from TECH 21TH Fedderlite PANEL COMPONENTS

Our Tech 21 subsidiary developed Fedderlite in time to solve the Toronto Esplanade Condominium construction scheduling problem. Winter was fast approaching, threatening costly postponement of the shear wall exterior completion date.



- The Fedderlite System was selected because it was compatible with the multitude of substrate conditions.
- The panels were mechanically fastened into clips which are easily installed into the shear wall.
- Panels were fabricated at the work site in a temporary indoor panel plant created on lower floors of the structure.
- Hoisting to position was simple utilizing a portable skip with a 1500-2000 lb. capacity.
- Dryvit Outsulation[®] on the face of the panels provides extremely favorable insulation qualities meaningful for both heating and air conditioning economies.

Circle No. 324 on Reader Service Card

Fedderlite Panel components were developed by Tech 21 to provide innovative, even less costly ways to utilize energy efficient, lightweight Dryvit Outsulation* Panels. They are built and erected by independent contractors. For new construction or retrofit. Write or call for information.

1-800-4-DRYVIT

DRYVIT SYSTEMS, INC. One Energy Way P.O. Box 1014 West Warwick, RI 02893

*Dryvit Outsulation's superior chemistry includes 100% ACRYLIC POLYMERS.

© Dryvit Systems, Inc. 1989



THE SOURCE IS ITALY...

Acknowledged as the best in the world, prestigious Italian Bathspace designers contribute their mastery to the design of exquisite bathroom products, ceramic tile, and the unparalleled utilization of marble, the aristocrat of stone. Italy has been teaching the world about marble for

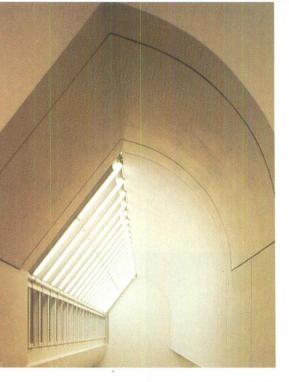
Italy has been teaching the world about marble for 2,000 years. A symbol of status and permanence, today Italian marble is an important element in commercial and residential architecture. Its hundreds of colors and veining patterns offer great designing choices.

Italian designers set the standards for classic, contemporary and ultramodern bath fixtures and furnishings. They maintain their leadership in high concept design with innovative use of color, form and a broad spectrum of materials.

To truly experience these exciting natural art forms from Italy, visit the Italian exhibitors booths numbers 647 to 673 and 748 to 774, May 11 through 13, 1989 at the World Exposition of Ceramic Tile and Bathroom Furnishings, McCormick Place North, Chicago, Illinois.

For further information, please contact the Italian Trade Commission New York office, 499 Park Avenue, New York, NY 10022, (212)980-1500, fax (212) 758-1050

Background photograph courtesy of Carlo Mariotti Inc., Beverly Hills, CA. Photographer: Taro Yamasaki



Now in America to fulfill the unique vision of the elite specifier.

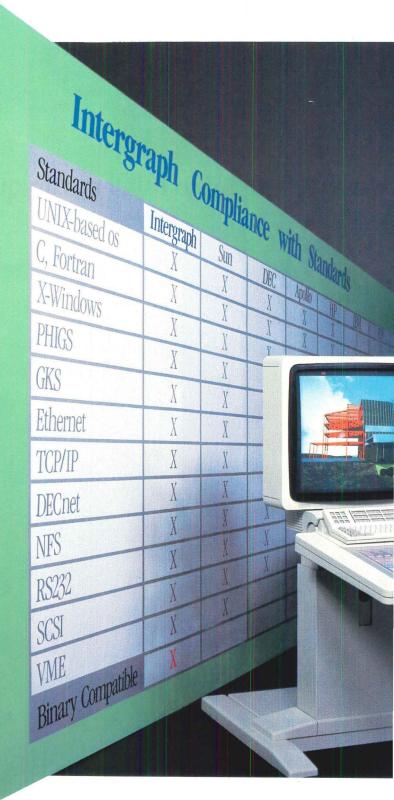
The world's finest architects, designers and consultants have consistently chosen Zumtobel as the one company best-suited to fulfill their inspired vision of lighting.

Now Zumtobel has made a major commitment to bring the full range of its resources to the American specifier: Luminaires that far exceed U.S. standards. A state-of-the-art manufacturing facility in Garfield, NJ. Unmatched advisory and support services. Uncompromising quality.

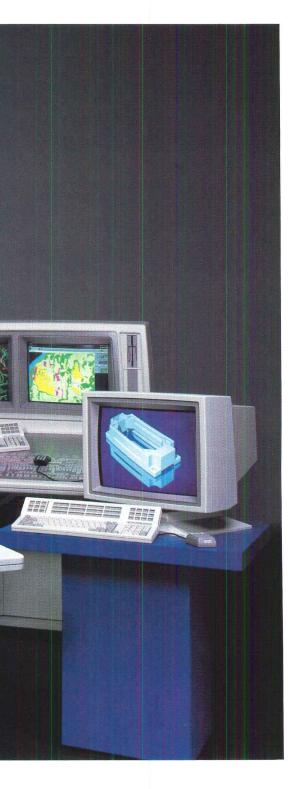


We're standard, b





e stand apart...



With Integrated Application Solutions

Intergraph[®] the leading total solutions company, offers the broadest range of integrated applications in the industry, including AEC, utilities, plant design, mechanical, industrial engineering, mapping, energy exploration, electronic publishing, and electronic design.

With Third-Party Software

Intergraph's RISC-based CLIPPER[®] platform allows us to offer hundreds of third-party software products. Additionally, a full suite of development tools provides an ideal platform for third-party vendors.

With Binary Compatibility

Intergraph goes beyond the source compatibility of other vendors. We offer binary compatibility. So software running on any CLIPPER system will run on all future CLIPPER systems without modification. This protects your investments in software, training, and databases.

With Number 1 Standing In Customer Satisfaction

We rank Number 1 in customer satisfaction. This is due to 20 years of commitment to total systems solutions and our worldwide sales, training, and support. To learn more about our workstations and systems solutions, call us today: 1-800-826-3515 in the United States, 31-2503-66333 in Europe, or 852-5-8661966 in Asia.

INTERGRAPH

Intergraph and CLIPPER are registered trademarks of Intergraph Corporation.

Circle No. 341 on Reader Service Card

Authentic divided lites for that distinctive Early American look.

Maintenance-free exterior cladding resists anything the weather throws at it.

> Glazing options like Low-E glass helps keep heat in during winter, heat out during summer.

NEVER

LETANYONE SAY

YOU CHOSEA

MARVIN DOOR JUST FOR ITS LOOKS.

Of course, we could understand if you did.

After all, it hasn't escaped our attention that our long line of patio, terrace and French door styles is opening a lot of eyes around the country. And with the additional design opportunities presented by sidelites, transoms, authentic divided lites, leaded glass inserts and more, we're opening a lot of minds as well.

But this ad isn't about how great our doors look, it's about how great our doors perform.

DOORS BUILT EVERY BIT AS GOOD AS MARVIN WINDOWS.

You're no doubt familiar with Marvin

Windows, some of the most fine crafted products in America toda Our doors are quickly building th same reputation. That's because we believe, first and foremost, a door should perform. And perfor for years to come.

So we start with the highest grade of materials, employ the mc advanced techniques in design ar Fine-grained Ponderosa pine accepts a beautiful stain or paint finish.

Tough maintenance-free sills wear longer than wood or metal.

Our hardware is specially designed for beauty, durability and security

engineering, and then add the best finishing touches we know of. For example, we ashion all frames, stiles, rails and huntin bars from fine-grained conderosa pine. The wood is deepreated with a PILT solution for onglasting protection against rot nd decay. Then each piece is lesigned and cut by hand to interock perfectly with the piece ext to it.

Our sills are made from an ndestructible, scuff-resistant, pace-age material that has 1400 times the insulating value of aluminum.

Maintenance-free Marv-A-Gard aluminum cladding provides a tough exterior, and, when combined with our solid wood doors, virtually eliminates denting and other damage.

Locksets and hardware, in many cases, are custom made to our specifications for smooth operation, long life and added security. Extensive weatherstripping reduces air infiltration, and, in combination with a variety of glazing options like



new energy-saving Low-E glass, gives Marvin Doors energy efficiency ratings that in most cases far exceed industry standards.

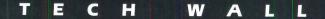
WHAT'S BEHIND OUR DOORS HELPS KEEP US IN FRONT.

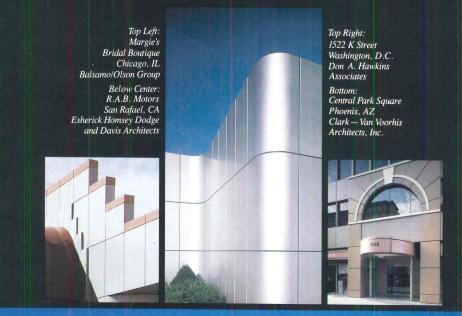
Behind every Marvin Door is a list of services that helps it practically sell itself. We provide the fastest delivery in the industry, no matter what style of door you order, or what options you choose. And the highest level of technical and design support is available right from your local distributor, as well as back-up service that assures your customer that everything will work perfectly.

So perhaps recommending Marvin Doors purely on the basis of their looks is not a bad idea. After all, we all know beauty is more than skin deep.

To learn more about Marvin Doors, call toll-free **1-800-346-5128** (in MN, 1-800-552-1167, in Canada, 1-800-263-6161), or write Marvin Doors, Warroad, MN 56763.









Tech Wall offers architects and builders a stunning range of design possibilities — without the compromises common to other systems. From radiused corners to intricate compound curves; from continuous coping to projected curved panels; *almost anything you can design can be realized with Tech Wall*. And since Tech Wall is solid aluminum, *there are*



no standard sizes. Every panel is made to meet the architectural requirements of your job.

Tech Wall also offers a virtually unlimited range of tested and proven finish options. For further infor-

mation, call today.

FLEXIBILI

1-800-631-7379 in New Jersey 201-272-5200

THECSGROUP

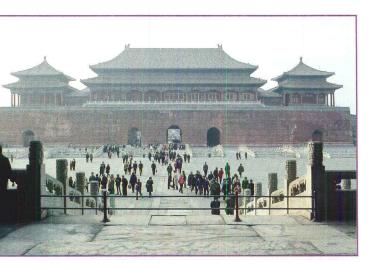
UNCOMPROMISED DESIGN

Circle No. 319 on Reader Service Card

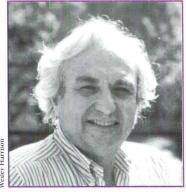
P/A News Report

25 Illegal Houses

- 26 Cleveland Towers
- Architects Endorsements
- 37 French Furniture Fair43 Report from China
- 51 Calendar



a recent P/A-sponsored tour of China saw andmarks ranging from Beijing's Forbiden City (above) to recent skyscrapers. Report from China, p. 43.



Frank O. Gehry.

AIA Honor Awards: Small Is In

Three things have become certain about the AIA's annual Honor Awards over the years: They'll be eclectic, they'll be predominantly small-scale projects, and they'll be familiar. This year is no different. Of the 598 entries submitted to the 1989 Honor Awards, 12 winners were chosen, ranging from the mythic Rationalism of Steven Holl's Odgis-Berkowitz House to the pop historicism of Centerbrook's pier at Watkins Glen, N.Y.

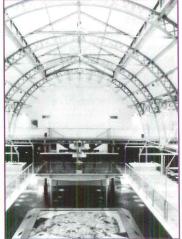
A statement by jury chairman David Childs of Skidmore, Owings & Merrill, New York, indicates that the jury was uneasy about the "limited" scale of the winners. (The largest was an elementary school.) He said the jury debated over whether largescale projects, in order to win, (continued on page 24)

Pritzker Prize to Frank Gehry

Commending his "restless spirit," the Pritzker Architectural Prize jury has selected Frank O. Gehry from over 500 nominees as this year's laureate. After two years of honoring Modernist elder statesmen (Kenzo Tange, 1987; Gordon Bunshaft and Oscar Niemeyer, 1988), the jury has this time chosen a 60-yearold laureate at the height of his (continued on page 24)



Model house at Breakers West by Robert Venturi: Mix and match.



Atrium space of Pavillon de l'Arsenal. Model of Paris in foreground.

Paris Architecture at the Pavillon

In a Paris dominated by the popular success of President Mitterand's ambitious architectural politics, the fervent architectural activity sponsored by the municipal government of Jacques Chirac has remained in the background. Far from the well-worn tourist paths of central Paris, the municipal government is building countless new schools, nurseries, sports centers, public parks, and housing. The work of such noted designers as Henri Gaudin and Christian de Portzamparc as well as some of the most interesting young practitioners—given access by a (continued on page 28)

Venturi Goes to Market

After years of expounding on the American suburban building vernacular, Robert Venturi has put his architecture where his theories are and collaborated with a builder on a commercial housing development in West Palm Beach, Florida. Known as Breakers West, the development, located alongside a country club, at once departs from and celebrates traditional speculatively built communities.

Eyeing an architectural "void in high-end suburban develop-(continued on page 30)

Pencil Points

Eisenman Architects has won a design competition for a convention center in Columbus, Ohio, where another major Eisenman building, the OSU Visual Arts Center, is under construction. Also competing for the convention center were Holt Hinshaw Pfau Jones and Michael Graves.

Elsewhere in Ohio, Morphosis has won the commission to renovate the Emery Theater Complex in Cincinnati. The complex will include space for the city's Contemporary Arts Center and a refurbished 2000-seat theater. Also in the running were Tigerman McCurry, Venturi & Scott Brown, and Tod Williams and Billie Tsien.

The 80-story Amoco Building in Chicago will be reclad in white granite in an \$80-million project. The Edward Durell Stone building was originally clad in white marble, which has warped and weakened over its 15-year life. Amoco is suing the building's architects and contractors to recover the cost of recladding.

The 1929 Moscow home of Russian avant-garde architect Konstantin Melnikov is the subject of a restoration fund-raising drive. Russian and international fund raisers hope to complete the restoration by the centennial of Melnikov's birth in July 1990. For more information, write to the Melnikov House Fund, School of Architecture, University of Tennessee, 1715 Volunteer Blvd., Knoxville, TN 37996-2400.

Vice President Quayle's designer was arrested for fabricating an architect's seal on blueprints for an unrelated project. Charles Scott Hughes of Washington, D.C., who is not a licensed architect, was hired by the Quayles to remodel the third floor of the vice-presidential residence.

A sculpture garden devoted to works by Henry Moore will open at Kansas City's Nelson Atkins Museum of Art in June. Jaquelin Robertson and landscape architect Dan Kiley designed the 17-acre garden.

Neoclassicist architect and author Thomas Gordon Smith has been named chairman of the Notre Dame School of Architecture. Smith has taught at UCLA, Yale, and most recently at the University of Illinois, Chicago. **Gehry** (*continued from page 23*) career, who is unquestionably architecture's man of the hour.

The jury statement focused on Gehry's marriage of architecture and art, calling his work "a highly refined, sophisticated, and adventurous aesthetic that emphasizes the art of architecture" and "a unique expression of contemporary society and its ambivalent values."

Alluding to the timeliness of the choice, the jury expressed its hope that "although the prize is for a lifetime of achievement" Gehry will consider it as "encouragement for continuing an extraordinary 'work in progress.' " While Gehry has behind him a long list of important buildings and furniture designs-not to mention a major traveling exhibit (P/A, Nov. 1986, p. 26) and a special issue of P/A (Oct. 1986) devoted to his work-major projects underway, such as the Progressive Insurance tower in Cleveland, the Walt Disney Concert Hall in Los Angeles (P/A, Feb. 1989, p. 21), and the American Center in Paris, suggest that it's too early for retrospectives.

A factor that cannot be ignored in looking at past Pritzker laureates is the jury's apparent Modernist leanings. James Stirling, the second laureate, is the only overt Post-Modernist to have won the prize (excepting Philip Johnson, who won in 1979 in the early stages of his Post-Modern conversion). Gehry, who has frequently denounced historicism, gave the jury (which is more or less continuous from year to year) a chance to confer legitimacy on a newer generation without acknowledging Post-Modernism.

The prize will be awarded on May 18 in Nara, Japan, at Todaiji, an eighth-century Buddhist temple considered to be the largest wooden building in the world. Along with a bronze medallion, Gehry will take home \$100,000. *Mark Alden Branch*

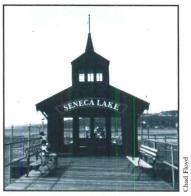


House by Clark & Menefee.

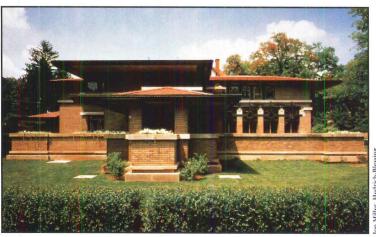
Honor Awards (continued from page 23) must "achieve the same uniform degree of perfection and consistency" that smaller, simpler projects do. Childs acknowledged that the jury's decisions indicate that they must but left the doors open for further debate of the issue.

As for familiarity, most of the projects will be well-known to readers of the design press. Seven have been featured previously in one of the U.S. architecture magazines (four in P/A); the Delaware River Aqueduct won a Presidential Design Award last year (P/A, Jan. 1989, p. 21), and Tod Williams and Billie Tsien's pool addition was featured as one of *Time* magazine's best designs of 1988.

The winners, listed in alphabetical order by architect, are: Delaware Aqueduct renovation,



Centerbrook's award-winning pier.



Wright's Meyer May House, restored by Tilton & Lewis, lauded by AIA jury.

Minisink, N.Y./Lackawaxen, P by Beyer Blinder Belle, New York; Seneca Lake Pier and Pavilion, Watkins Glen, N.Y., Chad Floyd of Centerbrook, Essex, Conn.; Reid House, Joh Island, S.C., by Clark & Menefee, Charleston, S.C.; Mi ler Park Plaza, Chattanooga, Tenn., by Derthick, Henley & Wilkerson/Koetter Kim & Asso ciates, Boston; Hansen House, Wilmette, Ill., by Hammond Beeby Babka, Chicago; Folger Shakespeare Library, Washing ton, D.C., by Hartman-Cox Aı chitects, Washington, D.C. (P/. July 1983, p. 65); Odgis-Berkowitz House, Martha's Vineyard, Mass., by Steven Holl An chitects, New York (P/A, Dec. 1988, p. 62); Central Housing Office, University of Californi Irvine, by Eric Owen Moss, Culver City, Calif. (this issue, 1 92); Desert View Elementary School, Sunland Park, N.M., b Perkins & Will, Chicago, with Mimbres, Inc., Santa Fe, N.M. Clayton County Library, Jones



Hammond Beeby Babka's Hansen Hou

boro, Ga., by Scogin Elam & Bray, Atlanta (P/A, Nov. 1988 p. 82); Meyer May House restoration, Grand Rapids, Mich., b Tilton & Lewis Associates, Chicago (P/A, Nov. 1987, p. 112); Pool Addition, Kings Poin N.Y., by Tod Williams Billie Tsien & Associates, New York

Jurors, besides Childs, were Peter Bohlin of Bohlin Powell Larkin Cywinski, Wilkes-Barre Pa.; AIA associate member Sto ven Ellinger, Abilene, Texas; critic Brendan Gill of The New Yorker; Kathleen Hoeft of Lon Hoeft Architects, Denver; student member Joyce S. Lee of Massachusetts Institute of Teo nology; Jaquelin T. Robertson of Cooper Robertson & Partne New York; Michael Rotondi o Morphosis, Los Angeles; and John Whiteman of the Skidmore, Owings & Merrill Found tion, Chicago.



uerilla postering of development site by tlanta's Architectural Jihad.

'Holy Wars'' n Atlanta

or the past nine months, Atanta construction sites have beome the targets of poster warare. A clandestine coalition hich calls itself the "Architecural Jihad" has been plastering rban walls with slogan-bearing osters attacking what the Jihad alls "bad moves" in urban archiecture. Their targets range rom historic structures slated or demolition ("If This Thing GOES, So Do The Rest of Us!") o new "historicist" buildings "This is NOT a HISTORIC TRUCTURE").

The members of the Architecural Jihad are architecture and rt students whose stated purose is to raise public awareness of the irreversible changes occuring in Atlanta today. The group has launched what they call an aesthetic holy war" that has aught the attention of local media and politicians, who are often invited along on late night poster maneuvers. The easily recognizable style of the posters, along with the logo, have become commercials for a more political architecture. In fact, the Jihad is planning new projects for the upcoming Mayor's race in Atlanta in hopes of making the development of the city a campaign issue.

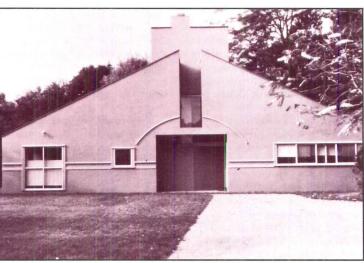
While most of the posters placed at construction sites are quickly painted over, many could be seen in a recent exhibition at Nexus, Atlanta's contemporary art center. The Jihad is now planning to call attention to some good moves in urban architecture, as well as looking at the state of architectural education, and members report that interest in the group is expanding. *Claire Downey*

The author, a freelance writer in Atlanta, is completing a book on John Portman & Associates.

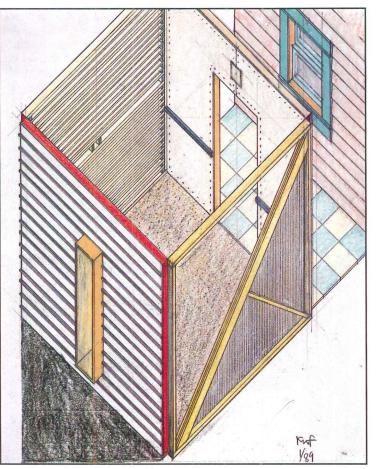
25 Year Award for Venturi House

Robert Venturi's Vanna Venturi House in Chestnut Hill, Pa. has won the AIA's 25 Year Award, given annually for "a design of enduring significance that has withstood the test of time," in its first year of eligibility. The award, selected by the AIA Honor Awards jury, is to be presented at the AIA convention in St. Louis this month.

Venturi designed the gablefronted house for his mother in 1962; it was completed in 1964 and first published, in P/A, in May 1965. The house became well-known as an embodiment of the principles Venturi committed to paper in his 1966 book Complexity and Contradiction in Architecture and has become an immediately recognizable symbol of the Post- Modern movement. Most recently, the house showed up in model form in the Museum of Modern Art's permanent architecture and design collection.



anna Venturi House, AIA 25-Year Award winner.



Kevin Flynn's "House for a Gnostic Voyeur" from "Illegal Houses."

"Illegal Houses" in Minneapolis

"Illegal Houses" is not about crack houses, or houses of ill repute. Rather, it is about houses that don't meet code and for good reason. The architects responsible for the exhibition shown at the Minneapolis College of Art & Design Gallery during March—have purposely avoided the banal in their search for the singular house. Breaking the rules was the first rule they agreed to when asked to be part of this experiment.

The exhibition, which is the work of young, unpublished architects and one artist/architect collaboration, includes designs, models, drawings, and full-scale installations. The work is quite diverse; each architect used the main theme—violating code requirements—as the starting point of a private vision, provoking thoughts and exploring issues of housing and architecture in the process.

Many of the show's pieces are sculptural essays expressing, as Bachelard would say, "the poetics of space." For his "House for a Gnostic Voyeur," a construction in which the resident can spy through a window on his neighbors, violating codes and "a universal more," architect and poet Kevin Flynn presses his quill into service on a roll-down window shade.

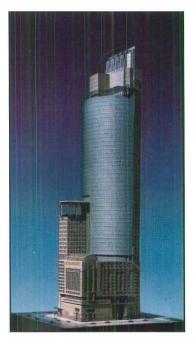
Helena Espinosa's house for a judge is a poetic, disturbing comment on the inaccessibility of our legal system. A narrow sculptural form, within a honeycombed retaining wall, blends into its site (a freeway cloverleaf), trapping the judge between the very public roadway and the privacy of the embankment.

Many of the pieces explored the nature of materials. For example, an installation piece by architect Anthony Desnick and artist Constance Lowe entitled "The Nature of Things #2" has the unlikely mix of wood, cardboard, straw, ice, concrete, and acrylic on photostats. Playing off the notion that concepts of permanence are embedded in our codes and neighborhood zoning restrictions, Desnick and Lowe have created two tenuous spaces, one inside defined by rough straw and cardboard walls, and one outside the gallery in ice and concrete—all materials that would never meet code in any city.

Other participants include Samuel Alexander, Sixto Beltrandy, Gary Diebel, Troy Kampa, Vincent James and Joan M. Soranno, Julie VandenBerg Snow, and Geoffrey Warner. Ultimately, "Illegal Houses" challenges the viewer, as well as the artist/architects in the show, (continued on page 26) **Illegal** (continued from page 25) to question preconceived ideas about houses and the purpose of building and zoning codes. Without purporting to give definitive answers, the show nevertheless is a crucible of ideas that adds to our understanding of the building type.

ing type. "Illegal Houses" is tentatively scheduled to travel the country, although locations have not yet been set. *Bruce N. Wright*

The author is editor of INFORM Design Journal and teaches design theory at the Minneapolis College of Art & Design.



Kohn Pedersen Fox's Ameritrust Tower on Cleveland's Public Square.

Three Towers to Peak in Cleveland

Downtown Cleveland will soon sport a resculpted skyline, featuring towers designed by Cesar Pelli, Kohn Pederson Fox, and Frank Gehry. These three towers symbolize the billion-dollar building boom spawned in Cleveland since the city dug itself out of default in 1980. After a decade of chipping off the postindustrial rust and shining up its service-based sector, Cleveland now ranks 4th in number of Fortune 500 companies headquartered there.

While the Gehry design is yet unannounced, the other two, both developed by shopping mall magnates Richard and David Jacobs of Jacobs Visconi Jacobs, are underway. Pelli's Society Tower (P/A, March 1989, p. 48) and KPF's Ameritrust Center will rise from parcels fronting Public Square joining the city's veteran skyscraper, the Terminal Tower, and its recent partner, the 45-story BP America headquarters by Hellmuth, Obata & Kassabaum. Society Tower will house the

headquarters of Society Bank, a major midwestern financial institution in a 55-story structure.

The tower will adjoin Society's 99-year-old former headquarters, for which extensive renovation is planned. In answer to Cleveland's dearth of downtown hotel space, Society Tower includes a 424-room Marriott. All phases of the \$343-million building are to be completed by 1992.

The 60-story Ameritrust complex, designed by KPF's William Pederson and Richard Evans, on the northwest corner of the square, also includes a hotel-a 484-room Hyatt-and one million square feet of office space. The design does respect the Terminal Tower but also pays tribute to the city's industrial heritage with its exposed mechanical systems. A curve of blue glass, representing Lake Erie like a wind-furled spinnaker, begins at the 12th floor; below is a glass barrel-vaulted atrium.

Not yet publicly announced but already causing a stir are Progressive Insurance Company's plans to erect a new headquarters complex designed by Frank Gehry. Local speculation holds that the facility will contain a 50-story, one-million-squarefoot tower, an art park, and a 2500-car parking garage on a lakeside pedestal. Jennifer Frutchy, assistant vice president at Progressive, did confirm that the goal is to "create a link between the present edge of downtown and lakefront.'

Cleveland has incorporated each of the three projects into its recently completed master plan, Civic Vision 2000, which will guide the city's renascent development into the new century. *Christopher Johnston*

The author is a writer in Cleveland.

Of Shoes and Shirts and Saleability

Suddenly they're everywhere: Open any of a number of massmarket magazines, pass a big-city bus stop, and staring out at you are photographs of architects whose work has graced P/A's own pages. But this is coverage of a quite different type: architects are entering the public realm as clotheshorses for editorial and advertising fashion work.

Why architects? Why now? "Businessmen have had their day," says Arthur Cooper, editor-in-chief of *GQ*, which featured Helmut Jahn on its May 1985 cover. "This culture con-



Architectural models: Murphy for the Gap, Graves for Barneys.

sumes people, and now I guess it's just architects' turn." But advertisers stress that they are not purposely picking architects. The Gap let photographer Annie Leibovitz present them with possible faces for their ads, and some of those faces belong to architects. "We're looking for a nice mix of people-some famous, some not so famous. We like the idea of an architect because it's a creative field," says the Gap's Richard Crisman. He admits that to a certain extent it is an "image campaign. We want people to know that hip people shop at the Gap."

One Gap ad shows Los Angeles architect Brian Murphy in a Gap turtleneck; another, New Yorkers Tod Williams and Billie Tsien in chambray shirts; still another, Bostonian Rodolfo Machado in a Gap polo. Michael Graves poses for Barneys New York in a \$1275 Ermenegildo Zegna suit and for Dexter Shoes (shown only from the waist up, however). Advertisers have been very pleased with the outcome. Woody Kay, creative director for the Dexter campaign, says the Graves ads were "one of the most successful shoe campaigns ever." Neil Kraft, vice-president in charge of marketing and advertising at Barneys, says that the "response was terrific," adding that there were many calls on the tie that Graves wore, a woven gold-and-blue Zegna design.

What motivates the architects to lend their images to advertisers? Altruism is part of it, as both Barneys and the Gap compensate their models with donations to charity. (Graves used his to support the Drawing Center's Inigo Jones exhibition.) Other architects see it as "kind of a lark." They all agree that there are moral issues involved in posing for mass-market advertising, especially the self-promotion and popular style arbitration of which they are often accused. "Some architects think it's frive lous, others are jealous," says Graves. "I have no moral problem with it." And more architect are asking themselves the same questions and siding with the advertisers: Barneys and the Gap both say to watch out for other familiar faces in the near future. *Andrea E. Monfried*

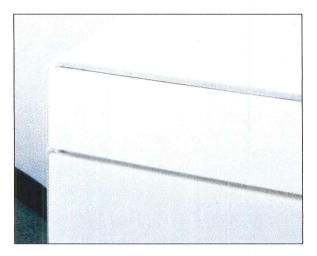
WestWeek: L.A. Draw

In keeping with Southern California's temperate climes, WestWeek '89 was suitably laid back: While the 14th annual design symposium, held at the Pacific Design Center in Los Angeles, March 29–31, heralde no earthshaking new trends, harbingers of fresh design wer evident at every turn.

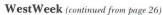
Close to 31,000 architects, designers, corporate specifiers, and journalists who attended th fair were greeted with innovativ displays, if not major product launches. For instance, the join showroom designed by Gilbert Bensen for Armstrong and its subsidiary, Forms + Surfaces, employed a black, white, and re palette, platonic cones, cubes, and spheres, and the imaginativ suspension of a peaked ceiling s that the companies' ceiling, floo and wall treatments appeared anything but flat. In a complete different vein, Vecta's looming machine-like steel sculpture by L.A.'s Morphosis provided a dramatic backdrop for the firm seating line.

Most manufacturers represented in the 210 showroom: were content to display refinements and extensions to existin lines. Notable exceptions included Stendig Textile's lustrou new fabrics by Andrée Putmanincluding jewel-toned weaves quite surprising for the French designer who made her reputa tion in severe black and white. (continued on page 28)

ONE OF THE BEAUTIES OF CORIAN® IS WHAT IT LEAVES TO THE IMAGINATION.



P/A NEWS REPORT



ICF's new compact leather sofa by Alessandro Mendini epitomized a trend toward downscaling apparent also in Stendig's polished "New Scale" series of business sofas introduced last June.

It was refreshing to find some of the most provocative pieces in the PDC's corridors: Lois Lambert, director of the Gallery of Functional Art, exhibited whimsical works by artists and architects. Among them were an anthropomorphic steel chair by Reiss Nimi, a chest painted with Cezanne-inspired still lifes by Anne Kelly, and a "high-rise" magazine stand by Ted Tanaka.

The GFA corridor showcase was only one instance of enlightened use of space. This year, to alleviate the pressure on jampacked auditoriums, the PDC provided live video coverage of the lectures and seminars.

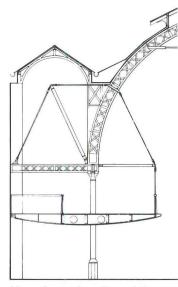
The conference theme-"Critical Choices: Intuition and Reason in the Design Process"was fortunately broad enough to accommodate diverse and illustrious assemblies. Thus, in one blockbuster architectural session, Mexico's Ricardo Legorreta, France's Jean Nouvel, and Japan's Kisho Kurokawa shared the podium to discuss current projects. David Hockney on the design of L.A. artists' studios proved a major draw, as did ABC's Sam Donaldson, who addressed the effect of the Bush administration on Pacific Rim business. Ziva Freiman

Nine Competing for Seville World's Fair

Nine architecture firms and collaborations have been shortlisted for the design of the U.S. Pavilion at the 1992 Seville World's Fair. An evaluation panel of the United States Information Agency selected the nine from 73 portfolios submitted last fall.

The Seville fair, called World Expo '92, will celebrate the 500th anniversary of Columbus's voyage to America. The fair will be the first in Europe since the Brussels event in 1958, and the first "universal class" exposition anywhere since Osaka in 1970. The program for the U.S. Pavilion, for which the shortlisted firms are now preparing conceptual designs, includes a theater, art gallery, outdoor stage, and exhibition space for U.S. corporations, cities, and states.

Architects for the nine teams are: Site Projects, Inc., New York; Arquitectonica, Coral Gables, Fla.; Holt Hinshaw Pfau Jones, San Francisco; Antoine Predock Architect, Albuquerque, N.M.; Barton Myers Associ ates, Los Angeles; Davis, Brody & Associates, New York; Skidmore, Owings & Merrill, Chicago, with Frank O. Gehry & Associates, Santa Monica, Calif. Cesar Pelli & Associates, New Haven, Conn.; and Venturi & Scott Brown, Philadelphia.

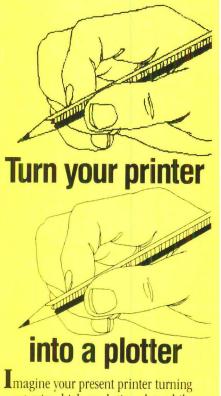


Mezzanines are hung from existing structure at Arsenal.

Pavillon (continued from page 23) municipal law requiring competitions for all projects over a budget of 900,000 francs (\$150,000)—has thus been brought into the capital's neighborhoods.

Eager to publicize these local "interventions," the mayor last December inaugurated the Pavillon de l'Arsenal, a display of Parisian architecture not far from the Bastille, one of the city's most rapidly changing neighborhoods. Under the grea glass and iron skylights of a building that long served as a warehouse for the Samaraaine department store, architects Reichen and Robert have created an elegant and stylish showcase for architecture.

The architects—who designe the "Paris Grands Projets" exhi bition in the great oval hall of Manhattan's Old Custom Hous last spring (P/A, July 1988, p. 24)-were charged with adapting the 1600-square-meter space to accommodate a gallery for a permanent exhibition on the city's architectural and urban history, temporary exhibition spaces, a small library/documer tation center, and a jury room for competitions. Cleared of all but its original grid of cast-iron columns carrying the skylights, the space has gained a new trans parency as well as a new focus: central atrium volume rising (continued on page 32)



magine your present printer turning out crisp, high resolution plots while you continue to work, *without interruption*, at your PC.

The EOgraph Plus add-on board lets you do that, and more.

You have total control over eight different line widths, and as many colors as your printer offers.

You can produce drawings 15 feet long, and longer, in any carriage width.

How about multiple plots, or automatic queuing of text and plots? Yes, the EOgraph Plus lets you do that, too—with ease.

Think of it! Using virtually *any* CAD or graphics program, you can work at your PC while your printer generates plotter-quality drawings with nearly incredible detail.

Best of all, you get all of this without the headaches, or expense, of baby sitting a plotter.

Thousands of users agree: No other PC add-on can increase your productivity, or pay for itself so quickly, as the EOgraph Plus.

It may sound too good to be true, until you call for the facts, tollfree, at 1-800-548-5780.

DEALER INQUIRIES EOgra	w h
Eotron Corp / 121 Westpark Road / Dayton, O Please send information and independent test reports to: NAME	H 45459
ADDRESS CITY STATE ZIP	

Surprising as it may seem, you're actually looking at a U.S. Post Office in Chicago, Ill.

But clearly no ordinary one. Because its designers found a material

that perfectly expressed their imagination. CORIAN®

The material with an incredible design versatility matched only by its durability and ease of maintenance.

As a result, what you envision remains intact for years and years. And, as you can see, you can envision just about anything.

For more information, see your CORIAN distributor. Or call 1-800-527-2601. Or write Du Pont CORIAN, Room G-51552, Wilmington, DE 19801.

Then leave it to your imagination.



CORIAN.* The premium quality brand of solid surface products from Du Pont.

POND

Circle No. 330 on Reader Service Card

SPACEBIRD

Imagine this Spacebird airborne and soaring, elegantly floating in orbit, it's brilliant light beam emulating the sun. When docked to LSI track, it's identified as our SB16.

For a SB16 series information kit, write on your letterhead to: Lighting Services Inc Industrial Park, Route 9W, Stony Point, N.Y. 10980 Circle No. 349

P/A NEWS REPORT



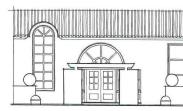
Front elevation of one Venturi alternative.

Venturi (continued from page 23) ment," New York builder Warren Pearl approached Venturi on the collaboration proposal with the idea of targeting a specific market, in this case second home buyers, and suggested a rather unconventional use of the architect's wares: within the framework of a basic house design, accoutrements such as entranceways, windows, fireplaces, pools, and driveway pavement, each in a variety of shapes, colors and patterns, could be mixed and matched by the client. Venturi was won over, joining a slowly growing number of prestigious architects-Robert A.M. Stern, Charles Moore, and even Aldo Rossi-designing for the developer housing industry.

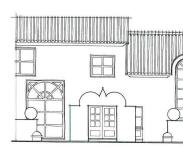
In March, after six months of give-and-take between architect and builder, the first of 24 proposed Breakers West homes was unveiled. Dubbed the "Limited Edition Signature Series" by Pearl (in long-term anticipation of recruiting other well-known architects for similar projects), the basic house, situated on a half acre of land, is stucco clad with a clay-tile roof.

The homes, which range in size from 3500 to 5000 square feet, abound with decidedly tame pop-architectural elements in an effort to reach the culturally informed but fairly conservative Florida market. Using a magnetized board with the basic Venturi house superimposed on it, and a set of miniature, magnet-backed architectural elements, the prospective buyeranyone with an extra \$600,000 to \$1,000,000 in their pocketwill be able to "custom-design" their future home.

Should the Venturi/Pearl venture prove successful, a steady stream of Breakers West-style communities may well rise throughout the country. The hope for the future, however, is that not only will architects and developers continue to work together, but that they will also be able to look beyond the "highend" market. *Abby Bussel*











Door number 1, 2, 3, 4, or 5? Entry options for house shown at top.

5

You've never held a piece of wood like Ipe (E-pay) before. The reason is there's never been a wood like Ipe. A tropical hardwood, Ipe is significantly harder than any wood you've ever specified. And much heavier. That means you can use the warmth and beauty of real wood

for a vandal-resistant bench or planter for schools, parks and malls that is stronger, heavier and more durable than any you've ever specified.

Seeing...and feeling is believing. That's why we'd like to send you a sample of Ipe so you can see and feel for yourself what this tough, durable wood is like.

We'll also include a copy of the Sitecraft Idea Book. Write today or call 800-221-1448 (in NY 718-729-4900).

Just holding a piece of Ipe will tell you why we can make our TrimSet benches slimmer.

Sitecraft, Inc. 40-25 Crescent Street Long Island City, NY 11101

Please send a copy of Sitecraft's IDEA BOOK and a sample piece of Ipe to:

State

Zip

Name

Company Name

Address

City



40-25 Crescent Street, Long Island City, NY 11101 Circle **No. 366** on Reader Service Card

At last! Hickman quality for fast-track projects..



Now you won't have to sacrifice roof appearance and integrity to meet fast-track completion dates. Hickman's new lightning-fast delivery lets you safely spec our premium quality...without putting contractors in a time bind.

Now your genuine Econosnap® membrane roof edging or Permasnap® parapet coping can roll on-site in only 2 to 8 working days! That's faster, in many cases, than your contractor could field-form substitutes himself. This fast turn-around applies for most U.S. orders in 24 ga. galvanized steel or .050" aluminum, with prefinished Kynar 500®. Naturally, Hickman-applied Kynar 500, baked acrylic, anodic, or other special finishes take somewhat longer.

By specifying Hickman, you ensure outstanding appearance, precise fit, top performance in wind and weather, a solid guarantee, and above



all...no call-backs and satisfied owners.

Next fast-track project, don't gamble on field-formed roofing products-spec Hickman. Call your local Hickman representative today for all the details on Hickman's lightningfast delivery programs.

See Sweet's General Building & Renovation 07715/HIC and 07610/HIC, and ask your Hickman rep for our new PRODUCT/DATA sheets.

Kynar 500® is a reg. TM of Pennwalt Corporation.





W.P. Hickman Company
175 Sweeten Creek Road P.O. Box 15005
Asheville, NC 28813
(704) 274-4000
FAX (704) 274-4031

© 1988 W.P. Hickman Company

Pavillon (continued from page 28) uninterrupted above a 40square-meter model of Paris. With the touch of a button, the exhibition visitor can select a particular new project that is then instantly pinpointed by a laser beam on the model and illustrated in a series of slides projected on a broad screen be hind it. The permanent exhibition, realized on the ground floor by Bruno Fortier and Jean Louis Cohen, relates the histor of Paris's development to the themes that structure the contemporary architectural debate in the French capital.

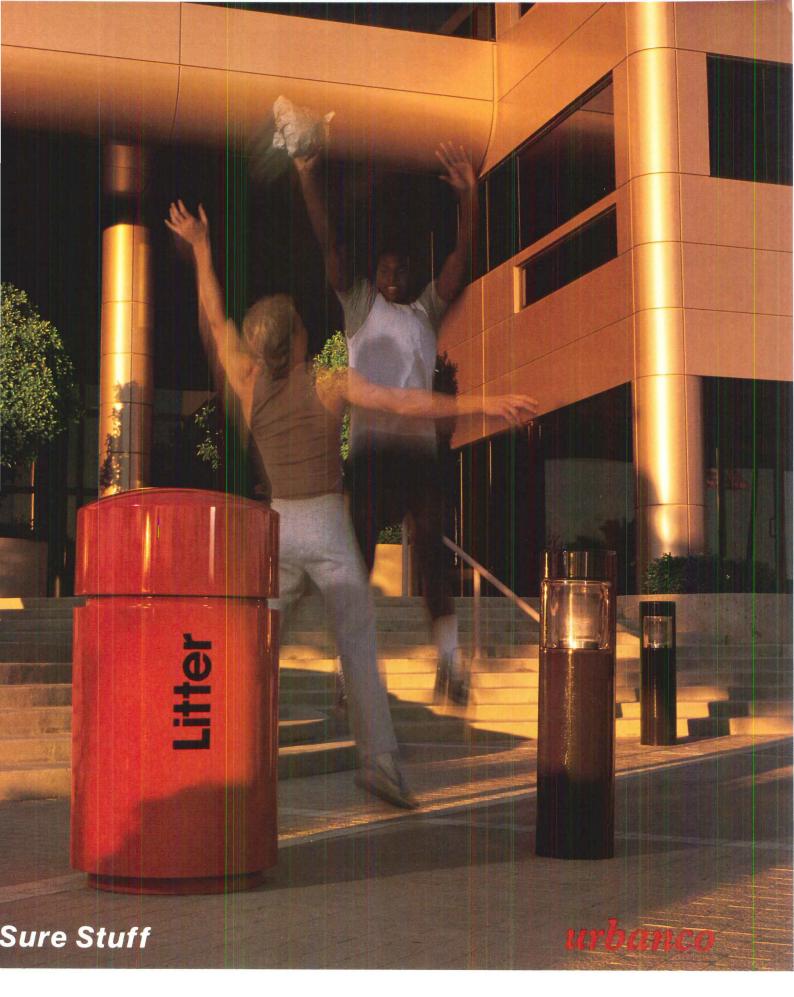
Temporary exhibition spaces are arranged on two new tiers o mezzanines around the central atrium. The mezzanines, like th exhibition panels and cases designed by Reichen and Robert, are treated as modern insertion suspended within the historica framework. Carried on "airplan wing" beams, these new balconies are clearly but subtly dis tinguished in materials and col ors from the 19th-Century framework, while their own sim ple but clever structural principle exploits the existing frame t great advantage.

Almost in homage to Reiche and Robert's design of the permanent exhibition, the current temporary show is devoted to "Iron in Paris." The show relate the long history of metallic arch tecture's struggle to gain accep ance in this city of fine ashlar and painted stucco, a city slow to accept such icons of iron as the Eiffel Tower. Also documented is the post-industrial aesthetic i the Paris of the 1980s, from Nouvel's Institute of the Arab World (P/A, July 1987, p. 72, May 1988, p. 94) to the city's recently announced Prefecture de Paris, a steel and aluminum design by Aymeric Zublena. Barry Bergdoll

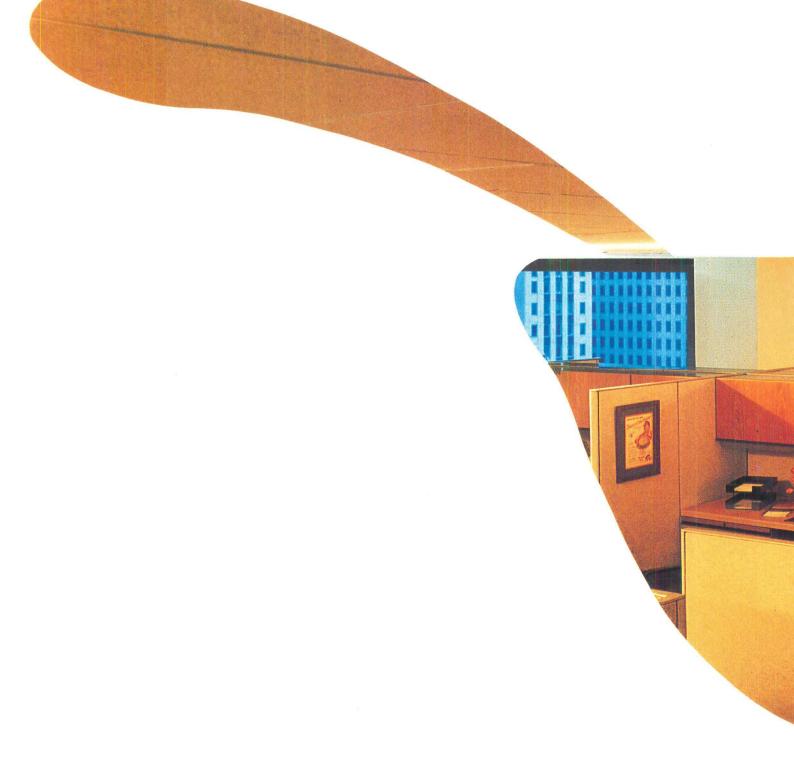
The author, who teaches architectural history at Columbia University, is on sabbatical in Paris.

Virginia Chatfield 1921 - 1989

The Progressive Architecture staf lost one of its most respected colleagues on April 6. Virginia Chatfield was the P/A copy edit from 1978 until this February. Her dedication, her wisdom, he humor, and her spirit in the fac of her final illness will be remen bered by all who knew her.



Urbanco litter containers and bollards are sure winners for your city streets. They're functional, vandal resistant and good looking. A new brochure that gives complete details is yours for the asking from: Urbanco, P.O. Box 8824, Grand Rapids, MI 49508; (616) 281-1880.



It was good for us to get into Quaker. But it was good for them, too. Because just after they bough And after that? They needed new floor plans. Thanks to PlanWrite, our computerized entry syste The way we see it, what good is furniture that's designed well, if the service isn't? Call 1-800-848



Morrison System, they bought a new company. able to change the orders. Without changing the delivery schedule. 286) to talk with a Knoll representative or a KnollSource dealer.

KnollOffice

Circle No. 327 on Reader Service Card

THE HEART OF A SARGENT

10 year warranty

Exhaustive testing, proven reliability

All mounting applicationsstandard, top jamb and parallel arm

UL Listed

What distinguishes the new 350 Series closer isn't its clean, contemporary styling. It's what's inside.

Design that brings new meaning to the concept of durability. Components that are cast, machined and fitted according to a 125-year tradition of craftsmanship. And practical, purposeful features that make the 350 the right choice for every door on any project.

The versatile, reversible, new 350 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. Adjustable BHMA sizing 1 through 6, with 75% additio power available

For more information, prompt delivery and responsive customer service, contact your local Sargent distributor.



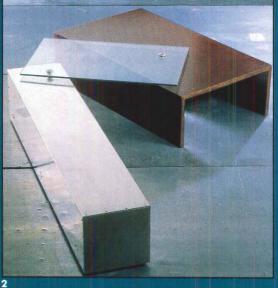
Sargent, New Haven, Connecticut 065 Sargent of Canada Ltd.

Circle No. 345 on Reader Service Card

Perspectives

As demonstrated at this year's Furniture Fair in Paris, French designers are among the most innovative in furniture today.







Paris Beats Milan?

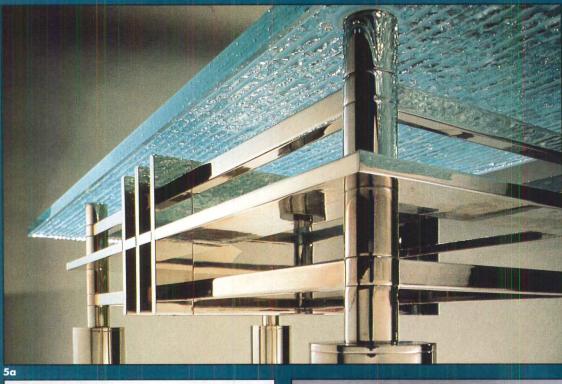
Each September, crowds of American furniture buyers, importers, designers, and press swarm to Milan's Salone di Mobile, to see what's new in design. Each January, only a handful of this same group go to Paris for the Salon du Meuble. Those that do have witnessed the evolution of a new wave of French furniture design. The school has expanded rapidly in the past several years, and its designers are prolific. This year at the Port de Versailles the best of this new group were represented.

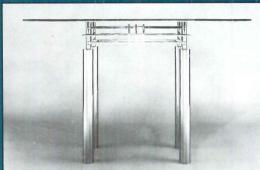
Jean Nouvel's new "Profile" seating for Ligne Roset was the most exciting introduction at this January's fair, and its appearance signalled a concerted effort by that large French firm to move into the vanguard. Nouvel's cold-molded polyurethane foam slab on a molded aluminum frame not only uses material from the automotive industry but also appropriates details such as an adjustable back mechanism.

Jean-Michel Wilmotte, designer of the interiors for I.M. Pei's Louvre, earned the title of Designer of the Year at the Salon. His newest furniture is constructed of crushed glass, <u>chrome, and</u> rubbed gray oak.

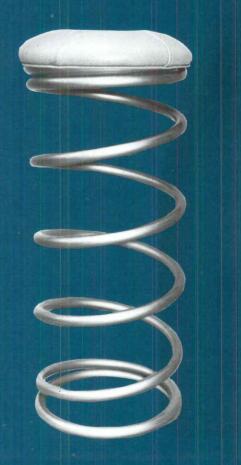
Also represented was Philippe Starck, who remains by far France's best known furniture

Jean Nouvel's "Profile" (1) in coldmolded foam and aluminum reclines fully to form a bed. Marie-Christine Dorner designed this lacquer table (2) for the Spanish firm Scarabat. Christian Duc designed this aluminum chair in green paint (3) for C.M.B. (VIA), while a table (4) by 18 Aout. is a VIA-supported prototype.













designer. His graceful, often witty designs look back not onl to Empire precedents but also to the decorative effects of Frenc furniture of the 1930s, with a humor and a fresh approach to materials.

Christian Duc illustrates the French tendency towards spectacular metal work, often finished in glistening automobi paints, while his penchant for medium-density fiberboard is proof that simple materials can be elegant.

One of the newer names at the Salon was Marie-Christine Dorner, a 28-year-old designer whose furniture is simultaneously thin and light, and rich and romantic. Other stars in the show were Ronald Cecil Sporte Martin Szekely, Rena Dumas, Marc Berthier, Giles Derain, Pascal Duvert, and Pascal Mourge, who will be the subject of a one-man show this summa at Steelcase Design Partnership

"This new French furniture graphic, linear, like turning a sketch into a three-dimensiona object. Proportions are always elegant," says David McFadde Curator of "L'Art de Vivre; De orative Arts and Design in France, 1789–1989," an exhib tion now at the Cooper-Hewitt (see Calendar p. 51). Other characteristics of the new Frend furniture include virtuoso met work-especially the use of ste and molded aluminum, and th use of rare or exotic woods, which are beautifully handcrafted. Styles range from hig tech to tribal, with an emphasi on two-dimensional effects as opposed to sculptural ones.

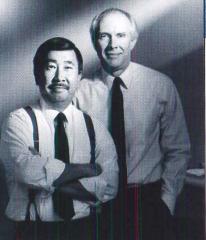
Behind this new wave is VIA (Valorisation de l'Innovation dans l'Ameublement), a gover ment agency set up in 1979 to enhance the image of French furniture. VIA not only gives financial support for prototype but also provides an outlet to exhibit work, publicity, introdu tions to manufacturers, and evo commissions, arranging, for example, the renovation of Elysee Palace for President Mit terrand. Susan Grant Lewin

The author is President of Design Con munications International.

A console (5) by Jean-Michel Wi motte is entitled "Elysée." Its crushed glass top rests on a nick base, Lacquered wood furniture (6) is by Sylvian Joey and Veronique Baille for Transfert. A delightful tabouret (7) is part of a collection designed by Christian Duc for C.M.B. and is called "Sta of Siege." Settee in chrome stee tubing and leather (8) is by Gera den Berg for Artelano.

38 Progressive Architecture 5:89





ctor Chu, AIA & Noel Davies ne Victor Group, Inc.

"We could have carved our reputation in stone. Instead we chose <u>Avonite</u>."

There are areas in every design project that must make a major statement. Those focal points create a "perception of elegance and value." Choosing the right material is the challenge faced on every job.

AVONITE is a solid surface material, unique in the flexibility of its applications and is only limited by your creative imagination. Fabricators are amazed that "it looks like stone but cuts like wood," and that they're able to interpret the most intricate designs with regular woodworking tools!

AVONITE, being a manmade stone

composite, has been chemically engineered to resist attack by acids and stains and is truly a miracle of polymer technology.

Counters, walls, floors, furniture, signage, and accessories become spectacular in AVONITE. Lasting beauty and durability is backed by a 10 YEAR WARRANTY. There is no question that because of this exciting material creative designers and architects throughout the world are developing reputations etched in AVONITE!

Call, toll free, for your nearest AVONITE Distributor...1-800-4-AVONITE.



Circle No. 311 on Reader Service Card

CRYSTALINE. IT'S MOR THAT MAKES IT WORTH



Adjustable astragal at meeting stiles for thermal integrity.

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

Sealair bulb weathering to reduce air infiltration at door perimeter.

102

IAN THE LOOK



Radiused borizontal and vertical framing members present a softly sculpted interior. Crystaline 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.

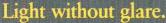
Crystaline from Kawneer is a complete system for storefronts and one-story office buildings (even interiors) that proves good looks can be mundanely practical, too.

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



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





This picture shows the light from the Peerless Open Office Fixture.

Look at the soft shadows and smooth, pleasant light on every wall, every corner of the ceiling, every work surface.

Then think about what you <u>don't</u> see in the photograph. Glare bouncing off the VD screens, or any other surfaces—desktops, papers, telephones.

Or glare from the fixtures. They're never brighter than the lightest part of the ceilin Look right at the lens. You see a soft, crystalline glow that defines the light source an makes the light level seem higher and the room seem more cheerful. It's a continuou line of light, never darkened by a shadow from a fixture join, lamp socket or balla. There's a whole new optical technology behind it.

The technology goes beyond the lens, into the housing. The optics fit into slim, graceful aluminum extrusions that can be extended into clean, true runs of any length.

No other fixture in the world can light an open office so well. Ask us for a booklet calle "Lighting the Open Office." We'll send you photo comparisons and hard engineering date

The Open Office Fixture represents a quantum leap in lighting comfort. Investigate and make an effort to see it.



PEERLESS LIGHTING, BOX 2556, BERKELEY CA 94702-0556. (415) 845-2760. FAX (415) 845-2776 PEERLESS' IS A REGISTERED TRADEMARK OF PEERLESS LIGHTING CORPORATION. C 1989, PEERLESS LIGHTING CORPORATION.

Circle No. 358 on Reader Service Card

The Peerless Open Office Fixture

Report from China

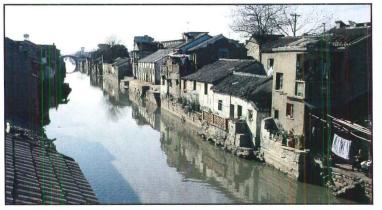
A P/A-sponsored trip reveals the effects of cultural liberalization and economic expansion on architecture and construction in China.

n understanding of architecture in hina, home of one quarter of the orld's people, was the objective of a A-sponsored tour that took place obruary 9 to 26. Eleven Americans the fields of architecture and conruction took part, including P/A ditor John Morris Dixon and correondent Sally Woodbridge of Berkey, California. Our itinerary inuded Shanghai (with a sidetrip to e historic city of Suzhou), Beijing, ian, Guilin, and Hong Kong. The llowing is the journal of that tour, ot a methodical journalistic report.

he skylines of China's biggest ties are bristling with cranes, as he nation's effort to reform its conomy along Western lines as generated vast amounts of construction. But this key sign of conomic growth is about to indergo serious retrenchment a means to cool off an inflaonary economy. Government eviews of all construction are kpected to halt many jobs that re already out of the ground and severely reduce new starts.

The amount of housing reently completed and under onstruction is particularly aparent in the capital city of Being, where new apartment slabs nd towers line literally miles f the broad boulevards and ighways at the city's periphery. he typical six-story walk-up abs of a decade ago have been icceeded by 15-to-20-story ructures. Exterior surfaces of ommon brick or dun-colored oncrete have given way to conete and stucco in a variety of ns, greens, roses, and other uted hues, which articulate the arts of these highrises. One ement of continuity is the way sidents express their occuancy by filling the ubiquitous ilconies with glass enclosures, orage sheds, and animal cages; me even cantilevered little its out from the balconies to pture more space. After all, a mily of three to five typically is only about 600 square feet of terior.

The tower housing now going o in Beijing, a type that has en discredited for public housg in the West since the 1960s, ust be seen as a vehicle of progss by prospective residents, no may have been doubling up th parents or inlaws, in older "artments or in the traditional re-story court houses, where al braziers and shared out-



A canal in Suzhou.

houses are the rule. Often, marriage and/or birth of the one child permitted per couple are deferred until an apartment is available. Asked whether the disciplined Chinese have any of the social problems associated with highrise family apartments in the West, one Chinese observer indicated that this kind of housing causes more difficulty than is officially acknowledged.

Most new housing is at the edges of the cities, apparently because building there does not involve demolition of old housing—which is precious whatever its condition—or displacement of residents. The result of this policy, however, is that pockets of dilapidation remain in the city core and ever greater numbers of residents are located in the outskirts, exacerbating transportation and traffic problems.

Besides housing construction, both Beijing and Shanghai are building new hotels—several major ones in each city—and new offices for corporations, both state-owned and foreign. Each year's crop of luxury hotels tries to outdo the last one in amenities such as pools, health clubs, rooftop restaurants, and shopping arcades. While offering impressive service, these hotels seem to suffer from inadequate maintenance, so that a five-year-old hotel, though lavish in its original appointments, is likely to have dribbling faucets and chancy HVAC systems.

Riders in the Dust

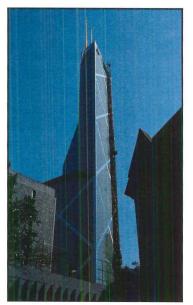
In the dim morning light of Shanghai or Beijing, vast flotillas of workers on bicycles can be seen pedaling in almost eery silence toward their jobs. On the major arteries, they have their own median-separated lanes, isolated (except at intersections) from the trucks and the jampacked public buses that make up most of the motorized traffic. But even without a plague of private cars, pollution in Chinese cities is obviously severe. Innumerable coal-fueled cooking fires, plus the emissions of industries, trucks, and buses turn the morning sky gray even on cloudless days. Beijing has a fine modern subway system, but it reaches only small portions of the sprawling metropolis.

Although the traveler in China

does not feel restricted (at least in extensive parts of the country that are now open to tourists) there is a sense of living in an isolated environment, economically. Foreigners still use a distinct currency, the Foreign Exchange Certificate, which is the only kind of money accepted at first-class hotels and their shops, at the state-operated Friendship stores for travelers, and at many restaurants. While some local people turn up in these places, one senses that the great mass of Chinese are barred from these oases of comfort and service.

Cultural Evolution

Generally, everyone in the cities looks alert, well-fed, and neat. Little girls tend to be brightly dressed, with colorful ribbons in their hair, and young working women wear bright scarves and ribbons. Many young men affect (continued on page 45)



Pei's Bank of China, Hong Kong.



Personalized balconies, Beijing.



Hua Ting Sheraton hotel, Shanghai.

THE COMMERCIAL FLOOR THAT GOES THE DISTANCE. MARATHON FROM CONCOLEUM.

Congoleum, the color and design leader in floors for America's homes, is now the name to beat in commercial flooring with Marathon.

Marathon is a heavy-duty inlaid floor specifically engineered for your commercial applications. A 55 mil, inlaid vinyl that exceeds Federal Specification L-F-475a(3), Type II, Grade A. The "gold standard" of commercial flooring. Now, quality at its best. With superior flexibility that resists cracking. Flooring that installs so easily, it significantly reduces time and labor costs. And outstanding contract colors that capture today's smartest commercial interior design trends.

Now you have choices when you consider flooring for any commercial building or facility. A superb combination of maximum performance and maximum beauty. Before you make any decision, put Marathon in the running.

The terms CONCOLEUM and MARATHON are registered trademarks of Congoleum Corporation. ©1988 Congoleum Corporation

Marathon flooring shown to actual design scale.

Circle No. 322 on Reader Service Card

Congoleum The Beauty Endures

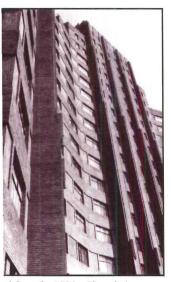
inued from page 43)

international chic with jeans, kets, and running shoes. mong the latest fads obved were exercises to disco sic, undertaken by school dren and adults alike—a far from the peaceful grace of ditional Tai Ji groups, who still be seen just about everyere around sunrise. Another prise on the recreation front he current popularity of bilds, which is played outdoors ng Beijing's boulevards, even he February chill; the particints are all young men with asional young female onlook-. Now that the resistance to stern pop culture has broken, e can hear country music in a jing taxi, and the Beatles' esterday" soothes passengers a domestic airliner.

ildings from a Complex Past nong the most vivid and value experiences in China, of urse, were the visits to ancient dmarks. The Great Wall repents the immense resources d audacity of the ancient eme, as its stark forms maneuver er jagged border hills. The perial Palace in Beijing leaves impression of immensity and der; though many details are orful and luxurious, it vertheless seems austere. Smaller-scaled architectural



llework in a Suzhou garden.



el from the 1930s, Shanghai.

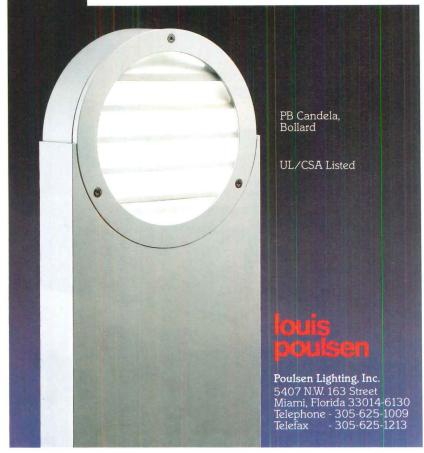
pleasures are found in just about any of the older urban neighborhoods. The most appealing of these that we experienced were along the back streets and smallscaled canals of Suzhou, a wellpreserved small city not far from Shanghai (photo page 43). Suzhou is noted for its ancient gardens of exceptional refinement-and preservation-most of them developed on small urban sites by merchants or civil servants. The Master of the Nets Garden, one of the most renowned in Suzhou, showed us what an incredible density of environmental experiencespergolas, belvederes, bridges, framed views, paving patterns, groupings of rocks, filligree screens, and so on-can be composed on a mere 1.2 acres.

Xian, an inland provincial capital (with only three million people, compared with Beijing's ten million and Shanghai's 12 million) bears some handsome reminders of its stature as an imperial seat up to the Tenth Century A.D. There are massive stone city walls rising above miles of moat and a 210-foot pagoda. A smaller-scaled landmark is the so-called Great Mosque, a series of exquisite structures interspersed with garden courts. Reached through the narrow alleys of Xian's old Moslem quarter, the complex looks thoroughly Chinese, except for the Arabic inscriptions worked into its brick walls.

Shanghai has its unique architectural character, shaped largely by close contact with Western nations. Justifiably wellknown are the many Art Deco commercial buildings of its central district. Equally interesting are many developments of lowrise housing from before World War II that show adaptations of every foreign style from Queen Anne to Moderne.

The Profession and its Works Among our contacts with the profession and its current works was a visit to Shanghai Center, a 2 million-square-foot project recently topped out at 50 stories. Developed by a consortium that includes the Portman Companies and designed by the Portman firm, the complex will include offices, a hotel, some apartments for foreign business people, shops, and a theater much like the one in Portman's Marriott Marquis Hotel in New York. The three precast-clad towers that rise up from Shanghai Center's mixed-use base will look quite sedate compared to some of the extravagantly sculpted and mirrored towers

Light and Design



Circle No. 359 on Reader Service Card

ABITARE The international
magazine that deals with the home,
town, and the environment.
Subscribe today!
For information please call our toll free number (800) 238-8462. From California (818) 994-4462. To take out your subscription please mail this coupon to: (818) 1994-4462. To take out your subscription please mail this coupon to: (918) 1994-4462. To take out your subscription please mail this coupon to: (918) 1994-4462. To take out your subscription please mail this coupon to: (918) 1994-4462. To take out your subscription please mail this coupon to: (918) 1994-4462. To take out your subscription (10 issues) \$75 instead of \$100 (1) 1-year subscription (10 issues) \$75 instead of \$100 (1) 2-year subscription (20 issues) \$130 instead of \$210 (1) Mrs Name Surname Address Zipcode City State Enclosed is my check for \$

Circle No. 305 on Reader Service Card

PRECAST/ PRESTRESSED CONCRETE INSTITUTE

The Precast/Prestressed Concrete Institute invites Architects, Engineers and Designers to submit their outstanding precast/prestressed concrete structures for its 1989 Design type Call for entries Awards Competition. Any type of structure, including short, medium and long span bridges in the United States and Canada, using plant manufactured precast/ prestressed concrete, architectural precast concrete or glass fiber reinforced concrete is eligible. All entries will be judged by a nationally recognized panel of jurors. Winners will be

百百 前川

175 West Jackson Blvd.

Chicago, IL 60604

Photos: Several 1988 PCI Award Winners.

honored and will receive national publicity in major architectural publications. For PCI Awards Entry Kit or additional information, contact Brian D. Goodmiller, PCI Marketing Director.

SUBMISSION **DEADLINE IS:** July 31, 1989





Central Hong Kong from the Peak.

REPORT FROM CHINA

currently being completed to designs by Chinese or "overseas Chinese" from Hong Kong or Southeast Asia. Following a pattern common to all commercial developments involving foreign investment, Shanghai Center will be transferred to the government after about 20 years.

One recent landmark that had to be seen was the Fragrant Hill Hotel near Beijing, winner of an AIA Honor Award for I.M. Pei & Partners. Built on a wooded hillside a few miles outside the city, this moderately-scaled complex meanders around some superbly designed gardens. At Fragrant Hill, the poor quality of some construction work gave a head start to the deterioration that plagues China's hotels generally. Nevertheless, the complex provides an elegant setting for the conferences that-given its distance from the city-account for most of the hotel's occupancy.

An afternoon at the Beijing Institute of Building Design gave us an excellent briefing on the current state of the profession in China. The suave director, Liu Kaiji, explained that "institutes" such as his were actually the state architectural offices. The busy Beijing Institute now has a staff of 1600 (1400 of them professional architects and engineers), but its monopoly on Beijing design ended in 1980. The institute now gets about 40 percent of the region's architectural commissions, in competition with about 200 other firms-most of them small, recently established "cooperatives," the word used here, as in the Soviet Union, for private offices. Working for fees, rather than government appropriations, institutes such as this one must be economically selfsustaining.

For major commissions, state offices from several cities may compete, along with cooperatives, and occasionally university teams. Liu seems to relish the new competitive situation and expects it to raise standards.

Island of Abundance

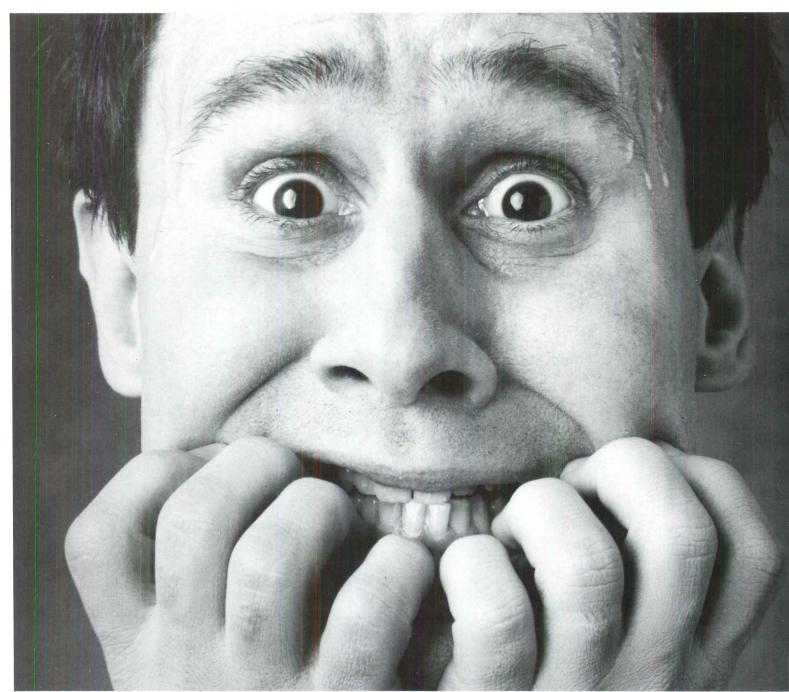
The conspicuous prosperity of Hong Kong is, of course, something of a shock as one arrives from the mainland; there is ever warm sunshine, in February, to underline the contrast. The great bursts of highrise offices and apartments, against a backdrop of tropical hills, are exciting, but the virtually total concern with commerce makes the city seem less than complete.

Our main architectural object tives in Hong Kong were two office towers: the elegant Hong kong Bank by Norman Foster (P/A special issue, March 1986) which rewards the visitor with marvels of mechanistic detail at every turn; and the 70-story Bank of China building by I.M Pei & Partners (photo page 43) which was humming with work ers aiming for completion late this year. This tower, which is the tallest in East Asia-at least until a taller one planned for Hong Kong goes ahead-is an exercise in geometry and minimal detailing. Its square volum at the base is made up of four triangular forms (delineated by the two diagonals), which rise t different heights. Sleek, gridde curtain walls give no hint of floo levels or scale. The banking ha on the third floor (above surrounding highway ramps) will be a monumental space.

Hanging over Hong Kong, o course, is the prospect of being absorbed into China itself in a decade. So far, that seems to be having little adverse effect on the colony's thriving capitalism And if the trends we observed on the mainland continue (a bi "if," of course) China is on the way to making itself over in the image of Hong Kong. John Morris Dixon

Circle No. 360 on Reader Service Card





Sometimes overnight is absolutely, positively too late.

We're not knocking the other guys, but sometimes you need to get it there right away. The very same day. Today, not tomorrow.

With TWA's Next Flight Out® delivery service, you're in business.

Even as you read this, TWA planes are about to take off. We can make sure your small package is on the next flight out to any one of over 100 U.S. cities. And we'll deliver it door-to-door or airport-to-airport. Same day. Seven days a week.

We'll give you our money-back guarantee and Frequent Flight Bonus miles, too (exciting details when you call). We also deliver next day to Europe and second day to the Middle East.

So for anything up to 70 pounds domestic and 50 pounds international, just call the 800 number. It's that easy. It's *not*

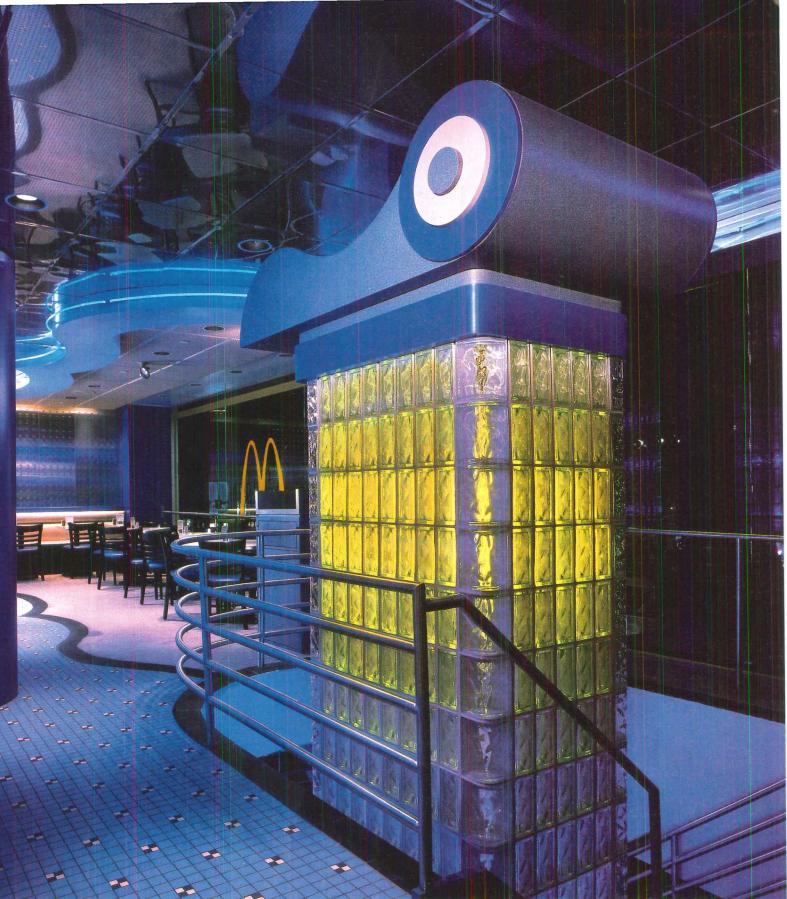
Next

011

that expensive. And most of all, it's fast -very, very fast.

1-800-638-7380

For information or immediate pick-up, ask for Agent 221.



What's surfacing at the posh new McDonald's? Formica brand laminate, of course.

It's the most exciting new restaurant in Manhattan on 57th Street. McDonald's. For designer Charles Morris Mount, Formica® brand products help achieve this striking match of environs and concept. His crowning touch, this signpost column with its ionic-inspired capital in Formica Spectrum Blue ColorCore® and Stardust and Adobe laminates. For the country's choicest site, the choice is—once again—Formica® Brand. For samples call ZIPCHIP 1-800-524-0159.

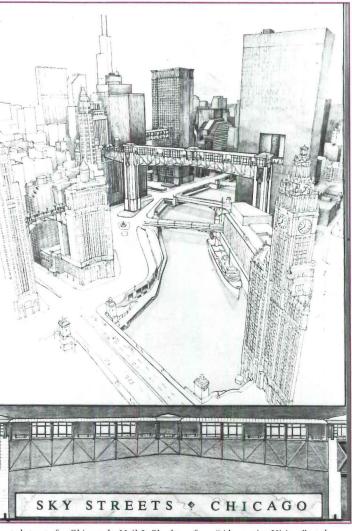


Circle No. 334

After architects learn about Senergy exterior insulation and finish systems, they think twice about using traditional materials like precast, brick and stucco. We have a very simple philosophy. Offer more. More design freedom. More colors. More energy savings. For more of the best call 1-800-221-WALL.

Senergy Inc., 1367 Elmwood Avenue, Cranston, RI 02910

P/A Calendar



vated streets for Chicago by Neil J. Sheehan, from "Alternative Visions" at the cago Public Library Cultural Center through May 27.

ibitions

rough May 21

rephosis: A Decade of Archicural Confrontation. Cheney wles Museum, Spokane, sh.

rough May 27

ernative Visions: Chicago, at Young Architects See. cago Public Library Cultural iter, Chicago.

ough May 28

e Architecture of Imre kovecz. Storefront for Art & hitecture, New York.

ough May 31 'all Heritage: St. Louis Sky-

upers 1892–1931. The um, St. Louis, Mo.

ough June 11

the Boards: Drawings by eteenth Century Boston Arects. Wellesley College, lesley, Mass.

ough June 25

d Öffices: The Seventh ngo International Design ibition. Ft. Lauderdale Mun of Art, Fla.

Through June 26

Louis Kahn in the Midwest. The Art Institute, Chicago.

Through July 2

Robert Adam and Kedleston: The Making of a Neoclassical Masterpiece. Philadelphia Museum of Art.

Through July 8

The Experimental Tradition: Twenty-five Years of Architectural Competitions. National Building Museum, Washington, D.C. (P/A, July 1988, p. 28).

Through July 16

Architecture Tomorrow: Morphosis. Walker Art Center, Minneapolis.

Through July 22

Inigo Jones: The Complete Architectural Drawings. The Drawing Center, New York.

May 18-July 2

Exhibition Diomede: Proposals to connect Siberia and Alaska in the Bering Strait. Clocktower Gallery, New York.

May 31-September 30

Parks and Gardens. Pompidou Center, Paris.

June 8–September 12

Frank Lloyd Wright. In the Realm of Ideas. Museum of Science and Industry, Chicago. (See P/A, March 1988, p. 37.)

June 9-August 2

Emilio Ambasz and Steven Holl. La Jolla Museum of Contemporary Art, La Jolla, Calif.

June 10-August 6

Emilio Ambasz: Architecture, Exhibition, Industrial, and Graphic Design. La Jolla Museum of Contemporary Art, La Jolla, Calif.

July 1–August 15 Projects: Elizabeth Diller/

Ricardo Scofidio. Museum of Modern Art, New York.

July 8-13

Beaux Arts Exposition: The Best of Architecture and Landscape Design on Long Island. Community House, Montauk Highway, Bridgehampton, N.Y.

July 14-September 18

French Avant-garde Architecture. Art Institute, Chicago.

Competitions

May 26

Registration deadline, Peace Garden Design Competition. Contact Paul D. Spreiregen, Professional Advisor, Peace Garden Design Competition, P.O. Box 27558, Washington, D.C. 20038-7558 or call Christine Cestello, Project Manager (202) 337-2887.

May 31

Nomination deadline, 1990 Citation for Excellence in Urban Design. Contact Pete McCall, American Institute of Architects, 1735 New York Ave., N.W., Washington, D.C. 20006 (202) 626-7300.

June 1

Entry deadline, Third Annual Excellence on the Waterfront Competition. Contact Susan Kirk, Waterfront Center, 1536 44th St., N.W., Washington, D.C. 20007 (202) 337-0356.

June 16

Submission deadline, 1989 Steel Bridge Competition. Contact American Institute of Steel Construction, 400 N. Michigan Ave., Chicago, Ill. 60611.

July 1

Submission deadline, Ralph Wilson Plastics Maximum Exposure Design Competition, recognizing planned, in progress, and finished projects using Wilsonart® laminates. Contact WRP Maximum Exposure, 600 General Bruce Dr., Temple, Texas 76504 (800) 433-3222.

Conferences

May 21-24

International Contemporary Furniture Fair, Jacob K. Javits Convention Center, New York. Contact George Little Management, 2 Park Ave., Suite 1100, New York, N.Y. 10016.

June 5-8

A/E/C Systems 89, Anaheim Convention Center, Anaheim, Calif. Contact Judi Sprankle, A/E/C Systems, PO Box 11318, Newington, Conn. 06111 (203) 666-1228.

June 13–16

NEOCON[®] 21, Merchandise Mart, Chicago. Contact Gloria Zylowski, 470 The Merchandise Mart, Chicago, Ill. 60654 (312) 527-7550.

June 13-18

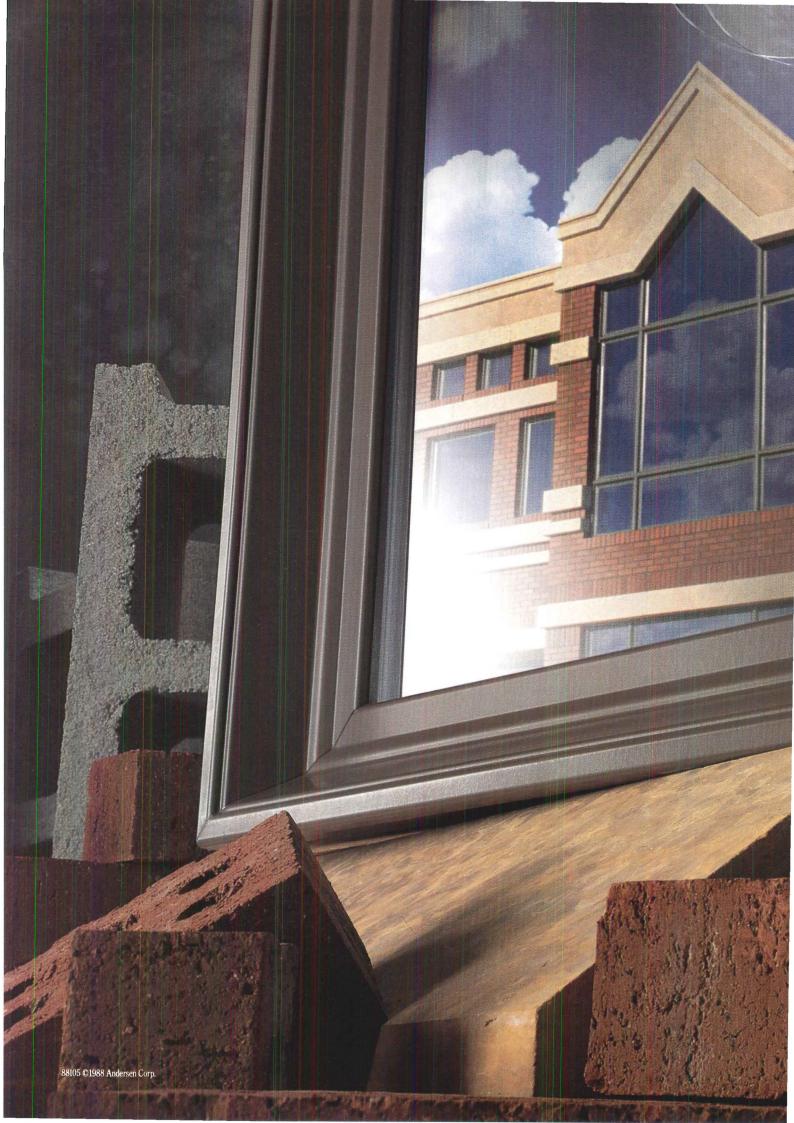
1989 International Design Conference, The Italian Manifesto, The Culture of Nine Hundred and Ninety Nine Cities, Aspen, Colo. Contact Lita Talarico, IDCA, 21 E. 4th St., 6th fl., New York, NY 10003 (212) 979-7833.

June 19-23

Solar 89: The National Solar Energy Conference, Denver, Colo. Contact American Solar Energy Society, 2400 Central Ave., B1, Boulder, Colo. 80301.

July 10-12

Giuseppe Terragni: A Colloquium, Villa Vigoni, Lake of Como, Italy. Contact Paul Harro Piazolo, Via Giulo Vigoni, 1-22017 Menaggio, Como, Italy.



WITH ANDERSEN WINDOWS, Unlimited design potential. Is it too much is ask of Andersen windows? Simply and emphatically no. Not with Andersen Perma-Shield" Flexiframe" windows. Is RUNNING INTO Wersatile window ine comes all of the custom benefits of designing buildings

with an attractive stick window system.

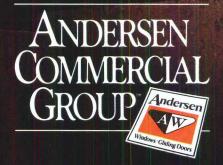
You can create curtain walls, trapezoids, pentagons, octagons, whatever you fancy. In whatever size and combination you wish.

With our crisp, clean Andersen lines and smooth, tight Andersen corners.

In a style to complement any building facade, any pattern, any texture.

Unlimited design potential? Let's just say that with Perma-Shield Flexiframe windows even running into a brick wall can be a beautiful experience.

Call 1-800-635-7500 for the name of your local Andersen commercial representative. Or write Andersen Commercial Group; PO. Box 12, Bayport, MN 55003.



adds a new dimension to your designs



DORMA's array of colors match closers with doors and hardware

For the first time, the colored hardware you specify can have a truly uniform appearance. Because DORMA, the world leader in hydraulic door closers, has broken through the barriers that limited your selection to the few standard painted and plated finishes.

Now you can choose from an array of colorful closers and hardware that will match or contrast your doors... without adding excessive cost. And underneath the eye-catching colors will be a high-quality DORMA surface-applied door closer you can depend on for trouble-free service.

Door control—the DORMA way

DORMA Door Controls Inc., Dorma Drive, Reamstown, PA 17567 215-267-3881 Fax: 215-267-2106

DORMA Door Controls Ltd., 1680 Courtney Park, Unit 13 Mississauga, Ontario L5T 1R4 416-673-1281 Fax: 416-673-5850

Circle No. 326 on Reader Service Card

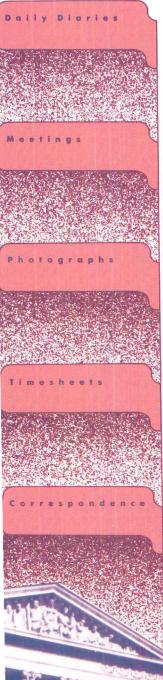
Both our European-designed TS Series and our North American DC Series meet today's most demanding standards for interior and exterior door control. From basic door closing to sophisticated fire/life safety conditions, DORMA offers economical, aesthetically coordinated door controls for every application.

When you specify DORMA door closers, you can design with confidence. DORMA's reputation for quality, reliability and versatility is built on 35 years experience on five continents. And as an innovative industry leader, we see beyond black and white.

For more information, call us to arrange a meeting with one of our consultants. There's a bright future with...

P/A Practice

Law: C. Jaye Berger lists the project records useful in a trial. Management: The Coxe Group shows how one firm delegated its management duties. Personnel: David McFadden explains the architectural freelance trend.





Law: Project Documentation

What types of project documentation are important to the attorney defending your firm in a lawsuit? Why are they important, and how can your internal recordkeeping be improved? Firms rarely consider such questions until they have been sued. However, the time to do so is now before litigation occurs.

When you meet with your attorney to discuss your defense in a trial you will be asked for the project file. These documents will reveal the strengths and weaknesses of your case. Eventually the attorney on the other side will also demand copies of these documents through "Requests for Production" to assist in preparing his case. Keep in mind, when preparing notes on a project, that some day an adversary in a lawsuit may read them and use them to try to obtain damages from your firm.

Daily Diaries

Probably the most important category of documents, daily diaries, should contain all the details of your conversations with clients and your visits to sites. They also can be extremely helpful to an attorney in putting together a chronology of the key events in the project. There may be an issue, for example, about delays on a project. The diaries will explain what was going on at the time which prevented work from going forward.

Minutes of Meetings

The types of minutes required will vary depending on the size of your firm and the types of projects on which you are working. A residential renovation project would not ordinarily require weekly project minutes, but in certain circumstances it might. Larger projects will almost always demand the writing of project minutes.

Photographs

Design professionals all think about photographing a project (continued on page 56)

Management: Delegation

The amount of management required to operate an architectural practice has grown considerably over the past generation. Regardless of the size of the firm, the need to pay at least some attention to marketing, personnel, liability, finance, and administration is inescapable. While 80 to 90 percent of a firm's energy will always be focused on producing architecture, the general rule is that about 10 to 20 percent of the effort must be devoted to managing the organization if the firm is to be successful.

Some firms have had success differentiating the roles of principals—with one or more architects devoting all of their time to managing the organization while the others concentrate exclu-(continued on page 56)

Personnel: Parttime Architects

A significant shift has begun to occur in the staffing and hiring practices of design firms. Firm managers are supplementing their core staff of full-time professionals with flex staff composed of professional freelancers. As architecture firms of all sizes feel they must keep employee overhead to a minimum, using part-time and project-toproject help has become an integral component of intelligent management.

Adding to this are the fluctuations inherent in the architectural marketplace, which have traditionally created the need for immediate upscaling or downscaling of employment capacity. These fluctuations typically happen in three areas. The first occurs when deadlines and/ or expertise require personnel to shift from one project to another on demand. This is a good example of internal fluctuation. Hiring flex staff under these circumstances enables firms to avoid having their core staffs work long overtime hours while still meeting their deadlines with (continued on page 60)

Practice Points

Almost 20 million square feet of office space is under construction in Washington, DC, according to the 1989 International Office Market Report. Second and third on the list of 50 cities world-wide are Los Angeles (15 million square feet) and Chicago (14 million square feet). Of the cities surveyed, only Fort Worth, San Antonio, and St. Paul have no new office space under construction.

Prepayment, escrow accounts, job cancellation fees, and project restart fees top a list of 29 terms that the Professional Services Management Journal suggests be included in A/E/P contracts. The Newton, Mass., publication also considers a number of liability, penalty, and design scenarios that should be in contracts.

A growing amenity in the real estate market is on-site day care, according to Commercial Reporter. In order to stay competitive in the office market, developers are addressing the needs of this country's rising number of female employees by including child care facilities in new buildings.

A Department of Energy report states that approximately \$387 million is saved annually through energy conservation. Interpro, the newsletter of the American Consulting Engineers Council, attributes that achievement to such federal programs as The Institutional Conservation Program, created in 1979 by the Department of Energy to provide matching grants to institutions for energy conservation.

Warehouse/distribution and light assembly facilities top the list of preferred investment properties, replacing regional malls and community retail centers, states A/E Marketing Journal. Since expansion often follows investment, architects should consider the design potential of this growing market more closely, even though it is traditionally less glamorous, the Journal suggests.

Law (continued from page 55)

for publication but few think about project photographs for possible use in litigation. During the construction of a project, it is a good policy to take periodic status photos. They should be labeled, since identification may be difficult at a later date, and negatives should be kept so that copies can easily be made for your attorney and for the judge and jury. Your adversary's photographs will generally show the project in the worst possible light, often taken well after you are off the project, with lighting effects that make things look worse than they really are. By noting the date when photographs are taken and who took them, you can accurately illustrate how the project looked when you were on it.

Timesheets

Not all firms routinely keep timesheets. Many firms only use them when they are billing on an hourly basis and do not require employees to fill in many details about what they were doing on a particular day. As with diaries, timesheets help to reconstruct what occurred on the project during the various design stages. They may tell which drawings were done on a given day and how many hours were spent revising them. Merely noting the project name and the number of hours spent does not tell much. Each employee should fill in timesheets daily noting the day,

the project name, which phase they were working on, and a brief description of what was done. Timesheets also have value beyond that of your defense in a trial. If you ever sue a client for an additional service or for an unpaid basic service, they will be essential.

Correspondence

Copies of all letters you send and all letters received should be kept in chronological order in your files. Letters you send should be xeroxed *after* you sign them so that you will know later whether they were actually sent. Especially important letters, such as termination letters, should be sent by certified mail. The green receipt card should be saved and clipped to the file copy.

Correspondence also can she that you promptly attended to problem or warned the client of a problem that he chose to ignore. Failure to document a problem may be used by your adversary to imply that you wer acknowledging responsibility. Waiting too long to respond to an important letter on a projec can also make a firm look bad, s answer letters promptly.

Design professionals tend to pay more attention to keeping project drawings in order than they do to other project record Every folder should have the project name on it, and there should be separate folders for categories such as general corr spondence, project minutes, timesheets, change orders, ph tographs, and the project contract and correspondence related to it. Paying more attention to these documents will help your attorney tremendously in either suing for your fees or defending you. C. Jaye Berger

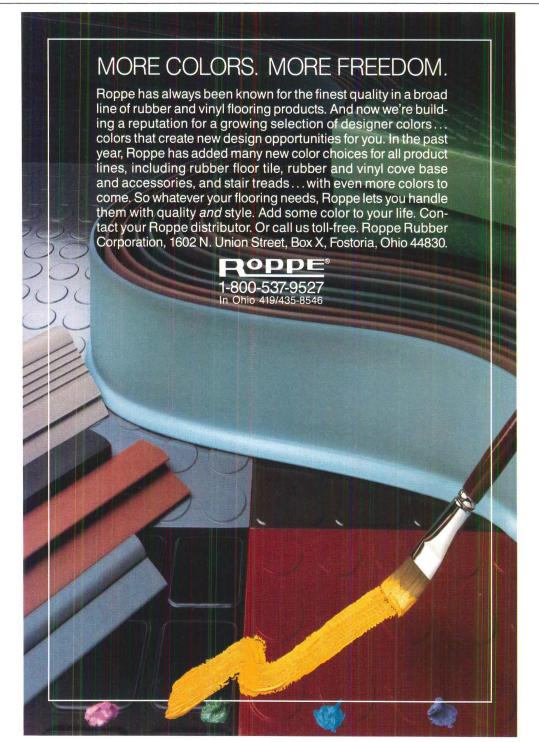
The author is a New York attorney wh specializes in representing architects, contractors, and developers.

Management (continued from page 5 sively on doing the projects. A few firms have experimented with hiring business-trained MBAs to manage the firm, but many of these cases, conflicts have developed over who is really in charge.

For most other firms, where no one principal is interested giving up practice to become a manager, the alternative is to spread the management tasks around. The following is a cas in point.

Background

Einhorn Yaffee Prescott Arch tects was initially organized in 1973 by Steven Einhorn and Eric Yaffee, who had been cla mates at architectural school a then had worked briefly for other firms in their hometow. From the beginning, the partners organized the practi around different (rather than similar) roles for each. Einho was clearly the best at client re tions, marketing, and design. Although only 30 when the f. was founded, he was welcom by the establishment of his ci and quickly landed an impre sive series of local governmei and developer projects. Yaff an intense perfectionist who worried about every detail of projects and the firm, becam classic "Mr. Inside," overseei project execution and office (continued on page 58)



Pedigrid/Pedimat[®]: unparalleled elegance, design flexibility and performance.

NEW CARPET COLORS. 25 in all – and they're sensational.

OPTIONAL LOGOS AND CUSTOM GRAPHICS.

Through a unique and exclusive process, your mat can be permanently personalized with graphics which cannot wear off.

IMPROVED WEARABILITY AND STAIN RESISTANCE.

Increased density, pile height and the addition of a stain repellant just made our splice-free Antron III® carpet even better!

DESIGN FLEXIBILITY AND SAFETY.

Pedigrid/Pedimat can be fabricated to virtually any size or shape. They're also engineered for safety and trouble-free performance. For design assistance and colorful new literature, call toll free 1-800-233-8493.

THEC SGROUP

Muncy, PA • San Marcos, CA Mississauga, Ont.

Circle No. 318 on Reader Service Card

P/A PRACTICE

Management (continued from page 56) ministration. The firm hired staff project architects to carry out the bulk of the effort. One of these, Andrew Prescott, quickly began to show Einhorn's talent for client development, but in new markets—he brought in a great deal of energy conservation work during the early days of the energy crisis. As a consequence, Prescott was elevated to partnership after only two years with the firm.

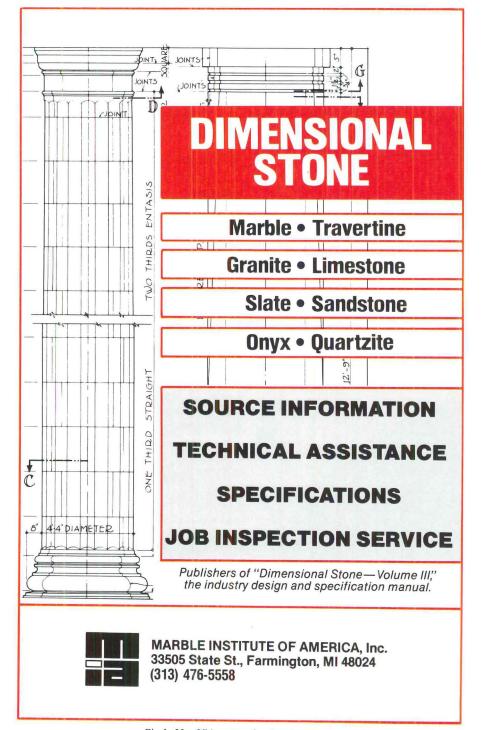
Einhorn Yaffee Prescott grew rapidly in the late 1970s—to a staff of 20 and then 40. The partners found themselves increasingly occupied with developing work for the firm and unable to devote the time they felt was needed to the organizational tasks, such as personnel management, hiring and training staff, equipment procurement, technical standards development, and scheduling. At first, Yaffee tried to pick up the slack, but he found himself overburdened by client work, contract negotiations, and overall financial management.

The Issue

The leaders of Einhorn Yaffee Prescott faced three choices: one or two of them could "lay down their architectural tools" and become fulltime managers of the organization, they could hire organizational managers from outside the firm, or they could begin to delegate a substantial amount of management to the next level in the firm. They chose the last route.

Actions Taken

In 1982, Einhorn Yaffee Prescott named eight of their key project architects and designers, plus the staff marketing director, as "Associates" and assigned the group a number of management tasks. Also, at this time, a studio organization replaced the department organization of the firm. The associates were the leaders of each studio. They were given responsibility for all hiring except at the highest level, for scheduling of all staff to projects, and for general assignment of space and maintenance of the office. After some initial time to organize themselves, the associ-



ates divided most of these tasks into individual or committee assignments, and developed a regular schedule of bi-weekly meetings to coordinate their collective efforts. Einhorn, Yaffee and Prescott attended the bi-weekly meetings with the asso ciates to oversee and communicate about their activities, and the individual principals made themselves available as resources or mentors.

It took about a year before al parties were fully comfortable with this delegation of duties, but once the associates realized that the principals were sincere about wanting them to take responsibility, and once mutual expectations for the standards to be met were clear, the system began to work. In 1984 Einhori Yaffee Prescott received the Pro fessional Services Management Association (PSMA) Management Achievement Award for their balance and unique management styles.

Subsequent Events

Over the past eight years, Einhorn Yaffee Prescott has trebled in size to 130 staff mem bers, and interior design and engineering have been added to the firm's in-house services. Th initial associate group has grown to 14 people. All of them, except the marketer and controller, ar directly involved in project activities, but each devotes six to eight hours a week to general management. Their management tasks have been expanded to embrace performance review and setting compensation for a staff except themselves (who ar reviewed by the three principals), negotiating contracts, and setting fees on routine projects general office budgeting, and development of new internal initiatives such as the adoption of CADD systems. The 14 have been elevated to the title of "Managing Principal" with own ership (about 2 percent each), plus significant participation in firm profits through an Incentive Compensation program. In effect, 80 to 90 percent of the day-to-day management of the firm is now carried out at the managing principal level.

The three founders, meanwhile, devote their day-to-day efforts to marketing, client rela tions, design, finance, and strate gic thinking about the future of the firm. The only area of man agement not significantly delegated thus far is marketing. While some of the managing principals have become success ful in obtaining new work from (continued on page 60)

DESIGN YOUR FLOOR WITH FLEXCO'S SPEC 1TM SYSTEM AND ALL THE PIECES FALL INTO PLACE.

Flexco just made your job easier. Because now, with the Spec 1 system, you can actually see the floor you're designing before you install it. In fact, you can see several flooring variations—all in a matter of minutes.

The Spec 1 flooring system from Flexco contains a supply of one-inch tiles in more than 25 exciting colors, and several styles and textures, plus a large grid on which to build your floors. You choose the colors you want—in the styles you want—to create endless floor design possibilities. As a result, Spec 1 system not only helps you design better, more applicable flooring solutions but it makes it a lot easier to sell those designs to your clients.

Order Spec 1 through your participating Flexco distributor. Or, for more information, call 1-800-877-2232, EXT. 204. Or write Flexco, P.O. Box 81368, Atlanta, GA 30366:

Circle No. 332

Constant of the second second

Management (continued from page 58) existing clients of the firm, they have yet to be challenged to take the lead in developing wholly new business. This will be the focus of the next stage of the firm's delegated management system. The Coxe Group

The Coxe Group is a Philadelphia-based concern specializing exclusively in the management of architectural, engineering, interior design, planning, and other professional design firms.

Personnel (continued from page 55) the desired level of quality.

The second area of fluctuation in staffing occurs when a few local firms receive the majority of new commissions. Although these shifts in peak workloads often balance themselves out over time, it is not uncommon for 20 to 30 people to be laid off and be re-absorbed by other firms. Using flex staff breaks the undesirable cycle in which employees, assuming they are hired permanently, are laid off on short notice. This in turn creates a more cordial, less paranoid office climate.

Finally, there are regional or national fluctuations in the architectural marketplace. When a particular region of the country is undergoing a building boom, as the South experienced in the seventies, the workforce must respond. Regional placement offices of flex staff can help service that demand.

Firms of varying size use flex

staff for reasons other than fluctuations in workload. Large international firms seeking new markets and offering expanded services must watch the expansion of their overhead. The use of flex staff makes good financial sense in the context of managing overhead in medium-sized regional firms, whose commissions and staff are vulnerable to absorption by large firms, the logic being that remaining lean and flexible will enable them to compete with their larger counterparts. Small firms, whose local market remains strong, are using flex staff to find that star designer or skilled technician when needed. With this type of flexibility, small firms can seek slightly larger commissions.

Working as a temporary employee does contribute to an architect's professional growth "When I interview at firms, the are very impressed, quite frankly, with my broad base of experience," says David Reck, a architect working on a flex basis "My portfolio contains drawing from a lot of firms and a lot of different projects." Working project-to-project, he adds, 'really helps hone your speed and skills because, when you a hired, you have to come up to speed real fast."

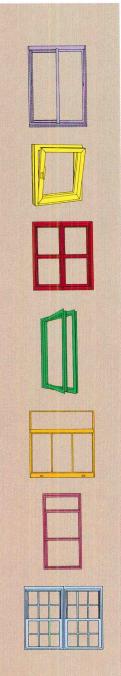
Flex architects typically wan to work full time, but in a variet of firms. In doing so, these inc viduals are exposed to diverse projects and methods, gaining greater experience in design, presentation techniques, production, and construction tech nology from the core staff the come into contact with. Their portfolios, work history, and maturity develop at an acceler ated rate. Working on a project by-project basis is also less traumatic than the troublesom job-jumping route to career ad vancement. Clearly, the highly skilled architect, possessing a diverse background, is the mo marketable professional-attra tive to any size firm.

This process also can greatly enhance the exchange of ideas and techniques in traditional office structures. Flex and corstaff working together create healthy competition and enthusiasm beneficial to employe and employers alike.

Unfortunately, there are ver few state-registered, full-service employment agencies catering to temporary architects. For those candidates considering this route, there are several things you should look for. Ma sure that the employment firm you are dealing with is fully re istered with all state, local, and federal agencies. Insist on a fir run by people with a "hands-on background and education in the architectural field. Associa yourself with a firm that spenmoney on research and develo ment and new services. Finally look for a company that does more than make placements. Find one that is active in the architectural community and offers counseling, manageme and special programs to its ca didates. David McFadden

The author is the president of Consult for Architects, Inc., a project-to-projec and permanent placement agency, bas in Manhattan and founded in 1984.

MANNIX WINDOWS DELIVERS AGAIN



turer and installer of sophisticated architectural quality aluminum windows and door systems including double hungs, sliders, casements, tilt and turns, swing and sliding doors, window walls, railings and greenhouses. With over 5,000,000 windows sold we

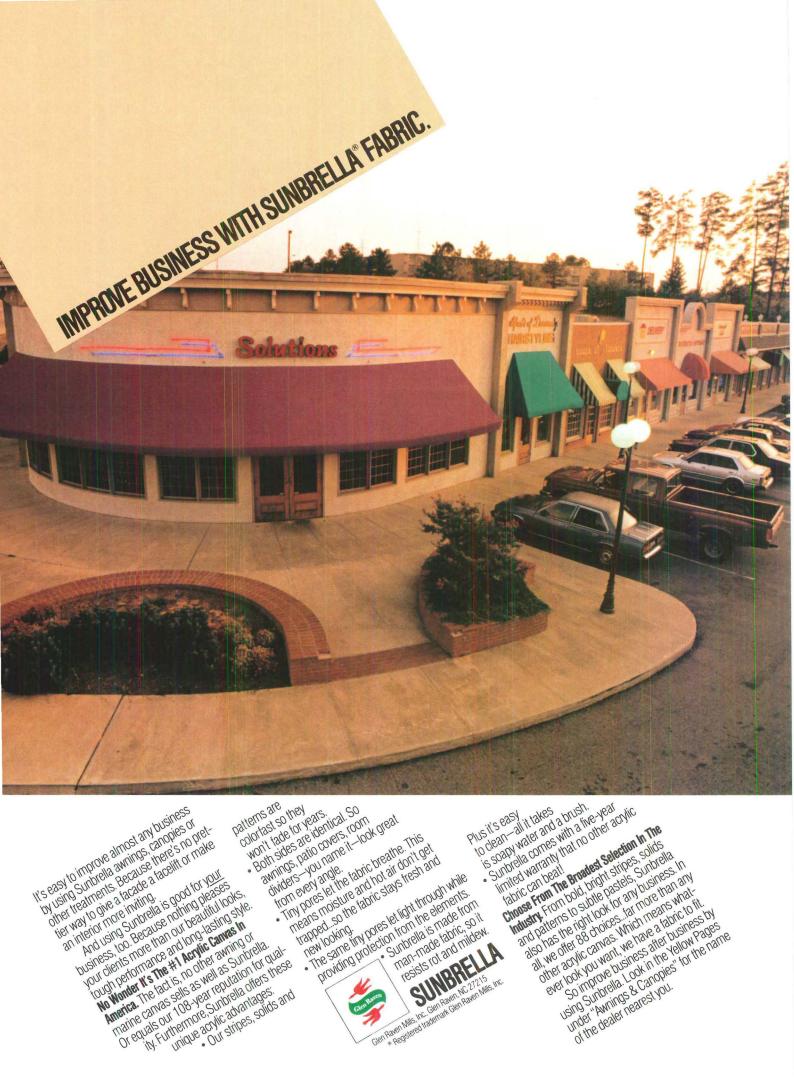
Mannix Industries is the East Coast's largest designer, manufac-

have built a solid reputation in the architectural and real estate communities by providing precision engineered products with unparalleled service, delivery and installation capabilities.

Our revolutionary new two-tone windows, in eight energy saving styles, with a unique dual direction painting process is another appealing reason to select Mannix for your next project.

Write or call Jon Snyder for the specifics on two-tone windows as well as all other Mannix products. (516) 231-0800, FAX (516) 231-0571 *Minimum quantities required

7000 TILT AND TURN SERIES WITH TWO TONE PAINT



Circle No. 338 on Reader Service Card

KEEPING THE LEA TAKES MORE THAN SIMPI

P

6

0

P

9

NOOD FURNITURE FICKING TO TRADITION

TRADITIONAL, TRANSITIONAL, CONTEMPORARY. NO ONE MAKES MORE OUT OF WOOD THAN KIMBALL. AND NO ONE CONTROLS MORE OF THE FURNITURE MAKING PROCESS, FROM GROWING TREES TO DELIVER-ING ON TIME, KIMBALL, THE CHOICE THAT WORKS, FOR WOOD, 1-800-482-1616

METALLIC CORPORATIO CHICAGO

ntroduces OVAR.

For as long as there has been acoustical eeilings, the suspension grid has been flat and lifeless. Now, Chicago Metallic Corpor un introduces a major innovation in exposed ceiling grid design Novara 3900. It is a revolutionary and refreshing new liene ex-cellings. Novara 3900 features a narrow 3/4" wide face while each ends 3/16" below the ceiling plane and has a distinctive bevel on ach side, creating a unique three dimensional appearance Mitted intersections and a custom wall molding help creat geometric picture frame effect that incorporates shadow lines available in over 100 designer colors and reflective transfer including laminated wood veneers. Novara 3900... it will make available in over 100 designer colors and reflective finisnes, including laminated wood veneers. Novara 3900...it will make flat grid nothing more than a memory.

3/4" wide face with beveled edges.

Circle No. 320

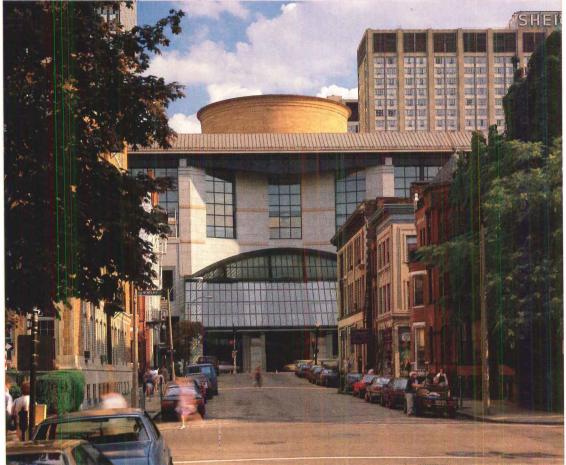
Precisely mitred intersections.

Chicago Metallic Corporati

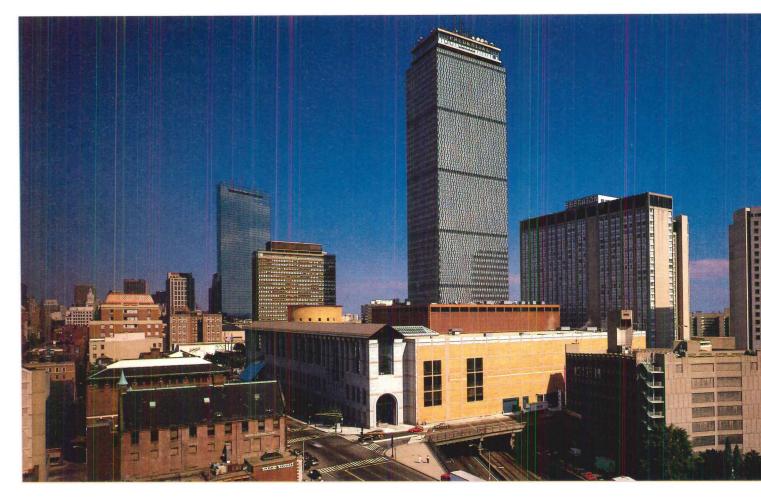
Progressive Architecture

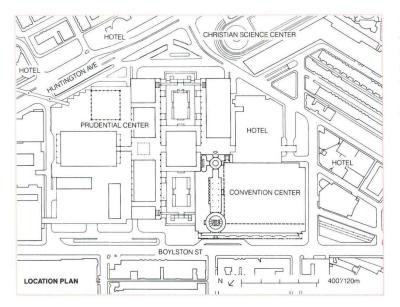
Civil Center

In Boston's Back Bay, architects Kallmann, McKinnell & Wood have expanded and transformed an ungainly 1960s exposition hall into the elegantly crafted Hynes Convention Center.



Main entry of convention center viewed from Gloucester Street.



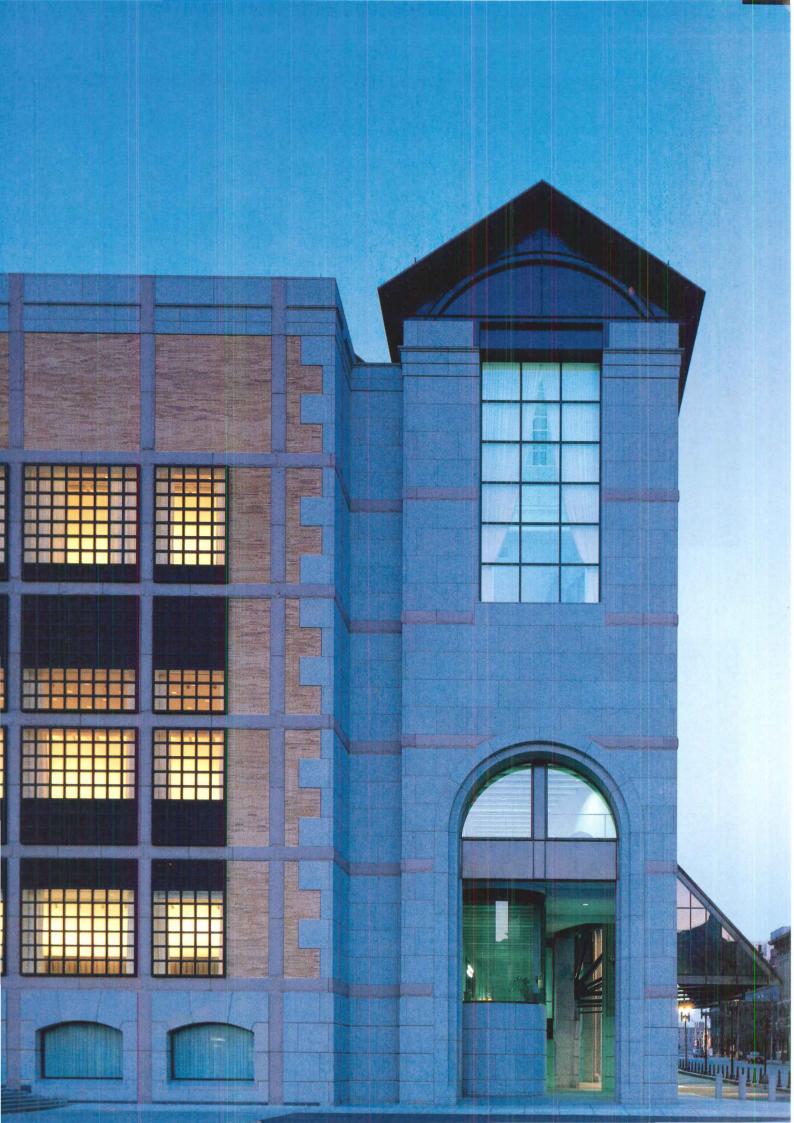


The convention center occupies a pivotal site in Boston facing one of the major commercial arteries, Boylston Street; straddling a main rail line and the Massachusetts Turnpike; and backing up to the mixed-use Prudential Center (above and top). The building itself has a linear, gabled front section containing circulation spaces that abuts the main block of meeting and exhibition spaces. Separated by a reveal and change of materials from granite to Roman brick (facing page), the two sections of the building are linked by a grid of stone that does not align with the floor levels. Grids applied to windows in the brick block obscure actual sill and head lines. Although the granite wall has deep reveals, that depth is countered by the "honest" expression at the corners of the stone veneer's thinness. MUCH has been said about the incompatibility of vast conventi centers and urban downtowns. Today's enormous meeting halls, w their demands for parking and truck access, are typically located the edge of the city core or beyond. (P/A Inquiry on conventi centers, February 1989, pages 74–81.) In Boston, archite Kallmann McKinnell & Wood and their enlightened clients, the M sachusetts Convention Center Authority, have shown how a conve tion center can actually heal the urban fabric rather than shatter it.

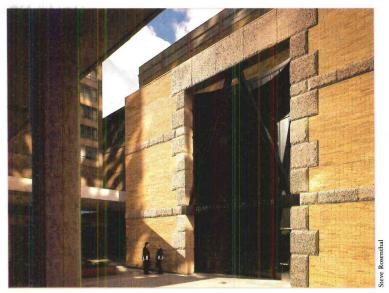
Buried inside this extraordinary new facility is the old Hynes *A* ditorium, an unspectacular product of 1960s urban renewal. Alw primarily a meeting/exposition hall, rather than an auditorium, old Hynes was the modest public facility huddling at the far end the superscaled, mixed-use Prudential Center. When it became cl that Boston needed larger facilities in order to hold its own a convention city, the one virtue of the old Hynes was its site, at edge of charming yet busy Back Bay and within a short walk of ho totaling thousands of rooms.

For "destination" conventions that draw out-of-towners—parti larly the professionals who tend to favor Boston—a site out on expressway would have had little appeal. For the big "gate" eve regional boat and car shows that draw thousands of locals in th cars, Boston already has appropriate city-edge facilities. So the r Hynes was programmed not only to offer space—450,000 squ feet of rentable space in an 850,000-square-foot structure—bu have meeting rooms and public spaces that would let visitors kr that they were in a special place in an uncommon city.

In typical 1960s style, the blank walls of the old Hynes were se rated from its major public access, Boylston Street, by a 90-foot s of vehicular drives and throw-away landscaping. Here was an ex lent opportunity to expand out to the street, with a multistoried la of meeting rooms. The other direction of horizontal expansion to the east, where a not-too-successful retail wing of Pruder







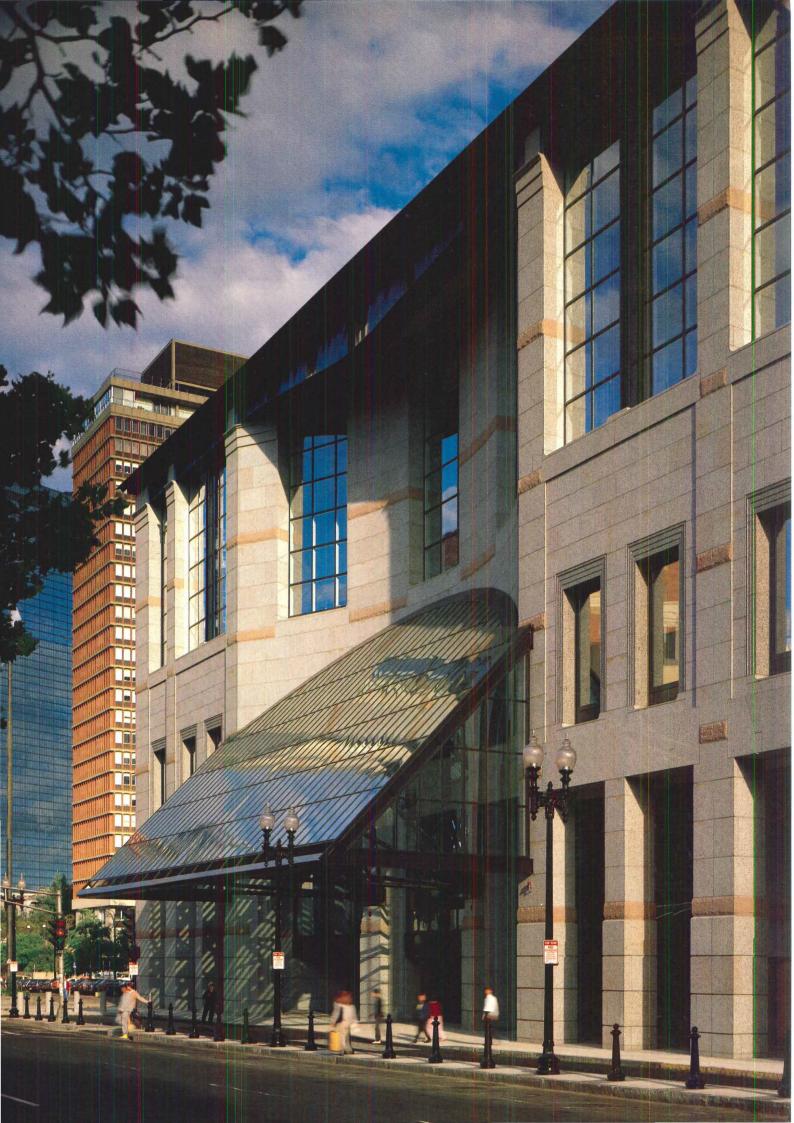
The Boylston Street façade features a ground floor loggia with glass-walled halls on the upper floors (top). To break up the 600foot length and to respond to the two side streets perpendicular to this façade, the architects varied its fenestration pattern. The windows step down at an internal stair near one end of the building (top) and, near the other end, the wall bows in behind a projecting glass entrance canopy (facing page and p. 175). The wall's inward curve, which recalls the main circulation rotunda behind it, is reflected in the downward bow of the exposed steel beam that supports the gabled roof over the entry. At the convention center's south entrance, facing the Prudential Center (above), many of the same façade elements—the exposed steel, stone quoins, and stone beltcourses set in brick are repeated. Center was replaced with a variety of new convention facilities.

The third direction for expansion was up, and it was possible add a partial layer of exhibition space and an ample new ballroo on top of the existing structure. All of this expansion, in all thr dimensions, was vastly complicated by the fact that the origin Hynes, along with Prudential, was built above the Massachuse Turnpike and the main railroad line into Boston. Adding to t structural complexity (and cost) was the fact that the mechanic plant for the 52-story Prudential Tower had to be disassemble temporarily replaced, then reassembled amid the underpinnings the expanded Hynes. Complicating the work further yet was the fact that the Hynes continued to operate, except for an unavoidal interruption of a few months, with portions being occupied incomentally as construction went on around them.

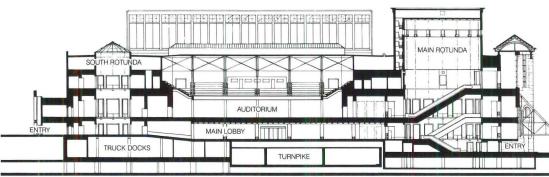
Reconstituting the Street

The architects were very much aware here of the opportunity "reconstitute" Boylston Street, developing a south street wall in here mony with the continuous but varied line of commercial and instittional buildings along its north side. To gain as much interior spaas possible, they developed this frontage as an arcaded sidewalk, we tiers of internal circulation above. They wanted this street wall have a civic dignity, with the subtle balance of order and variatithat could be sustained for over 500 feet without being bland overbearing; they wanted a maximum of visibility, in both direction between the street and the layers of corridors along it. Their solutiwas to design a visually self-contained loggia-like structure along to Boylston Street front, its autonomy signaled by a peaked roof. If hind this, the vast, largely windowless box of exhibition spaces partly exposed, partly hidden by Prudential Center structures.

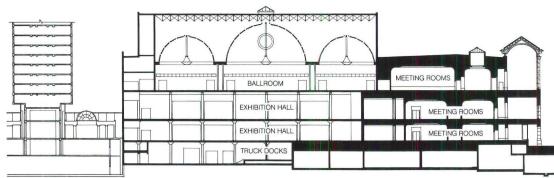
The distinction between these two formal elements is underscor (continued on page 72)



The convention center consists of new meeting rooms, circulation space, dining facilities, an auditorium, and a ballroom that wrap around and over rehabilitated exhibition halls. Public circulation runs in an L-shape, with vertical movement—elevators, escalators, stairs—occurring at two end nodes and a large rotunda at the corner (plans below). Meeting rooms form a block along the front of the building, while dining space and the auditorium are stacked along one side of the exhibit halls. The rail line and turnpike, which bisect the lowest floor, separate the entrance and administrative offices to the north from the truck docks to the south. Projecting above the front, gabled façade are the rotunda (section, top) and the barrel-vaulted ballrooms (section, middle). The upper hall overlooking Boylston Street (facing page) is a grandly scaled space with white walls and stone beltcourses. Custom-designed mahogany benches run down the center, and a curved stair connects to the hall below.

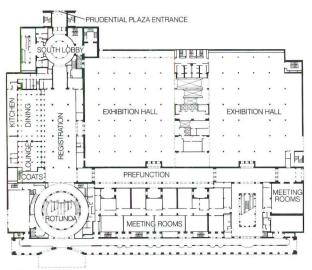


SECTION AA THROUGH AUDITORIUM AND ROTUNDAS

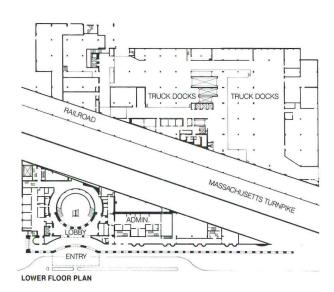


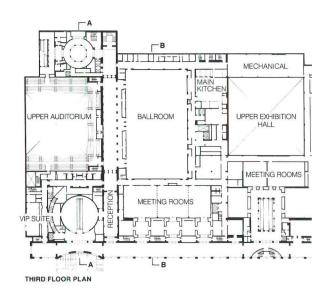
SECTION BB THROUGH EXHIBITION HALLS BALLROOM

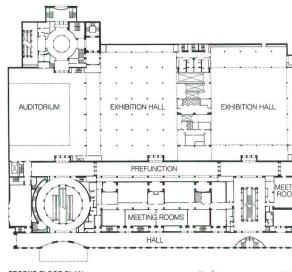
100%











SECOND FLOOR PLAN



Hynes Convention Center



(continued from page 68)

by facing the loggia principally in granite, with large glazed areas, and by cladding the volume behind it in an amber-colored Roman brick. The pale pink loggia granite establishes a kinship with many Boston landmarks, notably the great Public Library a few blocks east on Boylston Street, and the brick recalls the surprisingly contrasting walls of the library's internal court; it is a material found on few exteriors in the vicinity. In a way, the walls of the loggia portion proclaim a connection to the city fabric, while those of the larger volume assert its closed, separate character.

The designers were not content, however, to simply leave these two urban forms separate but bound them together visually with string courses and grids of dark granite, reminiscent of the stone of Trinity Church and other Victorian Back Bay monuments. On the loggia, the darker bands subtly gauge the one-story drop in grade along that frontage. On the structure behind, they form a Euclidean grid that is unrelated to the floor level or bays inside; they cross the few windows at odd levels (but not unsatisfactory ones from the interior), a fact that is veiled by the grid treatment of both windows and spandrels (photo, page 67). Another layer of geometric meaning is added to the body of the hall by inserts of white limestone, which are the surface "traces" of the original structure's 30-foot bays.

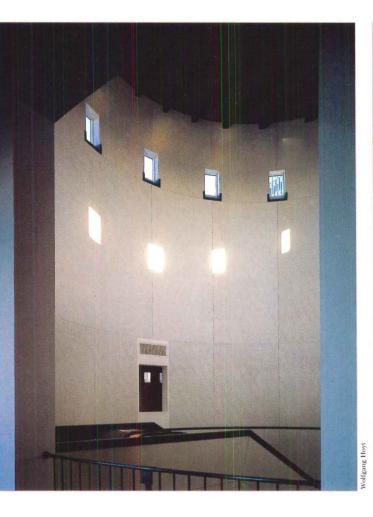
The coexistence of such abstract visual markers—akin to some of Peter Eisenman's grids—with the apparent historicism of the Boylston Street front illustrate the catholicity of Kallmann McKinnell & Wood's current design thinking. Neither part is, in fact, simply abstract or figurative: The Classicism of the granite-clad loggia portion is actually quite abstract, and it gives way in places to displays of bare steel; the abstract lines on the larger portion, on the other hand, are executed in rough-faced granite slabs that bear the earmarks of traditional construction. One common characteristic of the pointedly disparate portions of this building is an evident interest in the materials and craftsmanship. This visible materiality dist guishes the work from much dogmatic Modernism or Post-Moder ism, in which material is the anonymous servant of form. A comp rable juxtaposition of Modernist and Historicist devices—drawn gether by a consistent emphasis on materiality—can be seen in all Kallmann McKinnell & Wood's current work and in that of a f contemporaries; one notable parallel is Hammond Beeby Babk fine Hild Library in Chicago (P/A, Dec. 1985, p. 53), and the san firm has recently displayed a version of the Historicist-front-abstra rear *parti* in their design for Chicago's central library (P/A, Janua 1989, p. 103).

Little visual connection, aside from maintaining the orientation its rectangular forms, is made with Prudential Center, which or velopes the convention center on two sides. The architecture of Pr dential's buildings is quite varied, anyway—and none of it inspirin What's more, its owners have long been discussing additions a remodelings that would change its image.

Entrances, passages and nodes

Public access to the new complex was required both from Boylst Street to the north and from the elevated plaza of Prudential Cen to the south, the most convenient approach for most hotel gue Externally, the main entrance has been made to look like a gr apsidal recess into the loggia, although few feet of depth were actua available; an effect of greater dimension is generated by a bro steeply angled glass canopy that traces an ample curve as it interse the shallow recess. At the south end, a straightforward entrancwhich may later be hidden by contemplated Prudential Center ad tions—is given added presence by the rough-faced quoins that c line the tall, rectangular opening.

A strong axial sequence of lobbies was developed linking these t entrances. A major rotunda at the Boylston Street entrance hance







The main rotunda is a spatial tourde-force. Serving as the primary vertical-circulation node, the drum-like space has escalators that shoot across it and curved stairs that rise up from its floor (facing page left) to link the **Boylston Street entrance with the** main lobby. The openings in the rotunda's slightly textured, white plaster walls vary in size. On the lower floors, circular corridors overlook the space through large openings, with custom-designed bronze railings that were darkened on site. The top floor has two openings on the rotunda's cross axis, above which a series of small windows (above left and cover) lights the upper reaches of the cylinder. Capping the space is a wood ceiling almost rustic in its detail (facing page right). Between the inner and outer walls of the drum are curved, cascading slate stairs that connect the various upper floors (above right). This "poché" space is skylighted and contains a small bridge that links two sections of the top-floor VIP Suite. The south entrance features a three-story drum that echoes the main rotunda's details at a smaller, more intimate scale (left).

Hynes Convention Center

The convention center is unusual in its use of deep, rich interior colors, for which Stephanie Mallis was the consultant. Because of their fixed dimensions, the meeting rooms (below) have elements rarely found in such spaces, such as pilasters and ceiling coves; colored fabric wall panels are set into mahogany frames. Their anterooms (right) employ darker wall colors. Carpets throughout have tiny grid patterns in vivid colors that fuse into more subtle tones in the manner of Pointillist painting. The main lobby has, along its one side, a colonnade framing wood windows and doors that give access to the cafeteria (bottom). The outer face of the colonnade is painted a deep blue, which becomes a slightly lighter blue when it turns the corner; as in the stone veneer on the exterior, this expression of surface thinness counters the apparent depth of the wall. In other circulation spaces, such as the ballroom lobby (facing page) one strong color is applied to a front plane, another to recesses; note that the color on the forward plane does not extend into the recesses. In this space, skylights illuminate pale blue baffles.





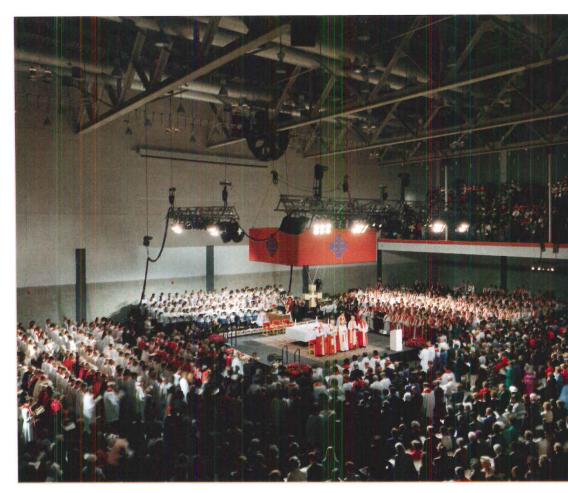
vertical circulation, with curved grand stairways and escalators th swoop across the void; a smaller rotunda at the Prudential Cent entrance leads to some more conventional, but handsome, escalat and stair wells. East-west circulation takes place along the glaze corridors of the loggia block and a parallel internal passage; a secon ary, skylighted escalator well toward the west end allows for vertic movement among meeting rooms without returning to the main axi

The circulation and prefunction spaces have been made corprehensible, with strong axes and punctuated sequences of space. Most of the meeting rooms have been organized into suites, enter through foyers that give a sense of group identity to the rooms. The meeting rooms themselves are for the most part permanent spaces not the typical temporary divisions of amorphous space—and the fact has been underscored by pilastered walls, carpet borders, a deep coves at ceilings.

Onto this series of spaces that evoke traditional settings, the arc tects and interior designer Stephanie Mallis have superimposed so decidedly non-traditional uses of color. In meeting rooms, dark a muted colors are used on fabric covered wall panels; very vivid color are used for the carpets, but in small checkerboard patterns th fuse into softer tones in the manner of Pointillist paintings. In some of the prefunction and circulation areas, and in the cafeteria a lounge, shockingly vivid colors appear on the walls, typically c strong color on columns or pilaster-like elements, another on pan of wall behind them. The color on the forward surface does a wrap around projecting elements, as one would expect, but rema in a single plane conceived as having no thickness. In some of t larger circulation spaces-the Boylston Street halls and the verti circulation wells-the colors shift to shades of white, with mut tones-mainly handsome British slate-on floors; the white in the instances is made to seem a very positive color because of the vir hues elsewhere and the light flooding these areas.



The two-story auditorium can be used independently of the exhibition halls behind it, as at this installation of Bishop Harris (right), or can be joined with them to accommodate tall exhibits. Capable of seating up to 5000 people, the auditorium has balconies on three sides that are accented with touches of bright color on the railings and exposed steel. Another space treated in an unusual way is the top-floor ballroom (facing page bottom) with its three parallel, barrel-vaulted volumes. Almost 25,000 square feet in size and able to accommodate up to 2200 at banquets, the ballroom can be divided into three parts by movable walls, although it is visually strongest when maintained as one space. An oculus at one end of the center vault lets in diffuse light through translucent glass (facing page top). The chandeliers, like much of the center's lighting, were custom-designed.



Kallmann McKinnell & Wood in Boston

It is interesting to consider that this is the second civic landmark in Boston by a local firm that got its start with the competition-winning Boston City Hall (1969–1973). It would be easy to see these two buildings as polar opposites: the city hall as a freestanding monument in the Brutalist manner—exposed concrete inside and out—which is now at the nadir of public and professional acceptance; the convention center as a volume shaped by its context, its structure largely wrapped in various surface materials and its details related to 19th-Century neighbors.

Actually, the Boston City Hall, and the Government Center plan by I.M. Pei that set its parameters, are much more sensitively adjusted to context than is generally realized today. But, in any case, there have obviously been significant changes in the specifics of Kallmann McKinnell & Wood's approach over the past two decades. In the American Academy of Arts and Sciences headquarters (1981) and the Becton Dickinson corporate offices (1986), their previous concentration on exposed structure was joined by a comparable emphasis on walls, sloping roofs, and applied surfaces. Yet even in these buildings, and particularly in their Back Bay rail and transit station (P/A, Sept. 1987, p. 53) they continue to show an interest in exposed structure and its joints.

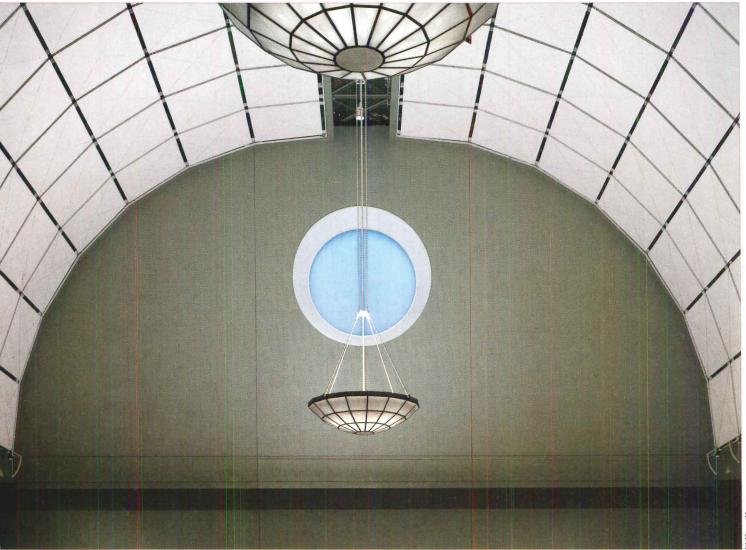
In all this recent work there is a tension between exposed members and applied wrappings, between Modernist elements—which often carry references to precedents such as, say, 19th-Century iron framing—and Historicist elements, which are always considerably abstracted. The design partners, Gerhard Kallmann and Michael McKinnell, consider themselves Modernists, but their respect for historical precedents comes up repeatedly in discussion of their work. They clearly love the traditional city and relish the opportunity to enrich it. And at this they have succeeded. *John Morris Dixon* **Project:** The John B. Hynes Veterans Memorial Convention Center, Boston.

Architects: Kallmann, McKinnell & Wood, Architects, Boston. Principals/Design: Gerhard Kallmann, Michael McKinnell. Principal/ Management: Henry A. Wood. Senior Associate/Design: Bruno Pfister. Project Management: Kathryn B. MacKenzie, Lloyd G. Dyson, Jr., Ronald Barber, Hans Huber. Project team: Charles Carlin, Ginette Castro, Martha Cuddeback, Matthew Ellsworth, Melanie Francis, Paul Frazier, Lynn Hopkins, Rayford Law, Thomas Robinson, Claudia Russell, John Salem, Vincent Synder, Anne Tansantisuk, Donald Taylor, Brooke Williams, Chuck Woods, Ronald Zeytoonian. **Client:** Massachusetts Convention Center Authority, Boston. Site: Original site of Hynes Auditorium in Back Bay, plus portion of adjacent Prudential Center. Total area: 244,000 sq ft.

Program: Exhibition space of 193,000 sq ft (of which portion can serve as 5000-seat auditorium), 38 meeting rooms totaling 72,000 sq ft, 25,000-sq-ft ballroom with banquet capacity of 2200, cafeteria and lounge, kitchen, loading docks. Total gross area: 850,000 sq ft. Structural system: new portions steel frame with composite floors; cast-in-place concrete at rotunda. Major materials: granite, Roma brick, aluminum windows and skylights, slate paving, carpeting, bronze doors, railings, and hardwa (see Building materials, page 171 Mechanical system: electric hot water heating (3, 1500-KW boiler central chilled water plant. Consultants: Structural: Weidlinger Associates. HVAC: TMP Consulting Engineers. Plumbing fire protection: Robert W. Sulliva Inc. Electrical: Lottero & Mason Associates. Geotechnical: Haley & Aldrich. Interiors: Stephanie Mall Inc. Specifications: Todisco Assoc ates. Lighting: Fisher & Marantz Sound Systems: Bolt Beranek & Newman. Security: Analytical Sy. tems Engineering Corp. Signage: Jon Roll & Associates. Landscape Moreice & Gray.

General Contractor: Bond Brothers/Dugan & Meyers. Costs: Phase I, demolition and de piles (bid 1985, actual 1986): \$. million. Phase II, building constrution (bid 1985, including site wo landscaping, and interior finishes \$129 million. Actual Phase II co not yet final. Brotec as noted

Photos: as noted.





Wolfgang Hoyt

Reordering the Suburbs

Architects across the country are seeking new solutions to the problems of suburban sprawl. These range from incremental improvements—a better shopping mall or office park—to utopian small towns and latter-day garden cities.



AS I was researching this article, a colleague asked if I suffered any "cognitive dissonance" in writing a critique of contemporary suburbia from my own home in suburban Connecticut. He touched a nerve. I live in a four-bedroom builder's Colonial. We have a septic tank, and a four-wheel-drive mini-wagon. I work in Stamford, a city that has remade itself in the image of suburbia. My commute, which I do alone, is 35 minutes along a clogged scenic parkway.

My town is grappling with the very problems of affordable housing and open space management that I have spent the past six months reading about. Indeed, my best source may well have been the local weekly paper. There I read the tale of a wily developer who flooded an old quarry to create two-acre lakefront lots that are three-quarters water, conforming to the letter of the law while quadrupling the apparent density of his development. The paper also carries near weekly warnings that our police and firemen can no longer afford to live in the community they serve, along with ads for after-school childcare that testify to the problems of families in which both parents work, like my own. At best, I can say that when I consider suburbia, I know whereof I speak. At worst, I am open to the criticism that if you're not part of the solution, you're part of the problem.

And the problem is enormous. The essential virtues of suburbia the characteristics that drew and continue to draw people there—are threatened even as they are achieved by more and more Americans. As Daniel Solomon phrases it, "The more of it there is, the less it is like what it was supposed to be." Or as Stephen Friedman writes in his book *City Moves*, released this month by McGraw-Hill, "At the heart of suburban development is a critical paradox. As any suburb increases its popularity, by providing people with the more informal, low-density settings that they seem to want, its very popularity destroys the features that first made the place appealing."

The litany of problems is as familiar as it is depressing. Little has changed since 1961, when Lewis Mumford issued his stinging indictment of suburbia—written, ironically, in suburban New York. Post-World War II suburbia, he wrote, "caricatured both the historic city and the archetypal suburban refuge: a multitude of uniform, unidentifiable houses, lined up inflexibly, at uniform distances, on uniform roads, in a treeless communal waste."

Nothing has changed, and yet everything is different. Architects building in the suburbs of today or those planning for tomorrow may revere the 19th-Century streetcar suburb, but they are working in a vastly different reality. Those who do not simply shudder and pass on recognize in the littered suburban landscape a crisis of potentially lethal proportions. "We see the urbanization of suburbia as one of the next clarion calls for architects and planners to answer . . . an ambitious, even heroic agenda," says Doug Kelbaugh, who with Solomon is one of the proponents of the Pedestrian Pocket, a new model for suburban development (page 88). "We offer no apologies for such tilting at windmills," says he.

Windmills indeed. Contemporary suburbia is not merely an extended version of Levittown but an entirely new animal. Polls have long shown that most people don't want to live in cities. The numbers now show that the majority has gotten what it wants. But residentidevelopment—and the shopping malls or new "hypermarts" (pag 79) that support it—does not account alone for the changing chara ter of suburbia. It isn't the bedroom but the boardroom—or st more the back office—that marks the essential unit by which ne growth must be measured. For with the arrival of the workplace—hit corporate headquarters or data-processing plant—all of the essential elements that go into making a city are now in the suburbs. Peop not only live there and shop there, but work there as well.

But if the elements of the city—both commercial and culturalare now replicated in suburbia, the forms they take are vastly diffe ent. The very essence of suburbia is the segregation and separatio of functions. "What emerges is not a true multifunctional core be rather a loose cluster of isolated specialized unifunctional subcenters," writes Peter Muller in *Contemporary Suburban America*.

The pattern he describes holds true not only for denser suburb but for the so-called exurban frontier. This "big new spread-ou small town" has been tracked down by journalist John Herbers an others. "Now, while the suburbs are evolving, another kind of deve opment is taking place. It . . . has the potential for causing further change on the scale of the migrations first from farms to cities ar second from cities to suburbs," writes Herbers in *The New Heartland*.

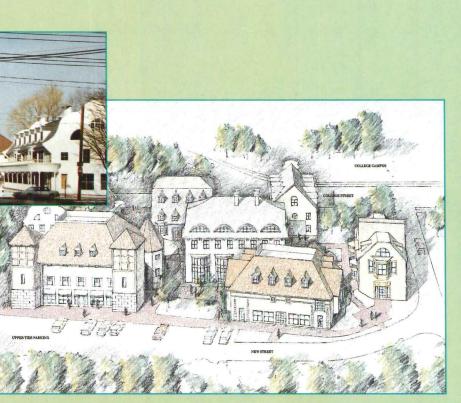
Exurbia's "nonmetropolitan metropolis" defies conventional definitions. Indeed, Herbers and other exurban geographers consider suburbia itself an out-of-date appendage of the 19th-Century citt As defined by Herbers, the typical exurban settlement contains population of 150,000 spread out over 250 square miles—a large land area than the city of Chicago with its 3 million inhabitants. I downtown is a strip 10 miles long, and its residents think nothing an 80-mile commute to work.

For Every Home A Car

The tool that perpetuates this pattern is the car. The automobile h effectively cut the cord tying suburb to city, ending a pattern dependence that characterized all pre-World War II suburbs. I deed, the true symbol of suburbia is not the single-family detache house but the car in its drive. Significantly, the most pressing proble cited by suburbanites in Southern California is not nuclear war depletion of the ozone layer but traffic.

According to Robert Cervero, author of *Suburban Gridlock*, mo and more communities are voting for anti-growth ordinances as means to control not only development but automobiles. The an growth movement itself, like the tax revolts of the early 1980s, proof of a sea change in suburbia. In California alone, according a report issued by the American Institute of Architects as part of Vision 2000 agenda, over 60 municipalities have no-growth statute The device masks a variety of motives, good and bad, from the desi to preserve rapidly vanishing farmland to the equally strong desi to preserve a given suburb's exclusivity.

Ironically, as the anti-growth movement gains steam, earli exclusionary laws—such as so-called hysterectomy zoning, which



-

The projects shown on the first four pages of this article represent new takes on old building types in suburbia. Graham Gund's Village Commons in South Hadley, Massachusetts, is a new kind of village mall broken up into separate buildings. The project's Post-Modern detailing may grow dated over time, but the site plan and program—which mixes retail, office, and the old-fashioned "apartment over the store" mark a new direction for malls.

Imported from France and packaged by Rafael Vinoly & Associates of New York, America's first Carrefour, a 330,000-square-foot "hypermart" in Bucks County, Pennsylvania, sells groceries, electronic and automotive equipment, apparel, and hardware.



g considered the quintessential urban building type, the scraper is increasingly common in suburbia. The 27-story cbrook Terrace Tower designed by Murphy/Jahn for a urb outside Chicago is typical in its monumental isolation.



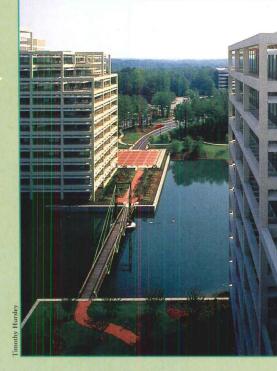
Although a vast improvement over most of its neighbors along New Jersey's infamous Route One, Princeton Forrestal Center lacks the housing to complement its office, retail, and hotel space. Thus the complex, designed by Sasaki Associates and Bower Lewis Thrower, remains an accessorized office park.



Design guidelines developed by RTKL Associates for Cascades Town Center recreate the good old American main street, with retail on the ground floor, offices and apartments above. The Center is to be the center of a new town in Loudoun County, Virginia (masterplan by Sasaki Associates).



In the design by SOM/Chicago for The Terraces at Perimeter Center, Atlanta, spec office buildings are treated as background for an elaborate wooded landscape whose stream is spanned by a cable-suspended wooden footbridge.



designed to restrict apartment sizes and thereby hold down the school-age population—are slowly giving way. The Supreme Court's refusal to hear an appeal of the Mount Laurel decision striking down exclusionary zoning and mandating the construction of affordable housing in a New Jersey community demonstrates the new need—albeit court-ordered—to reconcile private interests with public needs.

And therein lies the opportunity for architects and others who see the basic problem of suburbia as the absence of a public realm, be it social or physical. Public values have come late to suburbia, but they are there, most visibly, perhaps, in newly formed conservation groups. Land trust proponents, for example, would do for suburban Connecticut what Central Park did for Manhattan—preserve and control nature in the public interest. These concerns animate architectural schemes as well, from Eric Kuhne's Riverwalk, a latter-day Central Park solution (page 85) to Steven Holl's hypothetical designs for Phoenix, Cleveland, and Buffalo, projects in which he seeks to preserve the country by setting physical limits to the city it surrounds (page 90–91).

Suburban Organization

There remain, however, dramatic differences between the public realm in the city and its equivalent in the suburbs. The new suburb may contain all the elements of a city, but that does not mean urban solutions are always appropriate. The so-called suburban city is a perfect case in point. Known variously as the suburban activity center, or, more paradoxically, the urban village, this concept's many names are themselves indicative of a confused identity. Born of necessity, this high-density development is situated on a highway interchange, on top of an old town, or on the leeward side of a regional airport. It is neither urban nor suburban in character. "We lack a convenient name for this new city which has all parts of the city but no need for a center," writes Robert Fishman in his fine study of suburbia entitled *Bourgeois Utopias.* (Fishman himself cannot resist proposing his o term, "technoburb.")

Muller attempts to codify the various patterns of "minicities," use his term for urban villages, which he classifies as nodal (form over old towns like Stamford, Connecticut or White Plains, N York), linear (along highways), or circumferential (beltway develment, like Atlanta's Perimeter). The very diversity of potential p terns proves the absence of a universal vision for suburbia that min be its equivalent to the city grid. In this regard alone, the urb village differs dramatically from its most immediate predecessor, New Town of the 1960s. William H. Whyte, author of *The Organition Man*, writes in a new book called *City*, "The new town movem of the sixties had a very coherent set of aims; the physical vision v coherent too and if it failed, it went down with philosophy inta The current growth, by contrast, is quite free of utopian constraint

Shaped by a free market, urban villages can be ugly and evanti-social places. Criticism leveled against Tysons Corner, Virgin in a report issued by the Urban Land Institute (page 82) indicts entire species. "Urban villages," says Joseph Brown of EDAW we wrote the ULI report, "suffer a lack of overall physical unity, poor defined edges, and a transportation system lacking in hierarchy a identifying graphics. Pedestrian linkages and accessibility are pracally non-existent. Moreover, there is little sense of community public life. The typical site design focuses inward, and open spau usually limited to private use, are few." Brown's recommendationare equally generic. Set limits to the village and its component nei borhoods, he says; add housing and mass transit; capture "four land for public parks and pedestrian spaces.

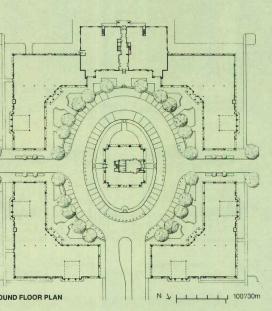
Other suburban communities, both new and old, are searching the right mix of functions. The new town of Reston, Virginia, example, is building a new downtown of office buildings, hot restaurants, retail, and movie theaters that will complement exist



The interior atrium of Gateway Center, a spec office building in Tuscon, Arizona, designed by Leason Pomeroy, is a lush garden that provides relief from the desert outside. Regional architecture is also echoed in color, materials, and form (below).







Somerset Square, a new open-air mall nearing completion in Glastonbury, Connecticut, that was designed by Robert A.M. Stern Architects, is a slice of strip retail turned in upon itself. Slow traffic will enliven the square.



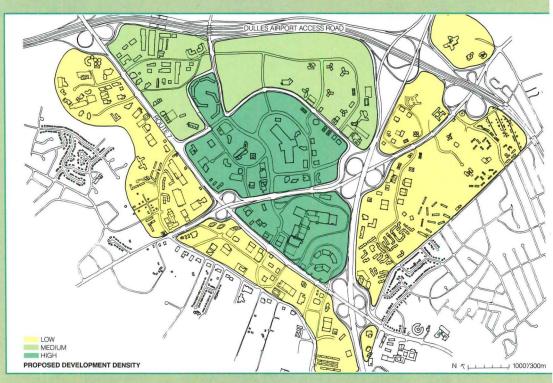
The parklike Dulles Corner Office Park in Fairfax, Virginia, designed by a joint venture of EDAW and WZMH Architects, is organized around an eight-acre central park, which has its own lagoon system, pergolas, and tennis courts.

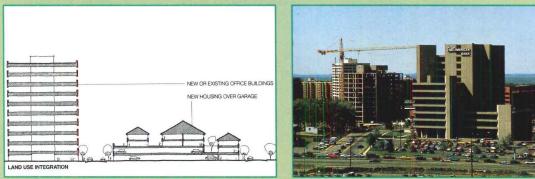
Reordering the Suburbs

Urban Villages

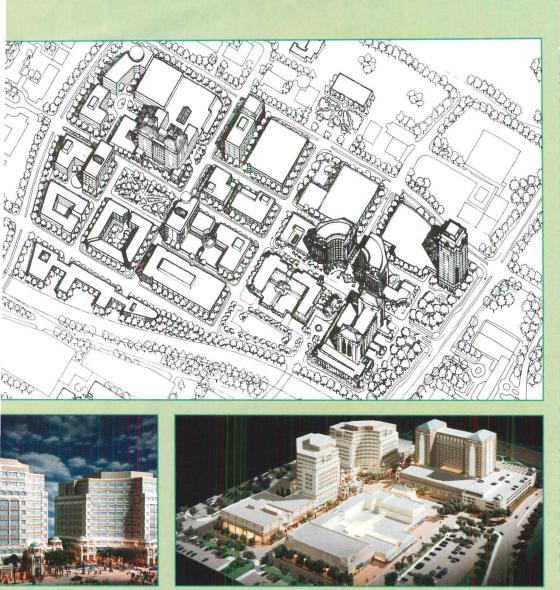
When a rural crossroads such as Tysons Corner, Virginia, is transformed rapidly into the country's 12th largest business district, the result is a prototype of "early urbanization, raw and successful, and ugly as all getout," says Joseph Brown, of EDAW, Inc. Along with ADD, Inc. architects and planners, EDAW analyzed the physical qualities of Tysons as part of an Urban Land Institute study. In evaluating "suburban activity centers" such as Tysons, a satellite of Washington, D.C., the team pinpointed shortcomings such as a lack of physical unity, site design that disregards pedestrians, traffic congestion, and little sense of community. In response, the report recommends changing zoning laws to allow urban-style development. Not only is higher density encouraged in Tysons's center, but new districts are proposed within the now-undifferentiated whole (plan, right) to allow pedestrian scaling and promote scattering of retail functions. Also recommended are better integration of land uses (section, right) with retail and office functions attached to parking structures; introduction of housing; addition of public institutions such as libraries; and creation of an internal roadway loop to relieve busy main arteries. Vernon Mays

Although the ill effects of suburban creep may be most graphically evident in rural and exurban areas, the importing of suburban building types—and the attitudes they express-into established cities can have an equally insidious effect. The shopping mall may be the most visible arriviste, but suburban-style condominiums and apartment buildings also threaten to break up the urban domain into private islands in which, says San Francisco architect Daniel Solomon, "the public realm is reduced to walls and garage." Such is the case in San Jose, where residential design guidelines by **Solomon & Associates are devised** to reinforce the relation between separate multi-unit housing projects and "to improve the quality of community that new housing creates in aggregation." A comparison of pre-quidelines projects (bottom left) and new designs constructed since the guidelines were voted into law two and a half years ago (top) proves its specificity in spelling out everything from site design to building articulation (bottom right) to materials. Daralice D. Boles









New Town's New Downtown

Reston, Virginia, has long been considered the quintessential New Town of the 1960s in both its successes and its failures. Although close to 47,000 people live there and another 25,000 work in the area, Reston is less of a town than a bedroom suburb surrounded by office parks. Twenty years after developer Robert E. Simon Jr. (the **RES of Reston) unveiled his plans** for a new garden city 18 miles west of Washington, D.C., Reston Town Center Associates—a joint venture of developers Himmel/ Miller Klutznick-Davis Gray Co. and Mobil Land Corporation-believe the community has finally reached the critical mass necessary to support a true, mixed-use downtown. Leaning towards the urban end of the urban/suburban spectrum, the town center (top) designed by **RTKL** Associates of Baltimore (Sasaki Associates, landscape architects) mixes 2 to 3 million square feet of office and retail uses with 1000 hotel rooms, 500 to 800 units of urban housing, and various cultural or community facilities, including a possible museum. The first phase of this development (bottom left and right), which is now under construction, includes two 11-story office buildings, two department stores and assorted shops, an 11-screen cinema, a 500-room hotel and health club. Daralice D. Boles

idential neighborhoods (page 83). The issue of mix in a mixed-use elopment also pertains to Princeton Forrestal Center on Route e near Princeton, New Jersey (page 79). The plan by Sasaki Assoes and Bower Lewis Thrower centers on a new "main street" and ntroduces the idea of office over shops, a deceptively simple but erently urban device absent in single-use suburban zones. The igners went too far, however, in removing the car from main eet, thus creating a Disney-style open-air mall that dies at five ock and lacks any connection to surrounding suburbia-although latter problem is not of their making. Although housing is part he original Forrestal plan, none has yet been built. This imbalance Whyte to term the development a "fine village center without a age. The trouble is not too many people," he writes, "but too few." ust as Forrestal has yet to be carried through, so many suburban jects seem incomplete. Robert Stern's Somerset Square in Glasbury, Connecticut (page 81), a project which exemplifies the real of strip retail, was stripped of its housing and remains for better worse a mall. Helmut Jahn's suburban skyscraper in Oakbrook, nois (page 79), could signal a new and potentially laudable direcn in office planning-provided the open space set free by the centration of offices in a single tower is preserved. Other projects y be praised as pieces—such as the park in EDAW's office park Dulles Corner (page 81) or the main street designed by RTKL sociates for the Cascades development in suburban Virginia—but y remain unintegrated parts that finally perpetuate the larger oblem.

om Critics to Apologists

e very role architects could play in solving that problem may be nted by a tendency to sneer at the suburbs and by the desire to pose solutions rather than draw them out of what is there. The e against the "slurbs," as critic Ada Louise Huxtable called it, has been carried by eloquent prosecutors from John Keats, who named the suburban antihero of his novel *Crack in the Picture Window* John Drone, to the inimitable Whyte, whose *Organization Man* condemned generations of white-collar suburbanites. *The Man in the Grey Flannel Suit* still dominates our perceptions—although the author of that novel, Sloan Wilson, has claimed that his book was misread and that his hero was in fact rebelling against the suburban conformity he has come to symbolize.

Such is the power of a metaphor set free of its context. Similarly, says Fishman, the word "suburb" has been used as a buzz word for "conformity" in the 1950s, for racial segregation in the 1960s, and for the decline of the center city in the 1970s. Thus, apologists for suburbia fight an uphill battle. Herbert Gans, sociologist and author of *The Levittowners*, has written that "If Levittowners report that they find their community satisfying, as they do, their opinion ought to be respected." But it is not, says architectural historian Lois Craig of the Massachusetts Institute of Technology in her essay "Suburbs," published as an issue of *Design Quarterly*.

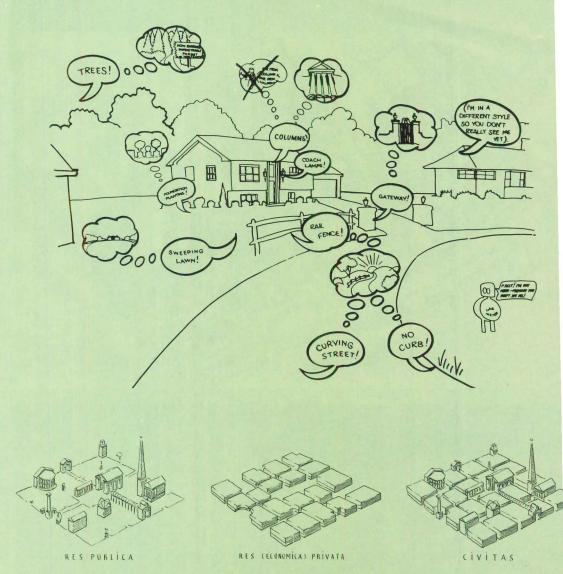
"Architects and physical planners are slow to reassess the suburb, possibly because they are particularly gripped by aesthetics, and therefore images," writes Craig. Twenty years after Robert Venturi urged that we learn from Levittown, the AIA's recent Vision 2000 report heaps scorn upon suburbia: "These new areas are populated by transient, career-minded families, who have not developed allegiances to these areas, beyond a concern for property values. There is also little interest in supporting nearby cities that at one point would have been the center of employment for outlying areas."

The clue lies in the reference to cities, places in which the impact of planners and architects is self-evident. "The case against the technoburb can easily be summarized," says Fishman. "Compared even to the traditional suburb, it at first appears impossible to comprehend. It has no clear boundaries; it includes discordant rural,

Reordering the Suburbs

Venturi's Suburbanism

"Learning from Levittown," as the cartoon at right is subtitled, neatly summarizes the approach to suburbia taken by Robert Venturi, **Denise Scott Brown, and Steven** Izenour. In this deceptively simple comic is enscribed an entire lexicon of suburban symbols—or clichés—and the dreams they embody. The cartoon also comments on the apparent willingness of would-be homebuyers to ignore inconsistencies ("I'm a different style so you don't really see me yet"). Venturi himself has put some of his symbols to work in a new subdivision now under construction in Florida (page 23).



West Coast (page 88).

Leon Krier's urban vision (right) is in many ways Levittown's antithesis. Krier's proposal that the solution to sprawl is to build cities in suburbia has influenced many architects now actively studying or building there, from Andres Duany and Elizabeth Plater-Zyberk (page 86) to the Pedestrian Pocket proponents on the

urban, and suburban elements."

Theorist Christopher Alexander, who preaches a kind of incremental architecture, supports this conclusion in his description of design as a process of setting barriers and distinctions. Architects, he writes, in his essay entitled, "A city is not a tree," are endowed with a "basic intolerance for ambiguity... we are trading the humanity and richness of the living city for a conceptual simplicity which benefits only designers, planners, administrators, and developers."

In his conclusion, Alexander echoes the concerns of a new class of scientists who study chaos. "Where chaos begins, classical science stops," writes reporter James Gleick in his book on the subject. Chaos theorists "had an eye for pattern, especially pattern that appeared on different scales at the same time. They had a taste for randomness and complexity, for jagged edges and sudden leaps. They believe that they are looking for the whole . . . In a universe ruled by entropy, drawing inexorably toward greater and greater disorder, how does order arise?" writes Gleick. Just as scientists are finding order in chaos, so architects and architectural historians are gradually coming to grips with suburbia. Indeed, Gleick might be describing J.B. Jackson, a writer and historian who sees beauty in parking lots and other pieces of the vernacular landscape. Jackson's broad but difficult agenda has been adopted by more and more architects in this post-Venturi era.

A Division of Disciplines

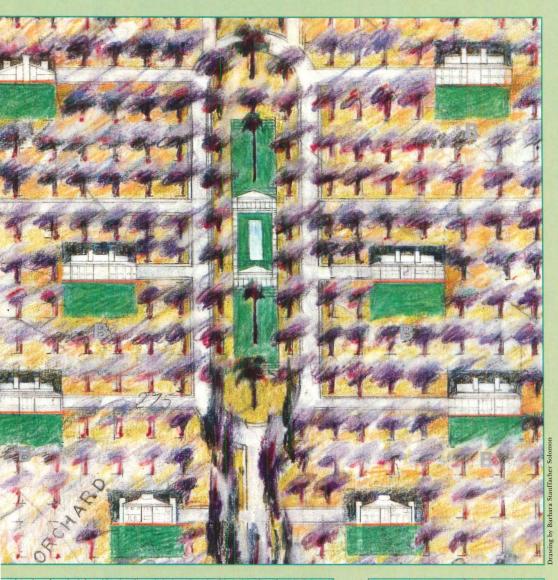
Just as the first scientists studying chaos were unaware of overlaps in their research, so suburban design is divided among the disciplines and falls, more often than not, between the cracks. Of all the facts found in a two-day symposium on suburban design held at Berkeley in March, the most shocking for many participants was the revelation that not one of California's legion planning departments had a traffic engineer on staff. The state hires many of them—but in the Traffic Department. Thus, in a classic case of left and right hands at od the traffic engineers are pressing full steam ahead with new highv plans for Fresno, a small town east of San Francisco that has be invaded by the silicon industry, while the planners contemplate slo growth plans.

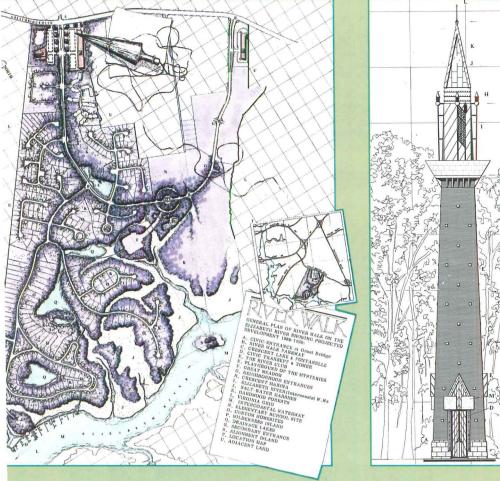
That the symposium took place at all was something of a mirafor it marked the first joint-venture project by Berkeley's plann and architecture departments—a source of pride for the school t is in its own way appalling. If planners and architects don't t together in school, when will they meet?

The symposium also afforded the chance to compare two comp ing alternative models for suburban development—the Traditio Neighborhood Development or TND developed by Andres Dua and Elizabeth Plater-Zyberk of Miami and the Pedestrian Pocke model developed by several West Coast architects, most prominer Peter Calthorpe and Daniel Solomon of U.C. Berkeley and Do Kelbaugh of the University of Washington, Seattle.

The New/Old Town of the TND

Duany/Plater-Zyberk have been thinking about the suburbs long than most of their contemporaries, and they have the built work prove it. Their town plan and design guidelines for the resort comunity of Seaside, Florida, executed from 1983 to the present, we the first of a long-running series of developer-sponsored town pla The firm has now perfected a "charrette" process whereby they a a team of landscape architects, civil engineers, and other consulta travel to a given site and spend a week on charrette, developing only a plan for the community but full urban design and architectu guidelines for its execution by other architects. Much of the proc has been computerized; built into the model are the generic char teristics of a traditional small town. The architects essentially uple local color—common materials and building types—along with





A Suburban Orchard

In their design for Lee's Orchard, a residential development in **California's Santa Clara Valley** (aka Silicon Valley), Daniel Solomon and Barbara Stauffacher **Solomon of San Francisco set out** to prove that subdivisions "need not substitute the golf course landscape of suburbia for California's agrarian past." Arguing that the picturesque landscape, as imported from England, has become a suburban cliché, these designers prefer what they consider to be a more American model—the agrarian grid. Their plan places 13 single-family houses within a new working fruit orchard, using the arid of trees as the principal landscape feature. The orchard itself serves as common area, its maintenance underwritten by production. The houses are modeled after California farmhouses, set in line with the orchard grid.

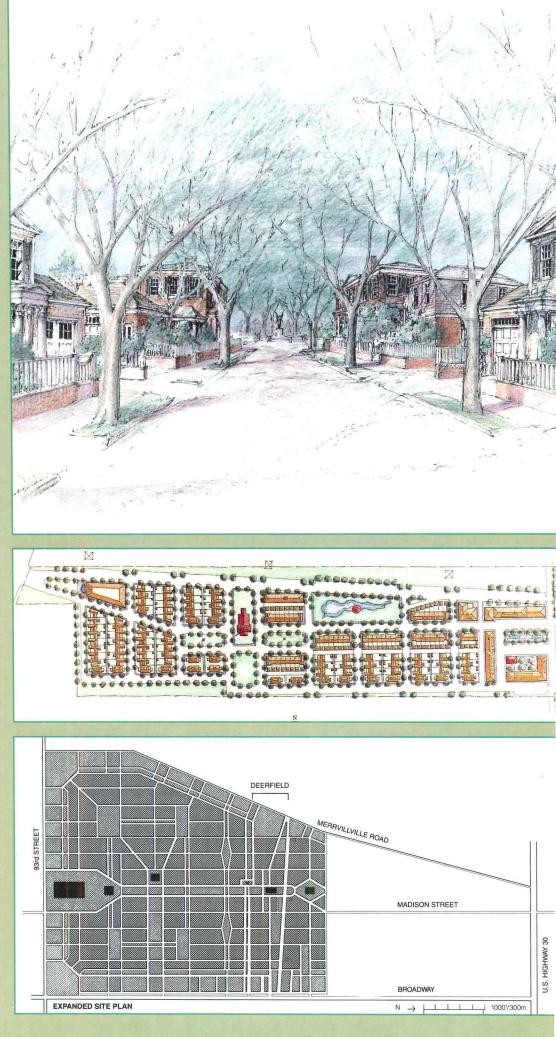
The development also taps into the history of this part of California. "When I was a child, the Santa Clara Valley and the lower hills surrounding it were covered with orchards," says Barbara Solomon, author of Green Architecture and the Agrarian Garden. "After the war developers systematically bulldozed the orchards away. I don't think they paused to think of incorporating them into their housing plan." Perhaps Lee's Orchard will change their minds. Daralice D. Boles

Suburban Central Park

Harking to Frederick Law Olmsted's semi-urban park schemes, River Walk, a three-phase development in Chesapeake, Virginia, relies on a processional parkway to lend it coherence and identity. **Designed by Eric R. Kuhne & Asso**ciates of New York, the 484-acre, 1400-unit subdivison is strung along a two-mile, U-shaped parkway punctuated with hierarchical "aateways," which mark entrances to neighborhoods ranging from \$60,000 condominium clusters to \$750,000 riverfront homes. Similarly, public amenities such as an elementary school, a day care facility and two commercial centers are located near junctions defined by curving brick walls, ironwork, copper roofs, and pavers that point north—"to orient people in a setting where everything twists and turns," explains Kuhne. Each gateway doubles as gathering place and landmark (like the tower, left). "Such civic design treats the landscape architecturally," says Kuhne. "It takes spaces normally regarded as residual and makes them formal and public." Ziva Freiman

Reordering the Suburbs

In the ten years since their plan for the town of Seaside, Florida was completed—and perhaps more significantly published—architects Andres Duany and Elizabeth Plater-Zyberk of Miami have designed literally dozens of similar developments in New Hampshire, Arkansas, Maryland, Virginia, Texas, and other states. Each "new town" was designed in a matter of days through an on-site "charrette" involving not only the architects and their developer clients but a full cast of consulting landscape architects, engineers, and often local architects. The team conducts a massive factfinding tour, studying everything from local building materials to the age of trees on the site, then plugs these findings into a computerized model and produces a plan for the property, backed up by urban and architectural codes that enforce its implementation long after the charrette is over. The Village of Deerfield in Merriville, Indiana (this page), is a typical product. Duany and Plater-Zyberk completed a master plan, zoning code, architectural guidelines and test unit designs for the 40-acre mixed-use development. Their plan calls for 174 housing units, 115,000 square feet of mixed retail and commercial development, public buildings such as a school, church, post office, and day care, and several public squares (top right). Although modeled on traditional American towns, the Deerfield plan has been modified to suit its site. "The town has been turned inside out," says Plater-Zyberk, who notes that the commercial center, normally located at the heart of a town, has been pushed to one edge of this site where it adjoins a preexisting highway (middle right). Main street runs perpendicular to this strip, terminating in the town's civic center. The "built-out" version of the plan (bottom right) repeats this pattern on adjacent properties, shaping a traditional, linear town out of a series of separate planned unit developments. The extended plan also illustrates a key aspect of this model, namely its repudiation of the hierarchical traffic patterns now dominant in suburbia. Echoing Christopher Alexander's thesis that "a city is not a tree," Duany takes issue with the typical artery/cul-de-sac dichotomy of suburban road systems, blaming the "funneling" effect of that pattern for suburban gridlock. He proposes instead a nonhierarchical grid that permits traffic to "filter" through a neighborhood on many routes. Daralice D. Boles



ntions

litional neighborhoods achieve ain social objectives: y providing a full range of housypes and workplaces, age and nomic class are integrated and ponds of an authentic community formed . . .

y promoting suitable civic build-, democratic initiatives are enraged and the organic evolution ne society is secured . . .

d Allocation for Civic Buildings

A minimum of 5 percent of the area of a TND shall be dedid to Civic Lots . . .

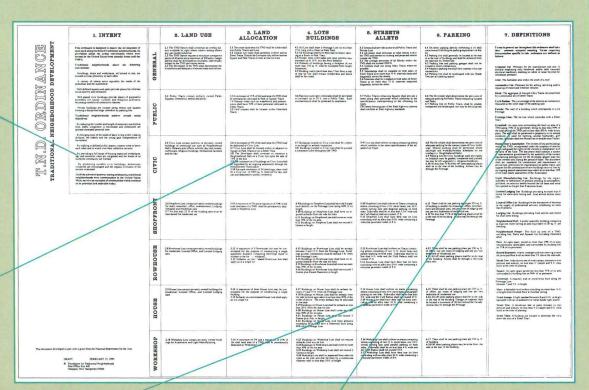
The Developer shall covenant to struct a Neighborhood Hall on a c Lot upon the sale of 75 percent ne lots...

For each increment of 50 dwella, there shall be a Civic Lot of 00 sq ft reserved for day-care and dedicated to public hership.

eets and Alleys Residential Areas

House lots shall enfront on ts containing streets consisting wo ten foot travel lanes and allel parking on one side. walks shall be no less than four wide and the Curb Radius shall exceed 25 feet.

5 House lots shall have their rear ine coinciding with an alley ik ten feet wide containing a lestrian pavement width of four



Definitions

Greenbelt: An open area surrounding the built-up area of a TND along 75 percent of its perimeter; being no less than 50 percent of the total area of the TND and no less than 200 feet wide at any place. The area shall be preserved in perpetuity in its natural condition, or used for farming, animal husbandry, golf courses, or subdivided into House lots no smaller than five acres. Coopying the New Old Town Generalizing from their town planning experience, Duany and Plater-Zyberk have produced a prototypical zoning ordinance called the Traditional Neighborhood Development (above), as an alternative to planned unit developments. The TND's one-page matrix is revolutionary, although the guidelines can also be written up as standard "legalese."

gencies of the given site—wetland locations, etc.—and produce a v/old town plan. (One such plan for the village of Deerfield, Inna is shown on page 86.)

The designs are naturally limited by the developer's program, and nough the architects try to influence their clients, they have yet design a fully integrated town plan. But the architects have now ved beyond this case-by-case approach to suburban designs, deoping a generic version of the new/old town that is embodied in ir Traditional Neighborhood Development or TND. Designed to voted into law as an alternative to the Planned Unit Development, TND is an ordinance that would replace single-use PUDs with ced-use developments designed as small towns.

n sticking to the program of planned developments, which are accepted mode for suburban building today, the TND proposes evolution from within. "It's an overlay code like the PUD that uires no education for planners," says Plater-Zyberk. It's an op-1 and hence, like the PUD it would replace, less likely to meet n resistance. Indeed, the first communities in New Hampshire, ere the Foundation that administers the TND is located, have ed it into law and Loudoun County, Virginia, should do the same is next election.

In some states, what we're doing is very closely related to growth tagement," says Plater-Zyberk. "It all comes down to the fact that aburbs were built in concentrated towns instead of sprawl, we ildn't have the problems of loss of land or traffic congestion. The es are saying 'no building.' What people have to see is that there way to build."

nd just what is that way? Picture a typical New England town, you have the basic mold. The TND, which is designed as a -page matrix for ease of implementation, calls for alleys and main ets, for tree-lined sidewalks and public squares. The TND starts n aesthetic premises, although the architects fully recognize and even welcome the result, which is a benevolent form of social engineering. "If you say a sidewalk has to be X dimension, that means you can have a cafe," says Plater-Zyberk. "Design affects space, and space affects behavior." Indeed, the TND's statement of intent is a virtual manifesto. "Traditional neighborhoods achieve certain social objectives," it reads. "By bringing most of the needs of daily living within walking distance, the elderly and the young gain independence of movement . . . By providing a full range of housing types and workplaces, age and economic class are integrated and the bonds of an authentic community are formed . . . By promoting suitable civic buildings, democratic initiatives are encouraged and the organic evolution of the society is secured."

But a full range of uses is absent from the TND and therein lies the rub, say critics who view the ordinance as a brilliant but limited product. Implemented by suburban developers, the TND will inevitably reflect the bias of the market it serves. Affordable housing and public transit are just two of the ingredients that these essentially private developments are likely to lack.

Also missing from the TND, beyond a rather utopian call for artisan workshops, is anything approximating the massive office development common in contemporary suburbia. The architects claim that their model could be modified to accommodate more office or retail development, as is the case in their design for Kentlands, a development in Gaithersburg, Maryland, that incorporates a regional shopping mall bordered by main street on one side and a highway on the other. Plater-Zyberk also takes issue in general with back-office norms, claiming that the preferred 30,000 sq. ft. footplate "is a myth. What manager covers that area in one day?" she asks. Why not stack the functions, or split them up?

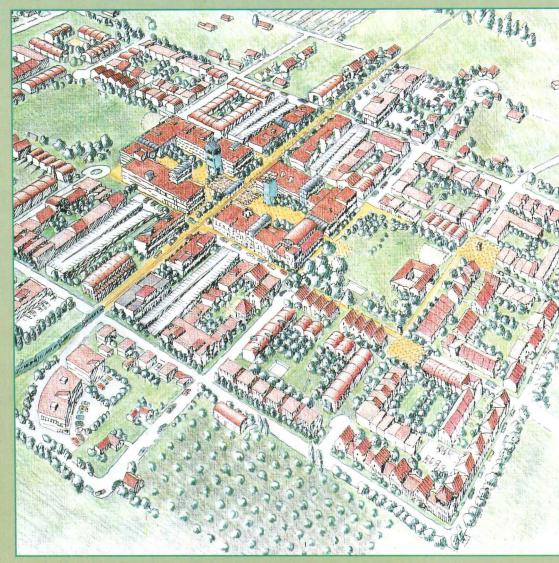
Although limited to the PUD process, the TND represents a new approach to suburban development, one that taps into a great townplanning tradition that extends from Ebenezer Howard and

Reordering the Suburbs

Pedestrian Pockets

A pedestrian pocket, says architect Peter Calthorpe, is a "cluster of housing, retail space, and offices within a ¼ mile walking radius of a light rail system." That may sound simple, but it is actually a very sophisticated concept initially proposed by a few West Coast architects that differs in significant ways from other schemes for reordering suburbs.

First, their proposal is production as well as consumptionoriented; most pedestrian pockets would provide substantial amounts of working as well as living and shopping space. Second, it reorders suburbs through the reorganization of their transportation systems. Calthorpe envisions the pedestrian pockets as walkable enclaves built along the many underutilized or abandoned rail lines in cities. Other mass transportation options, such as dedicated roadways for buses and car pools, might serve sites without rail access or as preludes to a light-rail system. Third, it emphasizes the functional rather than formal aspects of buildings. Each pocket, for example, would have a variety of housing, support facilities, and recreational areas for young and old, large families and small; the specific style of buildings in each precinct matters very little, and a diversity of formal types is actually encouraged.



Raymond Unwin—whose book *Town-planning in Practice* is Duany's Bible—to Clarence Stein and even James Rouse. Its innovation is as much a matter of means as ends, for the one-page code could revolutionize the way in which the suburbs are built. Like design guidelines for residential development in San Jose drawn up by Daniel Solomon (page 82), the document is prescriptive, not proscriptive—it tells builders exactly what to do and in what dimensions. Perhaps most astonishing within the context of typical suburban subdivisions, however, is the amount and distribution of public space allocated in the ordinance for civic lots (5 percent of the land area), parks and squares (15 percent), and a greenbelt (50 percent).

This most essential element of Duany and Plater-Zyberk's model has not been picked up by those who would copy them. "The New Town, The Old Ways," as the Seaside slogan goes, is a potent image, but surrogate Seasides have mimed its forms without absorbing the planning principles behind them. Unfortunately, the seductive watercolors produced by Duany/Plater-Zyberk for each charrette (page 86, top) accentuate style over substance. "We're very sensitive to that criticism by architects," says Plater-Zyberk. "But our architectural code is not as prescriptive of style as our drawings might seem. It does deal with the need for a rational basis for style that is related to place, history, or geography. Our drawings are meant for developer marketing. We've decided to do that so that we can get these things built. Then people can judge."

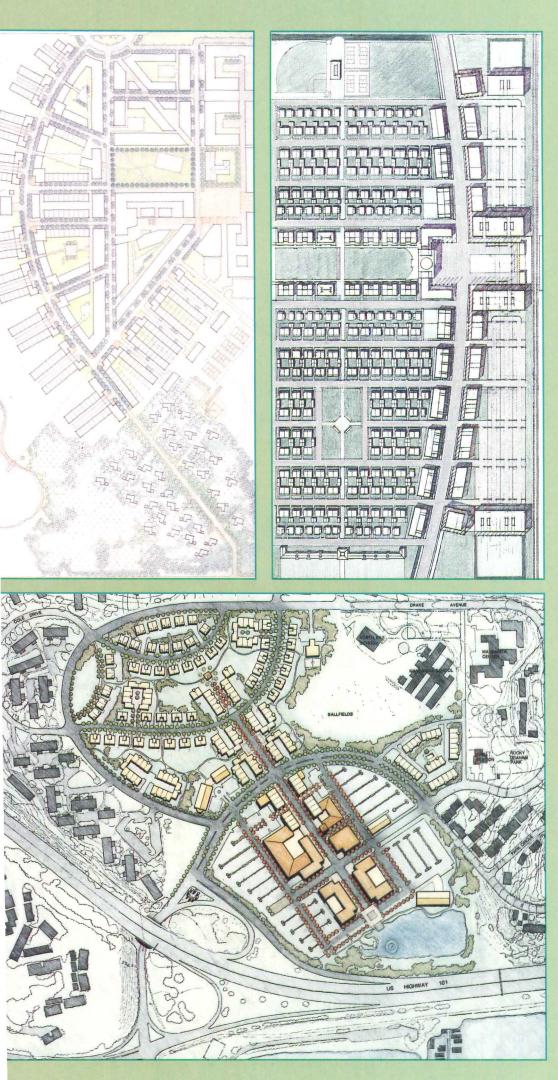
Pockets for Pedestrians

One of the most interesting results of the Berkeley symposium, say the architects who attended, was their recognition of just how much the TND and its West Coast equivalent—the Pedestrian Pocket—had in common. Both models posit a new vision of the old small town, bounded by a greenbelt, centered on a commercial and retail district, and composed of collected neighborhoods, each in turn centered on a school or other civic building. But, where the TND depends up developers for implementation, the Pocket requires significant g ernment intervention, not only in setting the site and size of a to or "pocket" but most significantly in building the light rail line t links one pocket to the next.

The heart of the pedestrian pocket ideal is the notion of a walk town. A quarter-mile radius would set the town's limits at a maxim ten-minute walk from the central station. The town would be tot mixed, combining retail, residences, and office development. The program also accommodates those who are hard-to-house in conv tional suburbia—single-parent families, elderly, and handicapp "Up to 2000 units of housing and 1,000,000 square feet of of space can be located within three blocks of the light rail station us typical condominium densities and four-story office configuration claims Peter Calthorpe.

Unlike the TND, the Pocket accommodates large-scale office de opment—the engine driving contemporary suburban growth—a it provides for the automobile through large parking facilities final difference between the two models is the proposed density development. The TND is flexible; its density can be loosened tightened up to suit a given program. The Pocket is more explic urban in character, its residential blocks composed of three-st walkups and two-story townhouses. The plan also projects emp ment for 16,000 people within four stops of the light rail.

Pedestrian Pocket proponents argue that this density of mi development is the only way out of the coming suburban crisis. the year 2000, the projected peak-hour average speed on the Diego freeway from the Los Angeles International Airport to Sur Boulevard is ten miles per hour," says Solomon. "If one likes to k track of disillusioning facts this is a very big one . . . on the scale the Ostrogoths' Sack of Rome or the Fall of the Third Reich. Con the gridlock," he maintains, "comes the revolution."



Each stage in the development of pedestrian pockets has brought further refinements to the concept. The original proposal, funded by the National Endowment for the Arts, was produced by Calthorpe and architect Mark Mack for available sites in Marin County north of San Francisco (facing page). While their scheme contained the basic elements-the rail line, the mixed uses, the open spaces providing pedestrian access to the centerits extreme order and symmetry gave it an idealized, utopian quality. A week-long charrette at the University of Washington (soon to be published in book form by the **Princeton Architectural Press**) revealed the flexibility inherent in the idea. Eight architects-Calthorpe, Mack, Donald Prowler, **Daniel Solomon, Harrison Fraker,** Doug Kelbaugh, David Sellers, and Robert Small—paired off with students to design four alternative pedestrian pockets for a site south of Seattle. The Mack/Prowler scheme (top left), with its radiating apartment blocks, reveals the influence of the German housing colonies from the 1920's, while the Solomon/Fraker scheme (top right) organizes the housing along the classic American grid.

Solomon and Calthorpe have continued to develop the concept with their students at UC Berkeley. Meanwhile, Calthorpe and SWA **Group have been commissioned** to design a pedestrian pocket in Marin City, California, a relatively poor community at a major bus transfer point for commuter buses outside San Francisco (bottom left). It will contain a main street of offices and stores that leads from the commercial section to a residential area woven into the existing street pattern. Parking is kept to the fringes of the site.

Other communities considering the pedestrian pocket idea include Albuquerque, New Mexico, and San Jose, California, as well as Marin and Sonoma counties outside of San Francisco. With its implementation has come a number of refinements to the pedestrian pocket idea, such as use of transfer rights and agricultural zoning to protect open space around each community, the creation of assessment districts and redevelopment areas to raise funds for infrastructure work, and the development of phasing plans to allow for incremental growth. The one issue that will remain unresolved until a pocket is actually built is whether this new suburban form will, in fact, wean suburbanites from their cars and their commutes. **Thomas Fisher**

Reordering the Suburbs

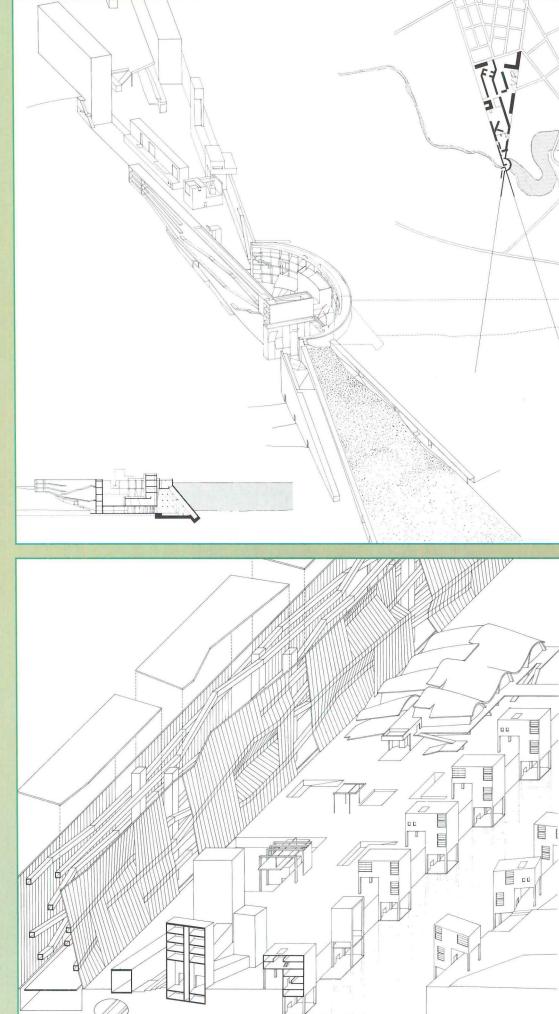
Edge of the City

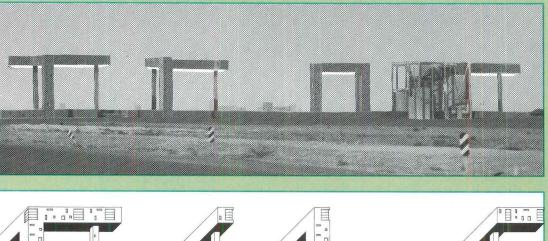
Steven Holl would invert the way we look at suburbs. In his proposal for the edge of three American cities—Rochester, Cleveland, and Phoenix—which was unveiled at the recent Museum of Modern Art exhibit of his work, Holl views the suburbs "from the landscape back into the city. We must look at the suburbs," he says, "in terms of their effect on the land," with the destruction of open space, forests, and farmland. "You become less accepting of suburbs as they are," he adds, "when you see them in those terms." Holl attempts in these projects not "merely (to) set limits to the destruction of natural landscapes," but actually to restore the many "partially ruined landscapes" at the edge of cities.

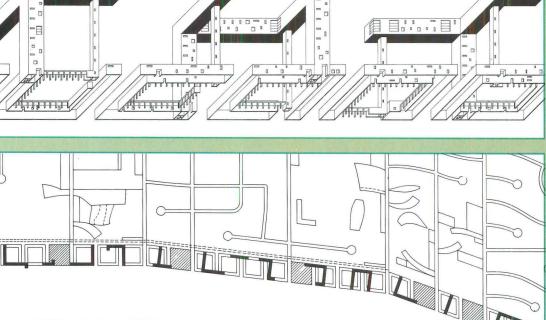
He also attempts to counter the sameness of suburbs by employing "a different strategy for each site, that illuminates particular meanings" and creates a sense of place through reference to its history and geography. Implicit in that approach is a critique of the generalities and abstractions of the planning profession; "We had to turn this into an architectural problem to find the necessary variety and specificity," he says.

In his scheme for Phoenix (facing page top), Holl emphasizes the contrast between the city and desert, while making a reference to the history of the place, with its many irrigation canals built by the now extinct Hohokum Indian tribe. A line of open cubic structures would define the edge of the suburban sprawl, embrace a section of the desert to be preserved, and frame views of the distant mountains from the city. Loft-like living units, entered through communal courtyards at the base of each cube, would occupy the structures' hollow concrete columns and beams. Adjacent loft buildings would contain office and commercial space and cultural facilities would be suspended within some of the open frames.

At the periphery of Cleveland, Holl implies an urban edge by creating five crossover points between the suburbs and rural areas. Those X-shape "stitches," with buildings on one side and open space on the other, would not only bring the natural landscape deeper into the city but would create needed suburban centers. Holl envisions one of the centers forming a dam across a river (top right). The dam and its adjacent structures would contain, among other things, a hotel, cinema, and gymnasium; the area behind the dam would feature an artificial lake, fish hatchery, aquarium, and botanical garden.







The little-used Erie Canal is the site for Holl's Rochester proposal (facing page, bottom). Along the urban edge of the canal, Holl calls for a discontinuous bar of workspaces whose ramped and angled interiors would be used for various electronic-based occupations. Social and cultural facilities would stand next to the bar structure. Along the canal itself would run a pedestrian walk and two rows of detached houses, aligned with each other on the urban side and unaligned on the rural side.

However utopian these proposals may seem, they address a very real problem with major funding by the National Endowment for the Arts, the Graham Foundation, and the New York State Council on the Arts. They also bring a fresh perspective to our thinking about the suburbs, one that forges a sense of place and of environment from the specific history and geography of a site. Thomas Fisher

Revolution, yes; but will it turn towards more urban solutions? erbers' research suggests otherwise, and pocket proponents themves recognize that their model is in its own way utopian. Acknowlging that left to their own devices, developers—and the people ey house at work or at home—won't produce a Pocket plan, Soltion et al look to government to act for the public good.

They also rely on a transit device—light rail—that has its own pilities. Although undeniably cleaner and cheaper than highway istruction, light rail still represents a substantial upfront infraucture investment at the state or county level. And it is a mode transport that many suburbanites cannot or will not adopt. Pedesun Pockets will work for those lucky enough to live in one and nmute by rail to work in another, but what of the poor suburbanite o commutes out of pocket, so to speak? Might he be better served buses or minivans? Or still more likely, the private car? Calthorpe wers that "express bus systems could not substitute for light rail ause their peak capacity is lower and their transitory nature Idn't sustain the land values needed for mixed-use development." t it is the very transitory nature of so much suburban development t threatens the life of a light rail line.

e Pastoral Impulse

thorpe himself relays the tale of a meeting with Leon Krier, whose an theory has influenced so many architects. Krier asked why the lestrian Pockets were not simply pulled together to form a "real n." Calthorpe replied that he wasn't trying to urbanize the subs, but to salvage those characteristics of suburbia that drew people re in the first place: privacy, open space and mobility.

Ie has a point. For both the Pedestrian Pocket and the TND tap o a strong nostalgia for an idealized, rural America shared by hitects and ordinary citizens alike. As such, these two planning dels stand heirs not only to the great garden city tradition but to a broader philosophical tradition of pastoralism that formed the basis for the garden city movement and distinguished this country's suburban development (see Books, page 121, for a review of John Stilgoe's *Borderlands*, a history of suburban nostalgia).

Cultural historian Leo Marx defines this "pastoral impulse" as "the urge, in the face of society's increasing power and complexity, to retreat in the direction of nature. The most obvious form taken by this withdrawal from the world of established institutions is a movement in space . . . away from a relatively sophisticated to a simpler, more 'natural' environment . . . like Emerson's New England village common, Thoreau's Walden Pond or Robert Frost's pasture." This impulse animates suburban development from Llewellyn Park to Sunnyside Gardens. It is present, albeit in debased form, in Levittown and Columbia, Maryland. And it is revived in the TND with its greenbelt, and the Pedestrian Pocket with its ten-minute walk to nature.

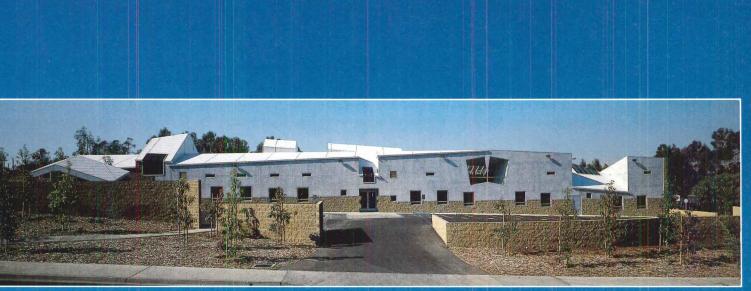
It is a strong, and distinctly American urge. "Americans are always starting over somewhere. We build what we don't like, then go somewhere else and start again," one exurbanite told Herbers. Yet that ideal grows more and more elusive, for it is based on the principle of flight, and we are fast filling in even our exurban frontiers. "We can't go back to a land of clearly defined cities, suburbs, towns and rural countryside," says Herbers himself. "We have created (note the past tense) a whole new form of the American community, one that is diffused, fragmented and without a center."

Fishman takes heart in reminding us that the horrific urban landscape Charles Dickens confronted, which was "as unintelligible as any dream," eventually resolved itself into a coherent, dignified city in the hands of Nash and Olmsted. But where is our Olmsted? Who is our Nash? "We shall solve the city problem by leaving the city," proclaimed Henry Ford. We've left the city and are faced with a new suburb problem. Where do we go now? *Daralice D. Boles* University of California, Irvine

ſ

Comfortable Challenge

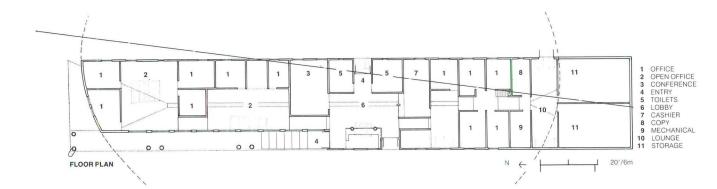
Addressing several site and circulation conditions, a design by Eric Owen Moss is among those that comprise UC Irvine's ambitious building program.



e west façade (below) accommodates the slope of the site and the main entry; secondary access is from the parking area on the east (above).



Central Housing Office UC, Irvine





OF all the buildings on the campus of the University of California at Irvine, none appears more outwardly "awkward" than that of the Central Housing Office. But as is often the case with the work of its designer, Los Angeles architect Eric Owen Moss, this "difficult" exterior contains an exceptionally humane and comfortable interior. The 7500-sq-ft building is the recipient of a 1989 National Honor Award from the AIA.

The Housing Office building is one of the most recent products of UCI's ambitious building program (P/A, May 1988, pp. 86–87), which was led by then-Vice Chancellor David Neuman, now University Architect at Stanford. The immediate client was Jim Craig, Associate Vice Chancellor of Student Affairs and Director of Housing at UCI. Craig oversees 125 full-time employees, 25 of whom work in the housing office. Craig and his staff had been working in extremely cramped quarters which, although uncomfortable, had fostered a certain community spirit that Craig was loath to lose. He also wanted the building to be welcoming to students: "I didn't want it to seem intimidating," he emphasized. It had to be a pleasant place in which to work, and finally, it had to allow for future expansion.

In addition to those criteria, Moss also faced a rather unusual site—a sloping corner lot at a prominent campus entry point and an important student walkway, the Verano Mall, connecting the residential part of the campus to the east with the academic and administrative buildings to the west. Moss's response was to try to "grab" the property—building, parking lot, and service buildings—in a single gesture. He superimposed an ellipse, described by concrete block retaining walls, that "folds" over the terraced site.

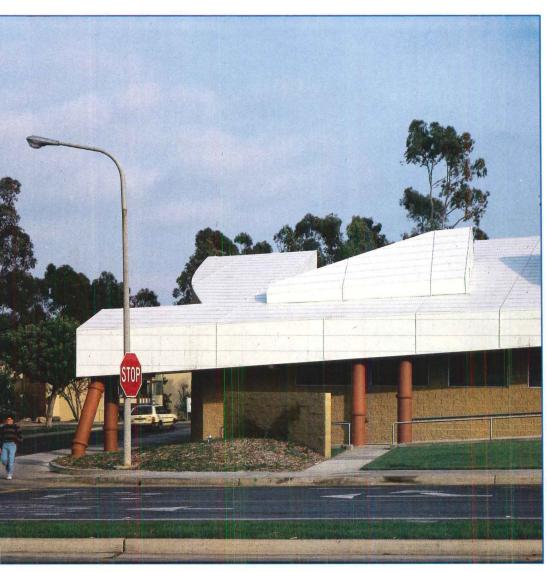
The building itself, for which the primary pedestrian access is on the west, seems to slope right along with the site. It is rectilinear in plan but appears much looser in section by virtue of its two intersecting roof configurations. One, which aligns with the building's axis, is a series of high, projecting hipped and gabled volumes that mark the public and open-office areas. The second, which looks like a long shed roof that is slightly askew since it follows the slope of the site, shelters private offices. Both roofs, as well as the building's west wall above the block base, are clad in a white-painted sheet met with a subtle red overspray—too subtle to be a convincing evocatio of the red tile roofs that are common on campus (Moss's intentior but striking on its own merits. On the east side facing the parkin the exterior is gray stucco. Supporting the roof overhang of th northwest part of the building are three pairs of clay pipe colum filled with reinforced concrete. The northwest corner is given proinence by a special bent pipe column and a marble fascia. This or reference to "fancy" materials seems a little too self-conscious, give Moss's sophisticated handling of humbler goods.

The lobby and other public and open-office areas are bright, e pansive volumes that look decidedly un-institutional. The priva offices, because of the intersecting roof forms, are all different; each however, has one large window and at least one small one, an sheet metal ductwork that seems to appear when least expected. small loft at the building's south end provides a staff lounge.

Materials and finishes are, by Moss's own description, "frugal," b are used with some elegance, as in the sheet metal baseboards, th brass joints in the trowel-finished concrete floors, and the cool b cheerfully updated "classroom" colors of pale green and blue.

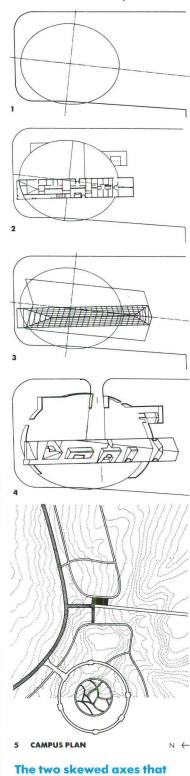
Some post-occupancy modifications have been made to the built ing. A partial section of lowered ceiling grid has been created ov one area to make it suitable for computer screen viewing (not program), tints were added to the west-facing glazing to cut dow glare, and the floors have been carpeted for greater acoustical confort. Such changes seem to have been a point of contention betwee architect and client, but by and large, most of the building's use seem happy with it, citing its expansiveness, abundant natural ligh and comfortable atmosphere. "It isn't the usual little boxy offic was a comment heard from more than one occupant. Taking a stanard building type and putting it through some unsettling changes Moss's specialty, but he is able to be subversive here without bein sadistic. This building, like his others, is challenging, but it's comfoable, too. *Pilar Viladas*

The author, formerly Senior Editor with P/A, is Los Angeles Editor for HG magazine



en from the air, the ellipse ss employed to carve out d define a specific area on s otherwise undefined part he campus is clearly visible :ing page). Future expann would be to the south ht in the photo), or vertiy. Also seen best from this stage point are the two erimposed roof volumes, higher and sketchier of ich celebrates five special as of the plan. The more tinuous ridge line starts at center of the south facade I angles off to the northt, disappearing at an edge er the centerline of a pair of wed clerestory windows he office area. The most nificant public portion of building, the northwest ner (above and right) is ictuated by paired clay e columns, one of which, ng with a marble fascia, hals the importance of this ner as the main entry from campus. Pre-painted et metal roof surfaces ate a dramatic sculpted articulated effect.

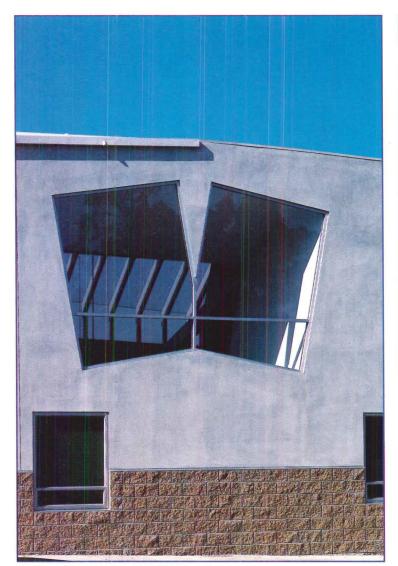




establish roof forms on the **Central Housing Office relate** to the site slope, the ring configuration of the inner campus, and the more orthogonal outer campus layout (5). The long axis of the ellipse that Moss uses to define the site (1) also defines the ridge line of the more continuous roof; the building plan axis (2) intersects the other at the center of the south gable (3), and marks the implied but discontinuous ridge over the higher spaces (4). As it moves north, the axis of the ellipse passes the edge of the building, leaving the roof a shed form.

Aark

Central Housing Office UC, Irvine









At the point where one of the gables turns into a simpler shed roof, the two canted clerestory windows (left, top two photos) occur in the Housing Support Services open office area; they are emphasized because this is the function that Moss sees as the most important of the office uses. Ductwork in the building (left, bottom) was given special attention, resulting in

Project: Central Housing Office, University of California, Irvine. **Architects:** Eric Owen Moss, Architect, Culver City, Calif. (Eric Moss, principal; Jay Vanos, project associate; Scott Nakao, Diane Gourdal, project team).

Client: Office of Physical Planning, University of California, Irvine; David Neuman, Associate Vice Chancellor.

Site: gently sloping corner facing a major campus entry point, and fronting on a student walk which connects the campus residential area to the academic/administrative center. **Program:** office building with three open office areas, lobby, employee lounge, 11 private offices, conference room, storage, parking for 25 cars. **Structural system:** wood frame and unique sculptural configure tions in many locations. His spaces, including office are (above) and the reception desk (facing page), each ho clerestory/skylight opening that reveal the ribs of the his roof volume. Paired clay pi columns reappear to frame the reception desk, with a somewhat greater spacing than those outside.

concrete block with slab on grade Major materials: concrete block exterior plaster, pre-painted shee metal, marble, vitrified clay pipe, gypsum board, and brass concret slab expansion joints (see Buildin Materials, p. 171).

Mechanical system: gas-fired boiler, multi-zone four pipe hydr system, electric chiller, variable c volume fan coils, and exposed sh metal ducts.

Consultants: Gordon Polon, str tural; Paul Antieri, mechanical, Paul Immerman, electrical; Sau Goldin, lighting; Peter Walker, landscape.

General contractor: MIAR, Ir Costs: unavailable.

Photos: Tom Bonner, except as noted.



P/A Technics Building in an Electronic Age



Wiring for Computers An issue often faced when designing the electronic office is the user's need for a variety of computers. Terminals linked to a centrai network, for example, often are supplemented by PC's. At the T&T Remote Work Center in Oakland, California (above), the challenge was to provide adequate space for the wiring that serves the many terminals used there. Architect James Burlage, of the San Francisco office of The Architects Collaborative, says the solution in this case was "a deeper than normal ceiling plenum" to provide both the needed space and flexibility to accommodate changes in the system.

The proliferation of electronic systems in modern buildings strongly influences many aspects of architectural design.

FOR a sense of the impact that modern electronic systems have buildings today, simply consider this example: The number of p sonal computers used by business employees in the U.S. number some 6 million in 1984, grew to 20 million by 1988, and will lik rise to 42 million by 1993, according to one industry analyst. A to that scale of growth the prevalence of office printers, computeriz HVAC controls, security systems, in-house telecommunications m works, and fire detection systems, and it becomes clear that off buildings must readily embrace a new partner.

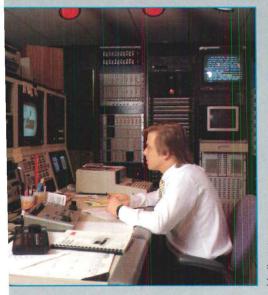
But what does that mean to architects? For starters, it indicat that electronics is not simply a grab bag of arcane gadgetry to cho from after completing the design of the basic building shell. Ma believe, in fact, that the introduction of these technologies justi a fundamental rethinking in the way commercial and institutio buildings are designed and built. "Buildings are becoming alive a interactive and almost human," says Piero Patri, of Whisler-Pi architects in San Francisco. "This is a monumental change." Pi served as chairman of two National Research Council committe that investigated the demands of new electronic technologies a produced the 1988 report *Electronically Enhanced Office Buildings*

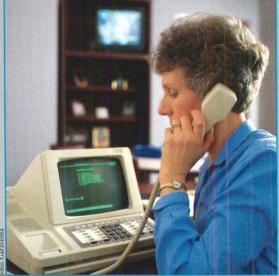
Experts in the field echo the study's theme that the use of co puter, communications, and automated control systems places mands on a building that, until recently, were rarely taken into count. The most obvious of those demands includes office space to offers a glare-free environment, suppression of noise, uninterru ble electric power, and cooling to offset the heat given off by e tronic equipment. But other demands of the building infrastruct are not so well understood: an extensive and accessible network wires and cables; central equipment rooms to house mainframe co puters and private communication branch exchanges; battery roo to provide the uninterruptible power; satellite dishes and microw antennas; a structural framework sufficient to support loads sociated with mainframe computers, battery rooms, and rooftop tennas; and freedom from electromagnetic interferences that contaminate electronic data.

Closely linked to these issues is the matter of worker comf which becomes more difficult to control centrally as heat-general devices are added to offices. Volker Hartkopf, a Carnegie-Me University professor who has studied the quality of office envir ments, says the addition of electronic technology to an office quickly upset the delicate balance of office comfort. "Marginally cessful buildings with this technology thrown into them become ures," Hartkopf says. The thrust of the work by Hartkopf—al with colleagues Peter Mill and Vivian Loftness at the Center









Video/Data Systems The Legislative Office Building in Hartford, Connecticut, by Russell Gibson von Dohlen, of Farming-ton, Connecticut, contains a wide range of video and data systems that usher lawmaking into the electronic age. The building's two large hearing rooms contain au-ditorium seating that faces legislators arranged along a tiered console. The audience can watch a video presentation on a 15-foot screen behind legislators (top), while the lawmakers simultaneously view the same images on monitors in the console (middle). Lighting within each hearing room is of TV studio quality so that television crews have adequate lighting without having to bring supplemental lights into hearings.

Closed circuit video is available throughout the Capitol complex. Video signals from portable cameras in hearing rooms can be routed through the building's broadcast center (bottom left) to monitors elsewhere in the building. Each legislator's office is equipped with a monitor (background in photo, bottom right) on which any of ten closed-circuit broadcasts can be viewed. Fiber optic lines connect the entire system to the nearby Capitol building for viewing in the Senate and House chambers.

The telephone system in each legislator's office shares a desktop console with the computer. In addition to offering voice mail, the system's workstations connect to a sophisticated data retrieval system (including daily schedules and copies of bills) accessed through a service bureau.

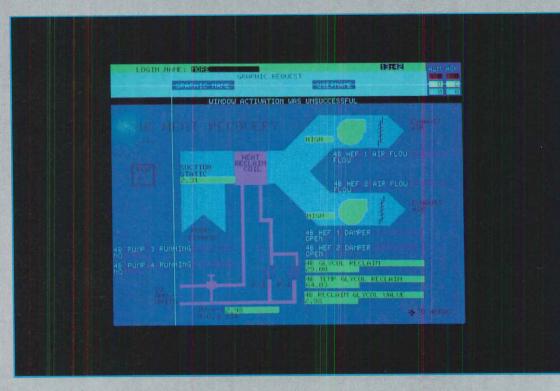
P/A Technics Electronic Buildings

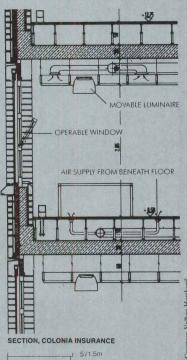
HVAC Controls

uildings with exve electronics are prime can-es for cutomated control of ng and cooling systems. Digital controls are generally ad today over pneumatic or red today over pneumatic or ric controls. Sensors on HVAC pment (for example, an air ciling unit) transmit data to a roprocessor-based controller t activates a valve or fan to uce the desired change. ng the advantages: Break-is or malfunctions in the system are detected im-tely and can be diagnosed corrected by the central comr or brought to the attention pervisor either on site or co-call. Equipment can be moni-tored system-wide or at the coment level from remote termials (screen, right).

Worker Comfort

Picanning for the Colonia Insurance Co. headquarters in Cologne, Germany, began with a survey of employees' expectations of a computerized office. Their concerns centered on Indoor air quality, narural light, and the ability to control the amount of air, light, and heat in their work space. In response, the building was arganized into small pads to give each worker ample daylight and natural ventilation. An increased floor-to-floor height (drawing, right) allows for the integration of both a hung ceiling for acoustics, ambient heating, and ambient lighting, and a raised floor for individual fresh air supply and cabling. Movable air diffusers in the floor allow for flexible desk arrangements. Designers for the projed were EHLM Architects of Dusseidorf.



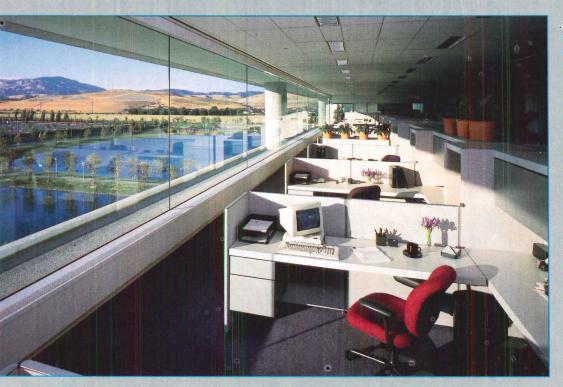


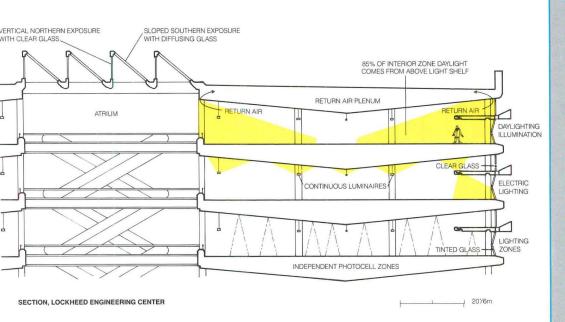
P/A would like to acknowledge the following people who contributed to this article: Jan Goebel, Intelligent Buildings Institute; Ted York, Software Productivity Consortium; Volker Hartkopf, Carnegie-Mellon University; Piero Patri, Whisler-Patri; Alan Abramson; Peter Valentine, COMSUL, Ltd.; Gene Smithart, The Trane Co.; Geryl Rose, John Juros, Russell Gibson von Dohlen Architects; Alan G. Curtis, Pacific Bell; Randy Drolen, Landis & Gyr Powers; Lee Windheim, Leo A. Daly; James Burlage, The Architects Collaborative. Building Diagnostics at Carnegie-Mellon—has been to improve t full menu of performance characteristics in the electronic offic including spatial, thermal, visual, acoustic, and air quality concern and overall building integrity. They contend that the individual co petence of specialists who handle elements such as structure, enc sure, service, and interiors does not necessarily lead to good perfor ance of the combined systems.

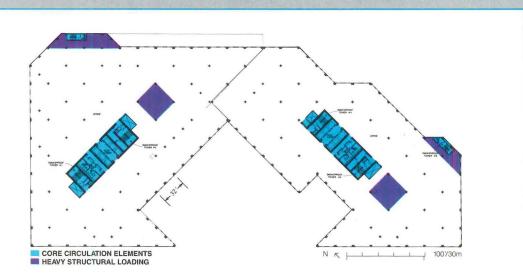
Efforts to achieve a desirable level of building "intelligence" term one must use with care, given the number of prevailing terpretations) are often made in Europe in the name of energy-cosciousness, says Jan Goebel, of the Intelligent Buildings Institute Washington, D.C. The selling point to building owners and tena in the U.S. just as often centers on worker productivity.

But whatever the motivation, the message coming both from ind try experts and the research community is that a structural char in the traditional building acquisition process is in order. The N report says that to accommodate electronic technology successfu an office building must be designed from the outset to suit technological systems that will be put in it. But how to make it h pen? Recommended first is that a detailed goal statement be artilated at the outset and adhered to throughout design and constrtion. Many experts lobby for the additional contribution of r players in the building process. Added to the typical list of part pants, for example, would be consultants with expertise in infortion systems and telecommunications.

Presumably, reliability will improve too. Until now, problems v dysfunction of everything from complex central management control systems to relatively simple sensor-controlled window sha have, at times, given a bad name to technology-centered control building environments. One of the key strategies in creating a : cessful electronic building addresses those concerns, says Patri. the inclusion of a stage called "commissioning," a period beginn before completion of the building and lasting through initial or pancy. During this time the facility and its component systems assessed with diagnostic procedures to see if they are performing to expectations and, if not, to propose remedies. Retrofitting of ex ing buildings raises another set of issues. "Up to 75 percent of existing inventory of commercial office structures will need to retrofitted for electrical capacity," says Peter Valentine of COMS Ltd., a San Francisco telecommunications consulting firm. As nature of work in America continues to shift toward reliance electronics, the implication is clear that buildings new and old have to accommodate those systems and be designed to adap rapid changes in technology. Vernon Mays







Lighting Controls Energy is easy to waste when providing office space for more than 7000 employees. So steps were taken to control costs at the Pacific Bell Administrative Offices in San Ramon, California, designed by the San Francisco office of Skidmore, Owings & Merrill. "More than 50 percent of our energy use is for lighting," says facility manager Alan G. Curtis. "Controls are the way to manage it." Central system operators monitor lighting in key areas of the complex. But building occupants control lighting in offices via their telephones. Lights do not come on until they are needed in an area. Then, at day's end, they dim to half-level to notify employees who plan to work late that they must dial into the system to continue lighting their areas. Every two hours, light levels drop again.

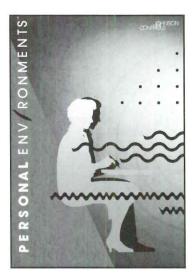
Integrated Systems

The Lockheed Missiles & Space Company's engineering facility in Sunnyvale, California, designed by Leo A. Daly architects of San Francisco, focused on both energy and space-efficiency. Illumination (drawing, left) is provided by task/ ambient fluorescent lighting designed to complement the daylighting scheme. Photocells automatically control electric light levels. Severe solar heat gain in the offices is avoided by allowing heat to collect above the large light shelves and feed into nearby return air plenums. Employees have moderately heavy telecommunications needs and tend to move often; raised flooring was used to avoid wire management nightmares. Machine and power rooms were separated from offices to foster space planning flexibility. Acoustic studies were conducted in a full-scale mockup to achieve acceptable speech privacy.

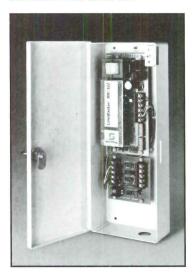
Building Structure

At Marathon Plaza, a spec office building in San Francisco by architects Whisler-Patri of San Francisco, the program assumed a back-office use that would rely heavily on computers. The structural implications of heavy electronic usage and back-office functions (much document storage and above-average density of people) suggested increasing the floor slab beyond code strength to 100 psf live load. A capacity of 200 psf was supplied in bays near core areas (plan, left) to provide the support for battery rooms, specialized electronic equipment, or libraries. The building's roof also was structured to support dish antennas.

Technics-Related Products



Individual controls for temperature, lighting, air flow, and sound are included in Personal Environments. The controls may be incorporated into existing or new structures and can be reconfigured to suit individual needs. Johnson Controls. Circle 200 on reader service card



A derived-channel communicator called LineBacker transmits alarm information over a phone line and alerts authorities if transmission is interrupted. It is compatible with digital dialers and fire and burglar panels. Sentrol. Circle 100 on reader service card

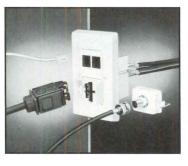
A microprocessor control system can be used with existing hydraulic elevators. It allows faster response time through call allocation, door controls, speed sensing, and position indicators, and can be placed on the elevator. Dover.

Circle 201 on reader service card



Lighting systems in the Pre-Pack line, from simple slide control to multiple lighting effects, are shown in illustrated case studies in this brochure. Special finishes, silkscreening, and engraving are available in custom controls. Lutron.

Circle 202 on reader service card



A communications outlet, with horizontal cables connected to each of two ports, can be quickly reconfigured without rewiring. Adapter inserts match office equipment needs and snap into the ports. Amp.

Circle 203 on reader service card



A closed-circuit camera has a 1/2-inch, high-resolution pick-up device and a built-in electronic shutter. A number of cameras may be attached to an auto-homing switcher to display selected images. Ikegami.

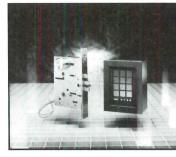
Circle 204 on reader service card

A suspended air-handling system consists of modules that bolt together to provide customized service for various areas of installation. Linear diffusers supply uniform air distribution; an envelope reduces noise. Industrial Acoustics Company. Circle 101 on reader service card

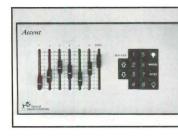


Outdoor photoelectric beams, which interface with security systems, are synchronized in groups of four to provide accurate operating range and stability in severe weather conditions. Features include high light tolerance and an audible alignment aid. Pulnix.

Circle 102 on reader service card



Electronic access controls use digital scrambler keypad to act vate electrified mortise and cylin drical locksets. Best Lock. Circle 103 on reader service card



A programmable lighting system designed especially for smaller applications consists of manual slider and preset control station, with four or eight prese and up to twelve channels of control. Strand. Circle 104 on reader service card



Closed circuit cameras, designed to military environment standards, are sealed in corrosion-resistant, nitrogen-pressurized housings to endure humidity, pressure and vibrations. Burle.

Circle 105 on reader service card

(See Technics, Electronic Buildings, p. 98)

Architects & Engineers...

t's tough getting a second chance.

When architects Bonanno and William began construction on the eaning tower of Pisa in 1174, they had no idea that they were embarking on what would become one of the greatest architectural lascos in history. Had this project been attempted in modern imes, it would have resulted in enough litigation to keep a battery of lawyers busy for twenty years.

At a time when liability litigation is becoming a national pastime, no aspect of business should dare go unprotected. Reliance National's Professional Liability Coverage for Architects and Engineers provides the necessary protection against costly and often crippling litigation.

Dur \$10,000,000 capacity, premium financing program, discovery clause and policy provisions, combined with our knowledgeable and professional claims staff, make Reliance National, THE CHOICE for Architects and Engineers coverage.

Get the right protection for your clients in case their next project starts to . . .*lean.*



- Civil Engineers
- Electrical, Mechanical, Heating, Ventilation, and Air Conditioning Engineers
- Land Surveyors
- Interior Designers
- Landscape Architects
- Selected Soil Engineers and Testing Labs



Reliance National

A Reliance Group Holdings Company Circle No. 363

THE CHOICE

For Further Information

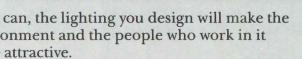
GE IS THE LIGHT THAT WILL RESHAPE THE WA

GE BIAX lamps make everybody and everything, including operating costs, look better. It won't take you long to discover that w GE BIAX[™]40-watt lamps, the design possi ties are endless.

Because they're only 22.5 inches long, y deliver all the light of standard four-foot f rescents, you can design with smaller fixth And that means more attractive ceilings.

And because BIAX lamps make colors richer and more vibrant than standard flu

DU DESIGN LIGHTING.

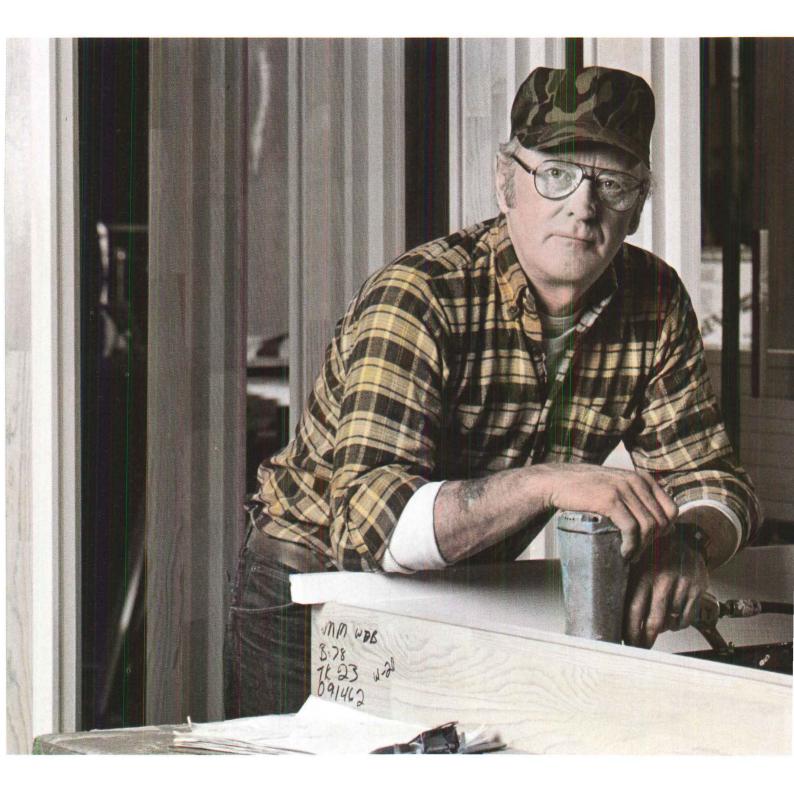


ually attractive is the amount your clients ave on operating costs. GE BIAX 40-watt s, you see, last up to 8,000 hours longer conventional U-shaped tubes. And 13 longer than incandescents. Ist your imagination on the endless possibilities of the GE BIAX family of lamps. For more product or application information, call your local GE Specification Area Manager. Or call the GE Lighting Information Center at 1-800-523-5520.

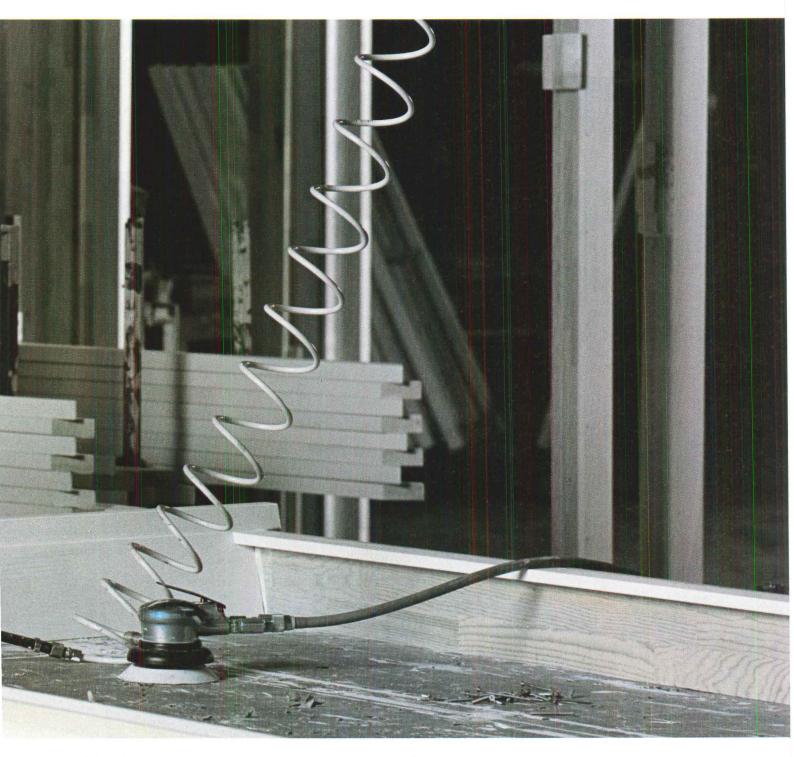


GE is Light.

GE Lighting



WE HAVE A REPUTATION TO PROTECT: YOU



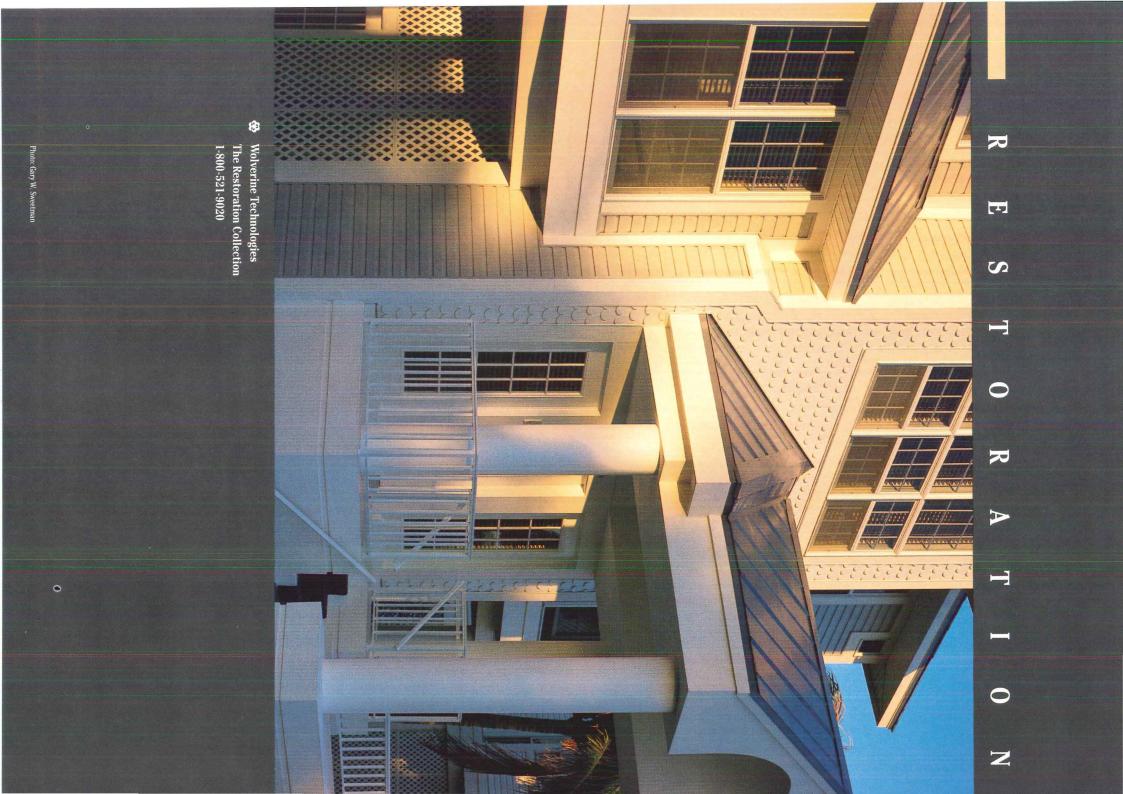
At Marvin, we make windows to order – something no other nufacturer chooses to do.

When you make a window to order, you put your customer's name t. You put your customer's reputation on it too. So you think as you build. invest the time and the pride to do the job right.

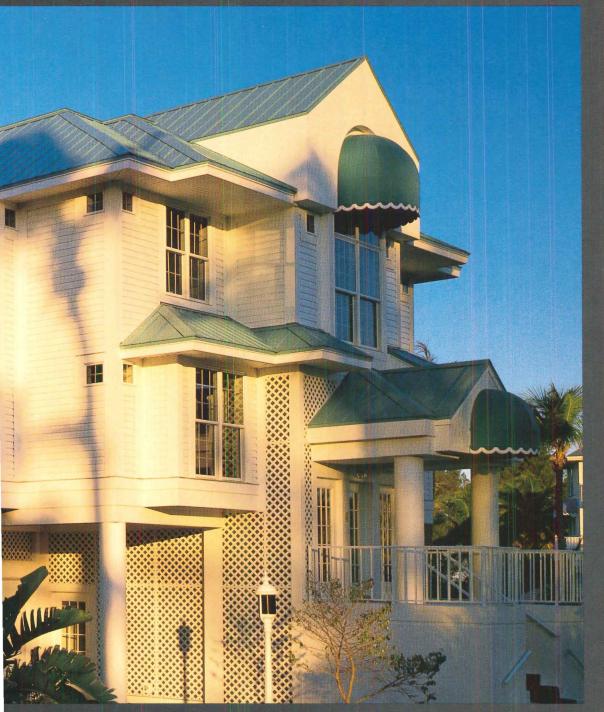
invest the time and the pride to do the job right. There are all kinds of machines out there that can frame up a pretty d window. But a machine can't read a customer's name. A machine can't e about a customer's reputation.

We can. We do. And, as long as Marvin makes windows to order, we will.

ARVIN WINDOWS ARE MADE TO ORDER.



COLLECTION®



"Because the Restoration Collection is a total system of siding, accessories, and trim, we knew the entire cladding package would be compatible from the panels and lattice we selected to the Great Shapes fish-scale accents. There's a whole range of sophisticated colors to choose from, too. Plus, everything comes in a smooth, matte finish with no artificial embossing. With so many options, Restoration gave us all the design freedom we needed to create an award-winning look. In fact, we won first place in Wolverine's 'Finish First' design competition!"

Be sure to select a winning siding system for your next project. Call 1-800-521-9020 for product information, specifications, and case studies on all five Restoration styles. And don't forget to ask about entry information for Wolverine's 'Finish First' competition.



Stockbridge 4½-inch Dutchlap is one of five distinctive profiles that make up the new Restoration Collection of premium vinyl sidings and matching accessories.

Bruce T. Gora AIA, architect Gora/McGahey/Lee Associates in Architecture Fort Myers, Florida IMAGINEERING • INCORPORATED • POST OFFICE BOX 648



GORDON DRIVE • ROCKLAND • MAINE 04841 • 207•596•6483

It all began in a garden

Create your own Eden. Furnish it with poppies and dahlias and peonies and iris ... with your own extravagant favorites. Then set it all off with a piece of Weatherend® furniture. Its elegant symmetry harmonizes with Nature's perfection.

The origin of our species was the Weatherend Estate, where a turn-of-the-century Norwegian shipbuilder used the techniques of fine yacht joinery to create graceful, yet substantial lawn furniture. His pieces are still in place after 75 years

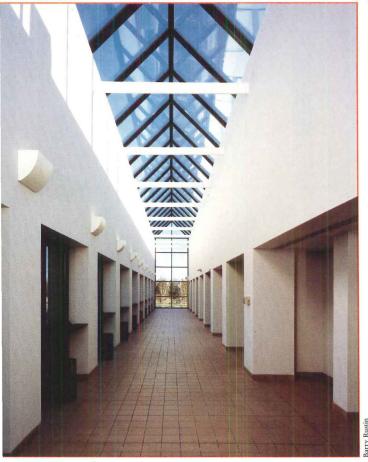
We build adaptations of his designs today with only the best materials and the same combination of boatbuilding and fine furniture techniques. When you see for yourself how our furniture highlights the beauty of your garden, you'll know why we call ourselves Imagineering.

For our portfolio, write or call Imagineering/Weatherend® Estate Furniture P.O. Box 648, Dept. LA, Rockland, ME 04841; 207-596-6483.



988 Imagin





ie Kit of Parts post office in Cordova, Tenn. (top), and lobby atrium (above).

A New Standard for Postal Design

Faced with a burgeoning building program that calls for construction of 100 to 200 post offices a year, the U.S. Postal Service has adopted a computerbased system of standardized designs with enough possible permutations to fit a nearly infinite combination of function, site, energy, and service requirements.

Known as "Kit of Parts," the program adopts a systems approach to ensure a given level of quality, to speed production, and to cut the costs associated with custom design of every new facility. "It truly was conceived as an integrated system," says Barry A. Yoakum, an architect with the postal service's Design and Construction Division in Memphis, Tennessee.

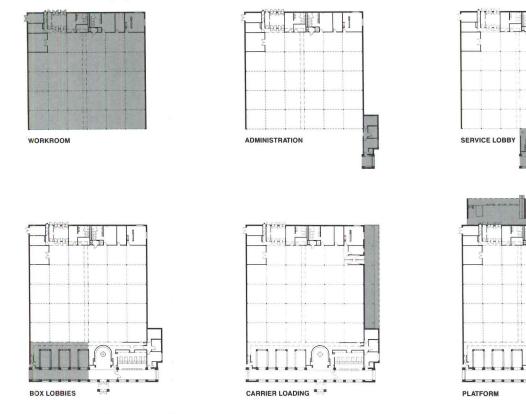
Kit of Parts grew into a nationwide program after officials in Washington showed interest in what was happening in Memphis. Yoakum had developed the concept—"It sounds awfully commonsensical now," he concedes-of taking the typical post office and dividing it into separate functional parts. Each component is designed on a 20-foot module, so the parts are as interchangeable as Lego blocks and can generate more than 100,000 possible floor plans.

"We haven't run across a site yet that we couldn't put a Kit of Parts building on," Yoakum says. Sixty-six post offices designed this way are now in some phase of design or construction. Fewer than a dozen facilities have been completed.

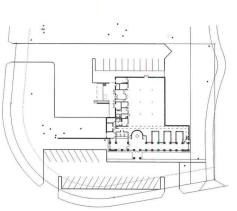
Part of the program's attractiveness is that it takes full advantage of computer capabilities. Development of the system's three-dimensional modular components and prototype form was executed by Memphis architects Jones Mah Gaskill Rhodes, a firm that was both systemsoriented and capable of generating the CADD software containing all the kit information. Now, when local firms are hired to design a new post office, they are supplied with recorded data compatible with one of three CADD systems-Intergraph, AutoCAD, or McDonnell Douglas GDS. The Kit includes complete architectural, structural, mechanical, plumbing, and elec-

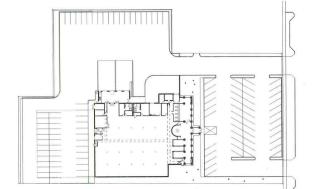


Daylighting strategies were integral to design of the workroom areas.



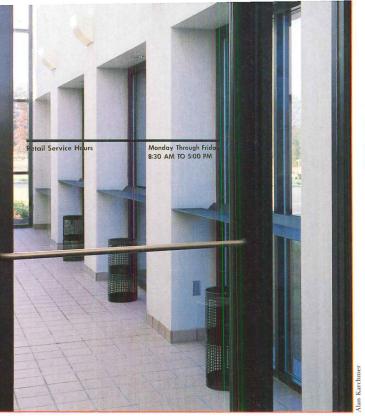
The assembly of a post office (above) combines elements that are sized and selected according to local needs.





Kit of Parts buildings adapt to varied sites, as do these projects in Salt Lake City, Utah (left) and Magalia, California (right).

10073



ordinated graphics and steel writing desks are part of the Kit.

cal drawings and details. Folving the official go-ahead by e postal service, the local firm s 3 to 4 weeks to produce final ntract documents from the set dimensions, specifications, redules, tables, and calculans supplied to them.

Only site-specific issues, which y according to the regional nate and geology, are left to e discretion of local designers. cluded are civil, landscape, indation, and slab design and ng of mechanical, plumbing, d electrical equipment. Design d construction of a Kit of Parts st office takes about a year. n developing a formal netrk of local architecture firms, and small, who are familiar h the Kit of Parts concept, the stal service is steering away m its former practice of hirconsultants who might spend nths learning the peculiarities post office design, never to do other again. "This way we get build a relationship," says akum. "Many firms boast out their repeat clients. Well, are a built-in repeat client.' Juring design development the Kit, the team questioned g-standing assumptions sut the makeup of post offices. ments as simple as the doors necting the workroom to the ding platform had always n done a certain way-in this e, they were metal-clad doudoors that had to be heavy ough to provide security at ht but still swing open (with siderable effort) when mail is were shoved into them. e redesigned doors are of m-filled plastic that function ch more easily during working hours. At night, a heavy steel grille pulls down from overhead to secure the threshold.

"These were the kinds of things we just kept beating and beating," Yoakum says. In time they arrived at a system that is now recommended for all new postal facilities between 8,400 and 35,000 square feet. Each Kit of Parts building is composed of six basic modules that are assigned particular functions. They include:

• A workroom, which provides space for mail sorting, support areas such as toilet and locker rooms, and an overhead lookout gallery.

Administrative offices.

A service lobby that provides clerk stations and a semicircular automated postal center opposite the entry.

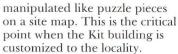
• A box lobby, which contains writing desks and alcoves for customer boxes and lockers.

A carrier loading dock, where mail for local delivery is loaded.

• A platform, where mail is shipped to and received from other facilities.

Various sizes of each module have been created to satisfy particular needs (for example, the number of employees or volume of deliveries). The inherent flexibility of module size, orientation, and relationship to adjacent modules allows buildings to fit unpredictable sites.

Program requirements determine the specific modules that will comprise each building. At the initial "site adapt meeting," attended by the local postmaster, the consulting architect, and others, photocopies on acetate of the required modules are



Decisions regarding placement and orientation of the building are also made at this meeting, with issues such as parking, truck access, and sight lines being resolved. While the basic form, proportions, and graphics are held constant to reinforce a consistent identity nationwide, a variety of façade materials may be selected to help the building blend with the landscape or honor local traditions.

The system relies on building components that are familiar to contractors throughout the country. All structural members-columns, beams, and joists-are constant throughout Kit buildings. "You've got the flexibility to create exactly the building you need, yet all the details have already been designed," says Martin E. Gorman of Jones Mah Gaskill Rhodes.

Prototype development involved the contributions of a number of postal service personnel from the Memphis office and representatives from each of the regional offices. Specialists also on the Kit of Parts team were Gardner & Howe, structural engineers; William Lam Associates, lighting; Cox Associates, roofing; Vignelli Associates, graphics and interior design; Smith Seckman Reid, mechanical and electrical engineers; Burt Hill Kosar Rittlemann Associates, energy; and Howard Associates, renderings.

The expertise of these consultants helped focus attention on refining the experiential qualule. "The most negative feature man. That became a major focus natural daylight into those typically dreary spaces? Sensitivity to the workrooms prompted a split from conventional thinking on daylighting design. Clerestory glazing in Kit of Parts workrooms is oriented east and west, because the room is occupied mostly during the early morning and late afternoon hours.

As designed, the Kit of Parts buildings meet all energy mandates for federal projects. That underlies a message that the postal service likes to convey: Excellent energy performance can be achieved cost-effectively in standardized buildings.

The common criticism of standardized construction, of course, is that all buildings turn out looking the same. Yoakum says the response has been mixed. "Some people say we need a standard corporate image. Others say each building should be different. So how do you strike a happy medium?"

More important to Yoakum is his belief that the strides made through the Kit of Parts program will have a positive impact on the entire practice of architecture. "The process itself is hightech," he says. "It's not in the imagery but in the way that all the parts fit together." Vernon Mays

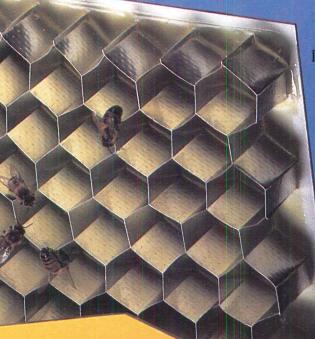
For more information on Kit of Parts, write the United States Postal Service, Facilities Department, Washington, D.C. 20260-6410



Progressive Architecture 5.89

We borrowed one from some ver

ir best panel ideas od designers.



We're not ashamed to admit it. Our engineers got the idea for our Alveus¹⁴ panels and curtain walls from somewhere else. They took it from nature.

The honeycomb core in a beehive is a masterpiece of engineering and art. It can support 25 times its weight in spite of its ultra thin shell.

Which is just what we were looking for. So inside Alveus panel products you'll find a rigid aluminum honeycomb core. Making them lightweight, yet still able to maintain exceptionally high strength-to-weight ratios.

It also gives you surfaces with absolute flatness.

And lets you curve them into almost any configuration you want. From rounded corners to column covers.

So when you need a smooth surface design that blends with glass to create an uninterrupted flush, monolithic surface, look for Alveus panel and curtain wall.

The ones with the honeycomb core. After all, four-hundred million bees can't be wrong.

For complete architectural design specifications, contact Kawneer Company, Inc., Department C, Technology Park-Atlanta, 555 Guthridge Court, Norcross, GA 30092.



Circle No. 347

FROM SKYLINE STEEL TO METRO BROWN, WE CREATE THE COLORS OF YOUR WORLD.

0

ColorAnswers[™] puts a world of color at your fingertips. The steels and grays of urban America. The sun-bleached shades of Africa. The muted greens and teals of Venice. Rich, sophisticated tones. As progressive and daring as your designs.

With ColorAnswers you get the industry's most complete system for specifying color. In addition to over 800 fresh new interior colors, we're now introducing over 400 exciting exterior colors. All organized in a compact, easy-to-use system, complete with large color samples, perfect for everything from pencil concepts to final elevations and paint color specifications. Get tomorrow's color answers today with the Sherwin-Williams ColorAnswers System. Call 1-800-321-8194, in Ohio 1-800-362-0903, and start coloring your world.

COLORANSWERS[™]



Circle No. 368





retrofit bathroom for the elderly (top) ntains a shower cell and a toilet cell; fustrial designer Robert Graeff demonates pull-out base cabinets (above).

Designing for Independence

Difficulties involved in personal care are a primary reason why older Americans enter institutions. And as the number of older Americans grows, the strain of supporting them grows also. But the answer to this dilemma is not beyond the scope of design, as shown by a pioneering project on retrofit bathrooms for the elderly.

The bathroom, designed by Robert Graeff, an architecture professor at Virginia Polytechnic Institute and State University, was developed to allow the elderly to maintain their independence longer than might otherwise be possible. Graeff, an industrial designer, had earlier completed a bathtub that tried to integrate safety and comfort. When he presented the tub design to American Standard, they expressed an interest in an entire bathroom system instead.

The initial idea was to present a bathroom that could be retrofitted into an existing space, negating the need for large-scale renovation or construction. The study became an interdisciplinary graduate project among VPI's gerontology department, human factors lab, and Graeff's Center for Product and Environmental Design. The objective throughout was to "integrate and combine creatively research and design," says Graeff. An analysis of the demographics of the aged revealed that the elderly population is growing, with especially significant increases in the number of older women living alone. The added layer of human factors data suggested appropriate dimensions.

The result was a list of design objectives, including provisions for progressive deterioration of eyesight and decreasing flexibility. In addition, a sensitivity to the need for privacy and the wish to preserve traditional and cultural features of bathrooms was expressed, though retaining traditional appearance proved difficult while providing for the changing physical capabilities.

Five design proposals were developed, all sharing the design objectives but adapted to different sectors of the population, including one for wheelchair users. A two-cell design was chosen for further development by American Standard because of its efficient use of space, although Graeff believes that each of the designs is useful.

The toilet unit in the full-scale model includes support and grab bars, both for ease in entering and exiting the facility and for approaching and rising from the toilet. Total storage is vastly increased over that of a traditional bathroom and includes base cabinets which tilt their contents upward when opened (to prevent dizziness caused by bending over), open-access countertop shelves, and, fitted into the wall cabinet, a magnifying bar which both guards shelf contents and makes the labels easily readable. The washbasin is mounted at a height that does not demand that a person bend over and is shaped to prevent splashing. The watercloset has been ergonomically designed for comfort and support.

The shower enclosure con-

tains a shower head that can be remotely adjusted, reducing the gross movements necessary for bathing. A shower/bidet seat incorporates three water nozzles that massage the back, and a hand-held spray. An infrared heat lamp and hot air blower assist towel drying and lessen exposure to cold air and wet surfaces.

Other features have been conceived especially for the bathroom when retrofitting into bedrooms. Ground level lights function as night illumination, allowing orientation in the dark without the sudden shock from bright lights. And transition angles are kept at 45 degrees to prevent "dirt corners" and aid in cleaning.

The cell design is an efficient use of space, because the shower unit and the toilet unit can be fitted either separately or together into an existing room, or into a bedroom where additional privacy is desired. The installation is neither expensive nor complicated, since the entire unit is prefabricated and can share existing plumbing.

Graeff says that equal importance was placed on user, equipment, and space. While there are currently no plans for manufacture of the prototype unit, these ideals have informed bathroom design in a way that can benefit all home design, and particularly design for special populations. *Andrea E. Monfried*

Five years of clear sailin

There's never been anything like this on the contract carpet horiz A five-year stain and fade warranty from Amoco Fabrics and Fibe This PermaColor[™] limited warranty covers virtually every stain. Everything from paint and ink to unruly lasagna. With Marquesa[®] Lana and Marquesa[®] Lana/ST polypropylen

With Marquesa[®] Lana and Marquesa[®] Lana/ST polypropylen (also known as olefin) yarns, you're assured the carpet you spec will stay colorful. No matter what the climate. Or how much sun soaks in. In commercial and residential installations, both.



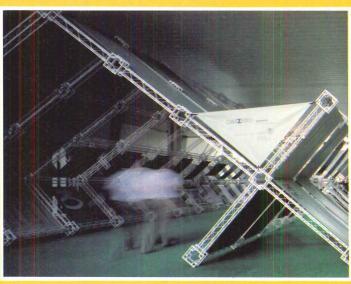
Guaranteed.

This remarkable PermaColor warranty is made possible by years of search and commitment to quality at Amoco. From developing w grades of polypropylene. To advancing the technology of face yarns d carpet backing.

Polypropylene yarn is just one of more than \$4 billion of products at Amoco Chemical makes each year. And now, the PermaColor arranty is forever changing the landscape of interior design. Call to t complete details. 1-800-292-6626.



Circle No. 308



Italo Lupi. Photo Leo To

ZERO is a modular italian designed and developed display system in epoxy coated steel. A universal link is the 6 direction junction from which lattice beams can be extended horizontally and vertically. Each component is connected by a die cast high strength aluminium spigot ensuring perfect reliability and resistance. Zero is designed to give freedom and allows infinite modular variations from interiors and shop fittings to the construction of exhibition booths and pavillions of all sizes. A versatile system offering many accessories Zero has a smart high tech look. Colour: titanium white and beluga black.

Quattrocchio design + De Pas, D'Urbino, Lomazzi

Zero U.S. Corporation 422 Post Road Warwick R.I. 02888 Tel (401) 941.6980



a 03-4190166 ☎ 02·4289286 ☎ 604-2762366 Finland France Italy ☎ 0.585204 ☎ 1-42873550 ☎ 0131-445361 Netherland Spain ☎ 040-455634 ☎ 01-3081433 ☎ 08-7850440 United Kingdom TOI-8793565

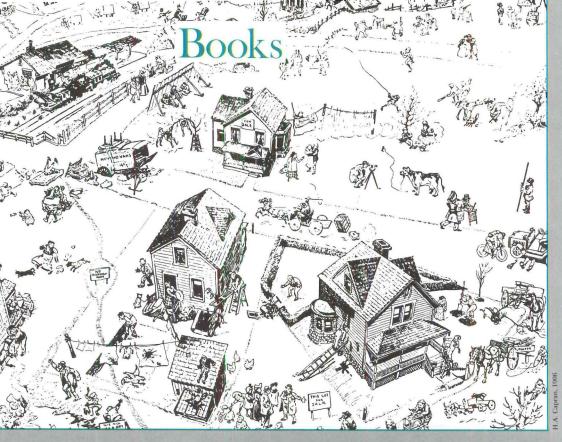
Japan

a 03-4

Schwei

a 01-9

Circle No. 382



ORIGINS OF THE AMERICAN SUBURE, IS20-1939 JOHN R. STILGOE

BORDERSAND

On The Border

Suburbia, as Russell Baker would say, is as American as frozen apple pie. In 1980, more than 100 million people, or 40 percent of the national citizenry, lived in the suburbs, far more than resided either in cities or in rural areas. And the trend has accelerated since the last census. From Morris County in New Jersey to Gwinnett County in Georgia to Orange County in California, shopping centers, subdivisions, and offices continue to eat away at the countryside.

Borderlands: Origins of the American Suburb, 1820-1939 is about this massive shift. But the focus is narrow. The book does not deal with streetcars or automobiles, sewers or schools, mortgages or building materials, family size or divorce. It is not about ordinary suburbs. Rather, author John R. Stilgoe has chosen to analyze the intellectual underpinnings and visual transformation of an environment that would today be termed exurban or ruburban. By borderlands, he means the semirural and marginal places on the outer edges of metropolitan regions. In the 19th-Century, borderland homes were usually beyond the farthest reaches of streetcar tracks, land developers, and utility lines.

Stilgoe brings impressive credentials to his task. A professor of visual and environmental studies at Harvard, he is the author of the Francis Parkman prize-winning Common Landscape of America, 1580–1845 as well as of Metropolitan Corridor: Railroads and the American Scene. Both ef-

forts prepared him well for this study of suburbia. Moreover, as a disciple of John Brinckerhoff Jackson, Stilgoe has cultivated a strong visual and aesthetic orientation that enables him to find meaning in everyday structures and patterns that most of us never even notice. Thus, Borderlands includes fascinating insights on such little-studied topics as the the passion for planting, the American love for old houses and antique furniture, the do-it-yourself movement, and the origins of the comeouter (commuter) tradition. He also deserves commendation for being among the first scholars to make effective use of the Sanborn fire insurance maps through which he reveals how villages diversified and changed as they became part of the borderlands.

Drawing upon a rich variety of primary sources and especially the extensive 19th-Century rural and country life periodicals that he seems to know better than anyone else, Stilgoe focuses upon the environs of New York, Boston, Philadelphia, Cincinnati, and Chicago. He combines such magazines as The Horticulturist, American Agriculturist, and New England Farmer with novels, diaries, and real estate advertisements and is able to tell us why so many people found the borderlands a welcome alternative to city life. Along the way he introduces us to artists and writers such as Nathaniel Parker Willis, Frederick Law Olmsted, Jr., and Henry Cuyler Bunner who have not previously received their due from urban historians. (continued on page 122)

Borderland: Origins of The American Suburb, 1820–1939, by John R. Stilgoe, New Haven, Yale University Press, 1989. 187 pp., illus., \$35.

High Tech Architecture by Colin Davies. New York, Rizzali, 1988. 160 pp., illus., \$45. Essentially a photo-essay on the subject, High Tech buildings by obvious candidates—Rogers, Foster, Grimshaw, Hopkins and others—are supplemented by axon- and isometrics.

A Comparative Analysis of 20th Century Houses by Hideaki Haraguchi. New York, Rizzoli, 1989. 92 pp., illus., \$25 paperback.

An effort to emphasize the importance of spatial integrity in architecture, Haraguchi's collection of axonometric drawings shows designs from Lutyens and Mies to Gehry and Rossi.

Antonio Sant'Elia: The Complete Works by Luciano Caramel and Alberto Longatti. New York, Rizzoli, 1988. 312 pp., illus., \$65. The prolific architect's visions, all 367 projects unrealized, are reproduced and analyzed with a kind of sad adoration.

Balkrishna Doshi: An Architecture for India by William J.R. Curtis. New York, Rizzoli, 1988. 192 pp., illus., \$40.

This unassuming monograph pulls together Doshi's integration of nature, ethnicity and Modernist dicta.

Artisans and Architects: The Ruskinian Tradition in Architectural Thought by Mark Swenarton. New York, St. Martin's Press, 1989. 239 pp., illus., \$39.95.

Heavy-hitting analysis of the man, his disciples—from Philip Webb to Raymond Unwin—and the continuing influence of his words.

(continued from page 121)

Stilgoe calls special attention to the women "who shaped much of the philosophy underlying borderland life in the United States." Susan Cooper, daughter of James Fenimore Cooper, was particularly influential. Her Rural Hours (1850) is central to Stilgoe's explanation of the virtues of natural beauty on the exurban fringe. Cooper scorned farm families because they did not know the names of wildflowers, but she loved the scenery of the countryside, and she was one of the first Americans to appreciate the outdoors for its beauty rather than as an evolving artifact of agriculture.

Because Stilgoe himself shares Cooper's vision and believes that vegetable gardens, wildflowers, outdoor privacy, and romantic spontaneity are essential for health and happiness, he is an advocate of the semi-rural lifestyle described in *Borderlands*. Similarly, he has disdain for the small yards, artificial scenery, electric railways, row houses, and busy streets characteristic of pre-World War II suburbs.

Cities fare even worse at Stilgoe's hands. Favorably disposed towards neighborhoods that have no stores at all, he is the polar opposite of Jane Jacobs, whose 1961 study of *The Death* and Life of Great American Cities celebrated short blocks, mixed uses, and active sidewalks. Instead, Stilgoe suggests that prospective borderers—then and now—were disgusted by "the urban juxtaposition of stores, factories, stables, taverns, and housing" and were "desperately anxious to locate in places permanently free of noxious activities."

Though vehement, Stilgoe's disdain for cities is unsurprising. What comes as more of a shock is the author's scolding of rural America. He notes sadly and scornfully that the nation's farmers were too slovenly and ignorant to make their potentially picturesque farms into places of beauty, order, and abundance. Lacking the requisite resources, energy, and training, they did no more than was absolutely necessary to make a living. Only in the borderlands, where gentleman farmers and enlightened ideas about horticulture prevailed, could one expect to find the fresh air "and a hundred other forces tending toward health and virtue."

Unfortunately, as Stilgoe notes, the automobile spread its baleful influence over the borderlands soon after the Model T went into mass production. Motorists ultimately reconfigured the physical contours of the nation, abetted by a traditional American antipathy toward planning which prevented local governments from preserving the best aspects of borderland life. Instead, the outer fringes of great cities were even more devastated by the internal combustion engine than the central business districts.

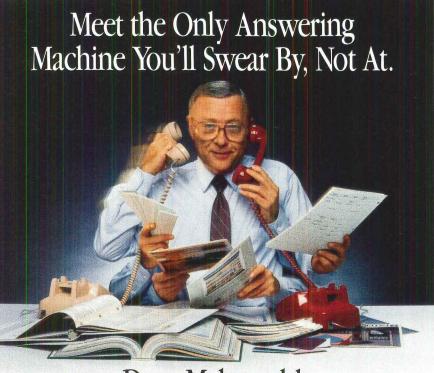
Despite its considerable virtues, Borderlands does not reach the standard set by Stilgoe's two earlier books. For one thing, he does not really deal with the fact that almost all of the communities which he finds attractive were places of unusual privilege. Most were snobbish in the worst sense, and almost all relied upon restrictive covenants to maintain class as well as racial exclusivity. Should we be surprised or even impressed that the rich were able to build residential neighborhoods of considerable distinction? Obviously, if enough resources and talent are available, it is possible to design and build communities that enhance the human spirit. The real challenge of our time, however, is to design and build attractive and healthy communities for those of less exalted circumstances.

About that dilemna, this book has little to contribute.

Stilgoe's unwillingness to com to grips with the problem of cost is symptomatic of his regrettabl habit of allowing the sources to speak completely for themselves. Too often, he simply summarize or quotes 19th-Century articles without stepping back from the material and giving us the bene fit of his analysis and judgment As a result, the chapters, some of which are as short as one or two pages, become repetitive on suc topics as the attractiveness or usefulness of trees and shrubs.

Stilgoe has established himse in recent years as one of the nation's most energetic and thoughtful commentators about the development of the American landscape. He has a better mind than is revealed in this book. Nevertheless, *Borderlands* offers a fresh perspective on th zone between rural space and urban residential rings, and it challenges our assumptions about what constitutes a good life. *Kenneth T. Jackson*

The author is the Andrew W. Mellon Professor of History and the Social Sciences at Columbia University and auth of Crabgrass Frontier: The Suburbanization of the United States (1985), which won both the Bancroft an the Parkman Prizes.



Dave Mahowald.

Every week, our team of experts gives hundreds of architects and spec writers answers to all types of coatings questions. Answers that save time and

prevent costly mistakes. So, when you need answers in a hurry, call



our toll-free Paint DataBank:[®] 1-800-321-8194, in Ohio 1-800-362-0903, from 8:30 a.m.- 5 p.m. EST, Monday–Friday. No canned

messages. Just candid advice from experts like Dave Mahowald.



Circle No. 353 on Reader Service Card

Circle No. 371 on Reader Service Card

Color Design Performance

HEWI, INC. HEWI CANADA, LTD.

IEWI

7 Pearl Court · Allendale, NJ 07401 · Tel. (201) 327-7202 170 Esna Park Drive, Unit 14 · Markham, Ontario L3R 1E3

Circle No. 339

Tailored Responses For Your Special Needs



System R's chemistry brings life to the laboratory.



Acton Stackers® an Solar Tables team u for a cordial cafete

System R[®] lends order to high-tech assembly.

Centrum® adds drama to the auditorium.



Whether you choose to specify System R and BioChairs[®] for a variety of office needs and looks, or Centrum for an auditorium, or Acton Stackers and Solar Tables for a dining area, or TEChairs[®] and furniture systems for a laboratory ... the broad range of tailored responses from American Seating will help you give special attention to many of the most challenging areas in your next project.

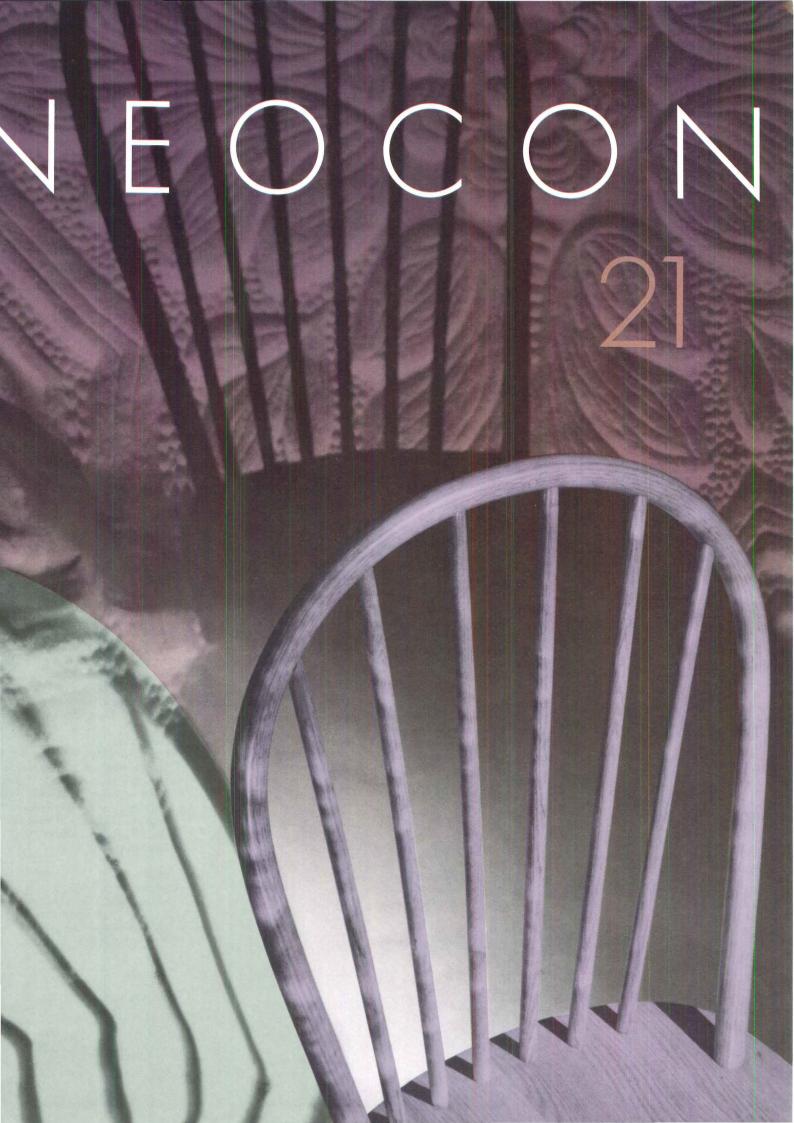
Over a hundred years of designing and building quality into tailored furniture for people at work make American Seating the responsive and responsible resource for your diverse and specialized needs. Take a closer look.



Support Systems for Responsive Working Environments™

For a closer look at a variety of tailored responses for your special needs, write American Seating Co., 901 Broadway N.W., Grand Rapids, Michigan 49504; or call 800-253-8104.





Seminars and Workshops



Charles Kuralt

1860–2000," can be seen at the Art

8:30 a.m.

World Culture: Agenda for the 1990s. Keynote Speaker: Charles Kuralt, anchorman, CBS News Program Sunday Morning. Panel: Emile Biasini, Deputy Minister, Government of France; Viacheslav Leonidovich Glazychev, journalist and Vice President, Union of Architects, Moscow; Adele Chatfield-Taylor, President, The American Academy in Rome, New York Office. Chicago Theatre

9:00 a.m.

SPEC Awards Presentation, recognizing outstanding specialty products that are applicable for contract interiors. Second Floor Conference Center

10:00 a.m.-12:00 p.m.

Designer's Informium on Creative Consciousness. Call ASID/Illinois Chapter for information. Expocenter

10:30 a.m.

Coming of Age: Designing and Building for the Elderly. Dr. Thomas Fairchild, Director, Center for Studies in Aging, University of North Texas. The Merchandise Mart

2:30 p.m.

Luxury Bath Suites: The Aesthetics of Performance and Safety. Alexander Kira, Cornell University Professor of Architecture and author. Merchandise Mart

4:30 p.m.

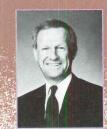
Restoration Case Study: The Villa Aurelia in Rome. Introduction: Sonja Roberts, IBD. Speaker: Mark Hampton, Designer. Moderator: Adele Chatfield-Taylor, President, The American Academy in Rome, New York Office. Expocenter

5:30 p.m.

NEOCON[®] 21 Industry Reception. Sponsored by E.I. DuPont de Nemours Co. and open to all NEOCON[®] participants. 14th Floor Atrium, Mart Plaza Hotel

9:00 p.m.

IBD Midnight Affair. Contact IBD at (312) 467-1950. Navy Pier



Harvey B. Mackay

Edward H. Matthei

and Chairman, the Mackay Envelope Factory, Minneapolis. Chicago Theatre 10:30 a.m. Groundwork: Specifying and Purchasing Contract Carpeting. Moderators: Mason Bell and Bernard

Making Things Happen: How to

Win and Keep Customers. Keynote

Speaker: Harvey Mackay, author

8:30 a.m.

Advisory Associates, Marietta, Ga. Merchandise Mart

10:30 a.m.

ABA Journal/Interiors Magazine, Fifth Annual Law Office Design Awards. Expocenter

Zuckerman, Principals, Commercia

10:45 a.m.

Excellence in Design: The Law Office. Panel: Swanke Hayden Con nell Architects, Chicago; Gensler 8 Associates, Los Angeles; and Larson Associates, Chicago. Expocenter

2:30 p.m.

Design Excellence for Healthcare: New Developments in Form and Function. Moderator: Frank Zilm, Chairman, AIA Committee on Archi tecture for Health and President, Frank Zilm and Associates, Kansas City, Mo. Panel: Edward H. Matthei Principal Matthei & Colin Associates, Chicago; James E. Zajac, Mar aging Principal, Hansen Lind Meyer PC, Chicago. CEU credits available 14th Floor, Mart Plaza Hotel

2:30 p.m.

Comfort in Office Buildings. Gail E Schiller, Associate Professor of Architecture, University of California Berkeley; Volker Hartkopf, Professor, Center for Building Performance and Diagnostics, Carnegie Mellon University, Pittsburgh. Expocenter

2:30 p.m.

Floor Coverings to Fixtures: Specify ing for Today's Grand Hotels. Speaker: Frank Mingis, President, Mingis Group, Atlanta. Merchandise Mart

Cover Photo: John Ferris Robben

4:00 p.m.

Humanizing the High-tech Workplace: Smart Offices, Smart Buildings, Smart Cities. Moderator: Michael Brill, President, BOSTI, Buffalo, N.Y. Panel: John Paul Eberhard, retired executive director, Building Research Board, National Academy of Science, Washington, D.C.; Duncan Sutherland, Office Technology Consultant and Chairman, The Sutherland Group, Reston, Va.; Forrest Wilson, Professor of Architecture, Catholic University of America and Technology Editor, Architecture Magazine.

6:00 p.m.

Celebrate Your Imagination in Chicago! A gala evening at the new Expressways Children's Museum at the renovated North Pier. Tickets \$30 per person, call (312) 467-5080.

8:30 g.m.

Innovations and Directions in Cor-

avid Snyder



Thursday, June 15

ichael H. Bourque



porate Culture. Moderator: David Pearce Snyder, Consulting Futurist, The Snyder Family Enterprises, Bethesda, Md. Panel: Upro Karjalainen, Digital Equipment Corporation OY of Finland, Espoo, Finland; Hideo Minagawa, Secretary General, New Office Promotions Association, Tokyo. 14th Floor, Mart Plaza Hotel

9:30 a.m.

Chicago Chapter AIA Interior Architecture Committee and Interiors Magazine Product Display Awards. Second Floor Conference Center

10:30 a.m.

Design Forum: Synergy for the '90s. Moderator: David Pearce Snyder, Consulting Futurist, The Snyder Family Enterprises, Bethesda, Md. Panel: Michael H. Bourque, President, IBD, Boston; Elizabeth Howard, President, ASID, Honolulu; Erik C. Lund, President, International Facility Management Association, Minneapolis; David Winters, President, Interior Designers of Canada, Toronto.

14th Floor, Mart Plaza Hotel

1:00 p.m.

NEOCON® Excellence of Showroom Design and ASID/Joel Polsky Prize Presentation. Second Floor Conference Center

2:30 p.m.

Communications by Design: A Survey of International Graphic Design. Joseph P. Duffy, President, The Duffy Design Group, Minneapolis. 14th Floor, Mart Plaza Hotel

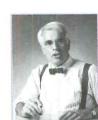




Andres Duany

Friday, June 16





Peter Eisenman

Edmund N. Bacon



4:00 p.m.

International Symposium on Modern Architecture VI: The New Pluralism. Moderator: Fulvio Irace, Architecture Collaborator, ABITARE, and Professor of Architecture, Politecnico di Milano, Milan. Panel: Andres Duany, Principal, Andres Duany and Elizabeth Plater-Zyberk Architects, Miami; Peter Eisenman, Eisenman Architects, New York; Jean Nouvel, Architect, Paris; Demetri Porphyrios, Architect, London; Jaquelin Robertson, Cooper Robertson & Partners, New York; and Wolf D. Prix, Coop Himmelblau, Vienna.

14th Floor, Mart Plaza Hotel

6:00 p.m.

A Tribute to the Facility Management Profession. Contact Carl Brewster, at (312) 527-0066. 95th Club, John Hancock Building

8:30 a.m.

The Chicago Architecture Awards Presentation of New Work. Presentors: Mildred F. Schmertz, editor, Architectural Record; Arnold Larsen, President, Illinois Council/AIA Chicago. Recipients: Edmund N. Bacon, Urban Planner, Philadelphia; Alfred Caldwell, Landscape Architect, Chicago; and Jean Nouvel, Architect, Paris. Chicago Theatre

11:00 a.m.

Design Presentation I. Participants in the Modern Architecture Symposium present their work. Panel: Peter Eisenman, Eisenman Architects, New York; Wolf D. Prix, Coop Himmelblau, Vienna. Second Floor Conference Center

12:00 p.m.

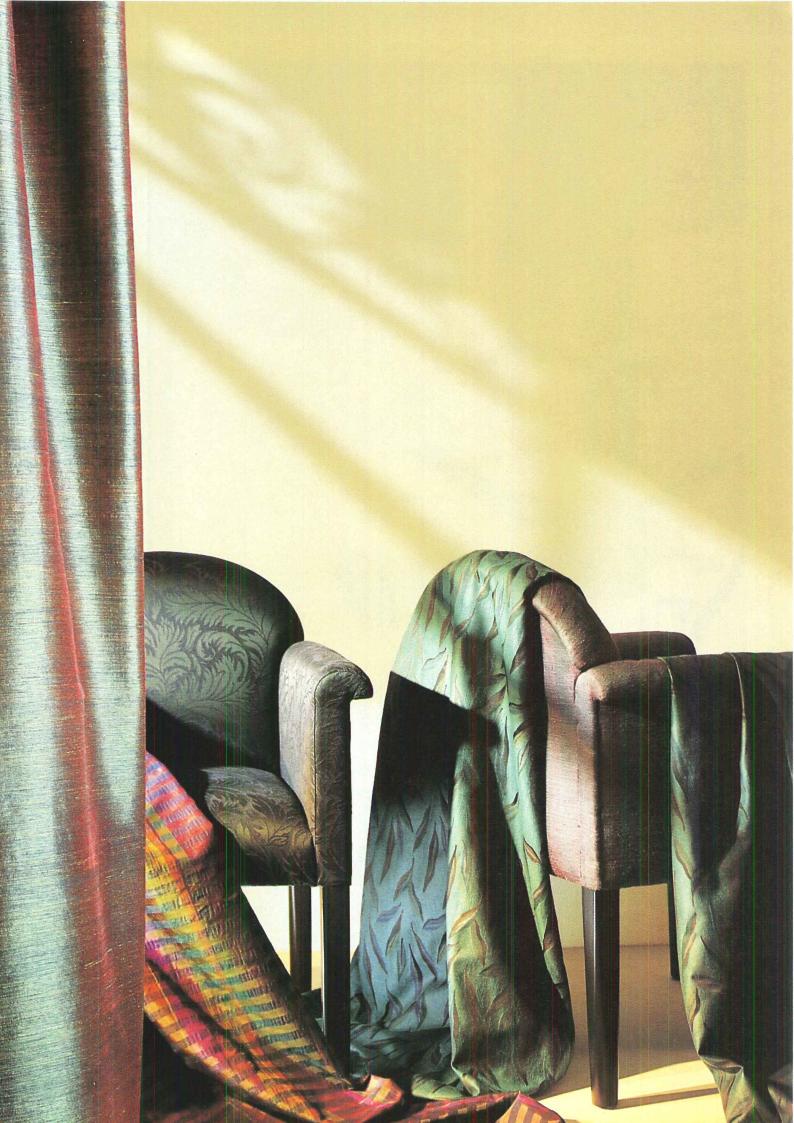
Chicago Day at NEOCON® 21. Open house for Chicago design, architecture, and business communities featuring special showroom events, presentations, lectures, and luncheons. A Chicago jazz review from 2:00 p.m.-5:00 p.m. on floors 3, 8, 9, 10, and 11 of the Mart.

1:00 p.m.

Design Presentation II. Participants in the Modern Architecture symposium present their work. Panel: Andres Duany, Principal, Andres Duany and Elizabeth Plater-Zyberk Architects, Miami; Demetri Porphyrios, Architect, London; Jaquelin Robertson, Cooper Robertson & Partners, New York. Second Floor Conference Center

Jack Lenor Larsen is color... any color you can imagine. Color, design, craft, and technology. Luxurious materials from exotic places. Elan Chair, Larsen Furniture 41 East Eleventh Street New York, NY 10003-4686 Telephone: 212.674.3993

拱 JACK LENOR LARSEN



STRATOS

Ceiling Fan Series

design RON REZEK

STRATOS is designer Ron Rezek's answer to the industry's need for a new generation of ceiling fans.

Unique in its design and engineering, the STRATOS ceiling fan integrates architecturally in any environment with unprecedented ease of installation.

Available in 42" and 52" sizes, in a range of colors and finishes, the STRATOS series comes standard with reverse and a four-speed wall mounted control.

A low voltage MR16 haloge recessed downlight kit is available as well as a complete line of matching accessories which allow the STRATOS to be adapted to low, high and sloped ceilings.

Listed Patent Pending

Distributed by:

Artemide, Inc.

Customer Service Cont 1980 New Highway Farmingdale, NY 11735

TWX-510-694-9292 TWX-510-221-1851 Fax-516-694-9275

STRATOS " is a product manufactured by the

Beverly Hills Fan Co. Circle No. 313

Products



GAT ditions to the Quadrant collection clude this bench, available in a l-inch, two-seat version and an -inch, three-seat style. Choose om 24 upholstery leathers. cle 108 on reader service card



merican Seating

vitation, a veneer-clad wood furnire system, features frame-and-inrt panel construction. The Celeation fabric, finish, and materials ogram complements the system. cle 112 on reader service card



AGI The DAS Collection, Designs Adapted for Space, includes Mont, a two-seat sofa that is also offered in lounge chair and loveseat versions. The arm velt may be specified in contrasting fabric or leather. Circle 109 on reader service card



Alma

Designed by Ole Christensen, Halcyon executive casegoods collection includes desks, returns, credenza components, vertical storage, bookcases, lateral files, and conference and occasional tables. Circle 110 on reader service card



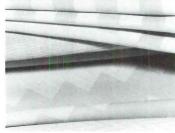
American Olean

A new tile called Quarry Mesa Grande^m combines the look of large-size natural quarry with a new stain protection program called AO QuarryGuard[®]. Four colors may be selected.

Circle 111 on reader service card

Arconas

Designed by Conrad Marini, the Paloma club chair can be specified for lounges, lobbies, and executive seating applications. Circle 114 on reader service card



Arc Com

The Medarc 4 fabric collection is designed for the health care market. The jacquard, flame-resistant polyester textiles feature both largeand small-scale patterns. Circle 113 on reader service card



Armstrong

Commercial ceilings such as Fine Look are acoustical panels that combine grid-hiding score lines and textured surfaces. Circle 115 on reader service card



Artemide

The Ettorino halogen floor lamp provides indirect lighting. Finished in a lead-gray, metallic lacquer finish, the lamp was designed by Ernesto Gismondi.

Circle 116 on reader service card





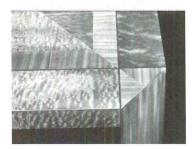


NEOCON²¹



Atelier International The Ingot Table collection offers over 12,000 shape, height, finish, and tabletop edge options. Four conical base plates support the table.

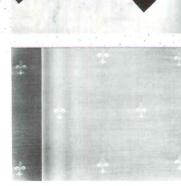
Circle 117 on reader service card



Baker Executive Office Pomelle mahogany additions to the Pfister Collection include an upper deck to complement the credenza, a series of conference tables, and a guest chair.

Circle 120 on reader service card





Gretchen Bellinger

The tissue taffeta Fleur de Lis® is a new gossamer silk fabric. Suitable for window treatments, the 59-inch fabric is offered in a cream, taupe, and pink palette. *Circle 121 on reader service card*

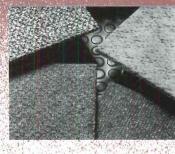
Brayton Textile

Serif, a 54-inch, 100 percent worsted wool upholstry fabric is offered in 9 colorways. Serif is patterned after Egyptian handwritings. *Circle 123 on reader service card*

Azrock

Genoa, an addition to the Century Marble line of vinyl floor tiles, has a white background with gray morbling running diagonally through the tile, which may be specified in 12" x 12" or 12" x 18" sizes. *Circle 118 on réader service card*





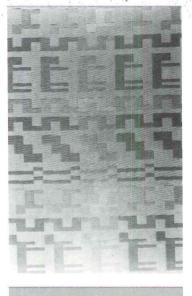
BASF

Contract carpets using Zeftron 500 ZX nylon can be overdyed or space dyed to break up or accent color. The nylon can also be combined with different yarns to create luminous effects.

Circle 119 on reader service card

Bogesunds USA

A new woven, flame-retardent tex tile is called Pal. The 59-inch-wide pattern is offered in nine colorway and manufactured in Sweden. Circle 122 on reader service card





Brickel

The Emile Chair, designed by Timothy de Fiebre, is an updated version of a familiar form. The pu up model rests on cherry legs and features upholstery detailing. *Circle 124 on reader service card*



veton

gridded truss system supports the andarin Table, designed by Stan-Jay Friedman. Four-, six-, and pht-leg versions may be specified. the 125 on reader service card





rryHiebert

provements to the Prism Electronic mponent Group include a metal nel—designed to complement wood panel—and new elements gineered to better manage incomwires.

le 130 on reader service card



China Seas

Cumberland

lar unit.

The high-arm Monaco three-seat

sofa is offered in leather or fabric.

The seating group also has a lounge

chair and a two-seat sofa that can

be specified as a low arm or modu-

Circle 131 on reader service card

Mandarin Rose, a 100-percent cotton versace fabric, is screen printed on a checked dobby weave. The 54-inch fabric is offered in lacquer red, royal blue, teal, and gold. *Circle 128 on reader service card*



Brunschwig & Fils

The multicolored geometric rectangles of Grosvenor, 54 inch wool textile, create the illusion of horizontal and vertical stripes. Seven colorways and complementary tones are offered. Circle 126 on reader service card



CenterCore

Trianon circular furniture systems for open plan offices complement the Spacemaker collection. Panels, storage units, worksurfaces, and panel inserts are offered in several styles.

Circle 127 on reader service card

Congoleum

Three new colors—taupe, steel, and white—have been added to the Boulevard, which is part of the Marathon collection of heavy-duty inlaid vinyl flooring. *Circle 129 on reader service card*



Dar/Ran

A new modesty option is now offered for the Ambience Collection of desks. Pedestal fronts feature vertical vein-line detailing with a solid hardwood transitional base. *Circle 132 on reader service card*



Davis

The collection of top surfaces available for the Dialog Desk series includes rectangular, 45 degree, triangular, and trapezoidal. Oak and walnut veneers may be specified for movable pedestals. *Circle 133 on reader service card*



ALL THESE BUI ADDRESSED IN TWO

*UNDERWRITERS LABORATORIES INC. CLASSIFIED HARDBOARD SURFACE BURNING CHARACTERISTICS: 604 flame spread: 10 (face & back); smoke developed;

U and L.

We don't get letters like these every day. Nobody does. So when over 800 of our Decorative Tambours received Class I or A fire ratings from Underwriters Laboratories Inc., we thought you should know.

©1989, Ralph Wilson Plastics Co.

This means you can fill out your next tambour application with any one of our Design Group I[™] laminate colors and patterns, Decorative Metals, or wood veneers. And get a first class fire rating to boot. That's a design statement everyone's just burning to make, but can't.



J ISSUES WERE TERS FROM THE LAB.

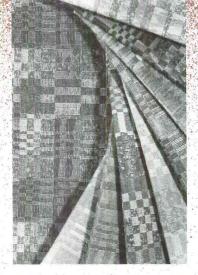
vou'd like the technical story behind our succall us. We'll still give you the same prompt be you expect from North America's number iminate manufacturer. You'll just have to adour Decorative Tambours a little differently. ber all, they're letter perfect now. For complete Fire-Rated Decorative Tambours technical data, call: 1-800-433-3222 In Texas: 1-800-792-6000



e spread: 15 (face) and 10 (back); smoke developed: 20 (face) and 15 (back). Wood veneer flame spread: 20 (face) and 10 (back); smoke developed: 40 (face) and 15 (back).

21





DesignTex

Nimbus, a new upholstery fabric for traditional and contemporary applications, is a durable, tapestry construction with a multi-colored warp. Circle 134 on reader service card



Domore

A four-circuit, eight-wire electrical system; a range of freestanding desks; and paper management products are features of System Seven, designed by Robert Reuter. Circle 135 on reader service card



Dunbar

Additions to the Enloe/Summers Executive Group include the pane desk, which measures 72 inches wide, 33 inches deep, and 29 inche high.

Circle 136 on reader service card

Edward Fields

The Carpetweavers Collection, de signed for large-quantity broadloom contract installations, consis of three textured patterns that may be specified in custom or standard colors.

Circle 139 on reader service card



Executive Furniture The Formtech Palette, an executive casegoods collection, is offered in four wood finishes with 48 laminate colors for worksurfaces.

Circle 137 on reader service card

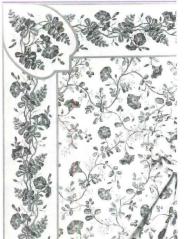


Executive Office Concepts A stackable panel system called Room With a View consists of 16and 18-inch high wood framed, acrylic and fabric-wrapped panels. Work surface choices include wood, veneer inlay, and laminate. Circle 138 on reader service card





Geiger International The Tinta System is a comprehensive modular system of casegoods, worksurfaces, and panels. A urethane coating is offered in 20 colors. Circle 140 on reader service card



Grey Watkins

A new upholstery fabric and wallcovering called Suzanne is part of the Provencal Collection. Printed on glazed cotton, the floral pattern has a 54-inch repeat.

Circle 141 on reader service card

Gullins International Transit Seating systems from Bief feplast feature milled steel constru tion finished in a variety of ovenbaked epoxy colors. One- throug

five-seat units or seat and stool/ table combinations are offered. Circle 142 on reader service card

IF YOU HAVEN'T SEEN US LATELY, YOU HAVEN'T SEEN US AT ALL.

WESTINGHOUSE.



We think you'll be pleasantly surprised when you look at Westinghouse.

You'll see the Wes-Group[™] Ultra Panel, our new, industryexclusive panel design. You'll see a generous fabric line, including Textura[™] patterns, that were developed in collaboration with Jack Lenor Larsen; you'll see the visual harmony of the sensitive color and texture palette and you'll see it all as a part of the industry's most flexible system...and a system that's backed with a lifetime warranty.*

Open your eyes to Westing-

house. It may just change the way you look at your client's needs.

For complete details, call your Westinghouse dealer, or contact Westinghouse Furniture Systems, 4300 36th Street, S.E., Grand Rapids, Michigan 49508, **1-800-445-5045.**

You can be sure . . . if it's Westinghouse

*Limited warranty for the normal lifetime of the new Wes-Group Ultra Panel and associated Wes-Group products. Some exclusions do apply. Broadloom and modular carpet systems in Antron® by DuPont have soil-resistance and static protection built-in.

Photography: Tom Crane

Veduta della Grande Galleria del Louvre, Hubert Robert. Coquillot, Claude Monet. Scala/Art Resource.

Lasting Impressions

When the acquisitions committee adds commercial carpet to the permanent collection, this is the search procedure:

Seek out the hidden values that guarantee long-term performance on the floor. Review the Unibond® technology that protects against edge ravel and delamination. Apply the state-of-the art in backing systems for a trouble-free wear surface.

Compare Unibond to other backing constructions. The eye may not see the difference in the sample, but every time you walk a project you'll see it on the floor.

Filing systems. For detailed construction and performance specifications, see Sweet's General Building & Renovation and Contract Interiors files 09685.

Call toll-free. For literature, warranties, installation and maintenance guides, call 800/523-7888. FAX 215/666-1094.

Circle No. 350 on Reader Service Card

There's no 'or equal' for performance.

Lees Commercial Carpet Company

A Division of Burlington Industries, Inc

21





Gunlocke

Influenced by the Federal Period, chairs from the Sutton collection have a camel top, detailed wood arms, and Marlborough legs or fluted base. Optional button tufting and nail trim may be specified. Circle 143 on reader service card



HBF

The Silhouette Chair, designed by Calvin Morgan, features six different, interchangeable side panel options. Several custom and standard colors are offered. Circle 144 on reader service card



Harden

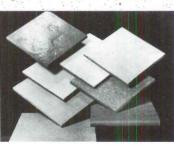
Additions to the modular furniture system include a full-length hutch and corner connection units. Optional door units are offered in 20or 30-inch units.

Circle 145 on reader service card



Hardwood House

A new line of component casegoods features a straight edge detail with a flush, back reveal. Enclosures, pedestals, tables, and vertical storage cabinets may be specified. Circle 146 on reader service card



Hastings Tile & Il Bagno A series of glazed, hand-molded tiles are frost-resistant. The terracotta tiles measure 10" x 10" and are available with matching stair treads.

Circle 147 on reader service card



Haworth

Places[®], freestanding steel furniture includes double- and single-pedes tal desks which measure 25 inches high and are available in three depths. Circle 148 on reader service card

Hendrick Textiles

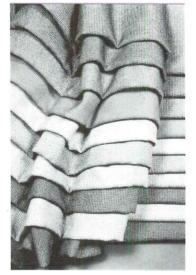
Highlights, a 100-percent nylon fabric, combines a reflective filament yarn with a subtle spun yarn. Offered in 10 colorways, the fabric is 54 inches wide. Circle 150 on reader service card



Helikon

The Pomele Makore stand-up desk is part of a new line of casegoods, which also includes credenzas, addon storage units, computer cabinet, table, and breakfronts.

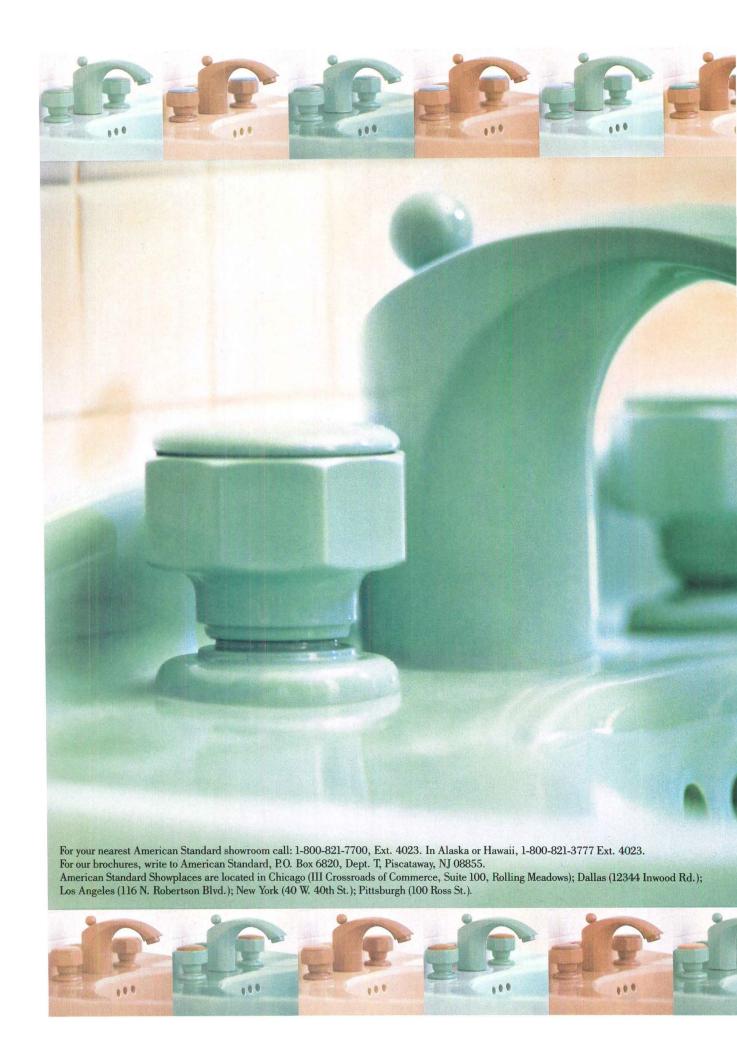
Circle 149 on reader service card



A Royal Reception.



JOCKEY leather embossed with CHABONAIS pattern on LOUIS XV FAUTEULL RAPHAEL damask in background







Living up to a higher standard. American Standard.™

With over 64 different color combinations, there may even be one that pleases your client.



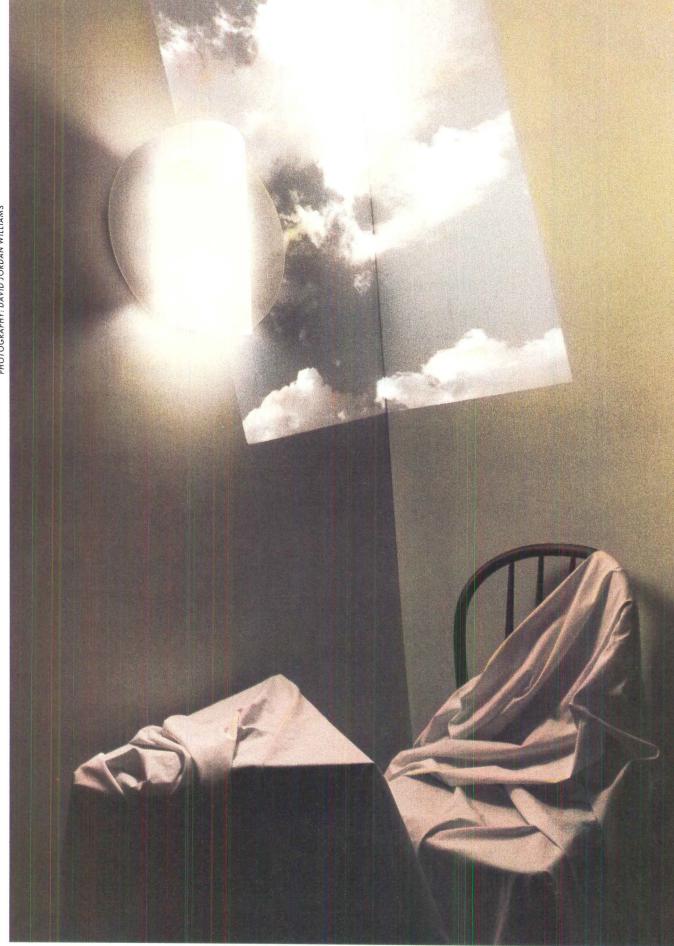


A palette of four harmonizing colors, Classic and Light Mink, Classic and Light Turquoise, the Tones[™] Collection allows you and your clients to interpret and reinterpret a color theme that suits your vision.

The Tones Collection of colors is available on whirlpools, baths, lavatories, toilets and bidets. Classic Mink and Classic Turquoise are also available on a selected line of Amarilis faucets.

American Standard

©1989 American Standard, Inc.



CYMBAL INCANDESCENT OR FLUORESCENT • 17 INCHES • ETCHED GLASS • DESIGNED BY RON REZEK

Ve anti lalatora











rex Furniture

ks and credenza tops from the dison collection are bordered by d mahogany edges. Drawer and r pulls for the casegoods are d brass.

≥ 156 on reader service card

Herman Miller

Hollington[®] managerial chairs are offered in high- and low-back versions with arms, as a low-back side chair with arms, and in lounge chair styles.

Circle 151 on reader service card

ICI Fibres

Sonnet, a tufted cut pile carpet,

signed by Patrick Carpet Mills.

Circle 154 on reader service card

features Tactesse nylon fibers. Of-

fered in 13 colors, Sonnet was de-



Howe

Folding tables from the Diffrient collection are available in a range of styles, sizes, and shapes. Other design options include accent colors, laminates, and veneers. Circle 152 on reader service card

ICF

Pelle is a new leather stacking chair constructed around a chromiumplated steel frame. The chair was designed for pull-up use in cafeterias, training rooms, or workstations.

Circle 153 on reader service card

Interna Designs

Philippe Starck's Royalton Chair rests on a signature, polished aluminum back leg. The chair is finished in mahogany stain or black ebonized wood. Circle 155 on reader service card



JAB

An all-cotton, upholstery fabric called Wayne features color-coordinated geometric motifs on a heavy ribbed background. The Italian jacquard is offered in six colorways. Circle 157 on reader service card



JG

UPS Cluster workstations, a panelbased office furniture system, can be configured into 4-, 5-, and 6station clusters with central power and data distribution. Circle 158 on reader service card



leading edge . . .

Using elegant lines to create a form of comfort, the curvilinear shape of ERGO adapts to any environment due to its transitional design. ERGO's gracefully arched back makes an harmonious transition into the arms and suspended seat to create one unified form. ERGO is accented with a double needle stitch detail for added definition.

With ERGO it's a matter of variation on a theme. The original ERGO chair, as featured, is also available in a dining and wide lounge version, as well as a two-seat sofa. Whether upholstered in fabric or leather, the uncompromising design of ERGO makes an original declaration that keeps it on the leading edge.



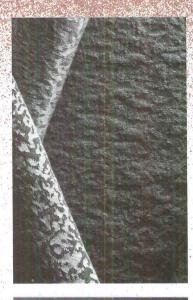
a member of the steelcase design partnership

255 swathmore avenue • high point, nc 27264 • (919)434-4151

Circle No. 315 on Reader Service Card



NEOCON²¹



Adam James Textiles Moonlight, an upholstery collection

of damask jacquards, is a cotton, wool, nylon blend. The contract textile is offered in 11 colorways. *Circle 159 on reader service card*



Kinetics

The modified Neon chair now features molded back. A stool version has also been added to the line. Both models have a cantilevered frame and a urethane, molded seat. *Circle 162 on reader service card*



Jasper Desk

The components of the Trieste Serie 3000—desks, credenzas, work su faces, and storage units—may be configured into a variety of work stations. Three finishes and antique brass hardware are offered. Circle 160 on reader service card



Kimball International The Independence seating collection

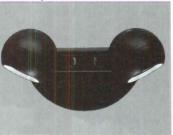
provides an executive swivel-tilt, task, and posture-back models. Guest seating and secretarial chairs round out the collection. Circle 161 on reader service card



Koch + Lowy

Designed by Sacha Ketoff, the Sapiens/2 table lamp extends up to 45 inches and can reach up to 51 inches in height. The 50-watt, 12-volt halogen lamp is finished in black or gray. *Circle 164 on reader service card*





George Kovacs

The Private Eye(s) Collection, designed by Robert Sonneman is powered by a 20-watt bi-pin halogen bulb. Made from injection-molded plastic, the lamps come in table and single- or double-wall versions. *Circle 206 on reader service card*



Kron

Alberto Lievore designed the Ponte Seating collection, which includes a loveseat, sofas in three widths, a chaise longue and ottoman, and modules with or without arms. *Circle 207 on reader service card*



KnollStudio

Architect Gianfranco Frattini designed The Kyoto table and Etager Constructed of wooden crossmen bers, the latticework table is offere in 35- and 44-inch sizes. *Circle 163 on reader service card*





Krueger International

A managerial chair joins the Pire seating collection designed by Giancarlo Piretti. Executive office seating and stacking and folding chairs can also be specified. *Circle 208 on reader service card*



The Moon Chair designed by Stanley Jay Friedman

Executive Offices: 145-68 228th Street, Springfield Gardens, NY 11413 Tel. (718) 527-3000 or (1-800) 221-6783 NEW YORK 979 Third Avenue, D&D Building IDCNY Center II DALLAS Design District 1621 Oak Lawn CHICAGO 946 Merchandise Mart

Photo: Peter Palge

What's tougher than heavy me





When it comes to contract upholstery fabrics a wall coverings, no other fibers come close to t unique combination of rugged durability and l urious styling versatility of Du Pont CORDURA In laboratory testing, CORDURA exceed the Wyzenbeek Double Rub Abrasion Test by such a wide margin that testing was stopped

after a million rubs. In other testing, CORDUF demonstrated that it will not pill, thereby assuing its long-lasting good looks where alter-

as stylish as Mme Butterfly?



itives look shabby or need costly maintenance.

Of equal importance, Du Pont CORDURA fers a soft, satisfying hand and a rich, inviting ok in a wide range of up-to-date colors, styles id textures, from jacquards and heathers to ool blends. So whatever the setting-from pard room to public arena-there is a ORDURA fabric that looks and feels just right. ind upholstery fabrics of CORDURA are pated with TEFLON® WBC for advanced soil and stain repellency, easy cleanability and quick drying.

To help designers with in-depth product information, technical literature, comparative testing or any other design assistance, Du Pont has established the CORDURA Design Resource Network.

Call us at 1-215-855-7765 or write CORDURA Design Resource Network, Du Pont Company, 100 West Main Street, Lansdale, PA 19446.



/ith Du Pont CORDURA, durability is always in style.

cle No. 328 on Reader Service Card

21





Krug

Laminate tables from the 5700 Series may be specified with rectangular, racetrack, square, and round tops. Wood edges are offered in two different styles and sizes, including a radius detail. Circle 209 on reader service card



Jack Lenor Larsen

New Italian locquer chairs from the Lyre collection are crafted from European beech and finished in black and white satin lacquer. Uphalstered seats may be selected for the arm and side chair. Circle 210 on reader service card



Lees Commercial Carpets The SurTex program offers color and design options in modular cai pet systems. A choice of four diffe ent surface textures and three bac ing systems are all available in either 18- or 24-inch squares. Circle 211 on reader service card



Loewenstein

The Ventura chair is offered with or without arms. Designers may also choose between a slated or an upholstered back for the chair which comes in 26 finishes. Circle 212 on reader service card



J.M. Lynne

The new VWC wallcovering collection offers a range of vinyl wallcoverings with a choice of textures and patterns suitable for high-traffic commercial applications. Circle 213 on reader service card



Maharam

A new jacquard upholstry fabric is called Stained Glass, and is a 65percent cotton, 35-percent polyester blend with an acrylic backing. The collection includes four designs in 14 colorways.

Circle 214 on reader service card



Marden

The Chesterfield II seating group consists of a lounge chair and a two- and three-seat sofa with trip stitched cushions. Circle 215 on reader service card

Meridian

New components of the Stackable Storage System include three drawer-front styles and three new drawer pulls. The vertical files are available in 22- or 28-inch deep models

Circle 216 on reader service card



Monel

The Viola Club Chair, designed by Franz Klein features ball feet and is constructed of hardwood and wood paneling at the back and arms. Standard and large sizes may be chosen.

Circle 217 on reader service card



Mueller

A new edge detail for Varia Casegoods is now available. Esquire, a square-edge design accented by two horizontal shadow lines, is offered on all component and in all Varia finishes. Circle 218 on reader service card













chairs and tables, for contract and residential use, designed for us by architects and designers from the East and the West.





F





It is a diverse collection with a common focus











on fine design, craftsmanship and exceptional wood finishes.











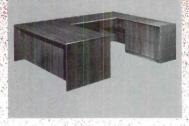
Call your nearest Conde House representative for more information.

Conde House 200 Kansas Street #225 San Francisco CA 94103 Telephone 415 864 8666 Birmingham, MI: 313 646 0097. Boston: 617 268 5020. Charlotte, N.C: 704 365 3500. Dallas: 214 698 9296. Houston: 713 961 9220. Los Angeles: 213 652 7090. St. Louis: 314 241 3324. Smithfield, N.C: 919 934 3773.









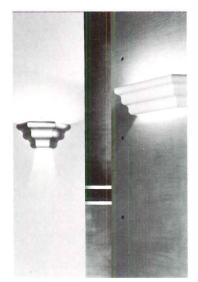
Myrtle Desk

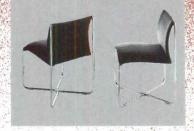
Executive U groupings can be ordered in both traditional and contemporary styles. Each desk features a full pedestal with storage drawers and one file drawer. Circle 219 on reader service card



Palazzetti

Three new chairs orginally designed by Rene Herbst are now constructed of mirror polished and chrome plated steel tube. Cloth covered elastic cords form the seat and back. Circle 223 on reader service card





Nienkamper

The Billow Chair, designed by David Rowland, has a patented Z coil suspension design. The chair is offered as a side chair or armchair in both fabric and leather. The frame is offered in polished chrome and other powder-coat finishes. Circle 220 on reader service card



Panel Concepts

Omnific Multiple seating uses a central support rail to provide three-, four-, and five-place units with a variety of seat or seat-andtable combinations. Seats may be specified in 17- or 19-inch widths. Circle 224 on reader service card

Ron Rezek

The Squiggle wall-mounted sconce, an 8-inch high fixture that accepts halogen and fluorescent lamps, is finished in white brushed aluminum. Circle 226 on reader service card



Parameters[®], a new panel and desk

system, offers four wood profiles:

square, radius, transitional bevel,

and traditional. Coordinating

casegoods are offered.

Circle 221 on reader service card

PCI/Tandem



Rosemount Office Systems A new color program developed by Joan Burgasser for the Orion® Panel

System includes fabrics, trims, and finishes. Circle 227 on reader service card

Pace

The Echo dining table has a sandblasted top with clear square to reveal the supports, which are copper coil enclosed by a blackmetal frame with green patin feet. End and coffee tables may be specified. Circle 222 on reader service card.

Patterson, Flynn & Martin

Illusion, a handtufted wool fabric, part of the Obsedian collection, which consists of black, white, and tones of gray colorations. Circle 225 on reader service card

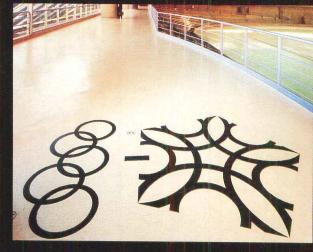


Scalamandré

Ariel is woven from 60-percent rayon, 30-percent cotton, and 10percent linen. The new contract textile may be specified in three colorways. Circle 228 on reader service card

Forbo Linoleum Lets Me Create Beautiful Mosaics For The Floor."





Lightly marbleized Forbo sheet linoleum in 11 different colors provides the perfect medium for Barbara Astman's art floor in the Olympic Speed Skating Oval. The University of Calgary also used Forbo off-white linoleum tile in the halls, where a decorative inlay of the XV Winter Olympic logo is installed.

"An historic building like the Olympic Oval demands a bold and heroic entrance—to enhance the excitement of the Winter Games, o create a legacy for the people of Calgary ong after the games have ended.

"Forbo Linoleum comes in such a beautiful spectrum of colors, is wonderfully durable, and lets me create and implement designs as elegant as a Byzantine floor at a quarter of he cost."

Artist/designer Barbara Astman is a native of New York now living in Toronto. For a letailed case history and full color iterature contact Forbo North America, oday.

aubara Uorman Artist/Designer

Toronto, Canada



DRBO NORTH AMERICA

Box 32155 • Richmond, VA 23294 0) 233-0475 • In VA (804) 747-3714

NEOCON²¹



Shelby Williams

A floral pattern tapestry called Tivali is made from a blend of 65-percent cotton and 35-percent rayon. The 54-inch fabric is offered in four colorways. Circle 229 on reader service card



Stroheim & Romann Part of the Tapestry collection, Langtree is a Gothic molding pattern that is designed to represent a sculpted border. Complementary woven textiles are also offered. *Circle 231 on reader service card*



TAB Products The products that make up the Prestige Systems line include a woodpanel system, a wood-trim system, and an executive high-end furniture program that features high-gloss mahogany and light oak finishes. Circle 234 on reader service card





Tarkett

A new Ricchetti ceramic tile collection is called Desert Moods and consists of subtle pink, bone white and beige colorways. The 8-inch tiles have an irregular edge and a semi-matte finish.

Circle 235 on reader service card



Studio Steel

The Technostat Table consists of structural and stainless steel with black rubber details and is available as occasional, conference/dining, console, and coffee table sizes. *Circle 232 on reader service card*



Steelcase

A new lightweight stacking chair called Paradel can also be specifie as a side chair. Fabricated with a DuPont Zytel[®] plastic shell. Parade is stain- and scuff-resistant. Circle 230 on reader service card



SunarHauserman

Design Option Wall offers many base, ceiling, and finish options. Th unitized movable wall has vertical chases for power and communication tion cabling.

Circle 233 on reader service card

Taylor Companies

The Bentley Swivel chair is offered in mid-management, low-back or closed-arm versions in addition to the Executive high-back model. Bentley stands 35" to 381/2" high. *Circle 236 on reader service card*



Every time

you buy

a carpet,

you're

putting

your

reputation

on the floor.

Carpet performance is a reflection of your performance. Which is precisely why you should know about BASF Fibers' extensive Performance Certification program. For the last 20 years, BASF has led the industry in testing carpet performance. Subjecting every carpet made from Zeftron fibers to more than 21 rigorous tests. Ensuring that when you specify BASF Fibers, you can be sure you're going to enhance your reputation. That's something you should keep in mind. Call 1-800-446-8953 for a free brochure that tells you more about the company driven by the spirit of innovation.

BASF Corporation Fibers Division





NEOCON²¹



Thonet/Madison

The Polar Chair, designed in Copenhagen by Komplot Design for dining areas and cafeterias, uses a bentwood arm and leg, a molded plywood seat and seatback, and steel wire leg supports. Circle 237 on reader service card





Trendway

Heather-tone tabrics for vertical panels are affered in a mix of complementary solids. Complementary high pressure laminates will also b featured. Circle 238 on reader service card

1

Vecta

Wilkhahn FS + Grand Class seatin adjusts automatically to provide constant lumbar support. High- an mid-back models feature pneumati height adjustments and a tilt-lock mechanism.

Circle 240 on reader service card



Tuohy

Six new desks make up the Japonica Collection. A complement of executive desks, returns, and credenzas in a range of sizes and finishes are part of the line.

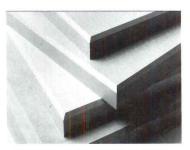
Circle 239 on reader service card





Westinghouse

A series of component enhancements includes modified cabinets and worksurfaces, a multi-rail accessory panel, and expanded trim, finish, and fabric offerings. *Circle 241 on reader service card*



Wilson Art

Decorative edge treatments for worksurfaces and cabinet doors make up the new Snap-On-Edge[®] line of moldings. Wood moldings are offered in 17 solid wood profiles. *Circle 242 on reader service card*



Worden

A new component transport syster is called M.T.S. Applicable in libraries, healthcare facilities, and private offices, the system consists of a maneuverable cart used together with staging racks and shelv ing units.

Circle 243 on reader service card

Choose colorful comfort.



Colby designs offer superb comfort, strength and the ultimate in versatility. Featuring 11 gauge steel frames with tough COBARTM coating, they're available in free-standing or joined to tables in modular configurations. All upholstered cushions use Nemschoff Flip+loc® or Corloc® seating systems to make them instantly renewable on-site. Call or write for the colorful new Colby catalog now.

Colby c/o Nemschoff Box 129, 2218 West Water Street Sheboygan, WI 53081 414-457-1164 Chicago 1193 Merchandise Mart Chicago, IL 60654 312-467-6297

Dallas 319 Oak Lawn Design Plaza Dallas, TX 75207 214-748-3051 New York 150 East 58th Street New York, NY 10155 212-759-7620

Circle No. 323 on Reader Service Card

OUS ES

A Call for Submissions

for the December

To identify outstanding houses to be featured in the December 1989 P/A, the editors are calling for submission of residential projects that will be completed by this summer.

Eligibility

Any single-family residence (house, house addition or renovation, apartment, guest studio) completed during the period January 1988 through August 1989 can be submitted. Landscaping and furnishing will have to be completed sufficiently to allow comprehensive photography commencing on or about September 1, 1989. Houses previously published in P/A, Architecture, or Architectural Record are not eligible.

Submissions

A one-page description of the program, site, and ideas behind the house's design. Special attention should be given to the development of the scheme and the precedents or conditions that affected it.
 Site plan and plans of each floor. Send reduced plans, not full-size working drawings.

Photographs (preferably slides, but prints accepted) of the house, completed or near enough to completion for its design to be evaluated. Photographs need not be professional, but should be clear and numerous

enough for editors to judge from them. There is no limit on the number of submissions a firm <u>can make, and there</u> is no submission fee.

Deadline

The deadline for submissions is Wednesday, May 31. Materials must show postmark (or receipt by other carrier) by that date. The editors will review submissions during the month of June and notify all those selected by June 30.

Return of Submissions

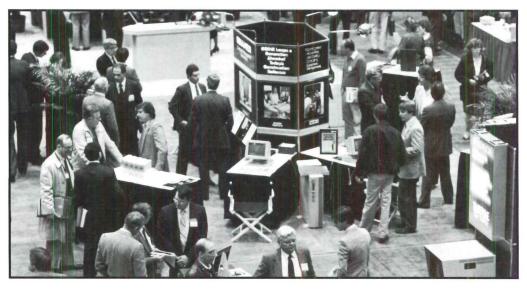
Submissions not selected will be returned by July 7, provided an addressed envelope with sufficient postage is enclosed. (alternatively, an account number for Federal Express can be attached, to allow for two-day, collect, return delivery). Entries without provision for return delivery will be discarded after the selection process.



Not to Miss!







June 5–8, 1989 Anaheim, California Convention Center Next June more than 30,000 architects, engineers, contractors, facilities managers, interior designers, mapping professionals, process/ power engineers, specifiers, project managers, computer consultants, CADD specialists, and other design and construction professionals will attend A/E/C SYSTEMS® '89.

In fact, they wouldn't miss it.

Should you?

The world's largest computer and high tech show for the design and construction industry









At the touch of a key. Introducing Letrex, the easy-to-use label lettering



 Introducing Letrex, the easy-to-use label lettering machine from MAX. Now give a professionally lettered look to all your graphic needs—quickly and easily. Letrex offers 7,470,876 character variations, 30 different color combinations, 8,000 character memory and over 20 character styles. For complete information, call 800-223-4293. In NY call 516-222-2184.

МАХ



MAX BUSINESS MACHINES CORP. The first name in a line of quality products. MAIN OFFICE: 585 Commercial Ave., Garden City, NY 11530 Phone: (516) 222-2184 / Fax: (516) 222-1046 L.A. OFFICE: 20830 Leapwood Ave., Carson, CA 90746

Circle No. 355 on Reader Service Card

New Products and Literature

125 NEOCON

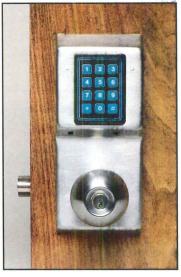
102 Technics-Related Products 166 Products and Literature continued



Victorian conservatories are available in rectangular or octagonal designs. A full-color catalog describes the modular, cedar structures and illustrates several design options. Tophung side sashes, held open by brass window stays provide ventilation. Extruded PVC gutters and leaders drain water. Double glazing is optional. Amdega. *Circle 205 on reader service card*



A barrier-free shower module features a fold-up seat and measures 36" x 36". Designed for residential applications, the compact unit also meets ANSI institutional requirements. Offered in white, almond, and four other colors, the unit is part of a collection of barrier-free bathing products. Kohler. *Circle 106 on reader service card*

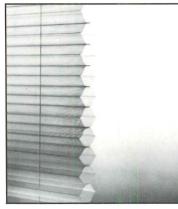


Electronic locksets called Touchcode® are microprocessor controlled and operate from a self-contained battery pack. Once the correct six-digit code has been entered, the mechanism unlocks for a period of time ranging from four to six seconds. Users can assign a different six-digit number to as many as three different employee groups, plus an overall master code. Touchcode[®] is available in six mortise lock configurations with features such as a one-inch deadbolt and key override. Yale Security. Circle 107 on reader service card



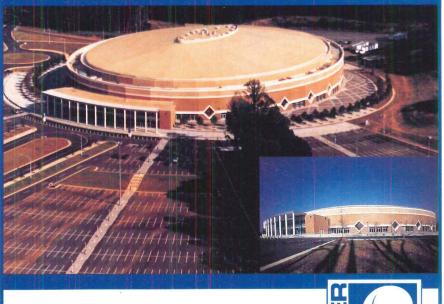
Press-button locksets called Premi-apri are manufactured in Italy. Rather than rotating, the locksets operate by a slight touch of a built-in lever-action button. Two models are offered in six colors and three finishes. Iseo Locks. *Circle 244 on reader service card* **Heated spas** for commercial and residential applications made from stainless steel can accommodate from 4 to 22 people and are offered in octagons measuring from 75 inches to 86 inches in diameter and varying in length from 86 inches to 168 inches. A brochure describes the easy access spas. Bradford Spas. *Circle 245 on reader service card*

A new lighting directory entitled Office Lighting and Productivity has been added to the large selection of free publications devoted to lighting innovations and solutions. The National Lighting Bureau. *Circle 246 on reader service card*



A new window shade called Duette Sheer Visuale is fabricated from a light, nearly transparent fabric. The pleated

Charlotte chose Masonry with DRY-BLOCK[®] for their Jewel. Would you consider anything less for your masterpiece?



Over 700,000 DRY-BLOCK[®] units used in the Charlotte Coliseum

The beautiful, split-face masonry units making up the walls of the fabulous Charlotte Coliseum are protected from the elements by the DRY-BLOCK[®] System.

Depend on DRY-BLOCK,[®] the original, integral water-repellent system for lasting beauty that stands up to whatever Mother Nature dishes out.

For the full story on the Charlotte Coliseum, just drop us a line.



7221 West Parkland Court Milwaukee, WI 53223 (414) 354-4400 1 (800) 558-7066

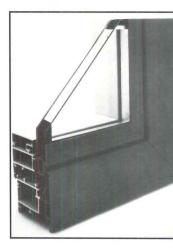


shades feature a patented honeycomb construction and are offered in six pale colors. Hunter Douglas. *Circle 247 on reader service card*

A software program called Wood-E[®] helps architects and engineers save hours of design time on wood joists and beams. The software can calculate mult ple spans with up to six support cantilevers, uniform, concentrated, and trapezoidal loads. MiTek Wood Products. *Circle 248 on reader service card*



A magazine rack made from steel tubing is finished with a black polyester enamel. A clean enamel coats the steel rod. The unit stands 72 inches high and weighs 15 pounds. Godley-Schwan. *Circle 249 on reader service card*



New two-tone windows may be specified in tilt and turn, doub hung luxury windows, and may other styles. A newly developed direct painting process maintait extrusion tolerances and protects against water and air infit tration. Mannix. *Circle 250 on reader service card* (continued on page 168)

Circle No. 336 on Reader Service Card

Now there's more than one way to look at residential sprinklers.

Until now, sprinkler system designers have had a limited choice of residential sprinklers to apply to a wide range of conditions. Viking solves this problem by offering two distinctly different residential sprinkler styles in a variety of colors.

The Microfast[®] line employs a small frame and a unique slender bulb element in pendent and horizontal sidewall models. Available in chrome, brass & bright brass, white and Navajo white, Microfast residential sprinklers are UL listed. Color-matched flat or special adjustable escutcheons are available for all Microfast sprinklers.

The new Horizon[®] Residential sprinkler is a visually appealing flush sprinkler design. UL listed, the rugged Horizon Residential is available in chrome, black chrome, bright brass, white and Navajo white with matching adjustable escutcheon ring.

Both Microfast and Horizon Residential sprinklers come in 1/2'' or 7/16'' orifice sizes in a variety of temperature ranges and provide unmatched quality, appearance, and performance at very competitive prices.

Viking sprinklers and fire protection equipment is distributed nationally through SupplyNet. For more information on Viking's Microfast and Horizon Residential sprinklers, contact your

nearest SupplyNet member distributor, call, or write the Viking Corporation, Hastings, Michigan.



SupplyNet Member Distributors: Viking Sprinkler Supply, Fairfield, NJ: Braintree, MA: Allied Sprinkler Corporation, New York, NY: Southland Sprinkler Supply, Atlanta, GA: Southern FL: Denver, CO: Addison, TX: Fire Protection Supply Company, Addison, IL: Midwest Sprinkler Supply Company, Columbus, OH: Sprinkler Contractors Supply, Fullerton, CA:

(continued from page 166)

"When I joined Best Western's Gold Crown" Club I thought I'd get free dental benefits."



"I got something better. Frequent guest benefits."

Best Western's new frequent guest program pays off in more than 3,000 different places around the world.

In the USA and Canada, you earn points toward rooms, U.S. savings bonds, gift certificates or AAA/CAA memberships.

In 1,400 international hotels, motels and resorts, you get corporate rates or special recognition.

	DNS, CAII <u>1-800-528-123</u> t Western is independently owned and ope	
Here's my application. Gold Crown Clu	Please enroll me in your b today.	
TITLE	PHONE EXT	
PLEASE MAIL TO MY 🗆 HOME 🗆 BUSINE	ESS ADDRESS	
CITY STATE/PROVINCE	ZIP/POSTAL CODE	COUNTRY
CREDIT CARD TYPE	#	EXPIRES
Mail to: Best Western International	l, Inc. Gold Crown Club P.O. Box 5838 F	Holliston, MA 01746 P-01

Circle No. 001 on Reader Service Card



Ceilings engineered for use ir ice rinks are called Low E ceilings. The design blocks radian heat transfer from the ceiling the ice, thus reducing refriger tion costs. Viking Arena System *Circle 251 on reader service card*

Asbestos removal is the subject of a 12-page color brochure which discusses the problems associated with the presence and abatement of asbestos. BFI Stephens.

Circle 252 on reader service card

A new rug called Inflight Day was designed by Pamela Babe Silk, carved dots are individual tufted and emerge from a flat matte textured wool background. Bordered with a fine silk band, the rugs are offered dark and light color palettes. V'Soske.

Circle 253 on reader service card



A new insulation system mad from blocks of FOAMGLAS[®] was developed for use in high temperature environments. StrataFab[®] may be ordered in multi-layered stacks or billets. Pittsburgh Corning. *Circle 254 on reader service card*



A new flat file drawer called Artfile Supreme is stackable to 15 files high—transportable and storable. The oak unit hole paper up to 22³/4" x 30³/4". Jerry's Artarama. *Circle 255 on reader service card* (continued on page 171)

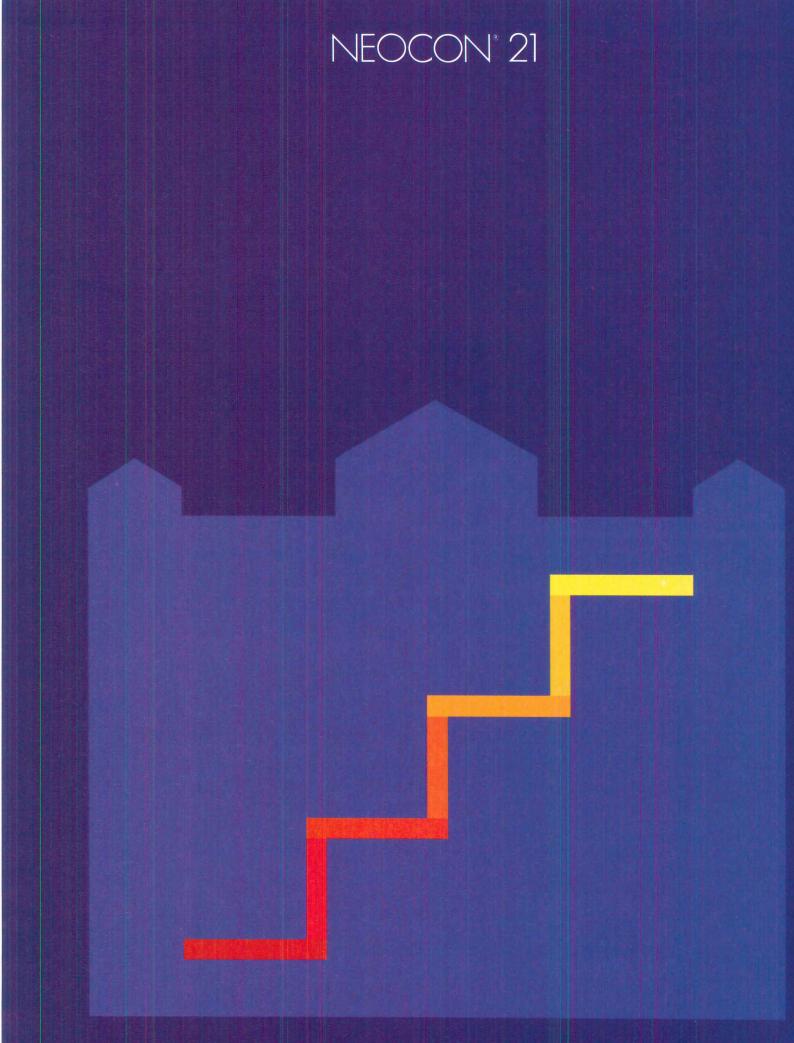
Sun Fighter

PTI's 767 Acrylic Plus Sealant offers big advantages to those who want high quality sealants at reasonable cost. This unique acrylic polymer, an alternative to urethane, inherently resists ultra violet degradation better than urethanes. Long life (20 year minimum) is built in, not added on in PTI's 767. It adheres tenaciously without primer to most clean substrates. Use it on glass, metal, concrete, wood or any combination. It provides excellent elongation, even in extremes of heat and cold, and meets the Federal Specification TT-S-00230C, Type II, Class A.

Get the Data Sheet on PTI 767 and learn how to put quality into your next building project. Protective Treatments, Inc., 3345 Stop Eight Road, Dayton, Ohio 45414. Tel. 1-800-543-7570. In Canada PTI Sealants Ltd., Rexdale, Ontario. Tel. 416-249-7234.

Circle No. 361 on Reader Service Card

pti Sea ants



THE MERCHANDISE MART CHICAGO JUNE 13.16 1989

NEW PRODUCTS

⁽continued from page 168)



Hand-painted fabrics make up the Rave Reviews collection of woven, print, and draper textiles. Pearlized, glazed cotton fabrics complement a line of tapestries and tea-washed linens. B. Berger. *Circle 256 on reader service card*

A new color selection system called Colorcurve® enables designers to communicate precise color selections to manufacturers using the same system. The system's colors are grouped according to objective reflectance curves for accurate matching. Colorcurve Systems. *Circle 257 on reader service card*

Building Materials

Major materials suppliers for buildings that are featured this month as they were furnished to P/A by the architects.

Central Housing Office, UC Irvine (p. 92). Architects: Eric Owen Moss, Architect, Culver City, Calif. Concrete block: Orco Block. Vitrified clay pipe: Pacific Clay Products. Pre-painted sheet metal roof/wall panels: "ColorKlad," Vincent Metals. Exterior paint/coating: PPG, with Pennwalt "Kynar." Interior latex-acrylic paint: Decratrend Paints. Exposed concrete floors: Ashford Formula, Concrete Chemical. Mortise locksets: Russwin. Fluorescent lighting: Prudential Lighting. Incandescent vaporproof lighting: Harvey Hubbell. Water closets: American Standard. Chiller and gas boiler: Trane. Carpet: Stevens. Desks and chairs: Steelcase. Aluminum mini-blinds: Levelor-Lorentzen.

The Hynes Veterans Memorial Convention Center, Boston (p. 65). Architects: Kallmann, McKinnell & Wood, Boston. Steel frame: (continued on page 172)

TAKE A STEP TOWARD THE FUTURE AT NEOCON 21.

Once a year, an event occurs of such magnitude that it draws the entire architectural community together. It's an event which presents the latest contract furnishings and brings together architects from around the world. It's NEOCON 21, at The Merchandise Mart in Chicago. From June 13-16, you'll be able to make plans for your next interiors project and network with other professionals at the year's most influential design event.

Resources for this year and beyond.

In NEOCON's twenty-first year, the event will be more exciting than ever, with millions of square feet of product previews. Whether you're presently involved in the shaping of interiors for your clients or looking to expand your interiors work, NEOCON is the place to examine the scope of the contract furnishings industry, and the place to find new resources for building products and technologies. There's only one building in the world that could contain an event of this scope: The Merchandise Mart.

A network of vital information.

Your entire staff will benefit from NEOCON 21's educational opportunities. You'll attend keynote and professional sessions dedicated specifically to issues that affect your practice. NEOCON is a time to meet, discuss, and discover new directions.



At the heart of architectural history.

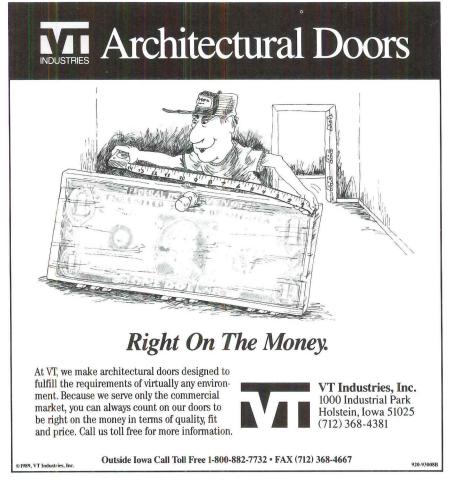
NEOCON is a landmark event in a landmark location: Chicago, a city with a history shaped by architecture and design. Because it's at the heart of the nation, you'll find travel plans simple and cost affordable. And The Merchandise Mart can help you budget your NEOCON visit, too, with early registration discounts on air fares and hotel rates. Take the first step toward future business success: mail in the coupon below today.

Mail to: The Merchandise Mart, NEOCON 21 470 The Merchandise Mart, Chicago, IL 60654

NAME		
TITLE		
COMPANY		
ADDRESS	CITY	
STATE ZIP		
	NERCA	
more information, or to receive	A IN T	
registration packet, please		
l 1-800-342-6278 (in Illinois, l 312/527-7618).	F CHICAGO	



Circle No. 002 on Reader Service Card



Circle No. 376 on Reader Service Card

(continued from page 171)

Lehigh Structural Steel. Steel reinforcing: Barker. Metal deck Rollform. Granite walls and pav ing: Cold Spring Granite. Roman Brick: Cloud Ceramics. Ceiling coves and column cover: Formglas. Mahogany paneling: Loughman. Fabric-wrapped panels: Acousticord. Stretched fabric walls: Stretchwall. Perforated metal wall panels: A.C. Aluminum windows: Vistawall. Aluminum skylights: IBG. Bronze balance doors: C.J. Rus Hollow metal doors: Bilt-Rite. Mahogany doors: Loughman. Overhead doors: Overhead Door. Slate floors: Burlington Natstone. Ceramic tile: Heath Ceramics. Vinyl-wrapped acou tical panels: Decostics. Aluminum frame ceiling: Eckel. Meta slat ceiling: Luxalum. Wood-sla ceiling: Loughman. Ballasted EPDM roof: Firestone. Silicone sealant: General Electric. Wate proofing: Tremco. Veneer plas ter: U.S. Gypsum. Operable walls: Modernfold. Paint: Sher win-Williams. Hinges: Hager. Locksets: Corbin. Panic bars: Von Duprin. Electronic signag Luminator. Computer video signage: Nynex Information, Solutions Group. Telephone system: AT&T. Security system Electronic Technology. Employee lockers: Penco. Custom signs: Cornelius. Fire alarm sy tem: Simplex. Elevators: Montgomery. Escalators: Otis. Public stairs: Burlington Natstone. Fire stairs: American Architectural Iron. Bronze rai Michaels Art Bronze. Sconce lighting: Bega. Accent lights: McPhilbin. Pendant metal halide: General Electric (exhib halls), Crouse-Hinds (loading dock). Recessed lights: Lightolier, Edison-Price. Glass wall sconces: Louis Baldinger & Sor Custom fixtures: C.W. Cole. Recessed fluorescent: Crouse-Hinds. Electrical distribution: Square D. Lavatories and wate closets: American Standard. Faucets: Chicago Faucet. Flush valves: Sloan. Toilet stalls: Glob Steel. Washroom accessories: Bobrick. Water fountains: Filtrine. Sprinklers: ASCOA. Boi ers: HSI. Air conditioning system: Carrier. Air handling equipment: VSM. Environmen tal controls: Johnson Controls Carpets: Patrick Carpet Mills. Office furniture: Unifor. Fold ing tables: Krueger. Mahogan benches: Loughman. Auditorium seating: Irwin Seatin Stacking chairs: GF. Blinds: Sol-R-Veil. Drapery: General Drapery.

P/A Job Mart

SITUATIONS OPEN

NORTH DAKOTA STATE UNIVERSITY Fargo. The Department of Architecture and Landscape Architecture at North Dakota State University is seeking applicants for one or more full-time teaching posi-tions at the Assistant Professor level in Landscape Architections at the Assistant Professor level in Landscape Architec-ture and/or Architecture (9-month basis; tenure-track) be-ginning Fall 1989. Teaching duties include architectural de-sign plus lectures/seminars in fields such as technologies, structures, landscape architec-ture. computers. building ture, computers, building methods and materials. Re-quired: Master of Architecture or Landscape Architecture. Preferred: professional and teaching experience and proteaching experience, and pro-fessional registration.

The Department of Architec-ture and Landscape Architec-ture has a student body of 300 in the Architecture and Landin the Architecture and Land-scape Architecture programs. North Dakota State University is part of the Tri-College pro-gram including two univer-sities and one college with over 20,000 students. North Dako-ta's full-time student body to-tals 10,000 students.

For full consideration, appli-cation should be made by June 1. Application, resume and names of references to: Faculty Search Committee, De-partment of Architecture and Landscape Architecture, North Dakota State Univer-sity, SU Station, Box 5285, Fargo, North Dakota 58105. NDSU is an Equal Oppor-tunity/Affirmative Action em-ployer. plover.

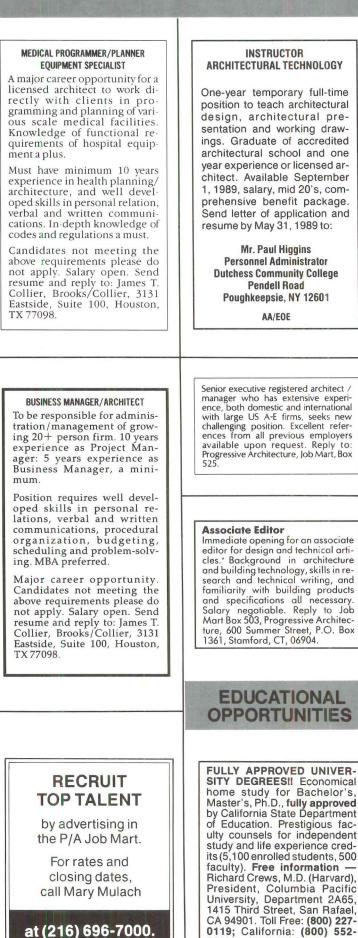


and commercial building design required. Send resume with salary requirements:

P.A. Smith, 10 N. Seventh St. Stroudsburg, PA 18360

HEALTH CARE COMMERCIAL BUILDING

Your architectural expertise is in demand nationwide. Key growth positions avail-able at all levels. Confidential. Call/send resume to: Anton Wood Associates, 1692 Central Ave., Albany, NY 12205, (518) 869-8477.



SITUATIONS WANTED

TEXAS A&M UNIVERSITY

GRADUATES Graduating May 12, 1989 with Masters of Architecture. Available for immediate employment. Interested in all locations. Creative ability and technical expertise. Anxious to start architectural career: Oscar Andrino-Barbier, Helen Brown, Marc Brundige, Debbie Fernandez, Huey Grant, Bruce Hoelscher, Toby Johnson, Geoffery Reiner, David Scott Roselius, Pornsiri Songkakul. Send inquiries to: Texas A&M University, College of Architecture, 608 Design Studio, College Station, Texas 77843-3173 SERVICES ARCHITECTS - \$25,000-85,000 **GROUP ONE SEARCH** Executive Architectural Recruiters. Superb positions Nationwide at all levels with Regional and National firms. Confidential. NEVER A FEE. P.O. Box 5199, Marietta, GA 30064-0544 (404)423-1827 or (813)969-0544 FAX YOUR ORDER! To Advertise in Penton Classifieds, FAX: (216) 696-8765 editor for design and technical arti-cles.' Background in architecture and building technology, skills in re-search and technical writing, and familiarity with building products and specifications all necessary. Salary negotiable. Reply to Job Mart Box 503, Progressive Architec-ture, 600 Summer Street, P.O. Box 1361, Stamford, CT, 06904. **Advertising Rates** of box number box number SITY DEGREES!! Economical home study for Bachelor's, Master's, Ph.D., fully approved by California State Department of Education. Prestigious fac-ulty counsels for independent Check should accompany the advertisement and be mailed to Mary Mulach, Progressive Architecture Classifieds, 1100 Superior Ave., Cleveland, OH 44114. Telephone: 216/ 696-7000, Ext. 2584. its (5,100 enrolled students, 500 Ads may be telecopied: 216-696-

Insertions will be accepted no later than the 1st of the month preceding month of publication. Copy to be set due seven days earlier.

8765.

5522; or (415) 459-1650.

Situation Open advertisements: \$180 per column inch, per your layout. Maximum 30 words per column inch. Maximum 6 column inches. Display style advertisements are also available in fractional page units starting at 1/4 page and running to full page. Commissionable to recognized advertising agencies. No charge for use

Situation Wanted advertisements: \$75 per column inch. Maximum 30 words per column inch. Noncommissionable. No charge for





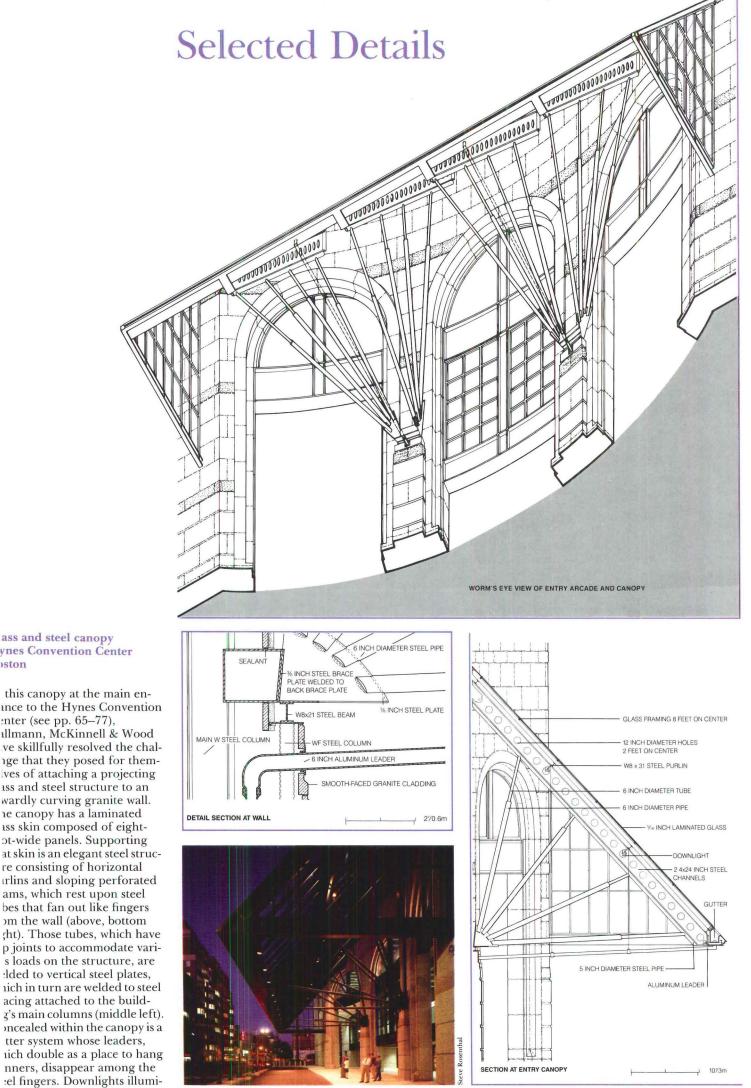
Kentile Portilla II Tile. The Height of Fashion.

The height of fashion starts on the floor with Kentile[®] Portilla II vinyl composition tile. Its big, bold vinyl chips create a rich, dynamic effect that coordinates beautifully with today's commercial decorating themes. And through-mottling contributes to Portilla II's durability.

Designed for long-lasting beauty, Portilla II has a smooth, greaseresistant surface that requires only minimal care to maintain its elegance. Portilla II comes in 12" x 12" squares, 1/8" thick. And it's available in 6 exciting, new high fashion colors: Tawny, Alabaster, Charcoal, Mulberry, Walnut and Tan.

Create your own exciting floor show with Portilla II. Ask your Kentile representative to show you the complete line today.





Night view of canopy.

te the sidewalk (bottom left).

ston

P/A Advertisers' Index

A/E/C Systems, '89 163 Abitare 45 American Seating Co. 124 American Standard Inc. 142, 143 Amoco Chemical Co. 118, 119 Andersen Corp. 52, 53 Armstrong World Industries. C2, 1, 2, 3 Artemide, Inc. 130 Avonite 39
BASF157Best Western International168Boyd Lighting Co.C3Brayton InternationalCollectionCollection146, 147Brueton Industries149Brunschwig & Fils141
C/S Group 22, 57 Chicago Metallic Corp. 64 Colby Furniture 159 Conde House 153 Congoleum Corp. 44
Domtar Gypsum 162W, 163W Dorma Door Controls, Inc. 54 Dover Elevator Systems, Inc. 10, 11 Dryvit Systems, Inc. 14, 15 DuPont Co.—Cordura 150, 151 DuPont Co.—Corian 27, 29
Eotron Corp. 28 Flexco Co. 59 Forbo North America 155 Formica Corp. 49 Forms + Surfaces 8 Forrer Industries 166
GE—C & I Lamps 104, 105 Glen Raven Mills 61
HEWI, Inc
L. t

Italian Trade Commission 16
Kawneer Co., Inc. 40, 41, 114, 115 Kentile Floors 174 Kimball Office Furniture 62, 63 Knoll International 34, 35 Kohler Co. 4
Jack Lenor Larsen 128, 129 Lees Commercial Carpet Co. 138, 139 Lighting Services, Inc. 30 Lunstead, Inc. 47 Lutron Electronics Co., Inc. C4
McNichols Co. 122 Mannix Industries 60 Marble Institute of America 58 Marvin Windows 20, 21, 106, 107 Max Business Machines Corp. 164 Merchandise Mart—Neocon 170, 171
N.C.A.R.B
Peerless Lighting 42 Poulsen Lighting, Inc. 45 Precast/Prestressed Concrete 46 Institute 46 Progressive Architecture 80 Bookstore 162 Protective Treatments, Inc. 169
Reggiani USA12Reliance National103Ron Rezek/Artemide, Inc.144Roppe Rubber Co.56
SRB Technologies, Inc.176Sargent/Essex Industries, Inc.36Senergy, Inc.50Sherwin-Williams Co.116, 122Sitecraft, Inc.31Southern California Edison161WSteelcase, Inc.6, 7

TWA		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	48
Urbanco		•		•	•	•	•	2	2		2	•		•	•	•		•	•	33
VT Industries				a			6	ē	•					•			•			172
Viking Corp.	3	2	÷			i,	•	•	•	•	•	•	•	•	•	•	•	•		167
Weatherend F	S	ta	at	e	d	F	LT.	rı	ni	it	u	re	P							110

Westinghouse Furniture Systems . . 137 Ralph Wilson Plastics Co., Inc. (WILSONART®) 134, 135 Wolverine Technologies, Inc. . 108, 109

Zero U.S. Corp 120 Zumtobel Lighting, Inc. 17

Note: R or W after numbers denotes material that appears in regional editions only.

Advertising Sales Offices

Stamford, Connecticut 06904: 600 Summer Street, P.O. Box 1361 203-348-7531 Fax 203 348 4023 Robert J. Osborn Vice President and Publisher Richard A. Strachan, Sales Manager Francis X. Roberts, James J. O'Brien, Thomas K. Healy, District Managers Atlanta, Georgia 30326: 3400 Peachtree Road, NE-Suite 811 Lennox Tower 404-237-5528 Fax 404 237 1372 Harmon L. Proctor, Regional Vice President Ronald L. Miller, District Manager Poston Massachuration Boston, Massachusetts: 600 Summer Street, P.O. Box 1361 Stamford, CT 06904 203-34 Thomas K. Healy, 203-348-7531 District Manager Chicago, Illinois 60601: 2 Illinois Center Bldg, Suite 1300 312-861-0880 Fax 312 861 0874 Patrick J. Carroll, Brian Keenan District Managers Gail Lisac, Sales Service

Cleveland, Ohio 44114: 1100 Superior Ave. 216-696-7000 Fax 216 696 8765 John F. Kelly, Western Sales Manager
 Dallas, Texas; St. Louis, Missouri:

 2 Illinois Center Bldg, Suite 1300

 Chicago, IL 60601

 312-861-0880
 Fax 312 861 08
 Fax 312 861 0874 Brian Keenan, District Manager Denver, Colorado 80222: 4155 East Jewell, Suite 202 303-753-1901 Fax 303 692-0219 Albert Ross, District Manager Los Angeles, California 91436: 16255 Ventura Blvd, Suite 300 818-990-9000 Fax 818 905 1206 Barbara Couchois, District Manager New York, New York 10168: Chanin Building, Suite 900 122 East 42nd Street 212-867-9191 Fax 212 867 5893 James J. O'Brien, District Manager Philadelphia, Pennsylvania: 600 Summer Street, P.O. Box 1361 Stamford, CT 06904 203-348-7531 Francis X. Roberts, District Manager San Francisco, California 94010: 840 Hinckley Road, Suite 233 Burlingame, CA 94010 415-692-1381 Fax 415 Fax 415 692-7406 Susan M. Werner, District Manager Paris, France: Continental Europe Continental Europe 12 Avenue Franklin-Roosevelt, 75008 Telephone: 43 59 36 06 Telex: 26071 Fax: 43 59 76 70. Yvonne Melcher, Manager **Tokyo, Japan 101:** Bancho Media Service Dai-Ichi Nisawa Bldg, 5th Fl. 3-1 Kanda Tacho 2-chome Chiyoda-Ku 03-252-2721 Genzo Uchida, President United Kingdom: Wood Coltage, Shurlock Row Reading, RG10 OQE, England 0734-343302 Telex 848800 Techno G Fax 0-734-343848 Malcolm M. Thiele Managing Disacter, UK Managing Director, U.K.

