INTRODUCING METAPHORS™
A NEW DIMENSION IN CEILING SYSTEMS.

Integrates coffer details with 2'x2' or 4'x4' acoustical lay-in panels.
Class A, mitered moldings in cove, crown, or micro step design. Add Cirrus® Metaphors panels
or Hardware Friendly fixture cutouts. Fits our standard or narrow T-bar grids.
For more information, call 1 800 233-3823 and ask for Metaphors.
ARMSTRONG CONTRACT INTERIORS
SHOWROOMS
NEW YORK
CHICAGO
LOS ANGELES

Circle 1 on inquiry card
INTRODUCING CALLIGRAPHY™

Acoustical lay-in ceiling systems with multidepth detailing. Predesigned medallion and border visuals. Cirrus® texture. 2' x 2' panels available in 24 designs and seven colors with matching grid. For our brochure, call 1-800-233-3823 and ask for Calligraphy.
On the Cover of Time

Aaron Betsky wrote [ARCHITECTURAL RECORD, July 1992] that Richard Neutra was “... one of only three members of the profession to make the cover of Time magazine (Frank Lloyd Wright and Philip Johnson are the other two).” There were at least three others: Eero Saarinen (July 2, 1956), Edward Durell Stone (March 31, 1958), and Nathaniel Owings (August 2, 1968).

Robert L. Skolmen
San Mateo, California

Not 'troubled'

What caught my attention on page 117 of your [July 1992] issue on Social Housing was your description of the Fort Greene section of Brooklyn as “troubled.” “Troubled” is one of those euphemisms used to describe the decay or decline of a community or region. This characterization is so far from my experience as a resident of Fort Greene from 1986-1989 that for, the first time, I felt I had to write you. While the past few months have shown the entire nation the worst about city life and race relations, Fort Greene is a good example of how people of varying backgrounds can live together peacefully. One of the things I enjoyed about Fort Greene was the diversity of its citizens. My neighbors included Austrians, Korean-Americans, fellow Afro-Americans, Jewish-Americans, Palestinians, and Iranians.

Among us were jazz musicians (Betty Carter and Henry Threadgill), artists, filmmakers (in 1986-87 I often saw Spike Lee walking through the neighborhood and his father still lives in the area), chefs, well-known architects, ex-hippies, and other recent college graduates like myself.

Fort Greene isn’t perfect, but to paint the entire community as “troubled” is to ignore the lives of the majority of its citizens, of which I was proud to be one.

Celia Clarke Philadelphia

Noise Control

In “Health Club Flooring: Selection Guidelines” [RECORD, July 1992, page 136], one concern not mentioned was impact-noise control. Selection of substrate (support and underlayment) and surface materials can have a big influence on the transmission of activity noise from gymnasium spaces to adjacent areas. Solutions may range from selection of appropriate standard support underlayment, or surface materials, to installation of a vibration-isolated flooring system designed to take advantage of the natural vibration characteristics of the structure.

Ronald T. Eligtor
Consultants in Acoustics New York City

Corrections

The associate architect for Westendstrasse 1 [RECORD, June 1992, pages 84-85] is Nagele Hofmann Tiedemann, of Frankfurt. The hotel part of the mixed-use project has been dropped. Similar to other Frankfurt projects shown, the curtain wall of the project is a double-wall that exhausts warm air from the insulating air gap.


Bouligny & Associates were architects of record for Codorniu Napa Winery [May 1992, page 25]. Domingo Triay of Barcelona was design consultant.

September 11-December 4


September 16

The International Design Center, New York City (IDCNY) will host Career Day for architects, designers, facility managers, and students. 718/937-7474.

October 7-10


October 11

46th National Preservation Conference, sponsored by National Trust for Historic Preservation in Miami, Florida. 800/937-6847.

October 8-12


October 12

“Path of Wind, Path of Water,” 4th Takiron design competition. Send inquiries and submissions to: Shinkenchiku-Sha Co., Ltd., 2-31-2 Tushima, Bunkyo-ku, Tokyo, Japan 113. Call: 81/3-3811-7101.

October 15-17

25th Annual Designer’s Saturday, New York City. 212/826-3155.

October 19-21


October 20-22

How to twist the rules of the game.

Introducing Cross Check. One of seven new designs by Frank Gehry for Knoll. 105 Wooster Street, New York City. For other locations or more information call 800 445-5045.

Circle 3 on inquiry card
Everybody talks about the weather.
We've done something about it.

Remember when rain on the job site was a problem for your flooring? Standing water caused buckling, swelling, warping, and swearing. But the new Inner-Seal® T&G flooring allows standing water to drain away from the panel quickly and completely. We redesigned the edge profile to make the most of gravity. Vertical notches in the tongue and straight edges do the trick. We improved our sealer at the same time. But we're not only doing something about wet weather. We're doing something about the environment. This product is made primarily from small-diameter, fast-growing trees, which reduces our country's dependence on old-growth forests. Buy Inner-Seal T&G flooring.

From now on, rain has nowhere to go but down and out.

Louisiana-Pacific Inner-Seal T&G Flooring
Doing something about it.

For more information, call us in Hayden Lake, ID at 208-772-6011, in Chicago at 708-517-8833, or in Houston at 409-756-0541.
All the benefits of a laser printer on a much larger scale.

A-size (8.5" x 11")

B-size (11" x 17")

C-size (17" x 22")

ProTracer™ — a 360 dpi desktop printer/plotter that produces A, B, as well as C-size output.

Features include:
- High performance inkjet engine from Canon®
- Fast, Intel i960™ processor — drawings that take over one half hour on pen plotters take as little as five minutes on ProTracer!
- Optional HP-GL® and PostScript® language emulations, memory expansion boards, and sheet feeders
- Unsurpassed customer service — 60 day money back guarantee of satisfaction, one year warranty, and free lifetime technical support

ProTracer Base Unit
- Customized ADI and PADI drivers for AutoCAD users
- Epson and ProPrinter emulations

$1499

ProTracer with HP-GL
- ProTracer base unit
- HP-GL emulation card
- 5 MB memory

$2249

ProTracer Fully Configured
- ProTracer base unit
- HP-GL emulation card
- PostScript language emulation card
- 5 MB memory
- Sheet feeder (100 sheet)

$2897

If you'd like to expand your printing and plotting capabilities, call Pacific Data Products at (619) 597-4678, Fax (619) 552-0889.
Years ago there was a show on TV called *Dragnet* which featured a detective, Joe Friday, who used to make rambling or fuzzy witnesses cower by requesting “just the facts, ma'am.” Now that the environmental movement is consolidating after a decade of proclamations and manifestos culminating in the June Earth Summit megaconference in Rio, one begins to see real progress. But this raises important caveats that recall Joe Friday's demand for “just the facts.”

Essentially, we now see industry and the professions sniffing the opportunity not just for glory alone but actual profit. Thus, several U.S. companies are making good money by marketing such items as environmental monitoring systems, packaged cogeneration systems that use less fossil energy, alternative-energy power plants, and waste-recovery systems. A few architects and engineers too have taken up the challenge and are providing programming and design services for facilities that reconcile a building's phenomenal thirst for resources (one half of this nation's energy consumption goes into building construction and operation) with the need to conserve those resources and minimize the damage caused by their mining, use, and disposal. Finally, a day doesn't pass without ads in the various media proclaiming a product's spectacular environmental benefits—its biodegradability, compostability, recyclability, source reduction, refillability, and ozone friendliness (nobody ever said that a new science's jargon had to be succinct).

Now more than ever it is vital for the environmental movement not to overstate its case. Ever happy to add to the nation's supply of regulations, a government agency has this time, to its credit, come out with a set of guidelines designed to control environmental marketing claims. The last week of July the Federal Trade Commission issued a document dealing with such claims, whether direct or by implication, whether using words, symbols, brand names, or other means, and they cover the environmental attributes of all types of products, including those for institutional and industrial use. Packaging is covered along with the product. EPA administrator William Reilly came out vigorously for the new guidelines, claiming they will “discourage [claims] that are vague, trivial, and overstated.” The voluntary guidelines carry considerable implied clout, since they are intended to help manufacturers avoid prosecution under Section 5 of the Federal Trade Commission Act of 1914, which monitors false or misleading marketing practices. For example, it won't do to claim that a product contains 50 percent more recycled content than before, if the percentage of recycled material merely rises from 2 per cent to 3 per cent.

Architects too must be on guard not to overclaim the benefits of a particular design concept; structural, mechanical, or electrical system; or product assembly. The AIA’s Environmental Resource Guide takes a solid step towards recording the facts as they are known today, for example in such product groups as aluminum, steel, particleboard, and various flooring types.

As concern for the environment moves slowly into the mainstream of public discourse, and with one candidate for national office as its articulate champion, one must take special care not to let overstated claims damage its hardwon credibility. Two months ago I heard Maurice Strong, organizer of the Rio conference, claim that “environmental investment is the best chance for the long-term vitality of the world’s economies.” In the process, let us keep a sharp eye on the facts.

*Stephen A. Kliment*
For more information about retrofit as well as new construction applications, call 1-800-382-6445 or 502-527-4200. Or write Alucobond Technologies, Incorporated, P.O. Box 507, Benton, KY 42025. And make a change for the better.
See the beautiful difference that SHEETROCK® First Coat can make.

SHEETROCK First Coat has a unique latex formula designed to provide a superior prime coat in drywall decorating. To keep joints and fasteners from showing through decorated surfaces, both porosity and texture differences between the gypsum panel face paper and the finished joint compound must be minimized. Most primers and sealers will equalize either texture or porosity, but not both.

SHEETROCK First Coat does equalize both, minimizing joint banding, photographing and costly callbacks. To get the job done right the first time start with SHEETROCK First Coat—the fast, economical drywall prime coat.

For more information, call 1-800-USG•4-YOU or write to:
United States Gypsum Company
P.O. Box 806278
Chicago, IL 60680-4124

Pictured above are two gypsum panels with a vertical joint in the center properly finished with a conventional joint treatment system. The top half was primed with SHEETROCK First Coat and painted with one coat of a quality paint. The lower half was not primed with SHEETROCK First Coat but was painted with two coats of the same quality paint. Notice the “joint banding” or “photographing” of the joint in the lower half of the photo.
Win the 16th annual Innovations in Housing design competition and you could be all three.
Rich: $10,000 richer. We'll also give up to three merit awards of $500 each.
Famous: Nationally recognized in Better Homes & Gardens.
Built: Your design will really be built — in the Midwest.

What we need from you: Your best single-family home design (which has not been built) not to exceed 2,800 square feet.

Send the coupon or call (206) 565-6600, extension 172, for entry forms and rules right away. Because new deadline for receipt of entries is January 7, 1993. A little earlier than usual.

Send us your best. We'll see that the best is built.


Innovations in Housing
P.O. Box 11700
Tacoma, Washington 98411-0700

Name ____________________________

[ ] Architect  [ ] Designer  [ ] Builder
[ ] Engineer  [ ] Student

Firm ____________________________

Address ____________________________

City ____________________________

State ____________________________

Zip ____________________________

Innovations in Housing Call For Entries.
Sponsored by the American Plywood Association, Better Homes & Gardens, Builder and Progressive Architecture and co-sponsored by the American Wood Council.

Circle 7 on inquiry card
It's like you old plott on ten c of coffe
Pigments of the imagination

Benjamin Moore paint comes in more than 2,000 standard and custom colors. More colors perhaps, than one might even imagine.

Benjamin Moore Paints
A Stroke Of Brilliance.

Circle 18 on inquiry card
PSSST. THE COMPANIES HAVE SOME MA
ES IN THIS BUILDING
FOR OPENINGS.

The way things are going in construction, we thought you should know about this. Because chances are, you’ve never seen anything like it.

Thanks to Vulcraft’s new composite joist system, 312 Elm and every other office high rise in America can now have more open floor plans with fewer columns. Which is just what developers are looking for, so some happy executive can have a corner office 50 feet square. But even more importantly, happy builders all over the country can probably save money. Because this system is almost always less expensive than precast concrete and structural steel.

On this job, 2-inch composite deck was attached to steel joists with shear connector studs. Then, 4 1/2 inches of normal weight concrete was poured on the deck. It all makes this system perfect for the popular, longer floor spans. What’s more, it minimizes floor-to-floor heights because the MPE systems can run through the webs of the joists.

Clearly, this is one office building with something everyone’s looking for: a quicker, easier way to the top. Since joists are lightweight and easy to handle, 312 Elm came in 3 weeks ahead of schedule and under budget. It may be one of the first buildings in America to use Vulcraft’s composite joist system, but with results like that, it won’t be the last.

So call any one of our plants listed below to find out more about how composite joists can span long distances in your next project. And offer something unheard of in American cities today: wide open spaces.

VULCRAFT
A Division of Nucor Corporation

PO Box 637, Brigham City, UT 84302-8017; PO Box 100520, Florence, SC 29501-0016; PO Box 186, Grapeland, TX 75844-4096-8665; PO Box 59, Norfolk, NE 68702-0059; PO Box 1000, St. Joe, IN 46785-2199-337-5411. Architect: Space Design International; Structural Engineer: Stanley D. Lindsey and Associates; Developer: Duke Construction Management; Steel Fabricator: Ferguson Steel; Steel Erector: Ben Hur Construction.

Circle 19 on inquiry card
When A New York Saddlery Chose Sunbrella® They Weren't Just Horsing Around.

Not just any fabric would do for H. Kauffman & Sons Saddlery Company. They needed something that was versatile, beautiful and durable. Sunbrella solution-dyed acrylic fabric and Sunbrella Firesist® fabric are all those things.

The versatility of our fabric is evident all over the store. Inside and out creative uses of the fabric abound: in the beautiful awnings that grace the outside, in the canopies hanging over the showroom, in the door and window treatments, in the many accent pieces.

The beauty of Sunbrella shines through in every Sunbrella fabric we offer. Regular Sunbrella is available in over 90 colors and styles.
and Sunbrella Firesist is available in 21. The durability is reflected in the best five-year limited warranty in the industry. Sunbrella retains its solution-dyed colorfastness and strength for years, and resists mold and mildew. And Sunbrella Firesist meets the requirements of the National Fire Protection Association and the California Fire Marshal’s test.

So check the Yellow Pages under “Awnings and Canopies” for the name of a dealer near you. And start designing with and specifying Sunbrella, because you wouldn’t want to horse around with anything else.

GLEN RAVEN MILLS, INC.

Circle 20 on inquiry card
It looks less like a bank and more like an English country manor. But the charm of the Investors Savings Bank belies the challenges its design and construction presented. Particularly to Marvin Windows and Doors.

For one thing, fast-track construction scheduling was necessary due to constantly evolving design constraints. For another, it wasn't until thermal efficiency, condensation resistance and aesthetics were factored in that wood was chosen over aluminum. Consequently, Marvin wasn't selected for the job until construction was underway, making manufacturing and delivery deadlines extremely tight.

But Marvin's biggest challenge proved to be the building's three massive window and door assemblies, the largest of which measures 28 feet wide by 30 feet high. Using a combination of sturdy Magnum Double-Hungs and French Doors, Marvin not only built them on schedule, but also engineered them prior to delivery to guarantee they would withstand the strong, prevailing winds off the lake. And, like all 177 of the bank's other made-to-fit windows and doors, they were built with features designed specifically for the project. Features such as authentic divided lites, interior windows and doors glazed to match those on the exterior and a durable, factory applied finish in two complementary colors; Midnight Teal for the sash
and Graphite Grey for the frames. Shortly after its completion, Investors Savings Bank was named the NAIOP Build To Suit Building of the Year. Which just goes to show that paying extra interest can result in some handsome dividends.

MAKE US YOUR FIRST CALL, NOT YOUR LAST RESORT.

If your new construction project needs special attention or you’ve got a window design problem you just can’t solve, call the one company you know will have the right solution. Call Marvin Windows and Doors at 1-800-346-5128 (1-800-263-6161 in Canada). Or mail the coupon for a free catalog featuring our entire line of made-to-order Marvin windows and doors.
Add the touch of elegance to your project with the natural textured image achieved by using concrete masonry units made with Lehigh White Cement. Used as interior or exterior walls, space dividers or unique exterior landscaping components, the combination of architectural concrete masonry and Lehigh White Masonry Cement expands the boundaries of architectural creativity.

Integral block cavities available in concrete masonry provide a cost saving, lighter weight unit and offer a higher capacity for energy efficient thermal insulation, fire resistance and noise control. This unique combination of properties allows the designer to create a beautiful, multi-functional building system with high economic value.

Lehigh White Masonry Cement is manufactured under rigidly controlled conditions to assure a uniform whiteness, consistent performance and reliable strength.

We invite you to discover more about Lehigh White Cements. For additional information or to request literature, call 1-800-523-5488 and speak to one of our representatives, or write to Lehigh Portland Cement Company, P.O. Box 1882, Allentown, PA 18105.

LEHIGH WHITE CEMENT

THE DESIGNERS PALETTE

Circle 22 on inquiry card
Orbitte Wall Maxi (Custom Version)
Headquarters Building
United Brotherhood of Carpenters and Joiners, New York City
Jens Moeller Jensen, Designer
Davis, Brody & Associates, Architects
Fisher Marrant, Lighting Consultants
Peter Aaron/ESTO, Photography

Louis Poulsen
Poulsen Lighting Inc.
5407 N.W. 163rd Street
Miami, FL 33166
Telephone: (305) 625-1099
Facsimile: (305) 625-1213
Call Toll Free: (800) 542-2310
Circle 23 on inquiry card
Nothing brings out earth tones quite like our electrostatic color plotters.

For presentation-quality color, one line of electrostatic plotters can make a world of difference: The 8900 series. The 8900 series gives you a range of options. It produces spectacular color plots in 24, 36 or 44-inch widths. It does it fast—up to 2 inches per second. And with less media waste between plots. You also get automatic trimming capabilities with our new ACS option for standard cut sheet sizes. And finishing capabilities like automatic cutting and rolling. Which means you'll save time and eliminate the cost of a dedicated operator.

And the 8900 series helps bring people in your world together. With our ServeWare LAN software, multiple users can access each plotter. And finally, the 8900 series comes with a special feature that no one else can offer—the Xerox Total Satisfaction Guarantee program. For more information, call Xerox Engineering Systems at 800-538-6477. And find out how to get plots with earth shattering color.

Xerox Engineering Systems
5853 Rue Ferrari, P.O. Box 210061, San Jose, CA 95151-0061
Xerox is a trademark of Xerox Corporation. © 1992 XES, Inc.
Since 1910, Julius Blum & Co. has provided ornamental metal components of high quality to the architectural trades. Today, Julius Blum & Co. is the industry's most complete source for architectural metals. Our latest publication, Catalog 15, describes our full line of architectural metal components: JB" Gloss Rail; Connectorail®; Colorail®; Carlstadt® Railing Systems; Traditional Railings; Elevator Cab Components; Handrail Brackets; Expansion Joints, Thresholds and Mouldings; Tubing, Bars and Shapes in Bronze, Aluminum, Steel and Stainless Steel.

Catalog 15 also includes a complete Engineering Data section to assist in the proper structural design of various handrail systems.
The great weight lifted.

Sweat.
Strain.
Muscles and sinews vs. sinks and tubs of cast iron.
Such was the Iron Age.

Then came the Age of Americast.
Stronger than iron. But only half the weight.

What a relief.

For a free brochure featuring Americast® Brand Engineered Material kitchen and bathroom fixtures, call 1-800-821-7700 ext. 4023

AMERICAST.®
THE END OF THE IRON AGE.

© 1992 American Standard Inc.
Antoine Predock and Robbins, Bell & Kuehlem are collaborating on a $35-million, 110,000-sq-ft expansion of Tampa’s Museum of Science and Industry that will more than double its space and make it the largest science museum in the Southeast. Plans include three areas for permanent exhibits on the history of Florida’s environment, the human body, and flight and space; two galleries for changing exhibitions and traveling shows; a café and shop; a dome-screen theater; and the Hillsborough County Library, said to be the first public library in a U.S. museum. A 47-acre wetland, accessible by boardwalk, will contain nature trails, water-conservation devices, and interactive environmental exhibits. The expanded facility is scheduled to open early in 1995.

New York City

West Coast Architects’ Collection Migrates to Manhattan for a Month

A showing of models, drawings, photos, and objects by 11 West Coast architects, “Angels and Franciscans,” is on view at the 65 Thompson Street Gallery from September 27 through November 7. The show, and Gagosian/Rizzoli catalog, covers Frank Gehry; Craig Hodgetts & Ming Fung (left, top); Holt Hinshaw Pfau Jones; Frank Israel; Koning Eizenberg; Lubowicki Lanier (left, bottom); Mark Mack; Morphosis; Eric Owen Moss; Stanley Saitowitz; and Studio Works. Admitting that Frank Gehry would be the first to protest, curators Susan deMenil and Bill Lacy consider the group of Los Angeles and San Francisco architects a kind of Gehry “school,” claiming it was he who created the climate for the late-20th-century acceptance of honest expression of materials, architecture as art, and experiment and risk, wit and brashness.

Ohio

Research Labs At Ohio State

Construction has begun on Bioscience/Parks Hall by Burgess & Niple and Perkins & Will for Ohio State University. The design places a six-story laboratory block atop a two-story podium housing the library. The first story aligns with a pedestrian route; the second is crescent-shaped to echo the concave stadium across the lawn.
Accent Américain

Wind Tower to Cool Outdoor Sculpture Pavilion

A $20-million renovation and expansion by Tod Williams Billie Tsien and Associates and Lescher and Mahoney/DR Group will more than double the size of the Phoenix Art Museum by 1996. When complete, the 172,000-sq-ft facility will house 20 galleries, two libraries, an auditorium, art classrooms, a shop, and an enlarged Phoenix Little Theater. The most innovative design element is an 80-ft-high translucent cone with a gently curved profile hovering over the outdoor sculpture pavilion to provide a passive cooling system. Based on principles used in the Middle East, a misting system atop the cone will cool and moisturize the scorching Phoenix air so that it drops into the cone and is sucked out the open base to lower temperatures in the immediately surrounding area. One of the first cooling towers in the U.S., it will create shade along with an expected temperature drop of 12 to 40 degrees, depending on humidity. Indoors, separate temperature/humidity zones will cater to the differing needs of 18th- and 19th-century European art, Asian art, Western American art and costumes.

Venturi, Scott Brown and Anderson/Schwartz Architects have won the competition for the new 350,000-sq-ft regional capital of Haute Garonne at Toulouse. Offices and ceremonial spaces are housed in two six-story buildings, each 47 ft deep, to provide daylight and views for interior spaces. All offices have operable windows. Multistory glass-enclosed pedestrian bridges connect the buildings at either end of an internal plaza. The plaza facades are mainly brick, the streetside mainly French limestone. Construction begins in 1994.

1.8-Million Fighting Women Honored

Almost-90-year-old Morris Lapidus dished up some history for the 30-something AIA Young Architects Forum. Architect—some might say inventor—of such glitzy 1950s Miami Beach hotels as the Fontainebleau and Eden Roc, he traced his career from a first job “designing what seemed like hundreds of toilets, washbasins, and urinals” for a convention center. When he recounted how a group of New York architects blocked his nomination as AIA fellow 20 years ago, AIA president W. Cecil Steward rushed to admit that the organization had not “done a laudable job in the past of appreciating people’s values and the ideas of those who dared to be different.” Now, Lapidus is enjoying a renaissance—a recent eight-week exhibit in Rotterdam and release of “Morris Lapidus, Architect of the American Dream” by Swiss publisher Birkhaeuser.

An overdue architectural tribute comes with the approval of Weiss/Manfredi’s Women in Military Service for America Memorial to women veterans. The design includes underground exhibit spaces and computer registry and an aboveground glass and water addition to the McKim, Mead & White 1932 entry to Arlington Cemetery. Beth Dunlop

Construction begins later this year on the new 145,000-sq-ft Guam legislature designed by Herbert Beckhard Frank Richlan in joint venture with Guam firm Arizala, Arizala. The plan incorporates the old structure as a museum and ceremonial space.
Design Briefs

New York City

Back Lot on the Waterfront

Industry returns to the Chelsea waterfront in the form of the six-block-long Silver Screen Studios designed by James Biber of Pentagram Architectural Services. Connecting three long-retired wharves about to become recreation resources jutting into the Hudson, the 300,000 sq ft of film and television sound stages will occupy a 60-ft-high head house providing ceilings in excess of 20 ft. Construction begins early next year. Scenery painters will cover pier-access routes through the studios with architectural highlights of Venice, London, Chicago, the French Enlightenment, and Main Street USA, among others. The piers will contain a marina/esplanade by Swanke Hayden Connell and an indoor skating rink by Butler Rogers Baskett.

Canada

Montreal Gives Birth to a MOMA

The Musée D'Art Contemporain de Montréal, Canada's only museum devoted to contemporary works, was recently completed. Designed by Jodoin Lamarre Pratte and Associates of Montreal, the 160,000-sq-ft building contains galleries, a theater, and a restaurant—all connected by a rotunda. Situated at the edge of Place des Arts, the museum is linked to existing facilities by a landscaped esplanade.

Naomi R. Pollock

New York City

Hadid Collaborates on Utopian Show

Zaha Hadid has collaborated with designers from the Guggenheim Museum on the installation of "The Great Utopia: The Russian and Soviet Avant-Garde, 1919-1932," on view at the renovated and expanded uptown Guggenheim from September 25 through December 15, 1992. The exhibition comprises over 800 paintings, works of sculpture, photographs, posters, architectural and typographic designs, theater costumes and sets, textiles and porcelains from museums and collections in Russia, Uzbekistan, Azerbaijan, Ukraine, Poland, and Latvia.

Samuel Brody Dies at 66

Samuel Brody, a partner in Davis, Brody & Associates, died July 28 of cancer. He and Lewis Davis led the design team for the U.S. Pavilion at Expo 70 in Osaka. RECORD interviewed them for a six-page feature on housing [February 1988, page 122].

Changes

Li Chung Pei and Chien Chung Pei, sons of Ieoh Ming Pei, have left Pei Cobb Freed to form The Pei Partnership.

Competitions

• San Rafael, California, is sponsoring a community-planning competition for 1,200 acres, the last major open land in an urban corridor. Prize is $20,000. Contact Model Village Competition, P. O. Box 151560, San Rafael, Calif. 94915-1560, 415/485-3085.

• American Olean offers trips to Italy for the best commercial use of Terra Paver or Quartz Crystal after January 1, 1992. Contact Dept. 2271, 1000 Cannon Avenue, Lansdale, Pa. 19446, 215/393-2290.

• Center for Critical Architecture and a coalition of prominent community organizations is sponsoring "Call for Vision: San Francisco Embarcadero/Waterfront Competition." Deadline is January 30, 1993. Contact Pam Kinzie at 415/863-1502.

Projects

• France hated Ieoh Ming Pei's glass pyramid at the Louvre so much it's building another—upside down and penetrating a subterranean home for the Paris fashion shows beneath the museum gardens. The $380-million, 270,000-sq-ft Carrousel du Louvre opens, along with a $255-million interior overhaul of the museum's Richelieu wing, for the Louvre's bicentennial in September 1993.

• Cooper-Robertson and NBBJ will design the Charleston County Judicial Center and renovate neighboring historical structures.

Designer's Saturday

New York's 25th Designer's Saturday takes place October 15, 16, and 17 at the traditional venues—IDCNY in Long Island City and the A&D and DAC buildings in Manhattan—plus the 85,000-sq-ft main floor of the New York Resource Center at 34th Street and Fifth Avenue, a landmark renovation not really scheduled for completion for another two years. Programs at the various sites include ARCHITECTURAL RECORD hosting a talk with Ian Schrager and moderating panels on athletic design and smart buildings.

• France hated Ieoh Ming Pei's glass pyramid at the Louvre so much it's building another—upside down and penetrating a subterranean home for the Paris fashion shows beneath the museum gardens. The $380-million, 270,000-sq-ft Carrousel du Louvre opens, along with a $255-million interior overhaul of the museum's Richelieu wing, for the Louvre's bicentennial in September 1993.

• Cooper-Robertson and NBBJ will design the Charleston County Judicial Center and renovate neighboring historical structures.

Competition

Li Chung Pei and Chien Chung Pei, sons of Ieoh Ming Pei, have left Pei Cobb Freed to form The Pei Partnership.

Competitions

• San Rafael, California, is sponsoring a community-planning competition for 1,200 acres, the last major open land in an urban corridor. Prize is $20,000. Contact Model Village Competition, P. O. Box 151560, San Rafael, Calif. 94915-1560, 415/485-3085.

• American Olean offers trips to Italy for the best commercial use of Terra Paver or Quartz Crystal after January 1, 1992. Contact Dept. 2271, 1000 Cannon Avenue, Lansdale, Pa. 19446, 215/393-2290.

• Center for Critical Architecture and a coalition of prominent community organizations is sponsoring "Call for Vision: San Francisco Embarcadero/Waterfront Competition." Deadline is January 30, 1993. Contact Pam Kinzie at 415/863-1502.

Samuel Brody Dies at 66

Samuel Brody, a partner in Davis, Brody & Associates, died July 28 of cancer. He and Lewis Davis led the design team for the U.S. Pavilion at Expo 70 in Osaka. RECORD interviewed them for a six-page feature on housing [February 1988, page 122].
Architects’ Spec Power Reaffirmed

“Would Corbusier or Mies van der Rohe have accepted [product] substitutions in their projects?” Tally Love asks rhetorically in an article in a CSI newsletter, Conspectus. That you do not have to accept them either was reaffirmed by the U.S. Supreme Court in 1976, when it refused to hear an appeal of Whitten vs. Paddock, a 1974 finding by a Massachusetts U.S. District Court that established architects’ right to make and enforce informed judgments about those specific products that best serve their clients’ interests.

“We ran into a flurry of rumors that there had been another refusal recently by the Supreme Court to hear the case,” says attorney Lesa Miller of Kasimer and Ittig in preparing an article on specifiers’ rights for the July Construction Specifier. While the rumors led to a dead end, the principles of Whitten vs. Paddock still hold:

- Proprietary specifications do not violate antitrust laws.
- Few brands of building products are exactly alike and architects who want to limit choices have every right to do so.
- Other brands qualify as “or equal” only when the architect says so.
- An architect “may waive specifications in order to obtain a more desirable product for the client,” but the architect is the only one who can determine if the product is more desirable.
- “The burden is on the not-specified manufacturer or supplier to convince the specifier that its product is equal for the purpose of the particular project.”

Love, who represents a “high-end” paint company, goes further by questioning the use of “or equal” at all. From a technical point of view, “often there is no equal when relating products,” he says, and he maintains that using the phrase in specifications only opens the door to contractors’ bidding projects on the assumption that they can substitute less-expensive products to increase their profit. C. K. H.

Affordable Housing

Will HOPE Starve Out HOME?

Although Congress “put most of the vital mechanisms in place to address housing problems,” lack of funding has stalled progress. So says a recent update of the Enterprise Foundation’s 1987 report, A Decent Place to Live, which triggered the 1990 National Affordable Housing Act. A Decent Place to Live: Revisited claims housing conditions are “significantly” worse than five years ago.

Enterprise’s co-founder and chairman, developer James W. Rouse, led the National Housing Task Force that produced 1987’s report with then-Fannie Mae CEO David O. Maxwell. Rouse and nonprofit Enterprise focus on neighborhood-based housing for the country’s 33.6-million poor people.

“The Los Angeles riots were not an aberration,” said Rouse at a recent meeting at the National Press Club in Washington, D.C. He called the state of U.S. housing an “outstanding and outrageous danger” that threatens political stability. Revisited notes that housing, at $20 billion, is the only major federal poverty-aid program not available to everyone who qualifies. Almost 5-million eligible poor households wait, while tax deductions offer current homeowners an annual $80-billion subsidy. Of poor families who rent, 60 percent pay at least half their income for housing. Meanwhile, in 1991, 13 percent more homeless people in major cities sought emergency shelter—and 15 percent were turned away [although a recently resigned head of the homeless program for New York City notes that not only poverty, but social-behavior problems, create homelessness].

The good news: As the 1987 Task Force advocated, low-cost housing providers have proliferated, including state and local programs and some 5,000 nonprofits in 50 states. Federal support for grass-roots action—which would call for Washington to distribute money to local groups without specific controls on what is done with it—is on paper in the Affordable Housing Act’s HOME program. Rouse points out that the problem is to find that money in strained federal budgets and other sources. Revisited’s ideas range from the “peace dividend” and tax credits, to foundations, insurance companies, and pension funds. Rouse himself adds construction-cost savings to the big picture of financing, calling

Federal Computer Help

Canada Helps CAD Research

Vancouver architects Aitken Wreglesworth Associates Ltd. recently hosted a “Computers in Architecture Think Tank,” bringing together practitioners, academics, computer consultants, and suppliers from Canada and the U.S. AWA’s goal is to attain a competitive edge in the marketplace by developing and applying a leading-edge computer system for integrated architectural design and documentation.

Renowned Canadian architect Arthur Erickson, who recently merged his practice with AWA, presented and discussed his work. He stressed the importance of architects identifying and gaining access to individuals with state-of-the-art knowledge in materials research and construction technologies. Erickson expressed enthusiasm for the potential of computer technology to facilitate this communication.

Other speakers were Chris Quek of the University of Manitoba School of Architecture, Larry Rocha of Wimerby Allison Tong Goo Architects, Kristine Fallon of A. Epstein and
small local architects who have community concern and offer services for accommodating fees one more part of what makes community-based housing affordable.

Quoting Revisited, Senate Democrats Alan Cranston and Paul Sarbanes and Republican Kit Bond have allied with Rouse to seek reauthorization and funding for the 1990 bill. As the first HOME funds move to cities and states, however, not everyone sees the Act as a tuned engine waiting for fuel. HUD regulations adopted this summer seem to counter any guarantees that HOME-funded housing will remain affordable indefinitely.

An open question is whether Kemp's HOPE will divert resources from fund-starved HOME. Another is if Enterprise's report—enthusiastic about inner-city nonprofits—is not overlooking vacant suburban units and sites targeted by anti-NIMBY legislation. Although Rouse and author Carol Steinbach are as mute about planning as about design, A Decent Place to Live: Revisited dramatizes the undiminished need for housing and suggests how to pay the bill. Order copies from The Enterprise Foundation, 50 American City Building, Columbia, Maryland 21044, 410/964-1230. Robert Miller

Sons International, David Stone of Orchard Group Consulting, Kim Solar of BAGH Design, and Dr. Jens Pohl of Cal Poly's ICAD Lab. Topics included business strategies, reviews of the current state of computer applications in architectural practice, and academic initiatives, including expert systems for design being developed at Cal Poly.

In a public/private partnership unparalleled in the U.S., partial funding for AWA's research and the Computers in Architecture Think Tank program is provided under the National Research Council of Canada's Industrial Research Assistance Program (IRAP). The mission of this program is to assist small companies in becoming more profitable through the appropriate use of technology. Architect William Gies, serving as IRAP's Industry Technology Advisor under a joint appointment of the National Research Council and the Royal Architectural Institute of Canada (equivalent to the AIA), assisted AWA's Brian Sinclair in structuring his research, identifying experts to serve as resources, and gaining funding. Kristine K. Fallon

The Bush administration and HUD Secretary Jack Kemp remain anxious to get units off government hands and into the hands of occupants who, after a period of time, may resell them into a market economy according to current regulations. Revisited delicately reminds readers that this HOPE program, advocated by Kemp, was not the Task Force's idea. Going further, a recent Washington Post editorial by Massachusetts Institute of Technology urban-development professor Lawrence J. Vale finds such alternatives to public housing "almost comically implausible notions for most residents."

An open question is whether Kemp's HOPE will divert resources from fund-starved HOME. Another is if Enterprise's report—enthusiastic about inner-city nonprofits—is not overlooking vacant suburban units and sites targeted by anti-NIMBY legislation. Although Rouse and author Carol Steinbach are as mute about planning as about design, A Decent Place to Live: Revisited dramatizes the undiminished need for housing and suggests how to pay the bill. Order copies from The Enterprise Foundation, 50 American City Building, Columbia, Maryland 21044, 410/964-1230. Robert Miller

In a public/private partnership unparalleled in the U.S., partial funding for AWA's research and the Computers in Architecture Think Tank program is provided under the National Research Council of Canada's Industrial Research Assistance Program (IRAP). The mission of this program is to assist small companies in becoming more profitable through the appropriate use of technology. Architect William Gies, serving as IRAP's Industry Technology Advisor under a joint appointment of the National Research Council and the Royal Architectural Institute of Canada (equivalent to the AIA), assisted AWA's Brian Sinclair in structuring his research, identifying experts to serve as resources, and gaining funding. Kristine K. Fallon

BSA bailout
Boston Society of Architects head Richard Fitzgerald reports that the organization has completed refinancing negotiations of a $2.75-million mortgage on its handsome turn-of-the-century headquarters in downtown Boston, ending a crisis that some feared would mean foreclosure. Under the new agreement, the BSA is taking advantage of current low-interest levels to bring down payments to its mortgage holder, Baybanks, to a manageable level.

Environmentally sustainable design
Environmental Building News is a new bi-monthly publication that discusses the effects of construction on ozone depletion, solid-waste buildup, and resource consumption, among other issues. The premier July/August edition contains an interview with AIA president Susan Maxman. $60 per year from the publishers at RRl, Box 161, Battleboro, Vermont, 05301, (802/257-7300).

Help in snagging residential clients
Investing in a Dream: A Guide to Getting the Home You Really Want, a 13-minute video for architects to give a prospective client and for prospects to use when looking for an architect for the first time, is a lot better than the syrupy title implies. Case studies include candid interviews with owners and architects before, during, and after design and construction. Houses are shown in a range of styles and locations. The video-tape comes with worksheets to help the client get organized. For information, contact Elizabeth Wainger at AIA, (202/626-7411).

How to design your practice
Successful Business Plans for Architects is a new book by Ronald McKenzie and Bruce Schoumacher that helps you see your firm through analytical eyes. Covered are positioning (finding out who you are and what you do), figuring out your opportunities and problems, finding objectives, developing marketing objectives, and achieving smoothly running operations. $38.50 from the McGraw-Hill Book Company, 1221 Sixth Avenue, N. Y., N. Y. 10020. C. K. H.
By George A. Christie

It was a little more than a year ago that the Dodge Index of contracting for new construction heralded the building industry's recovery from its post-'80s crash. Although the rebound has been less than dazzling—as was expected—the first year of revival has nevertheless brought welcome improvement. Between 1991's first quarter (the starting point) and 1992's second, this leading indicator of construction expenditures and building-materials demand regained a little more than half its recession loss.

In the industry's coincident indicator, Construction Put in Place, outlays later confirmed the industry's change of direction with a tentative upturn in 1991's second half, which gathered momentum going into 1992. The two macromeasures of the construction sector were saying that a new cycle of building was on its way. Or so it seemed until 1992's second quarter.

A scary 5-percent decline of contracting for new projects in the second quarter suddenly raises the question of whether this year-old recovery is in danger of stalling out. Is it capable of making the critical transition from a flashy spurt of single-family house building to a more lasting expansion embracing multifamily housing, commercial and institutional buildings, and infrastructure work? That is the key issue to address in this second update of Dodge/Sweet's 1992 Outlook.

A step backward

So what went wrong in 1992's second quarter? Until then, the recovery of the construction sector appeared to be progressing "by the book." Falling interest rates and gradually reviving consumer confidence together lifted the rate of single-family housing starts from its low of 700,000 units (F. W. Dodge basis) in 1991's first quarter to a highly respectable 975,000-unit rate by the end of the year. Having almost reached business-as-usual volume, house building then became more of a steadying influence than a continuing source of expansion in 1992's first half.

At the same time, two unrelated events in the public-works arena introduced an element of instability into the recovery sequence. A brief delay between the expiration of the former federal transportation program last September and the enactment of the new one in December created a temporary backlog of contracting for highways and bridges that erupted in 1992's opening quarter.

Simultaneously, the Bush Administration was trying to give the sagging economy a jolt of fiscal thrust (without actually engaging in forbidden deficit spending) by accelerating the disbursement of already-appropriated public-works funds. The consequence of these actions was to produce a "spike" of contracting for public-works construction in the first quarter, and some inevitable backlash in the second.

This erratic behavior of public-works contracting during the first half of 1992 does not pose a serious threat to the continuing recovery of the construction sector. As the new transportation program shakes down, the rest of the year should bring renewed stability to public-works construction at a rate below that of the distorted first quarter, but higher than the second, leaving a comfortable net gain for the year as a whole.

An ominous side-effect of the "strong-then-weak" pattern of public-works construction during this year's first half has been to conceal and then to expose the most vulnerable feature of this newly forming building cycle: the chaotic commercial-real-estate market.

Based on past experience, it is still early in the game to be looking for support from the commercial sector. For at least a year following a general business recession, it is enough to ask that commercial real-estate development simply remains dormant, neither complementing nor undercutting the building industry's revival. But in 1992, the grossly overbuilt commercial market is still in decline, acting as a drag on the recovery. This condition was concealed early in the year by the burst of public-works construction, but it became all too apparent in the second quarter. Until commercial building eventually picks up, the building cycle of the 1990s will remain stuck in low gear.

Regaining Momentum

The strength of the 1992 recovery of the construction sector depends, as always, on the interaction of the four major sub-markets: Single-family housing, by now nearly fully recovered, has only a little room for still further improvement. Commercial building is not capable of providing much support in the near future, but should soon cease being an offset to expansion in other areas. Public-works construction, once it settles down, will get a boost this year from the quinquennial escalation of the federal highway program. And institutional building, presently feeling the pinch of state governments' fiscal stress, will remain on hold at least until 1993. For the time being, it's still a "2-H" recovery: house building and highways.

THE CYCLICALS:

Single-family housing

The decade of the 1980s showed that under workable financial and economic conditions, the housing market, driven by the needs of the maturing '50s generation (and their kids) could absorb a steady output of a million new single-family units per year. From 1983 through 1988, production seldom strayed from that volume, resulting in a six-year total of 6,060,000 new houses built and sold. (No overbuilding here, in sharp contrast to multifamily housing.)

What's more, the recent strong rebound from a recession volume of only 800,000 units per year in both 1990 and 1991 shows that the market fundamentals did not change much while the economy strayed off course. With the annualized rate of single-family housing starts back in the high 900,000s in 1992's first half, the question is: "How much room is left at the top?"

If the sustainable upper limit, as indicated by pre-recession experience, is still one million single-family houses per year, two scenarios are most likely. In one of them, housing starts reach the one million unit level in the second half of 1992 and remain at that volume, as they did in the 1980s, until financial/economic conditions change. In the other, the rate of starts temporarily exceeds one million units as deferred demand carried over from 1990 and 1991 surfaces to meet current needs.
An abnormal spurt in public-works construction in the year's first quarter makes recovery in the second look less robust than it is.

Considering that housing output in 1990 and 1991 reached only 80 percent of its potential, it is not unreasonable to expect that some deferred demand will evolve as the economy's recovery becomes more firmly established over the next several quarters. However, with rising unemployment creating insecurity and indecision at mid-1992, this "bonus" is more apt to show up in 1993. A conservative estimate of this elusive "pent-up demand" could lift next year's single-family housing starts close to 1.1 million units, but the practical limit for 1992 is more like 1.0 million or a shade less.

Either way, there's no avoiding the reality that most of the thrust that is available from single-family housing will soon have been exhausted. As the momentum generated by house building fades into stability, the continued expansion of total construction contracting will be increasingly dependent upon nonresidential building and public works.

**Income properties**

Development of commercial buildings and multifamily housing faces two formidable obstacles. The more familiar of them is the ongoing resolution of the late-1980s banking crisis (which, by now, has been downgraded to a serious problem). But, as the overextended banking industry gradually gets its nonperforming assets to perform, another obstacle—the shrinking demographic base for this group of building types—will complicate the assimilation of the vast surplus of vacant commercial space.

A sharp decline of the birth rate in the 1970s (the so-called "baby bust") is currently working its way through the young adult cohort—ages 18 to 35. With more people reaching age 36 than are becoming 18, the number of young adults will shrink by 5 million individuals between 1990 and 1995, and by another 3 million by 2000. This group, which provides the new entrants to the labor force as well as most of the nation's renters, is the part of the population that must occupy all those empty offices and apartments left over from the mid-80s commercial building binge. Yet, the young adult population is shrinking at a rate of a million a year! With financial constraints inhibiting a recovery in...
<table>
<thead>
<tr>
<th>1992 Regional Estimates</th>
<th>Dodge Construction Potentials</th>
<th>Second update 7/92</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construction Contract Value</strong> (millions of dollars)</td>
<td><strong>1991 Actual</strong></td>
<td><strong>1992 Actual</strong></td>
</tr>
<tr>
<td><strong>Northeast</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CT, ME, MA, NH, NJ, NY, PA, RI, VT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonresidential Building</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial and Manufacturing</td>
<td>$6,387</td>
<td>$6,200</td>
</tr>
<tr>
<td>Institutional and Other</td>
<td>2,110</td>
<td>9,475</td>
</tr>
<tr>
<td>Total</td>
<td>$15,497</td>
<td>$15,675</td>
</tr>
<tr>
<td>Nonbuilding Construction</td>
<td>$10,777</td>
<td>$11,600</td>
</tr>
<tr>
<td><strong>Residential Building</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singlefamily Houses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial and Manufacturing</td>
<td>$10,317</td>
<td>$12,000</td>
</tr>
<tr>
<td>Institutional and Other</td>
<td>2,625</td>
<td>2,600</td>
</tr>
<tr>
<td>Total</td>
<td>$12,942</td>
<td>$14,600</td>
</tr>
<tr>
<td><strong>TOTAL CONSTRUCTION</strong></td>
<td>$39,416</td>
<td>$41,275</td>
</tr>
<tr>
<td><strong>North Central</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IL, IN, IA, KS, MO, NE, ND, OH, SD, WI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonresidential Building</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial and Manufacturing</td>
<td>$9,093</td>
<td>$9,525</td>
</tr>
<tr>
<td>Institutional and Other</td>
<td>5,981</td>
<td>10,775</td>
</tr>
<tr>
<td>Total</td>
<td>$16,644</td>
<td>$20,300</td>
</tr>
<tr>
<td>Nonbuilding Construction</td>
<td>$10,213</td>
<td>$11,400</td>
</tr>
<tr>
<td><strong>Residential Building</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singlefamily Houses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial and Manufacturing</td>
<td>$19,240</td>
<td>$24,575</td>
</tr>
<tr>
<td>Institutional and Other</td>
<td>2,813</td>
<td>2,925</td>
</tr>
<tr>
<td>Total</td>
<td>$22,053</td>
<td>$27,500</td>
</tr>
<tr>
<td><strong>TOTAL CONSTRUCTION</strong></td>
<td>$50,100</td>
<td>$59,200</td>
</tr>
<tr>
<td><strong>South Atlantic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DE, DC, FL, GA, MD, NC, SC, VA, WV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonresidential Building</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial and Manufacturing</td>
<td>$7,438</td>
<td>$7,350</td>
</tr>
<tr>
<td>Institutional and Other</td>
<td>3,607</td>
<td>3,800</td>
</tr>
<tr>
<td>Total</td>
<td>$11,045</td>
<td>$11,150</td>
</tr>
<tr>
<td>Nonbuilding Construction</td>
<td>$8,263</td>
<td>$8,700</td>
</tr>
<tr>
<td><strong>Residential Building</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singlefamily Houses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial and Manufacturing</td>
<td>$19,544</td>
<td>$25,450</td>
</tr>
<tr>
<td>Institutional and Other</td>
<td>2,843</td>
<td>2,925</td>
</tr>
<tr>
<td>Total</td>
<td>$22,387</td>
<td>$27,500</td>
</tr>
<tr>
<td><strong>TOTAL CONSTRUCTION</strong></td>
<td>$47,455</td>
<td>$51,200</td>
</tr>
<tr>
<td><strong>South Central</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AL, AR, KY, LA, MS, OK, TN, TX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonresidential Building</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial and Manufacturing</td>
<td>$6,466</td>
<td>$6,025</td>
</tr>
<tr>
<td>Institutional and Other</td>
<td>6,687</td>
<td>6,357</td>
</tr>
<tr>
<td>Total</td>
<td>$13,153</td>
<td>$12,382</td>
</tr>
<tr>
<td>Nonbuilding Construction</td>
<td>$8,283</td>
<td>$8,700</td>
</tr>
<tr>
<td><strong>Residential Building</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singlefamily Houses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial and Manufacturing</td>
<td>$12,060</td>
<td>$16,500</td>
</tr>
<tr>
<td>Institutional and Other</td>
<td>995</td>
<td>925</td>
</tr>
<tr>
<td>Total</td>
<td>$13,055</td>
<td>$17,425</td>
</tr>
<tr>
<td><strong>TOTAL CONSTRUCTION</strong></td>
<td>$33,978</td>
<td>$38,525</td>
</tr>
<tr>
<td><strong>West</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonresidential Building</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial and Manufacturing</td>
<td>$11,285</td>
<td>$10,325</td>
</tr>
<tr>
<td>Institutional and Other</td>
<td>10,225</td>
<td>9,800</td>
</tr>
<tr>
<td>Total</td>
<td>$21,510</td>
<td>$19,800</td>
</tr>
<tr>
<td>Nonbuilding Construction</td>
<td>$12,258</td>
<td>$12,900</td>
</tr>
<tr>
<td><strong>Residential Building</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singlefamily Houses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial and Manufacturing</td>
<td>$22,031</td>
<td>$24,175</td>
</tr>
<tr>
<td>Institutional and Other</td>
<td>3,892</td>
<td>2,825</td>
</tr>
<tr>
<td>Total</td>
<td>$25,923</td>
<td>$27,000</td>
</tr>
<tr>
<td><strong>TOTAL CONSTRUCTION</strong></td>
<td>$57,771</td>
<td>$59,825</td>
</tr>
</tbody>
</table>


Copyright 1992 McGraw-Hill, Inc. with all rights reserved.
The transfer of funding for sewer/waste-to-advance by increments of 10 percent represents a 20-percent escalation of user-mass transit over the next six years. This represents a 20-percent escalation of user-fee-financed highway construction.

If DOT's spending authority under the new legislation is fully appropriated, transportation-related construction is slated to advance by increments of 10 percent in both 1992 and 1998, and then to hold steady at this higher level. Contracting in 1992 is heading for something close to a potential 10-percent gain, but there is growing resistance in Congress to appropriating all of ISTEA's authorized funds for fiscal 1993.

The transfer of funding for sewer/waste-treatment facilities from direct EPA grants to State Revolving Funds continues to inhibit this important category of public-works construction. A recent EPA evaluation of the situation concludes: "At this time, state's funding does not appear to be increasing sufficiently to offset the phase-out of federal SRF monies." Under these circumstances, annual growth of contracting for waste-treatment facilities will barely keep pace with inflation.

The second half
1992 started well enough to justify a forecast of a 10 percent improvement of construction contracting over the 1991 total. Due to a weak second quarter, however, there is now necessary to fine-tune the year's outlook downward to a gain of 8 percent. There's still a recovery in the making, but to achieve 8 percent for the year as a whole will require a better second half. Where will the second-half improvement be coming from?

- The stabilizers will live up to their name during the rest of 1992, offering little change from their first-half rate.
- The cyclicals are the obvious place to look for action. Single-family housing still has room for expansion and falling interest rates will help. Income properties are also capable of a better second half, but any improvement there will be in multifamily housing.

By Ann Bayard Ketterer
Site visits are key to effective construction-contract administration. The second in this series explores some basics of how to plan and carry them out.

Who should go to the site?
One person from an architect's office should make all site observations and evaluations throughout an entire project. Qualification requirements for selecting that person vary. In a very large office, there often are people who only observe construction; in a small office, one individual may carry a project from design through contract administration and have the advantage of familiarity with the intent of the total contract-document package.

In a medium-sized office—where it is particularly important to show only quantities and locations of materials on working drawings and to describe only quality and performance requirements in specifications (avoiding duplication and chance of conflict)—whoever writes the specifications knows best what to look for on the project site. For example, the working drawings might show a wall with "waterproofing" applied to its exterior face below grade. A block-wall foundation with a black bituminous compound brushed onto it might appear to provide the "waterproofing" shown on the drawings, but the specifications writer may require an entirely different application, such as elastomeric sheet-membrane waterproofing.

When to go to the site
There is a theory that weekly visits at the same time on the same day may encourage contractors to prepare for the visit by hiding anything that does not conform to contract documents. Some site visits on a regular schedule, however, encourage contractors to make lists of their questions, to have subcontractors on the site who want clarifications, to have samples ready for approval, and have an agenda of items to discuss. Do not make scheduled visits on such a rigid schedule that the contractor cannot get answers when needed, possibly causing the contractor to claim a delay in construction. You must consider each request and act on it appropriately. Some contractors call frequently and expect architects to run out to the site at a moment's notice to answer routine questions, but such queries are often dealt with on the phone.

What to take to the site
Take your own set of drawings and specifications, a notebook and pen, a field-report form, and a camera, as well as a list of items to discuss, questions posed since the last visit, and items to look for at this particular time in the construction sequence. Some architects also carry a hardhat, a level, a tape, and a flashlight, but the contractor should be able to provide these if needed.

Taking control
In good practice, the contractor presents all questions in writing. Any questions or comments to the architect from subcontractors must be presented by the prime contractor, but this does not preclude discussions with the contractor and subcontractor together. During discussions, however, be careful not to make casual comments that may be construed as firm directions. Document all site meetings in a field report that includes all topics considered and any opinions and requests from all present. After reviewing these with your project team, address any decisions requested in writing.

If you find work that is not proceeding according to contract documents, request that it conform. You are within your rights to have inferior work removed and replaced at no additional cost to the owner. But before pointing out errors or omissions, check all construction documents. Make sure you are right.

If you find errors, discuss them with the contractor. There sometimes are conditions that can only be corrected by removal, but often you and the contractor can work together to find ways to correct problems by means less drastic, time-consuming, or expensive. If inferior work is accepted, negotiate with the contractor to determine the amount to credit to the owner.

Ms. Ketterer is an architect experienced in project management and contract administration.

Architectural Record September 1992 41
AutoCAD 11 for Macintosh

By Steven S. Ross

All of the features of AutoCAD 11 for DOS and UNIX platforms, and some features of AutoCAD 12, are included in this long-awaited release for the Macintosh. Unlike AutoCAD 10 for the Mac, which did not enjoy much popularity among architects, this release follows Macintosh conventions more closely. It is also somewhat faster than the previous version.

Nevertheless, this is a big, feature-rich program that is not to be used casually. It is meant for those who need full-blown 3-D CAD on a Macintosh—especially those who must exchange files on a regular basis with DOS and UNIX computers that also run AutoCAD. The standard Macintosh pull-down menu is replaced by more-or-less standard AutoCAD when you are working on a drawing.

"Faster" is also a relative term. Although AutoCAD 11 will run on an SE/30, a Quadra would be far more comfortable. The Quadra series, with Ethernet port built in, also communicates easily with Sun Microsystems. AutoCAD .DWG files move effortlessly between the different computers.

AutoCAD 11 Summary

**Equipment required:** Apple Macintosh II or Quadra series, or SE/30. The SE/30 must have external monitor. The Ilsi must have math coprocessor and a monitor larger than the standard 12-in. normally sold with it. Other models may need a coprocessor (68881 chip or newer equivalent). At least 5 MB of random-access memory if using System 6; at least 8 MB for System 7. The Advanced Modeling Extension for solids modeling (not often used by architects) requires System 7 and 16 MB, some of which can be space on the fixed disk.  Minimal installation (without all fonts, sample drawings, space for the drawings you create, and space for AutoCAD to store parts of your drawings on disk while you work on them) requires 6 MB of fixed-disk space. The Advanced Modeling Extension adds 3 MB. Supports digitizing tablet (through the Apple Desktop Bus) as well as mouse. AutoCAD requires that MultiFinder be engaged and that 32-bit Quickdraw be used.

**Vendor:** Autodesk, 2220 Marinship Way, Sausalito, Calif. 94965. 800/445-5415. $3,500.

**Manuals:** Standard AutoCAD, not standard Mac. All the information you need is there, but you'll dig for it. There's a tutorial, AutoLISP programmer's reference, Advanced Modeling Extension reference, AutoCAD Development System reference, the hardbound command reference for AutoCAD itself, and a Macintosh-specific installation guide. We dwell on this because the manual talks a lot about using virtual memory (disk space) to compensate for lack of RAM. But that only works in System 7, not System 6.0.5. *Circle number 308*

**Ease-of-use:** Good. The most commonly needed functions should prove reasonably intuitive to seasoned Macintosh users. You can edit entities more easily on-screen. Installation is straightforward on a Macintosh with standard equipment. Digitizers and special monitors need their own device drivers.

**Drawing regenerations (regens) can take a long time on slower Macintosh models, so the system can be set to warn you before they occur—allowing you to avoid them. As with AutoCAD 12 for DOS systems, zooming will rarely cause a regen.**

We forced an out-of-memory condition to see how AutoCAD would respond. The software handled this in an orderly fashion; no data lost.

The Help facility has been much improved, although you have to move out of the drawing window and back to the standard Macintosh menu to use it (the old AutoCAD-standard help facility is accessible from the drawing window).

The clipboard can now be used to import bitmapped art as well as to export it. Using the clipboard to move CAD entities from one drawing to another was a bit dicier when we ran it. Sometimes it worked, sometimes we got an error message when we pasted from the clipboard to a new drawing. Autodesk knows about the problem. There's an easy work-around: Move the block you want with DXFout/DXFin.

If you have an older-style digitizer that connects through the serial port, you will not be able to access the menus through it; you'll need a mouse to do that. Newer ADB digitizers can replace the mouse entirely.

The minimum memory requirement is 5 MB, which leaves about 3 MB for AutoCAD itself, once MultiFinder is loaded using System 6.0.5. That's a bare minimum, however. If AutoCAD senses it does not have enough memory, it refuses to load AutoLISP. If that happens, commands that need AutoLISP, such as for shading, will be inoperative.

For more information, circle item number on Reader Service Cards.
Once upon a time, VersaCAD was a leader in drafting software. While there are still some strong points to recommend it—especially for 2-D production drafting—this latest upgrade for DOS computers will be of interest mainly to those who use VersaCAD 6.0 or earlier versions, or to those who are using VersaCAD on the Macintosh (where the software still enjoys a lead over many of its competitors).

At base, VersaCAD offers 2-D drafting, 3-D modeling, and an excellent rendering package and simple bill-of-materials generator built in. It runs comfortably on a small 80386-class computer with 2 MB of random-access memory and VGA graphics. It works with a mouse, but it is easier to use in production settings with a digitizer. We reviewed the 386 version, which uses extended memory easily. There is also a straight-DOS version that can be shoehorned into 640K, using expanded ("Lotus-Intel-Microsoft") memory for some tasks. This new version offers numerous new drawing tools, better networking, better printer support, and better file translation, especially for large DXF files. There are multiple overlays for digitizing tablets, offering good access to hundreds of command sequences. And there is full support of SuperVGA cards (800 by 600 or 1024 by 768 pixels) that support the VESA standard, TIGA-2 cards, and other equipment.

Experienced VersaCAD users will find new commands are simply appended to existing menus. You see them by pressing the + key, and you go back to the old menus by pressing the – key. Among the new commands:
- Multi-add for circles, arcs, polygons.
- Modify control points for Bezier curve to change the shape. Also, make new Bezier curves parallel to an existing one.
- Break or split an object at any point.
- Copy a group (the objects making up a complex wall segment, for instance) at a specific distance from an existing group.
- Create cross-sections of objects in a scene.

KIS Scaling

Ever wish you could easily create and edit multiple-scale drawings inside one large file with AutoCAD? This add-on for AutoCAD does the trick. It can be called with an easily customized menu of its own from inside AutoCAD, and it seems to be compatible with other add-ons.

Without KIS Scaling, the normal way to make a large-scale detail inside another drawing with AutoCAD is rather awkward—you make the entire detail a single block and write it to disk as a separate file using the WBLOCK command. This requires that you exit the drawing and use the block as the basis for a new drawing.

With AutoCAD Release 11, the details can be referenced to the main drawing. But then they can’t be edited from inside the drawing. You might also like to change the scale of a detail. KIS Scaling allows that to be done quite easily. **Circle number 310**

**KIS Scaling Summary**

**Equipment required:** Anything that can run the DOS version of AutoCAD. The AutoLISP files in KIS Scaling take up about 100 kilobytes on disk.

**Vendor:** KIS Software, PO Box 663, Pearisburg, Va. 24134, 703/921-4577. Single copies are $100; two through five are $80 each.

**Manual:** A simple, 26-page guide. It is crudely printed, but well written.

**Ease of use:** Good.
**300. Tactile.** Vinyl wallcoverings offer a fabric visual with the stain resistance needed for hospital, hotel, and office environments. Embossed to look like silk or printed in two tones to resemble corduroy, wallcoverings are 54-in. wide. Koroseal, Fairlawn, Ohio.

**301. Homelike.** Part of a trend towards resilient floorcoverings that have the appearance of carpet, the Rugg-be pattern of Flor-ever sheet vinyl comes in a subtle, soft-edged motif in gray, mist, beige, and mauve colorways. Congoleum, Mercerville, N. J.

**302. Murano.** Formelle is a poured, molded glass available in over 30 decorative patterns and 12 colors. Developed in Italy by architects Roberto Ramio, Renato Tosso, and Noti Massari, the smooth-surfaced glass comes in sizes up to 22-in.-sq, and rectangular, round, and triangular shapes. Polished edges permit butt-glazing individual lights to form larger, seamless-appearing panels as shown. Formelle is thin enough to fit standard wood and metal framing systems for use in interior and exterior applications. Leucos USA, Inc., Edison, N. J.

**303. Sintered.** Developed in Japan, Almune is a powdered aluminum alloy heat-treated to form rigid, 0.1-in.-thick panels that are 40 percent air by volume. The pores created by the sintering process dampen incident sound as it travels through the panels and the air space separating the panels from the hard wall or ceiling behind them (b). Sheets come in sizes up to 2- by 4-ft that can be used in standard lay-in ceilings, or butted and applied to furring strips (a). The standard look is this light-reflecting gray, but the material can be colored or textured without compromising its
New decorative materials for walls, floors, and horizontal surfaces expand the range of pattern and texture options for interiors.

**304. Mineral.** Evocative of—but not imitating—natural materials, Formations laminates recall the patterns found in stone, weathered metal, and shell-filled sand. An expanded color range coordinates with all Formica solid-color laminates as well as with Colorcore and Surell surfacing materials. Formica Corp., Cincinnati.

**305. Quiet.** Soundsoak acoustic walls offer new textile choices, including DesignTex’s Flight pattern (a), as well as custom scoring of the mineral-fiber substrate (b) that gives the 6- to 10-ft-high panels the impact of a modular assembly. The score lines can be treated as a design element, and placed to align with architectural details. Walls have a Class A composite flame-spread rating. Armstrong World Industries, Lancaster, Pa.

**306. Metallic.** Architect Michael Graves used copper Questech tile to add flash to this small bathroom. A patented composite developed by Roger Questel, the cast tiles have an appearance similar to solid metal, but at much lighter weight and cost. Custom metallic colors and bas-relief designs can be specified. Intaglio, Ltd., New York City.

**307. Multiflock.** Graphics software lets designers create unique textured finishes using any six colors from a palette of 95. Airless and waterborne coatings can be used on substrates like drywall, concrete, metal, and glass. Multicolor Specialities, Inc., Cicero, Ill.
Eric Owen Moss: Buildings and Projects, Preface by Philip Johnson, Introduction by Wolf D. Prix. New York: Rizzoli, 1991, 224 pages, $50 (cloth), $35 (paper). Reading Eric Owen Moss: Buildings and Projects is almost like getting a tour of the work by the architect himself. Almost. Besides the obvious limitations of representing complex three-dimensional spaces in two dimensions, the big difference between this glossy portfolio and a real-life project walkthrough with Moss is that here you can’t talk back, which, according to the architect, is just fine with him. Unlike typical monographs, where a disembodied professional voice narrates the presentation of each project, in this book photographs, drawings (both conceptual and explanatory), and model shots of built and unbuilt work are accompanied by Moss’s stream of consciousness transcribed. The text, like a conversation with Moss, is alternately provocative, scholarly, immodest, and earnest—characteristics that can be found in his architecture as well. K. D. S.

The Guide to the Architecture of Paris, by Norval White. New York: Scribner’s, 1991, 446 pages, $25 (paper). A sequel of sorts to The AIA Guide to New York City, this exhaustive work is as helpful to the Paris veteran as it is to the architectural novice. Paper and printing look cheap, and many of the illustrations—drawn or photographed—are of poor quality. But the book is thorough and all the recent work by contemporary French architects is represented.

Fay Jones, by Robert Adams Ivy, Jr. Washington: AIA Press, 1992, 224 pages, $60. Like Jones’s work itself, this monograph is carefully crafted and a pleasure to linger through. In a series of short essays, Ivy addresses key principles in Jones’s work—such as precedent, and nature and romanticism—and tries to define his place in contemporary architecture. The rest of the book offers a thoughtful look at the residences and “sacred spaces” the architect has designed since the 1950s.

Norman Foster Sketches, edited by Werner Blaser. Basel: Birkhäuser, 1992, 240 pages, $168. If sketches are windows into an architect’s mind, then this large-format book (14 by 11.25 inches) offers a wonderful view of Foster’s creative process in full gear. Although the drawings included in the book retain a certain intellectual rigor, many of them display a spontaneity not easily found in the architect’s finished work. Short descriptions accompanying the drawings are equally refreshing for their casual, behind-the-scenes tone and their straightforward commentary.


"... And after architecture school, I decided to stay right here and do some farming."
200 Architects and interior designers told us exactly what they wanted in the perfect commercial specification grade wall switch.

Introducing Decora Plus.

The "perfect" wall switch is here! And as you'd expect, it's from Leviton. We're hardly a stranger when it comes to making high quality designer wiring devices and controls. After all, our extensive Decora line offers an unlimited variety of applications in six stylish colors. And now, with Decora Plus, we've taken the best and we made it even better.

Decora Plus offers an outstanding combination of specification-grade inside and pure beauty outside. Featuring a rocker panel that's molded softer for a more graceful look, Decora Plus is handsome enough to complement any environment—from the mailroom to the boardroom. The finish is strong but flexible: smooth, too, for easy cleaning. Decora Plus wallplates are thinner and screwless. In fact, for your total convenience, Decora Plus wallplates are made to also fit right onto existing Decora devices. What it all comes down to is this: Decora Plus doesn't fight a room's design—it complements it. No wonder hundreds of architects and interior designers insist Decora Plus is the "perfect" wall switch! See for yourself. Send us your business card and we'll send you a free Decora Plus sample switch and wallplate.


In Canada, Leviton Manufacturing of Canada, Ltd., 165 Hymus Boulevard, Pointe Claire, Quebec H9R 1G2, 1-514-954-1840 or FAX 1-514-954-1853.
SWEET'S LIGHT SOURCE
A New Link to Your Hottest Lighting Prospects

COMING SOON!
Sweet's Light Source

In 1993, Sweet's will present Sweet's Light Source, the first single-source reference of lighting product information. Specifically targeted for buyers and specifiers of lighting products, Sweet's Light Source will only include lighting manufacturers.

Sweet's Light Source guarantees your products are seen by professionals with proven purchasing power - right at the moment they are actively seeking lighting products. To insure this, Sweet's Light Source will be distributed to the 21,000 Architectural, Engineering, Electrical Contracting, Interior Design, and Space Planning Offices, Lighting Design Consultants, Landscape Architects, Lighting Maintenance Firms, and Distributors who account for the majority of construction dollars spent in this market.

Fully endorsed by the IALD and IESNA, Sweet's Light Source promises to be an invaluable tool for buyers and specifiers of lighting equipment, providing you with an excellent showcase for your lighting products.

To include your product information in Sweet's Light Source, call 1-800-421-9330.
To qualify to receive Sweet's Light Source, call 1-800-442-2258.

Sweet's Group
McGraw-Hill, Inc.
1221 Avenue of the Americas, 20th Floor
New York, NY 10020
“Dens-Shield® tile backer is easier to install than cement board and performs better? Are you pulling my leg?”

G-P: Would I lie? Dens-Shield® tile backer is 33% lighter than cement board and it scores, snaps and fastens just like regular wallboard.

YOU: What about moisture resistance? You said...

G-P: Better than cement board, right. The surface resists water, so the tile stays tight and the stud cavity stays dry. Dens-Shield lasts better than MR greenboard, too.

YOU: And I won’t need any additional vapor barrier?*

G-P: That’s the beauty of it! The coating, the embedded fiberglass mats and the unique silicone-treated core make Dens-Shield resist water and wicking a lot better than cement board or greenboard.

YOU: I could try it on this bathroom floor.

G-P: Yes. You can use Dens-Shield on floors, ceilings, walls, countertops, you name it. No reason to use anything else.

YOU: You’re pretty sure of this stuff, aren’t you?

G-P: You bet. Is that your last question?

For more information on G-P Dens-Shield tile backer, or a copy of the 20 year limited warranty, call 1-800-BUILD G-P (284-5347), Operator 730. Or check Sweets Section 07310/GEO.

Solve it with G-P.™

*Unless required by code. Solve it with G-P is a service mark and Dens-Shield is a registered trademark of Georgia-Pacific Corporation. **See warranty for conditions and limitations. © 1992 Georgia-Pacific Corporation. All rights reserved. 36 USC 180

Circle 28 on inquiry card

Architectural Record September 1992 51
We’re delivering on our promise to share our profits with you.

CNA is now mailing over 10,000 profit sharing checks to architects and engineers.

In 1980, the CNA/Schinnerer program initiated COMMITMENT PLUS. This is a profit sharing plan that caps our underwriting profit and returns any excess to our insureds. Many of you received these checks in the past. Now, many more of you insured with us between 1985 and 1988 will be getting profit sharing checks as well. We’re able to offer this return because of your increasing success at controlling losses. COMMITMENT PLUS is one more way we support our commitment to architects and engineers and provide dependable coverage at stable rates over time.

For more details about COMMITMENT PLUS, have your independent agent contact Schinnerer.

*The CNA Insurance Companies and Victor O. Schinnerer & Company, Inc., are proud to have earned the commendation of the AIA and NSPE/PEPP.

For All the Commitments You Make

This profit sharing plan is available to all A/E firms, regardless of size, insured under our traditional, guaranteed cost program. Coverage for this program is provided by Continental Casualty Company, one of the CNA Insurance Companies/CNA Plaza/Chicago, IL 60685.
INSTALLING VELUX® ROOF WINDOWS AND SKYLIGHTS IS SO SIMPLE EVEN A MOUSE CAN DO IT.

The new VELCAD™ software is not only easy to use, but also quick, efficient and flexible as well. Operable with or without AutoCAD®, this new software enables users to edit our drawings and specifications with the touch of a button. And with standard features such as built-in editors and a memory like that of an elephant, it's the only software your firm will need for specifying the best roof windows and skylights made in the world. VELUX®. For more information call us at our toll-free number, 1-800-283-2831.

©1992 VELUX GROUP ©VELUX is a registered trademark. ©AutoCAD is a registered trademark of Autodesk, Inc. VELCAD is a trademark of VELUX GROUP.
TOTAL AEC COMPUTING

AUTOMATION AND INTEGRATION ARE THE BUILDING BLOCKS FOR RECOVERY

For total AEC computing solutions — and the power to make them work for you — there's only one place. The best national design, construction, management, and marketing conference and trade show.

60+ SEMINARS & HANDS-ON WORKSHOPS
San Francisco State University AutoCAD Training • AIA San Francisco Chapter Conference
• Civil Engineering Day Conference • Digital Visualization Workshop • Intergraph/IGUG Meeting • Construction Day '92 • Free Plenary Sessions • Free Keynote Address

10,000 AUTOMATION & INTEGRATION PRODUCTS AT YOUR FINGERTIPS
The total AEC solutions Integration Center coordinated by ASG • Enhancement Center for AutoCAD" Users • MicroStation Solutions hosted by Intergraph • Top Gun '92: AutoCAD Olympics Contest sponsored by CADENCE • Biggest-ever CAD Poster Gallery

3-D PRESENTATION THEATER, SPONSORED BY AUTODESK
View a stunning array of marketing presentations from the most progressive AEC firms.

Moscone
Convention Center
San Francisco
October 19-21
1992

FREE Tickets
800-766-EXPO
(8:30-5:30 EST)
**FINALLY, A POWER ASSIST SOLUTION THAT WON'T HANDICAP YOU.**

**POWERMATIC:**
Another Innovative Solution From Norton

Handicapped access is a requirement for nearly every public building. Your ability to offer a product that meets the diverse code requirements of building owners is critical. Norton's PowerMatic is the innovative solution.

Wind and air pressure play havoc with conventional door closers, making handicapped access difficult. With PowerMatic, Norton's integrated computer adjusts and controls opening and closing forces automatically. You get power operated door control that opens and closes completely, and safely, under virtually any condition.

PowerMatic can be operated by infrared scanner beam, radio frequency transmitter or push button. PowerMatic can also be used in the Power Assist function, which helps a person open a door with very little effort. In the event of power failure, PowerMatic operates as the reliable, efficient Series 7500 hydraulic door closer.

And unlike most power operated door controls, PowerMatic is a self-contained electro-hydraulic unit that makes installation, maintenance and retrofit incredibly easy. No compressors. No air tubes. No handicaps.

Look to Norton for innovative solutions. That's what makes us the largest door control manufacturer in the world.

For more information on PowerMatic, contact your local Norton representative or Norton® Door Controls today.

Circle 31 on inquiry card

Norton® Door Controls, A Division of Yale Security Inc.
US(800)438-1951 Canada(800)461-3007
Steel joist buildings have their place. Right?

Any neighborhood is a steel joist neighborhood. Because steel joist construction works so beautifully—anyplace you want to use it.

Design a beautiful office complex or office tower.

A dramatic new school. An auditorium. A handsome condominium, church or hospital. Whatever your imagination demands. It's easy because steel joist construction is also a great time saver, weather-beater and cost-saver, too.

The more you look, the more we think you'll agree: Steel joist construction is definitely showing up in some of the nicest places—all over town. Maybe the next building ought to be yours. Right? Right.

1205 48th Avenue North, Suite A
Myrtle Beach, South Carolina 29577

Circle 32 on inquiry card
**Closing Speed Adjustment Valve**
Adjustments to all valves, including closing speed, are made without removing the cover to save installation and maintenance time.

**Hydraulic Backcheck Adjustment Valve**
Beyond 70° opening, our Backcheck Adjustment Valve allows you to accurately adjust the cushioning of the door to control severe wind conditions and high traffic areas.

**Latch Speed Adjustment Valve**
When internal or external pressure conditions arise in doorways, Rixson's Latch Speed Adjustment Valve offers you the flexibility to increase or decrease speed during the last 10°. It assures complete closing and latching with every Rixson closer.

**Delayed Action Adjustment Valve**
For easier passage by handicapped and elderly people, Rixson's optional Delayed Action Adjustment Valve gives you the ability to slow the door's closing speed in the first 20°.

**Selective Hold-Open**
Fully mechanical hold-open can be activated or inactivated in the field by simply rotating the pin 180°.

**Heavy Duty Torsion Spring**
With our Heavy Duty Torsion Spring, the difference in tension between opening and closing is less than any other closer for more consistent operation and longer closer life.

**Spindle and Linkage System**
Rixson's Spindle and Linkage System creates less friction and loading than competitive closers for a much easier opening door.

**Dead Stop**
Our built-in mechanical Dead Stop helps protect doors, walls, and frames from excessive force.

Call Rixson today. We've got the products, the applications and the people to bring you an unbeatable performance.
LUCKS LIKE THE PERFECT SPOT FOR ONE OF OUR UMBRELLA TABLES.

OUR CAROUSEL TABLE IS TAKING THE OUTDOOR FURNITURE MARKET BY STORM. WITH AN INNOVA-
TIVE DESIGN THAT OFFERS THE SIMPLICITY AND SECURITY OF ATTACHED SEATING. NOT TO MENTION
ROOM FOR FOUR OR SIX PEOPLE. OR IF YOU WANT A MORE VERSATILE ARRANGEMENT, CHOOSE
OUR CHAIRS AND TABLES INDIVIDUALLY. EITHER WAY, ALL COME WITH OUR EXCLUSIVE PANGARD II®
POWDERCOAT FINISH THAT PROVIDES GUARANTEED PROTECTION AGAINST RUST AND CHIPPING.

TO RECEIVE OUR COMPLETE BROCHURE, CALL 1-800-521-2546. Landscape Forms Inc.

Circle 34 on inquiry card
HOW TO SIMPLIFY COMPLIANCE WITH THE ADA.

Minimize Your Time.
Yale, as your single-source supplier, will answer your ADA compliance questions and recommend the compatible products. In the time it takes to meet with several lockset, door closer and exit device reps, you could have all of the ADA door hardware you need installed.

Reduce Your Costs.
Yale can help you make hardware changes inexpensively while supplying you a first-class product that works. Product that is compatible in finishes and function. Choose from several different lever-handled locksets that fit your existing door prep, barrier-free door closers with minimal opening forces, and architecturally designed exit devices that combine aesthetics with ease and dependability. And it’s from a central source, so you’ll save on more than just shipping.

Shorten The Wait.
With Yale’s quick ship Warehouse Program, ADA hardware is available for immediate shipment from our 135,000 square foot distribution facility. We’ll deliver in as little as seven days. Call 800/438-1951 Ext. 146 today and request a 1992 Yale Condensed Catalog and a call from your local Yale representative. We’ll help you simplify ADA compliance.

Yale®
Yale® Locks And Hardware, A Division of Yale Security Inc. USA(800) 438-1951 Canada(800) 461-3007

Circle 35 on inquiry card
Andrée Putman

Andrée Putman, ASID, interior designer and founder of Ecart, a Paris-based architecture and design firm. Putman strongly adheres to following her own beliefs.

THE POWER OF DIFFERENCE.

"I believe in freedom. We should all have the strength and authority to think for ourselves, to turn against what is expected. To pick up something in the dust or in the worst condition. Maybe it’s not miraculous for everyone, but certainly for you this object has immense charm. "I like mixing things. Adding things that were never together before. Mixing rich materials with poor. Mixing something remarkably funny with a sad, boring material.

There is always balance, which is full of contradiction. But after all, life is full of contradiction. "Carpet is like the sand in the desert. It brings something very sensual that is not only visual. It has to do with sound. And the charm of walking barefoot. In so many places there's no other solution."

Innovators like Andrée Putman challenge us at DuPont to continue leading the way with ANTRON® nylon. The carpet fiber top professionals specify most.

For more information about Ecart design, call 1-800-4-DUPONT.
Where can you use belbien™ decorative vinyl film surfacing?

Almost anywhere!

Belbien lets you expand your flair for expression offering a potential for creative surfacing in ways never before open to you. It is because Belbien has features that are unique.

- Belbien has true 3-dimensional flexibility to cover any shape or contour.
- Belbien comes in a choice of over 150 patterns and colors that enhance any treatment.
- Belbien offers long-lasting protection against potential damage, both for exterior and interior installations.

These features give you a rare opportunity to let yourself go.
WE'RE NOT THE ONLY ONES BEHIND LAMINATED GLASS.

For years now, experts in safety and security have relied upon, trusted and specified laminated glass made with Saflex® plastic interlayer. They know laminated glass made with Saflex can stop bullets, bombs, blunt objects and just about anything else you might happen to throw against it. For security, for protection, for detention applications, for value, for aesthetics, nothing else performs quite like it.

For a free Security Glazing Design Guide and an accompanying IBM-compatible software program (or for a free informational video) complete and return the coupon on the right. Or just call us at 1-800-248-6844.

Because whatever (or whoever) you need to protect should be standing behind glass that can stand up to anything.
The Flexibility of Cellular Floor. The Economy of Cast-In-Place.

The CELLCAST system is a joint development of Robertson, the leader in cellular floor systems since 1930, and Ceco Concrete Construction, the nation's premier concrete forming supplier. It is the first efficient cellular floor system for concrete frame applications.

Unlike currently available embedded duct raceways, CELLCAST permits the composite steel floor units to carry both dead and live loads and completely eliminates traditional slab forming and shoring! The system has been thoroughly tested and is U.L. approved.

CELLCAST offers a host of advantages over conventional concrete designs, including:
- Speeds erection with pre-sized permanent steel forms.
- Allows a monolithic concrete pour for slab, beams and girders maintaining “T” beam action.
- Requires no extra building height - utilizes 5 1/2” or 6” total slab depth.
- Eliminates positive moment re-bars within the slab.
- Provides a built-in wire raceway system.
- Electrical services are accessed without core drilling, eliminating possible cut re-bars.
- Eliminates the need for expensive plenum rated wire.
- Provides the ultimate wire management system with built-in wire security and RF shielding for computer wires.

For more information and details on this unique concrete/cellular floor system, contact your Robertson sales office or write: Robertson 400 Holiday Drive Pittsburgh, PA 15220
PELLA. THE ONLY WINDOW COMPANY THAT DOESN'T HAVE TO MAKE BELIEVE ONE WINDOW IS PERFECT FOR EVERYBODY.

Other window companies offer one line, only Pella® offers three. Each a comprehensive selection of windows and doors. And each with Pella’s exceptional quality. So while other window companies present you with reasons that their one line is perfect for you, Pella presents you with exactly what you need.

The Designer Series™, the best all-around window we’ve ever made. It manages light, temperature and ventilation with a multitude of innovations that can be beautifully personalized with a wide variety of between-the-glass options.

The Architect Series™ Unlike our competitors, our technologically advanced, energy efficient, divided light windows can be true period replicas. They feature muntins that are accurate duplications of designs that are centuries old. Our competitors merely approximate them with muntins that are a sizable 1/2” wider. Which is unfortunate, considering there’s no such thing as sort of architecturally correct.

ProLine™ These windows have been built to Pella standards with the quality and functional features you’d expect. But they’re designed to include an added feature: a new definition of Pella affordability.

So whether you’re building or remodeling, ask your builder what Pella has to offer. Or visit your nearest Pella Window Store™ where you’ll find window solutions to fit your needs. Including something that may surprise you: a big choice. For more information, or the nearest Window Store, call 1-800-524-3700.

BUILT TO IMPOSSIBLY HIGH STANDARDS.
Hundreds of people see the sign and are forced to make it through one door. The traffic begins to build. And so do tempers. You can avoid door jams and traffic jams with a reliable Russwin Door Closer.

Those who open the door fast won't know that our adjustable backcheck intensity valve is preventing damage with a pressure relief safety system.

They'll never realize that the triple heat-treated spindle is stronger to help exceed ANSI Grade 1 standards.

People with disabilities won't think twice about how easily the door opens. But they shouldn't have to.

Because these are features that make Russwin Door Closers trouble-free — proven by millions sold, billions of cycles and a limited 10-year warranty. So leave the traffic to a high performance, easy-to-install Door Closer from Russwin.

To find out more about our complete line of door controls, exit devices, locksets and key systems, give us a call at (203) 225-7411. You'll get the support you need from our factory-direct sales force and inside sales representatives. Russwin Architectural Hardware, 225 Episcopal Road, Berlin, CT 06037 USA.
Superior architectural coatings for metal, glass, and other surfaces begin with PVDF, and superior PVDF coatings begin with HYLAR 5000™.

For the ultimate in long life and lasting beauty, specify HYLAR 5000 PVDF coatings.

HYLAR 5000 PVDF based architectural coatings are available from leading coatings manufacturers throughout the world.

For more information concerning HYLAR 5000, call 1-800-221-0553. (In New Jersey, call 1-201-292-6250.)
Here is the definitive resource on the coming school market boom for architects and educators...

School Ways
The Planning and Design of America's Schools
by Ben E. Graves

288 Pages. 8 1/2" x 11", 354 Illustrations.

$35 billion will be spent over the next three years on K through 12 school construction*

*F. W. Dodge.

The number of school-age children is booming. From top to bottom, the existing educational plant in most urban areas is in shambles. And 30 percent more space is needed per pupil. There's an explosion in special programs that targets the needs of students with learning disabilities or outstanding talents. Computers are now basic tools of education... and they require lots of extra footage. And most classes will be made up of 20 pupils — instead of 30 or more, requiring additional classrooms.

That means more schools have to be built!

Now "School Ways" provides:
- An important analysis of building forecasts for new schools.
- An in-depth examination of changing approaches to education that will shape school design.
- A concise history of school design.
- A key chapter on emerging trends by Perkins & Will architect William Brubaker.
- As well as detailed profiles on 50 important completed educational construction projects, model photographs and plans of schools currently on the boards, a discussion of educational technology, and much more.

Who should read "School Ways"?
Architects, architecture students, school administrators, school board members, and others concerned about education.

Scheduled for publication in November 1992, "School Ways" will sell for $39.50. But you can reserve copies at the pre-publication price of only $31.60. Simply fill out the attached coupon and mail it to:

"School Ways"
c/o Architectural Record
1221 Avenue of the Americas
New York, NY 10020

At the special pre-publication price of $31.60 plus postage, a saving of $7.90 off the regular price.

I understand that I will receive my copy(ies) of "School Ways" upon publication, along with an invoice at the special pre-publication price.
“DPIC is on the cutting edge of practice management today.”

We were excited when we heard the philosophy behind DPIC: their emphasis on education, the idea that they wanted to work with us to prevent losses, that they specialize in professional liability insurance...

DPIC was founded by design professionals who believed loss prevention education could help control their claims costs.

DPIC’s found ways to make us better managers through their education programs. And they’re smart enough to reward us for it.

In the past five years, Steffian Bradley has received $54,000 in education premium credits from DPIC.

All our partners read the book and took the test on it. Even our non-architect CFO. It’s simple to do — but you learn so much about dealing with potential problems.

The “book” is DPIC’s Lessons in Professional Liability, which deals with the business side of the design professions, where most claims start. Lessons is used by architects and engineers across the country.

It’s very satisfying to know that a company like DPIC cares enough to put programs like this together. We really have a partnership — I don’t even know all the things that DPIC and our agent do that are in my best interest. And that kind of support feels wonderful.

It’s one less thing to worry about, that’s for sure.

Different by Design™

The Professional Liability Specialist
of the Orion Capital Companies

Design Professionals Insurance Company • Security Insurance Company of Hartford • The Connecticut Indemnity Company • Guaranty National Insurance Company • Landmark American Insurance Company

Rated Excellent by A.M. Best Company

DPIC Companies, Inc. 2959 Monterey-Salinas Highway Monterey, CA 93940 (800) 227-4284

© 1992, DPIC Companies Inc.

It’s not just money back. It’s an incentive to be the best you can be.
wish to thank the generous corporate sponsors who contributed toward the production and dissemination of the Architect's Resource Kit.

Thanks to the following corporations, this magnificent symbol of our nation will come alive in classrooms throughout the country.

Benefactors:
McGraw-Hill, Inc., and its subsidiary the Sweet's Group
Autodesk, Inc.
Creative Classroom
MBNA America Bank N.A.

Corporate Sponsors:
Armstrong World Industries
Benjamin Moore & Co.
CNA Insurance Companies
The Chicago Faucet Company
Glen-Gery Corporation
Harper and Shuman Inc.
Louisiana-Pacific Corporation
Modernfold Inc.
Nucor Corporation
Sanyo Air Conditioning Products
The Sherwin-Williams Company
Trane Commercial Systems Group
Thoro System Products
Velux-America Inc.
Victor O. Schinnerer and Co., Inc.
Wayne-Dalton Corporation
Herman Miller Inc.
Grace Constmction Products; a division of W. R. Grace & Co. - Conn.
YOU CAN DO THIS. NOW!
With FastCAD® 3D Software for only $2995.
CALL 1-800-874-4028 for a FREE demo disk

Evolution Computing
FastCAD is a registered trademark of Evolution Computing.
These little dynamos aren’t the only ones reaching out and growing in new directions. So, too, is Von Duprin. We’re adding to our reputation for uncompromising quality by introducing several major product innovations and enhancements. Together, these advances can go a long way toward making everyone — large and small — feel more secure in an emergency.

Chexit™. Chexit, the first totally self-contained delayed access security system, is perfect for retail outlets, banks or research facilities because it will stop anyone in their tracks for up to 15 seconds. Without compromising life safety for a second. Chexit is now available in a broader range of applications, such as for vertical rods and mortise devices.

StrikeForce™. Every electric strike in the Von Duprin StrikeForce is made of top-quality stainless steel, then fully cycle tested 100 times before being shipped. No other competitor can match that. And for unmatched compatibility between

TO KEEP THEM SAFE, BABIES OF

...
electric strikes and hardware, our new 6000 series is the one to latch on to.

MaxHold.™ This new series lives up to its name by providing the highest level of holding force for direct-hold magnetic locks in the industry. MaxHold offers maximum safety and security for use on a wide variety of applications, including auxiliary locking with panic and fire exit hardware.

Von Duprin is safely in front in other areas, as well. Like our fully concealed vertical rods, uniquely tested for doors up to 10 feet high. And our fast, flexible, easy-to-program Series 7000 programmable card/PIN reader.

To find out more about all our latest babies, contact Von Duprin at 1-800-999-0408 (in Canada 416-278-6128). And remember, next time you want to enhance security, consider all of the costs involved — especially the human ones.

Von Duprin. We never forget the human cost.
ZERO SoundTrap systems can help you reduce sound control problems to zero.

The new SoundTrap systems from ZERO are designed to achieve up to a 53 Sound Transmission Class (STC) rating. Tested per ASTM E 90 standards, the results represent the actual sound transmission value of the opening, with the door operable. A rating of 53 STC means that loud sounds emitted from one side of the door will be heard only faintly or not at all on the other side. By comparison, 12" of reinforced concrete has a 56 STC rating. The SoundTrap system provides the highest STC rating and quality components available for door openings.

ZERO will help you close the door on most sound, air, smoke, fire and EMI shielding problems. Write or call for product information, engineering assistance and our illustrated to scale 32-page catalog.

ZERO INTERNATIONAL, INC.
415 Concord Avenue, Bronx, NY 10455-4898
1-800-635-5335
In NYC, call 212-585-3230
FAX 212-292-2243
TELEX 239777 ZERO UR

WHEN NOTHING ELSE IS GOOD ENOUGH FOR LONG ENOUGH.
FOLLANSBEE Roofing Metals
enviable records of longevity and beauty.

Today, re-roofing costs are a major consideration in the design of all types of structures. TERNE, the old "tin" roof, and TCS, terne-coated stainless steel, are establishing enviable records of longevity...adding a gracious beauty to outstanding function, at a cost competitive in value with other roofing materials.

62 years in place... the charm and durability of a TERNE roof!

This house, near Pittsburgh, PA was originally roofed with TERNE in 1929. Painted several times since, the roof remains as testimony to the durability of TERNE and a perfect complement to the charm and beauty of the residence.

62 years of service... still performing its designed function.

Hinsdale High School, Hinsdale, Illinois, was built in 1977 and roofed with TCS. Requiring no painting, it has weathered to a soft gray and will stay that way through generations of service. TCS, introduced by Follansbee in the 1960's, gains its finest testimonials from a distinguished roster of architects who continue to specify it for major projects.

TCS and a roofing lesson... weathering to beauty and generations of service

Now weathered to an attractive, warm gray, the standing seam roof on Hinsdale High School will remain beautiful without painting.

See our catalog in Sweets and Sweets Canada

TERNE... the beauty of color
TCS... beauty by mother nature

FOLLANSBEE STEEL • FOLLANSBEE, WV 26037
Call us toll-free 800-624-6906

Circle 46 on inquiry card
Fineline Suspension Systems offer more colors, reveal widths and appealing choices! Whether you select regular Fineline for a clean, tailored appearance; the unique Fineline "Inside Color" Suspension with bold primary colors in the reveal, or the Fineline 1/8 Suspension with its slender reveal and dramatic look, you're choosing the high quality systems that meet your needs! The systems that come in two reveal widths so they're more appealing and in 24 colors that are always revealing! Fineline™ Suspensions, from USG Interiors, Inc. For more information call 1-800-950-3859.

Circle 47 on inquiry card

USG Interiors, Inc.
Spanning the spectrum has long been a goal of RECORD INTERIORS. As always, the spectrum has many components—a project’s scale, use, budget, and, for lack of a better word, style. This year the outer boundaries are not as far-out as in the past; a creeping conservativism—economic and stylistic—mirrors the general mood. Several of the projects featured here did begin, however, with spectacular raw material—Tsao & McKown’s SCS Communications (page 114), with its astounding Manhattan vistas; likewise the East Coast outpost of New Line Cinema by Smith-Miller + Hawkinson (page 122), or, further afield, Carlos Zapata’s JPBT Advisers overlooking Miami’s Biscayne Bay (page 78). In all three, the architects reinforce the strengths of their sites rather than compete for attention. Tadao Ando didn’t have views to contend with in his windowless gallery at The Art Institute of Chicago (page 86), but he reckoned with an equally impressive force: the otherworldly glow of ancient painted screens. FTL Associates had to reconcile the luxurious fabrics of Carmelo Pomodoro’s clothing (page 98); Machado Silvetti faced the strict confines of a 19th-century townhouse (page 106); Allied Architects/Interim Office of Architecture remade a warehouse into a restaurant (page 92); and Ingo Maurer tamed the seemingly endless corridors of an airport terminal (page 132). Taken together, the projects show that success has many guises. As Zapata says, architecture doesn’t have to “scream at you” to make its presence felt. Sometimes, though, it’s a struggle to be quiet. K. D. S.
Clean Sweep

In his first completed project since establishing his own firm, Carlos Zapata reaffirms his faith in Modernism.
The offices Carlos Zapata designed for the Miami-based international investment firm of JPBT Advisors have a setting special to the subtropical city—a corner location on Brickell Avenue’s financial district with broad views of Biscayne Bay and across the cruise port to the hotels of Miami Beach and the ocean beyond. It is anything-is-possible vista, appropriate for a firm dedicated to making international investment capital grow.

Venezuelan-bom Zapata grew up in Ecuador and was hired for this project by an Ecuadorian design firm, Una Idea. Zapata, who is 30, trained in New York City at Pratt Institute and then Columbia University. He worked in Ellerbe Becket’s New York office until last year, when he opened his own firm. At Ellerbe Becket, Zapata and colleague Peter Pran gained international attention for their entries to major building competitions [RECORD, April, 1989, pages 90-95]—sleek, independent reinterpretations of Modernism. On his own, Zapata has continued work in the same vein, albeit at a smaller scale.

At JPBT Advisors, a single stainless-steel wall sweeps through the 8,000-square-foot space. Glass panels are improbably suspended from the ceiling, and they curve or tilt, depending on their placement. The offices are infused with light. The energy is palpable. “This is not,” admits Zapata, “a static situation.” The company has an open-door philosophy, and it is evident in the design: every employee gets a good view of the water, though some get it through several layers of glass. “Everything here is completely open,” explains Zapata. “That’s not something that starts with the architect. It starts with the philosophy of the company and gets translated into architecture.”

Zapata wanted an original design that would counter critics of Modernism who term it “too restrictive and too modulated.” Thus, walls are formed by canted panels of glass. Offices are divided by cherry wood partitions that jut out at various angles, all in a cadence that Zapata calls “relaxed, rather than a stiff, imposing geometry.” The partitions dividing the office bays are each of different heights, angles, shapes. In a corner office, the traders are situated behind glass walls, where their activity is apparent, another twist on typical financial offices.

The single strongest defining element is the satin-finished and beaded stainless-steel wall that takes off from the reception area, curving to define the entire space. It lifts from the floor like the prow of a ship emerging from the water, an inevitable nautical metaphor considering the view outside. Fastidious and detailed craftsmanship is evident throughout the space. For example, a barely noticeable strip of metal is inlaid into the cherry partitions at six feet, just above eye level, so that it seems to float by. Interior lighting, much of it tucked away in ceiling coves, is intended to simulate daylight. Zapata wanted to impart the sense that the offices are awash in natural light, with all the subtle shifts that implies.

The entire effect is an architecture of anticipation. What’s around the corner? What’s behind those curved, canted layers of sandblasted glass? Even in a small office with only one corner to turn, the suspense is there. Zapata is interested in the ideas of motion and balance, and expresses his interest by using sleek, sculptural materials in bold, inventive ways, but with great confidence. The material palette is pale and smooth—sandstone and veined blue Bahia granite set against steel and glass. “It’s very settled,” admits Zapata. “I don’t think a space has to scream at you.” Beth Dunlop
Zapata wanted the offices of JPBT Advisors to be filled with light, both from natural and artificial sources. He chose materials such as stainless steel and glass to reflect or diffuse light. He and project architect John West suspended glass panels from ceilings to partition offices without blocking views of Biscayne Bay and the Atlantic Ocean beyond (opposite). Cherry panels and Spanish sandstone flooring with blue Brazilian stone inserts complete the material palette.

Credits
JPBT Advisors, Inc.
Miami, Florida
Architects: Carlos Zapata Design Studio (design architect)—Carlos Zapata, principal-in-charge; John West, project architect; Maria Wilthe, designer
Una Idea (planning architect)—Catalina Landes, Diego Zurita, and Marco Nieto, project team
Associate Architect: Altman Architects—Jose Rodriguez, project architect; Frank Gonzalez, designer
Engineers: Santiago & Associates (structural); Lauredo Engineering Co. (electrical); Dunn Engineering (mechanical)
Consultants: Stainless Steel Fabricators (metalwork); Mison, Inc. (custom furniture); Clover Corp. (audio-visual/security); Hollywood Woodwork, Inc. (woodwork); Crayford Tracey Corp. (glazing); Gallo Marble Enterprises (stone flooring)
General Contractor: Skaf Construction, Inc.—Paul Kloman, project manager
Manufacturer Sources:
See Contents page

The Zapata-designed reception-room desk has a 13-foot-long cantilevered stainless-steel top (top). The conference room, with its sandstone floors and maple ceiling, is separated from the corridor by a tilted glass wall (bottom). Steel desks in private offices are also by Zapata (below).
In the Japanese Spirit
Tadao Ando’s first American commission combines architecture and art.
When it comes to pioneering architectural development, few cities in the United States can top Chicago. The city’s latest “first” is Osaka-born architect Tadao Ando’s American debut: a 1,850-square-foot gallery for Japanese screen paintings at The Art Institute of Chicago. The room is the final gallery encountered by visitors to the new 16,500-square-foot wing of Chinese, Japanese, and Korean Art, the result of a $5-million renovation funded by The Mitsubishi Bank, the Japanese government, and various private donors. “From its beginnings in the 1890s, The Art Institute of Chicago has made a major priority of assembling the arts of China, Japan, and Korea,” says James N. Wood, director and president of the museum. Now the Art Institute’s important collection, much of which was previously relegated to storage, is finally accessible to the public.

Within the tight confines of his allocated area, Ando has created a contemporary setting imbued with the spirit of traditional Japanese rooms, where screens are appreciated not just as objects of beauty but also for their space-defining qualities. According to Ando, “The whole idea of screens is to physically shut off space while conceptually extending it.” This he did by placing the screens along the gallery perimeter where the landscape and floral scenes visually expand the space. Enclosed in an L-shaped recess that wraps the room on two sides (previous pages), the paintings sit directly on the oak floor along with a group of primitive pots, just as they might in a traditional Japanese tea house or temple anteroom. The laminated sheets of glass span the opening’s full height and are almost imperceptible. A sliding glass door at one end provides easy access to the delicate screens, which will be rotated on a quarterly basis.

The real key to Ando’s bold scheme, however, is a grid of 16 free-standing pillars, each 10-feet tall and one-foot square, located at the entrance of the gallery (plan right) and interposed between visitor and art. The grouping literally obstructs views of the screens. As visitors walk through this grove of oak-veneer columns, their perception of the screens is altered with each step (drawing opposite). The pillars recall the post-and-beam construction of traditional Japanese architecture and are meant to “suggest the depth and resonance of the spaces,” according to Ando.

In contrast to the brightly lit adjacent rooms, the screen gallery’s lighting is kept dramatically low. Because the screens are sensitive to ultraviolet rays, natural light was avoided altogether. But Ando’s intent was to replicate the diffuse, indirect-lighting conditions typical of Japan, so the paintings are presented in semidarkness, with their gold- and silver-leaf mysteriously radiant. Though ceiling tracks were included in the gallery proper, reflected light from incandescent and filtered fluorescent fixtures mounted inside the cases illuminates the room. A glass ceiling within the case softens the light and blocks heat that is removed by a vent above. Glass doors at the gallery entrance help control the temperature and maintain the required humidity level—higher than normal for the museum.

Like a sacred precinct, the minimalist space has a character that is “felt, but not seen,” in Ando’s words. Without being irreverent, the gallery challenges the art and forces it to compete with the profound experience of the room itself. “If the art was weak, Ando would take over,” explains Yutaka Mino, curator of the department of Asian Art. “But, the art is so strong that both work well together.”

Naomi R. Pollock
A new brewery/restaurant retains the utilitarian esthetic of a former coffee warehouse.
The Hills Brothers Coffee Building lies just across the Embarcadero from a row of rotting San Francisco Bay wharves. It is a tribute to the days when tramp steamers brought world commerce right to downtown’s edge, and someone thought enough of the business of storing coffee beans to build a handsome brick building for the purpose, complete with monumental arches. The giant letters that shout “Hills Brothers Coffee” from the building’s roof are visible from the bay for miles; they gave the place landmark status long before the state officially did the same.

The Gordon Biersch Brewery/Restaurant, the first commercial/retail tenant in the Hills Brothers building, has become an important anchor for the revival of this neglected corner of the city. The brewery is a neighborhood gathering place for residents of new housing projects to the south and workers from new offices nearby, as well as tourists and other city dwellers.

The brewery owners and the two collaborating architects, Roddy Creedon of Allied Architects and Bruce Tomb of the Interim Office of Architecture, agreed to keep the interior of the restaurant spare, recognizing the industrial origins of the space. They chose dark or neutral finishes that are common to both industrial architecture and traditional pubs: black for metal work, red granite and dark mahogany for the bars and tables, sealed and sandblasted concrete, and yellow ochre terrazzo for the stairs. There is not a primary color in sight.

Creedon and Tomb also resisted the palette of clichés that has become the staple of architects trying to design “industrial-looking” spaces. “We dislike the pseudo-industrial look Ghiradelli Square has taken on over the years,” explains Creedon. They omitted exposed round ductwork and bypassed porcelain metal lamp shades on conduit stems in favor of custom “chandeliers” made of standard electrical hardware, hung from strap iron brackets. Avoiding now-commonplace white-painted metal ship’s rails, they designed clear sealed maple handrails supported by hand-wrought copper and iron balusters reminiscent of the heads of grain from which the house beers are made (gleaming exposed stainless-steel tanks further highlight the brewing process). Massive H-beams installed diagonally between floors and ceilings (previous pages) provide seismic reinforcement.

To attract bar customers to the second-floor dining room, the architects exposed the restaurant by removing large portions of two column bays almost directly over the first-floor bar. The sight and sound of activity in the dining room is now connected to the bar level below, encouraging patrons to make the trip up a grand stairway of terrazzo, iron, and glass to dine.

To conserve floor space, the kitchen was designed to operate vertically. Food is delivered, portioned, and stored on the first floor, and sent by dumbwaiter as needed to the second floor for prep and cooking in an open “exhibition” kitchen.

The extensive alterations required to install a brewery and restaurant in this landmarked building meant obtaining many approvals from the local preservation board, especially for the addition, on the exterior, of a grain silo that also serves as marquee.

The architects and owner credit the board’s foresight and cooperation in allowing the building to be altered to suit the needs of a changing neighborhood. Charles Linn
In order to keep the interior of the restaurant spare, the architects chose muted finishes: exposed concrete, hand-wrought iron and copper railings, and red granite and dark-stained mahogany bar and table tops. Attracting patrons to the second-floor dining room required cutting away a large portion of two-column bays and adding a grand stair of terrazzo, wrought iron, and glass. Piping and stainless-steel brewing vats (middle and bottom left, and opposite) complement more predictable restaurant and bar furnishings.

**Credits**

*Gordon Biersch Brewery/Restaurant*
San Francisco, California

**Architects:** Allied Architects—Roddy Creedon, partner-in-charge; Scott Williams, partner; Lorin Hill, project manager; Douglas Burnham, Jane Chun, Tim Contreras, Grog Ensslen, Karen Mar, Neil O'Shea, Gabriel Smith, project team

**Interim Office of Architecture—Bruce Tomb, partner-in-charge; John Randolph, Vanessa Belli, Anthony Cava, project team**

**Engineers:** Bhatia Associates (electrical); Bijan, Florian & Associates and Stephen Tipping & Associates (structural); George Lim & Associates (mechanical)

**Consultant:** Juarez Design (lighting)

**General Contractor:** Koll Construction

**Manufacturer Sources:**
See Contents page
Tensile structures and a few well-placed curves help FTL Associates soften the edges of a Seventh Avenue fashion loft.
Carmelo Pomodoro’s clothes and FTL Associates’ architecture elicit the same kind of descriptions. Phrases such as “carefully structured forms,” “efficient use of materials,” and “sensually drawn lines” apply equally well to either firm’s work. So it is not surprising that FTL principal Todd Dalland can point to a spare, but elegant, cream-colored outfit designed by Pomodoro and jokingly ask, “Is it a dress or a building?”

Fifteen years of using stretched fabric to create buildings has sensitized Dalland to the overlapping concerns of architecture and fashion. Designing showrooms and offices for clients such as Donna Karan, Issey Miyake, Liz Claiborne, and Henri Bendel has also helped him appreciate the common ground between the two fields. Originally called Future Tents Ltd., Dalland’s firm specializes in the design and engineering of tensile structures and has worked on projects ranging from a concert pavilion at Baltimore’s Harborplace to an exhibition space for furniture in Paris. What Dalland finds so exciting about this type of construction is its structural efficiency, its sculptural potential, and its almost human curves.

The 15,000-square-foot Pomodoro showroom and offices integrate tensile elements with traditional interior construction. Set within a midrise structure in New York City’s Seventh Avenue fashion district, the facility includes showroom space, offices, and production areas for 30 employees. “I wanted an industrial-loftlike environment, but one that has been softened around the edges” explains Carmelo Pomodoro, who took an active part in the design of the showroom. “I wanted it to be a flexible space with a sense of mobility and change.”

To create that industrial effect, FTL stripped the space to its original structure—square columns set 21 feet apart, concrete beams, and large window openings. The architects shotblasted the existing concrete floor and then sealed it with a sheer white stain. Colors echo Pomodoro’s own subtle palette, ranging from whites and off-whites to creams and grays. Within this understated shell FTL inserted a host of elements that hang from above or seem to float in midair: motorized polyester-mesh screens, six-foot-high plywood partitions, and fabric-covered plywood panels set on metal tubes. The most dynamic part of the project is the main showroom (preceding pages), a long space defined by two curving lines of plywood panels hung between slender black-metal posts. Just inside these panels, the architects placed curved metal partitions that rotate thanks to an anchoring pole at one end and a wheel at the other. “Chariot” rolling racks made of bent steel and topped with saddle-shaped flame-retardant polyester fabric further animate the space. A polyester-fabric tensile ceiling softens the showroom’s hard-edged industrial shell, adding a final Baroque touch.

Clifford A. Pearson
To maintain an open feeling, the architects used motorized fabric screens to define areas such as a conference area off one end of the showroom (preceding pages). Flame-retardant polyester-fabric ceilings are held in tension by metal frames and anchored in concrete columns (left and opposite) and slender steel posts. The tensile structures met the client’s request to use fabric in the design of the showroom without draping it in a traditional way. The L-shaped floor plan (left) places offices around the perimeter with the showroom in the center. Offices on the east house management staff, while those on the west are given to designers and other creative departments. Dalland likens the plan of the showroom to that of a cathedral with the long space acting as the nave, the curved display areas as chapels, and the reception corridor as transept.

Credits
Carmelo Pomodoro Company
Offices & Showroom
New York City

Architect: FTL Associates—Todd Dalland, principal-design; Margaret Matz, project manager; S. Russell Groves, Victoria Rospond, Amedeo Perlas, V. William Murrell, Rudy Schewermann, Kam Sitt, Ronn Basquette, design team

Engineers: Consulting Services Unlimited (mechanical/electrical)

Consultants: Light & Space Associates (lighting); Jan Kroese Lighting Designs (lighting); Construction Spex (specifications)

General Contractor: Linmar Construction

Manufacturer Sources:
See Contents page
Against the Grain
the businessman who owns this apartment in Boston’s stylish Back Bay doesn’t care for the traditional, Federal-highboy and threadbare-Aubusson aspects of his hometown’s design ethos. And, when looking for an architect to renovate his new duplex, he was emphatic about not wanting a home that “looked like the lobby of the Ritz-Carlton Hotel.” On the recommendation of a local art gallery owner, he contacted architects Rodolfo Machado and Jorge Silvetti, a team unlikely to offer an old-line New England look. Although the two Harvard professors have lived in Boston for many years, both were born and educated in Argentina, and have practiced in Europe, especially Italy. “Our work has been influenced by Mediterranean culture,” says Silvetti, who cites such influences as “the residential work of Le Corbusier, the thinking of Aldo Rossi, and, especially, the entire oeuvre of Palladio.”

Recent winners of an international competition to design Genoa’s Piazza Dante, Machado and Silvetti are perhaps best known for their (often unbuilt) urban projects. In recent years, however, their firm has done residential work. For this apartment, the key challenge was the project’s limitations. By the time the architects saw the space—the top two floors of a late 19th-century townhouse—the 3,000-square-foot unit was, in Silvetti’s words, “spatially defined.” The architects thus set themselves the task of using interior elements, such as fireplaces, a staircase, and cabinetry, to provide complexity to the existing shell. Incorporating the owner’s love of unusual woods, they developed what Silvetti calls “a narrative of materials”—in this case, satinwood, pomel mahogany, bird’s-eye maple, and oak (all sustainable species) combined with stainless steel, travertine, granite, and glass.

The architects have handled the mixing of materials with clarity and care. They treated the main spaces—the living-dining room on the upper level and the bedroom below—with restraint, in each case focusing the play of materials on the fireplace. In the bedroom they have made the fireplace an asymmetrical composition of granite, travertine, and metal; in the living room, it’s a more formal, symmetrical object of satinwood, steel, granite, and sandblasted glass. Two winglike satinwood panels open to show a slot of stainless steel, which in turn reveals the viewer’s distorted image—“a reinterpretation of the mirror over the mantel,” say the architects (page 111).

The relative simplicity of the main rooms contrasts sharply with the drama of secondary spaces. Located on the lower level, a windowless entry hall is a fittingly dark arrival point for a client who admits, “I don’t like a lot of light.” With its satinwood-veneer paneling and polished black-granite floor, this space establishes the motif of visually exciting materials for vertical planes and more neutral or reflective materials for horizontal surfaces.

The apartment’s material “narrative” is especially sumptuous in the private quarters. A blend of pomel mahogany casework and green leather upholstery, the dressing room is a sleek updating of the traditional gentleman’s sanctum sanctorum. (Cabinets were built off-site by Boston furniture-maker Dale Broholm.) Just beyond is a bathroom whose black-and-white formality suggests an approach to ablutions a Roman might appreciate. Here the fixtures are set within a composition of granite, travertine, and glass. In the kitchen, a similar palette creates equally sensuous results. An enthusiastic cook, the owner takes pleasure in this room, which includes cabinets whose interior shelves are made of bird’s-eye maple. “Visitors expect the usual Boston townhouse interior,” observes the client, “but it’s not.”

Nancy Levinson

Architectural Record September 1992  107
In the jewel-box-like dressing room (top left), closets and cabinets frame a green leather seat. Recessed lighting in the ceiling is made of frosted glass framed by black-enameled aluminum. In the stairwell (bottom left), the architects have muted the light from an existing skylight with a plane of ground glass; here the framing members are satinwood with black lacquer trim.
By the time the architects were commissioned, the building's developer had finished his basic renovation. The architects did, however, replace an existing straight-run stair, making the entry and stairwell a more generous space. The same sensuous palette of materials—satinwood paneling, 3/4-inch polished black granite, stainless steel—has been used for both the stairwell (top left) and living-room fireplace (bottom left and opposite). Wood and stone have been detailed to express the fact that they are veneers.
The sleekly outfitted kitchen features a polished black-granite floor and countertops, stainless-steel sink and backsplash, and low-voltage recessed lighting (top left). The upper cabinets combine frosted glass with black-lacquered wood muntins, for an effect that is somewhat Japanese; the lower cabinets have single panels of pomel mahagony. In the master bathroom (bottom left and opposite), light and dark materials are combined to dramatic effect. The floor is 3/4-inch black granite; the whirlpool bath is set into 3/4-inch travertine walls. Travertine tiles line the walls of the shower stall, adjacent to the tub. The sink stand has satin-finished stainless-steel legs, a nickel-plated basin, and a granite countertop.

Credits
Back Bay Townhouse
Boston, Massachusetts
Architect: Machado and Silvetti Associates—Jorge Silvetti and Rodolfo Machado, partners-in-charge; Adolfo Perez-Levia, project architect; Douglas Dolezal and Barry Price, design team
General Contractor: Connaughton Brothers—Leonard Connaughton, job superintendent
Manufacturer Sources: See Contents page
Room at the Top

Sleek corporate Modernism reaches new heights atop a Manhattan office tower.
SCS Communications
New York City
Tsao & McKown Architects
If making it in New York City is your dream, you need only emerge from the elevator onto the 57th floor of Carnegie Hall Tower and enter the offices of SCS Communications. Indeed, SCS’s Stephen Swid himself cannot completely mask his own pleasure at his success during a fast-paced tour of his domain. Visitors to Swid’s private suite might fight the urge to slip into his chair, put their feet up (though not, one hopes, on his prized 1927 Jacques Emile Ruhlmann desk with ivory-inlaid feet), stare at the constantly blinking Qutron financial-network monitor, and chat on his state-of-the-art digital telephone. Then there are the views, astounding even by Manhattan skyscraper standards. Swid’s, on axis with Central Park, commands vistas of the Upper East and Upper West Sides, and, on a clear day, LaGuardia Airport.

Swid, who admits to wanting “to live well,” turned to architect Calvin Tsao. Tsao came recommended by Swid’s wife Nan, co-founder of Swid-Powell, producer of architect-designed tabletop objects, including dishes by Tsao and partner Zack McKown. While McKown is overseeing construction of a mixed-use urban project in Singapore, Tsao welcomed a break in his bi-continental commuting to return to the work that has become the firm’s signature—interiors that combine subtle, idiosyncratic spatial maneuvers with a flair for materials [RECORD, Mid-September 1989, pages 58-63]. What’s more, Tsao’s view of architecture as stage-set is perfectly attuned to Swid’s needs: SCS Communications is a holding company with publishing, record, and film divisions.

With a tiny full-floor plate, panoramic views on four sides, and Swid’s important modern-art collection, Tsao had to tame a surfeit of visual stimuli. Then too, the building, completed in 1990, had its own problems. The envelope, designed by Cesar Pelli & Associates, is not fully reconciled with the floor layout by Brennan Beer Gorman. Tsao and project architect Gary Morgenroth discovered that the building’s structural columns and the window bays are arranged according to different grids. Tsao and Morgenroth incorporated both grids into their 7,900-square-foot scheme by subdividing the space into three main areas—reception room, conference room, and Swid’s office—and burying structural columns in a thick wall (plan page 120). They maintained the building’s nine-foot finished ceiling heights except in the three main areas where they relocated ducts to the perimeter and raised the ceilings to 10 feet 6 inches, keeping in mind Swid’s soon-to-be-installed art collection, which requires large open surfaces. The architects then focused on refining the proportions of each room and expressing the contrast between adjacent spaces. A windowless hallway lined with built-in cabinets of English sycamore (at left on previous pages), for example, connects the reception room with the conference room, much like a decompression chamber between two lofty spaces.

Rather than compete with the drama outside, the architects chose to subtly reinforce the spatial concept with custom furnishings; several elements such as light fixtures and elevator call-button panels are oval, the project’s unofficial trademark. While the views could have proved too assertive, they provided Tsao with a suitable color palette. He brought Central Park inside Swid’s office with pale chartreuse carpeting (pages 120-121). In the conference room, egg-plant and steel-blue upholstery on Gilbert Rohde chairs from the 1930s (pages 118-119) echoes the burnished-copper pyramid atop nearby Worldwide Plaza and the array of surrounding glass and steel towers. And if the views or the sun’s glare are too intrusive, the shades can be lowered—though that event seems unlikely.

Karen D. Stein

Calvin Tsao and project architect Gary Morgenroth made the reception area (previous pages) unusually large—600 square feet—for an office that receives few visitors, but impresses those who do visit with dramatic west-facing views. A concrete and glass coffee table by architect Joseph Eisner is a strong counterpoint to a 1970s steel sculpture by Anthony Caro set on a steel Tsao & McKown-designed base. Underneath, a checkerboard of matte gray limestone and polished white marble sets the area apart. A curved ceiling with recessed incandescent fixtures swoops down to a white plaster wall (opposite) to complement the forms of an (as-yet-unhung) Ellsworth Kelly painting from the client’s art collection. The reception desk (above) is screened by a sycamore-clad partition slotted to admit daylight.
To reinforce their client's custom of surveying New York City from his 57th-floor aerie, the architects placed his office along the north wall overlooking Central Park (top left), and the conference room (previous pages) at the south end of the space, with views of midtown and the Hudson River. Swid's office consists of a work area dominated by a 1927 Jacques Emile Ruhlmann desk and an oval glass-and-steel light fixture by Tsao & McKown (foreground in bottom right), a dining/conference area (background in bottom right), and a domestic-scale seating arrangement. Modern masters furnishings—Gio Ponti light fixtures, Gilbert Rohde side tables, Ruhlmann chairs—and a Tsao & McKown sofa and coffee table (opposite) are, by day, softly illuminated by muted north light. Says Swid of the result: "It's an office that's not an office, and a home that's not a home."

Credits
SCS Communications
New York City
Architect: Tsao & McKown Architects—Calvin Tsao, principal-in-charge; Gary Morgenroth, project architect; Ted Krueger, Ross Wimer, Werner Franz, project team
Engineer: Flack & Kurtz—Robert S. Roth, Jr., project engineer (mechanical, electrical, plumbing)
Consultants: Theo Kondos Associates—William Armstrong, project designer (lighting); Stephen A. Pine (specifications)
General Contractor: Alexander Wolf & Son—Anthony Patrick, project manager
Manufacturer Sources:
See Contents page
New Line Cinema lurks in a Modernist Los Angeles cave and spreads its wings in a New York City high rise.

New Line Cinema East/
New Line Cinema West
New York City/Los Angeles
Smith-Miller + Hawkinson
Architects
ew Line Cinema is a new force in the entertainment industry—not surprising for the producer of the recent hit The Player, a scathing inside-Hollywood parody by director Robert Altman. Once known as the folks who brought you Nightmare on Elm Street and Teenage Mutant Ninja Turtles, the company is now bigger, hipper, and hungrier. Architects Henry Smith-Miller and Laurie Hawkinson have been along for the ride from low-budget thrillers to high-brow satire; they designed company chairman Bob Shey's first New York City office out of cardboard and plywood. Their most recent sequels take place simultaneously in a midtown Manhattan office building and in Los Angeles, giving New Line Cinema a respectable, still slightly irregular pair of offices. After all, says president Michael Lynne: "We have made our name by taking a standard genre and giving it a twist."

The "genre" here is standard office buildings that would seem to dictate a conventional layout of either boxed-in cubicles or a sea of open-office systems. Smith-Miller and Hawkinson found that the idiosyncrasies of the buildings, combined with what they and their client agree is the more democratic nature of the company, gave them a chance to adapt the standard model. The architectural approach was simple and based on New Line Cinema's own medium: "We thought it was all about points of view, about where you shoot from; we layered the spaces accordingly," explains Smith-Miller. Angled ceiling planes and lighting tracks in New York and staggered axes in Los Angeles serve to accentuate perspective lines, defining individual offices and telescoping views.

East and West Coast outposts share a material palette of brushed aluminum, glass, maple veneer, and dry wall—a symbolic link for a company split into two parts and stitched back together by telephone-conferencing technology. The 22,000-square-foot Los Angeles office is located in a dark and narrow stack of floors clipped together by a metal and glass staircase. The offices are inward-looking; the activities they contain concentrate on film production. The architecture consists of translucent and opaque screens that section the space off into narrow slices. The introspection is such that at the back of the building the architects carved out the ceiling, as if to reveal how the building was made.

The 18,000-square-foot New York office, by contrast, is in a light and airy floor overlooking midtown and Central Park. Here layered work spaces are intersected by angled walls that force the eye out towards the skyline. The architects separated walls from the perimeter to create borrowed views diagonally along the glass facade. Clerestory bands admit light into the core. Walls and doors are stitched together with "mortise and tenon" joints, as if a skeleton of connections holds the various parts of the organization together. This is not all purely visual game-playing: for New Line Cinema, New York represents the corporate, money-oriented branch of movie-making. It's where deals are made with bankers, distributors, and other power brokers who influence the business of movie-making. It is a place of well-honed connections, not a place of production.

What ultimately ties New Line Cinema East and West together, however, is the way in which the architecture frames the activities of each office. In New York, the architects rewrote traditional boundaries between inside and outside and between private offices and shared spaces. In Los Angeles, their design alternates between close-up and rotated, pan shots. In both spaces, they combined simple materials into highly refined compositions, creating montages of startling angles befitting their client. Aaron Betsky
In the East-Coast offices (below left), drywall planes slide by wood frames and intersect the existing structure at odd angles, with lighting tracks and clerestory planes connecting the various pieces. On the West Coast (below right), walls have varying degrees of transparency depending on their distance from narrow windows. In both projects structural, electrical, and air-handling systems were reclad or relocated, but otherwise left unchanged. The two plans reveal differences: in New York a dense core gives way to open spaces overlooking the skyline, while in Los Angeles individual work areas are arranged within the rigid column grid.
New Line Cinema
New York City

The New York office takes up a floor-and-a-half of an L-shaped office building. The entrance (pages 122-123) is seen by the architects as a "camera" whose exposed mechanism catches views and cinematic images, including posters for New Line's recent releases in glass and steel frames. Metal-clad walls, gray slate floors, and subdued lighting (and a secret executive passageway behind a maple veneer partition) provide the "set-up" shot. Once past the foyer, visitors are sent down long corridors whose skewed placement gives off-center views of the city beyond.

In private offices the architects created what they called "composite shots." They exaggerated the thickness of door and window frames (photos page 129), a technique Hawkinson attributes to Carlo Scarpa and Rudolf Schindler, and separated them from the structure of the building, while they brought natural light to the core with glass clerestories.

Tilting ceiling planes, mirrored in the curve of the maple-clad reception wall, enhance the sense of exposure and make the space seem higher than it is. Fluorescent uplights in troughs reinforce telescoping sight lines to the exterior.

Executives claim corner offices and support staff occupies space divided by wood-encased file cabinets. "We're not breaking the mold of the office interior," admits Smith-Miller. "We're just disturbing it."
The conference room (opposite) in the New York office is, according to the architects, “a humidor”—a well-crafted container that appears suspended in midair. Up-to-the-minute technology is hidden in its thick walls: a maple surface contains televisions, the table and ceiling are outfitted with microphones for cross-country telephone conferencing, and the back wall slides out to reveal hidden script-storage racks. In the Los Angeles office, you can walk through the conference room, but here a doorsized window allows only views—a motif of visual transparency echoed in the adjacent glass floor (top left).

New Line Cinema Corporate Headquarters
New York City
Architect: Smith-Miller + Hawkinson Architects—Henry Smith-Miller and Laurie Hawkinson, principals-in-charge; Jorge Aizenman, project architect; Eric Cobb, Eugene Harris, Charles Renfro, Jane Wason, Fritz Read, John Conaty, Kit Yan, Belen Moneo, Yolande Daniels, project team

Engineers: Severud-Szepezdy—Edward Messina, project engineer (structural); Carstel—Carlo Marzot, project engineer (mechanical)

Consultants: Claude Engle and Associates (lighting); Harry Joseph and Associates (audio-visual)

General Contractor: NSC Construction

Manufacturer Sources: See Contents page
The more constricted space of New Line Cinema West permitted fewer expressive moves than the New York space. The conference room is something you walk through, not a formal object at the corridor's end. Skewed lines reappear here, but as office walls that slide away from the confines of the 5,000-square-foot space.

New Line Cinema West expanded from its second-floor space to occupy the building's third and fourth floors, allowing the architects to continue investigating the site's potentials. While the second floor has an irregularly shaped conference room within a series of shifting but orthogonal planes, by the time you reach the third floor, things start to twist and turn. On the fourth floor, subtle distinctions between open and closed spaces puzzled even the local fire marshal, who took a second look at the floor plans before granting approvals. The architects stripped structural columns and exposed the ceiling, adding metal-halide and fluorescent fixtures. Plywood panels and filing cabinets shape spaces.

Credits
New Line Cinema Corporate Headquarters
Los Angeles, California
Architects: Smith-Miller + Hawkinson Architects—Henry Smith-Miller and Laurie Hawkinson, principals-in-charge; Charles Renfro and Robert Rothblatt, project architects; Margi Northard, Jane Wason, John Conaty, Kit Yan, Nicole Koenigsberger, and Randy Goya, project team
Engineers: Steven Mesey and Associates (structural); Carstel—Carlo Marzot, project engineer (mechanical)
General Contractor: Archetype Construction, Inc.
Manufacturer Sources: See Contents page
Space Invaders

The latest innovations from Ingo Maurer’s Munich-based lighting-design studio stir dark, ambiguous emotions.
lighting Installation
Airport Munich II
Munich, Germany
Ingo Maurer, Designer
A lighting scheme for a Munich airport terminal combines the precise detailing for which Ingo Maurer is famous [RECORD, Mid-September 1988, pages 100-105] with a distinctively menacing zoological imagery. A camshaft-like armature marks a meeting place (overleaf), its steel-mesh wings appearing to flutter over crisp tubular lamps. For Il Mondo, a restaurant, Maurer devised a two-ft-wide by four-ft-high cone (top left) made of 3/4-in.-thick glass disks. Lit by neon tubes in white, blue, and turquoise, the 70-lb luminaire is suspended by a single wire. Ceiling-mounted fixtures (below) sandwich frosted foil between tempered glass. Maurer has also launched what he calls “light vessels,” sculptures up to 20 feet long (bottom left and opposite). Exposing their glass, plastic, and carbon-fiber viscera, and “propelled” by their silver- or gold-plated paper wings, they provoke the squealy fun of horror movies. J. S. R.

Credits
Lighting Installation
Airport Munich II
Munich, Germany

Design/Fabrication: Ingo Maurer GmbH—Ingo Maurer; Bernhard Dessecker, Bernd-Axel Kluge, Franz Ringelhan, Gerd Pfarré (design); Jörg Neuweiler, Hans Leinberger, Christoph Matthias, Werner Berthold (fabrication)

Manufacturer Sources:
See Contents page
When you're choosing tile for a client, it helps to have a wide choice. And nowhere will you find the range of style, color and decorative innovation that Italian tile offers. Italian tile is the highest quality, most durable, and most technically superior tile you can buy. For more information contact the Italian Tile Center. Or see us at CERSAIE from Sept. 29 - Oct.4, 1992 in Bologna, Italy.
"FLY-THRUS, ASSOCIATIVE DIMENSIONING, GLOBAL EDITING... ALL I KNEW WAS THIS HAD BETTER WORK."

Our search for CAD software was intense. Being a small architectural firm, we couldn't afford to make a mistake.

By Architects, For Architects
Fortunately, we discovered DataCAD*, a versatile, easy to learn, easy to use PC-based design and drafting tool. DataCAD was developed by architects, for architects, (unlike the "name brand" we almost bought).

Works Like An Architect
DataCAD allows us to do 2-D and 3-D designs faster and more easily than we ever thought possible. Create with built-in wall, door, window and column commands. Easy editing, symbol libraries and "live views" are also standard.

We now spend more time designing, while we've reduced our costs. And in this tough market, we can use all the help we can get.

Even The Price Is Easy
Not only was DataCAD simple to learn (and a pleasure to use), even the price was easy. We got everything we needed in one basic package with no costly add-ons.

If you could design CAD software for your firm, this is what you'd invent. Ask for a live demonstration and see for yourself. You've got nothing to lose except the drudgery.

DataCAD

Cadkey, Inc.
4 Griffin Road North, Windsor, CT 06095-1511
For a Free PC Demo Disk call today!
Toll Free: 800-654-3413

*DataCAD is a registered trademark of Cadkey, Inc.
400. Computerized paint specs
A floppy-disk-based painting schedule arranges selections by substrate for exterior and interior exposures. Written in Macintosh- and ASCII-compatible MasterFormat language, the specification program includes application instructions and will be updated automatically. The Sherwin-Williams Co., Cleveland.

401. Seamless flooring
A brochure illustrates resin- and acrylic-based, VOC-compliant systems in a variety of surface textures and colors, including decorative color-quartz finishes. Applications include new, light-traffic areas as well as restoring badly degraded industrial floors. Tnemec Co., Inc., Kansas City, Mo.

402. Slip-resistant tile
A new scratch- and stain-resistant matte-glaze tile with a light abrasive grain, Naturetones pavers meet ADA slip-resistant guidelines in an easy-maintenance unit for healthcare, school, food service, and restroom applications. Tile line comes as 8- and 12-in. units and trim, in 11 deep and light colors. American Olean Tile Co., Lansdale, Pa.

403. Designers' color guide
Booklet describes a six-language professional specification system with 1,701 code-identified color standards that can be communicated anywhere in the world by Reference Number. Offered in cotton cloth, color swatch, and paper fan-deck formats. Pantone, Inc. Moonachie, N.J.

404. VOC-free paint
A waterbased interior latex, Spred 2000 has been found to be completely free of volatile solvents by a third-party testing laboratory, Scientific Certification Systems. Color cards provide technical data on the coating, also offered as Lifemaster 2000 protective maintenance coating for professional application. The Glidden Co., Cleveland.

405. Carpet backing information
Flyer describes a generic educational program designed to reduce confusion about carpet-backing options and installation alternatives. Intended for the architect, facility manager, and interior designer responsible for floor-covering specification. Dow U. S. A., Dalton, Ga.

406. Architectural coatings
Capabilities brochure explains technical assistance available to the architect and interior designer selecting paint systems for residential, commercial, and institutional applications. Line includes special products for bridges and marine exposures. M. A. Bruder and Sons, Inc., Broomall, Pa.

407. Contract wallcoverings
Vinyl materials for corporate, healthcare, hospitality, and retail applications are covered in an eight-page design guide. Guard wallcoverings feature a stain-resistant top coat, nonmercury mildewcide, cadmium-free colorations, and custom color and pattern capabilities. Columbus Coated Fabrics, Columbus, Ohio.

408. Nonporous wall treatments

409. Pearlescent finishes
Color-chip cards hold samples of 33 shades of nonmetallic and interference pigments available for incorporation in weather-resistant coil- and powder-coat architectural metal finishes. Luster paint line includes grays, russet and copper tones, and eight blue and green colors. The Mearl Corporation, New York City.

410. Historic paints
Research by the Colonial Williamsburg Foundation on period buildings and original paint recipes has been incorporated in a line of authentic 18th-century colors for interior and exterior use. Color card displays a palette popular in pre-Revolutionary homes and public buildings, available in modern coating formulations. Martin-Senour Paints, Cleveland.

411. Embossed wallcoverings

continued on page 145
It's about time.

Specifying a roofing system used to take days. But now it takes just minutes.

Tam-CADD® from Tamko generates CSI-formatted specifications, drawings, construction details, even multiple roofs with electronic speed and total accuracy.

All you need to operate Tam-CADD is an IBM PC or compatible computer with MS-DOS as the operating system, a minimum 640K RAM, a 30 megabyte hard drive, AutoCAD Release 10 or higher and word processing software capable of importing ASCII files.

If you're an architect, Tam-CADD will help you create a better specification in less time and with fewer associated costs. If you're a contractor, Tam-CADD can give your bids more credibility.

Call 1-800-641-4691 today for a copy of our free brochure. Tam-CADD. Isn't it about time?

Tam-CADD is a product of TAMKO Asphalt Products, Inc.
© 1990 TAMKO Asphalt Products, Inc.
System developed by Architectural Synthesis Inc., Nashville, TN
Let your imagination soar!

PITTSBURGH CORNING
PC GLASS BLOCK®
PRODUCTS

Defined... yet flowing. Private... yet bright. Strong... yet ethereal. Angular... yet serpentine.

With most building products, such descriptive pairs would be contradictory.

But not with PC GlassBlock® products. Here, they express the multiple design possibilities of a single—and unique—family of products.

You can achieve spatial definition and an expansive feel. Visual, acoustical separation that's still radiantly lighted. Security that's beautiful to behold. And, curves from 45° to 360°!

All of these design opportunities with products that are unequalled in their consistent, sparkling clarity. Unequaled in their design versatility—from HEDRON® I Corner Block, EndBlock® Finishing Units and the new TRIDRON 45° Block® Units... to Solar Reflective and solid glass VISTABRIK® or Paver Units.

With a choice of traditional mortar or our silicone installation system—plus our Electronic CADatalog™'s product specifications and high quality detail drawings—your designs become reality exactly as you imagined them!

For more information call our PC GlassBlock®
Products Hotline:
800-992-5769
Continental U.S./Canada, Weekdays 8-4:30 ET

Or write:
Pittsburgh Corning Corporation
Marketing Department AGB-392
800 Presque Isle Drive
Pittsburgh, PA 15239-2799

Circle 51 on inquiry card
New Products
Continued from page 45


312. Keyed lever. An extension of this manufacturer's door-hardware product line, S-Series levers meet ADA requirements with a lockset suitable for light- and medium-duty entrances and interior passage doors. This Saturn style coordinates with D- and L-Series heavy-duty, ADA-compliant locksets. Schlage Lock Co., San Francisco.

313. Timeless style. Haws' polymarble drinking fountain is designed to work with a variety of school, healthcare, and public environments. Wall-mounted unit pictured meets both accessible and vandal-resistant requirements. Haws Drinking Faucet Co., Berkeley, Calif.

314. Turn-key heliport. Using expertise in aluminum-alloy construction gained in building helicopter pads for North Sea oil rigs, a Norwegian firm offers lightweight, demountable deck structures for hospitals, hotels, and commercial buildings. (Oregon Health Sciences University shown, left.) Economical bolt-together components are designed for project-specific aviation requirements, with features that include a permanently nonskid deck surface, safety nets, foam-deluge firefighting equipment, and electrical de-icing. Gerard Technology Associates, Thorndale, Pa.

According to Rick, it's a jungle out there.

Especially for a veneer buyer. It's a jungle of undefined customer expectations. It's wading through a forest of subtle performance features of a variety of wood species. It's searching out the source and choosing just the right log for the job. It's knowing just how to bring out the innate beauty of each wood species.

"It requires a lot of exploration," says Rick Philipps, Director of Purchasing at Eggers. "I have to determine exactly what the customer has in mind as to product appearance. I call it 60 questions. Of course you have to know what questions to ask. In the 14 years I've been at Eggers, I've been lucky enough to have some of the old craftsmen pass on a lot of their knowledge to me.

"The next step is to see if the customer's expectations can be accomplished within the limitations of a particular species. Our people know how workable a particular species is and how to bring out the best appearance. I guess you could say that consultation is a big part of our job. "After that, it's a matter of knowing where to find the most desirable flitch or log. It may involve as many as 15 to 20 suppliers. We have a good relationship with our suppliers. It pays off when we're looking for just the right log.

"We're usually pretty successful in giving the customer just what he wants.'

Eggers has a booklet of tips on working with and specifying veneer. Call (414) 793-1351 or write for it.

Eggers Industries
1819 East River St., P.O. Box 88, Two Rivers, WI 54241-0088

Circle 52 on inquiry card
Dal-Tile is the Classic Finish...Whatever the Style.

Dal-Tile offers you a tile for every style, from contemporary...to conventional...to classic. From ceramic wall and floor tile to classic natural stone, Dal-Tile suits every application with style. Discover a tile for every style at one of our more than 160 company-owned and operated office/showroom/warehouse facilities nationwide and in Canada. Or write today for more beautiful, versatile, durable ideas.

The Classic Finish.

7834 Hawn Freeway • Dallas, Texas 75217 • (214) 398-1411 • (800) 933-TILE

Participant in the Kohler Color Coordinates Program.
Circle 53 on inquiry card
Manufacturer Sources

For your convenience in locating building materials and other products shown in this month’s feature articles, RECORD has asked the architects to identify the products specified.

Pages 78-85
JPBT Advisors, Inc.
Carlos Zapata Design Studio with Una Ibañez, Architect

Pages 86-91
Japanese Screen Gallery, The Art Institute of Chicago
Tadao Ando Architect & Associates, Architect; Cone Kalb Wonderlick, Coordinating Architects

Pages 92-97
Gordon Biersch Brewery/Restaurant
Allied Architects and the Interim Office of Architecture, Architects

Pages 98-105
Carmelo Pomodoro Company Offices and Showroom
FTL Associates, Architect

Pages 106-113
Back Bay Townhouse
Machado and Silvetti Associates, Architect

Pages 114-121
SCS Communications
Tsao & McKown Architects

Pages 122-123
New Line Cinema East/New Line Cinema West
Smith-Miller + Hawkinson Architects

Pages 132-135
Lighting Installation, Airport Munich II
Ingo Maurer, Designer
Lighting fixtures by Ingo Maurer are available through See, Ltd., New York City.

5 years, 100 tons of lettuce,
30 tons of bananas (seven tarantulas),
25 tons of squash,
Two tons of squashed squash,
one Raynor Rolling Steel Door,
one Raynor Distributor.

RAYNOR ROLLING STEEL DOORS

Years from now, you'll be glad you specified a Raynor Rolling Steel Door...because the only thing as reliable as a Raynor Door is a Raynor Distributor. To locate the one nearest you, call 1-800-345-8456.

Circle 54 on inquiry card
Leave it to USG Interiors to invent a glassfiber ceiling panel so white, it makes every other panel look old and yellow.

It’s called Premier™ Nubby/White. And the secret of its amazing brightness is its exclusive white-on-white construction.

You see, ordinary panels have white fabric over yellow glassfiber. This gives them a slightly yellowed look. But Premier Nubby/White is the only panel that has white nubby fabric on pure white glassfiber. That produces a noticeably whiter panel—one that looks fresher the day it goes up, and keeps looking newer years longer.

New Nubby/White is available in 1" and 1-1/2" thicknesses, with Shadowline or Fineline™ edges. And it’s just one of a long line of ground-breaking ceiling products from USG Interiors.

So call 1-800-950-3859 for more information or to see a sample of Premier Nubby/White.

And find out why, when it comes to ceilings, everyone looks up to us.

White-On-White Nubby Ceiling Panels.

One More Reason To Look Up To USG Interiors.
412. Paint-color selection aids
An architectural catalog illustrates several specification tools offered to the design professional: carry-case with color decks of 1,680 paint colors; in-office binders with largeformat swatches; computerized color matching; and CAD-generated what­ifs. Benjamin Moore & Co., Montvale, N.J.

413. Linoleum flooring
An eight-page brochure discusses the environmental, installation, and maintenance benefits of Marmoleum/Linoflex resilient flooring. Illustrations show custom-inlaid floors, and all 36 Marmoleum marbleized sheet-linoleum colors. Forbo Floor Coverings, Inc., Richmond, Va.

414. Interior/exterior latex
A 24-page catalog lists performance data and recommended substrates and exposures for all Devoe Paint coating systems, such as drywall, masonry, and metal surfaces. It also explains paint technology, and describes special products such as stain killers and elastomeric waterproofing coatings. Devoe & Reynolds Co., Louisville, Ky.

415. EMI-proof glass
A brochure describes Pilkington's "spy-proof" Datastop glass, said to offer the EMI-shielding properties of a Faraday Cage in a clear glass for interior and exterior applications. Material gives installation requirements such as metal framing and electrical connections. Tempest Security Screening, Inc., Tampa.

416. Fire-retardant coatings
Pittsburgh's 34-page catalog covers technical, environmental, and weathering data on a complete line of architectural paints and varnishes, including Speedhide intumescent latex. Recommends systems for specific applications and substrates, such as ferrous metal/hard service or wood floors/normal use. PPG Industries, Inc., Pittsburgh.

417. Detention/vault partitions
A booklet describes the Structocore wall as an economical, lightweight alternative to concrete masonry in correctional facilities, bank vaults, and other secure areas. Formed-steel sheets provide continuous reinforcement for fire-retardant plaster to create penetration-resistant walls only 3 1/2- to 4 1/2-in. thick. United States Gypsum Co., Chicago.

For more information circle item numbers on Reader Service Card.

Tell your own story.

Imagine a time long ago and a place not so far away an estate in Maine called Weatherend.
This place had gardens with furniture tables benches chairs whose sinuous curves mirrored the lines of the sea. That was long ago but listen

Weatherend
ESTATE FURNITURE
to the story of Weatherend today a story of artisans and boatbuilding techniques and furniture as durable as it is beautiful.

For our new portfolio of our complete collection, contact Weatherend* Estate Furniture, P.O. Box 648, Rockland, Maine 04841 or call 207/596-6483.

Circle 56 on inquiry card
Metal makes a strong statement at any height!

SunBank Center, new addition to Fort Lauderdale’s downtown skyline, blends timeless elegance with a Mediterranean ambiance. Every detail is crafted to please the eye, from custom designed tiles with palm tree reliefs to the twin cupolas topped with seafoam green metal roofs.

Architectural metal roofing from MDCI is used throughout the Center, providing strong aesthetic appeal and advanced design flexibility, along with long-life, low-maintenance, weatherproof protection for roofs and mechanical equipment screens.

When your clients demand a strong architectural statement, consider the advantages that metal can bring to the project. For more information from the industry leader in preformed metal roofing systems, call us today.

Project: SunBank Center, Fort Lauderdale, Florida • Architect: Hellmuth, Obata & Kassabaum, Tampa • Roofing Contractor: Novo Enterprises, Inc., West Palm Beach

Circle 57 on inquiry card

Houston 713/445-8555
Atlanta 404/948-7568
Tampa 813/752-3474
Richmond 804/526-3375
Indianapolis 317/398-4400

Lubbock 806/747-4091
Oklahoma City 405/672-7676
San Antonio 512/661-2499
Dallas 214/988-3300
AWARD-WINNING COPIERS THAT ARE #1 IN CUSTOMER SATISFACTION.

Today, customer satisfaction means more than productivity and reliability. It means cost-effectiveness. That's why you need Sharp Thinking.

Sharp Thinking created the high-speed, high-volume SD-2075 Master Series Copier/Duplicator. An advanced technology package that's winning industry and customer raves for excellence.

The SD-2075 does it all for less, giving you the most-wanted features as standard. It produces high-quality documents at 75 copies per minute, and masters the largest, most complex jobs — sorting, finishing, computer fanfolds, report covers and much more. That's Sharp Thinking.

It's behind every Sharp copier. So if you're looking for high value in a high-volume copier, start thinking Sharp. For more information call: 1-800-BE-SHARP
The American Institute of Architecture Students
Wishes to thank the Sponsors who made our
1992 Grassroots Leadership Conference
So Successful.

**Benefactors**
Arriscraft Corporation
Cambridge, Ontario, Canada
American Institute of Architects
Washington, District of Columbia
Copper Development Association
Washington, District of Columbia
Sheet Metal and Air Conditioning Contractors
National Association and National Training Fund
Arlington, Virginia
Sheet Metal Workers International Association
Washington, District of Columbia

**Donors**
Charrette
Woburn, Massachusetts
Hellmuth, Obata & Kassabaum, Inc.
St. Louis, Missouri
International Brotherhood of Carpenters & Joiners
Washington, District of Columbia
Lafarge Corporation
Whitehall, Pennsylvania
Marvin Windows and Doors
Warroad, Minnesota
MBNA America
Wilmington, Delaware

**Remember...**

**AIAS International FORUM in Buffalo/Toronto**
November 24th to 29th, 1992
Speakers, Workshops, Debates, Elections, Issues, Tours, History!

Janice Austin
ARCHITECTURAL RECORD
Princeton Road
Hightstown, NJ 08520
(609) 426-5494
Porcelain Pavers From Summitville: There Are No Equals.

At Summitville, the word is new. New pavers, new techniques, a new approach for the tile industry innovator.

A fresh approach highlighted by a new breed of impervious glazed porcelain pavers. Pavers unequalled on the world tile market for quality, versatility and durability.

All Summitville porcelain pavers, including our new tread tiles—Summit-Tread and Tactile-Tread—are impervious and virtually eliminate freeze/thaw failure.

Each Summitville paver is made from recycled waste products from the feldspar industry in a new high-tech facility. This tradition of respect for our environment has been a part of Summitville since 1912.

To learn more about Summitville’s new porcelain pavers, complete the reader service card and get all the facts from full-color product information.

When you're searching for porcelain paver solutions, turn to Summitville. The tile industry innovator.

Summitville
Summitville Tiles, Inc., Summitville, Ohio 43962
FAX 1-216-223-1414

Circle 60 on inquiry card
Be part of this industry event and meet the key people shaping the future with metal!

Learn about the newest metal technologies at over 30 seminars.

View the latest applications and newest advances in metal construction products at over 350 booths.

Network with your current suppliers and identify new contacts... face to face.

Apply your knowledge to design more effectively and profitably.

Prepare yourself to better meet the challenges of today's highly competitive construction market.

COME TO METALCON AND FIND OUT!

METALCON '92 is your opportunity to learn more about the many advantages of using metal in your design projects.

DON'T MISS IT!

METALCON INTERNATIONAL '92

The Annual Conference and Exhibition for the Metal Construction Industry

October 28-30, 1992
McCormick Place
Chicago, IL

For details on METALCON '92 - call (617) 965-0055, fax (617) 965-5152, or write Claire Kilcoyne, Metalcon '92, Ten Midland Avenue, Newton, MA 02158, USA.

Sponsored by The Metal Construction Association
SweetSource.
A new way to keep Sweet's at your fingertips.

Ever wish for a faster, easier way to search, compare, and specify building products? Then you're ready for SweetSource.

SweetSource is the electronic data base that lets you reference thousands of products in Sweet's printed catalog files. Plus you can quickly find and compare detailed electronic information from a growing list of more than 500 leading manufacturers.

With a simple "point and click," you can import color photographs, line drawings, CAD details, guide specifications, and technical data directly from SweetSource to your project documents. And SweetSource is updated quarterly, so products and specifications are always current.

SweetSource will be distributed in early 1993. But you can get a demonstration diskette now.

Call 1-800-442-2258 and find out how to get your hands on SweetSource.

Sweet's Group
1221 Avenue of the Americas
New York, NY 10020

SweetSource is a product of Sweet's Electronic Publishing
99 Monroe Avenue, NW, Suite 400, Grand Rapids, MI 49503
At Buchtal Ceramics, we choose our words carefully. Much like an architect chooses a building material. That's why when we say Chroma® offers the designer the most extensive palette of modular sizes and colors in glazed ceramics, you can believe it's true. With 71 colors and sizes from 2×10 strips to two-foot square panels, dramatic design statements are inevitable with Chroma. Architects like you have been using Chroma all over the world for dozens of applications. In banding, to identify spaces and define circulation patterns. As colorful medallions to punctuate a never-ending wall. Or to fully expose an entire facade. And Chroma’s performance attributes take the mystery out of specifying glazed tile. Chroma is frost-proof, acid-resistant, and colorfast. And offers high bond and breaking strengths. With Chroma, we wrote the book on glazed ceramic tile.

Chroma glazed ceramic tile is featured in our catalog in Sweet's File 09300/BUB. Or contact Buchtal Ceramics directly at 1325 Northmeadow Parkway Suite 114 Roswell, GA 30076 (404) 442-5500 Fax: (404) 442-5502. In the meantime, every picture tells a story.

7th Street North Parking Garage Minneapolis, MN
Architect: The Stageberg Partners, Minneapolis, MN
Product: 6×6 in 140 Intense Yellow, 141 Intense Orange, 142 Intense Red
794 Purple, 761 Creme, 146 Intense Blue Green, 726 Cobalt Blue

Circle 61 on inquiry card
Translucent Danpalon

Once you know the facts, you'll know why Danpalon® translucent insulating system is PREFERRED

Danpalon's use of modern technology produces a panel that keeps its distinctive structural properties, original color, and high-tech architectural appearance year after year. The Danpalon system you install in 1992 will still be like new in 2002.

Danpalon's QUADWALL multilayer prismatic design provides superior light quality and thermal performance, with better shading factors. Only roof system of its kind that can meet Class A fire rating standards.

Danpalon's cutting-edge technology delivers a panel that will not delaminate, discolor, or "bloom", and requires no maintenance.

Danpalon gives you unequalled design freedom, polished performance, and unmatched durability — in a system that is competitive, and warranted to outperform products of dated technology.

Danpalon's dry/mechanical standing seam technology does not rely on adhesive bond, provides ultimate short and long term protection against leakage.

Excellence in Translucent Systems Since 1976

Get the facts about the Danpalon system by CPI. Discover why it's the one designers prefer.

Danpalon's QUADWALL multilayer prismatic design provides superior light quality and thermal performance, with better shading factors. Only roof system of its kind that can meet Class A fire rating standards.

Danpalon's cutting-edge technology delivers a panel that will not delaminate, discolor, or "bloom", and requires no maintenance.

Danpalon gives you unequalled design freedom, polished performance, and unmatched durability — in a system that is competitive, and warranted to outperform products of dated technology.

Danpalon's dry/mechanical standing seam technology does not rely on adhesive bond, provides ultimate short and long term protection against leakage.
PRINCIPAL ARCHITECT

The University of California, Davis, Medical Center, Sacramento serves as the principal clinical research and teaching hospital for the UC Davis School of Medicine. UC Davis is implementing a $500 million long-range capital development plan to renovate and expand its clinical, inpatient, and research facilities by three fold over the next fifteen years. This expansion includes new state-of-the-art patient care services, new research laboratories, a new Shriners Childrens Hospital and several new “Centers of Excellence.” The Office of Architects and Engineers is seeking applications for a Principal Architect to help manage the design and construction program. We seek an accomplished architect with proven design, project management, and communication skills. Responsibilities include developing architectural standards and design philosophy, and managing all project phases from programming through construction. The Principal Architect must have:

- *architectural experience with health care facilities.*
- *a strong design experience.*
- *advanced knowledge of computer applications to design management and project management.*
- *experience in total project management.*

An architectural license is required (an engineering license will be considered provided the experience requirements are met). Added consideration will be given to candidates who have detailed experience with “Design Build”, “Construction Management”, and other non-traditional contracting methods, construction administration or construction claims management.

The current annual salary range for Principal Architect is $50,200-$75,300. UCDMC offers an excellent benefits package. This recruitment will be open until filled. Candidates should be highly motivated individuals who can develop the unique resources of the University Medical Center. If you are a dynamic individual able to provide the vision needed for our next stage of growth please call (916) 734-2905 to request an application packet. For more information contact:

Donna Avalos, Outreach and Recruitment Unit,
UC Davis Medical Center, 2525 Stockton Blvd., Room 1016,
Sacramento, California, 95817.
Fax (916) 734-3800. Please refer to job #580-92

The University of California is an affirmative action/equal Opportunity employer.

Architectural Engineer required. Detail of architectural & structural specifications for commercial & installation structures of concrete, steel, masonry & wood. Perform architectural detailing & cladding design, wall section design, & CADD. Perform structural analysis, finite element analysis, two and three dimensional frame analysis & utilize knowledge of spring constants & beam on elastic foundations design procedures & theory. Work with Load & Resistance Factor Design (LRFD). Applicant required to have a Master’s Degree in Architectural Engineering plus one year experience in the job duties described above. Must have proof of legal authority to work in the U.S. Annual salary will be $34,000/year for a 40-hour work week. Interested applicants contact the Oklahoma Employment Security Commission (7392), 3105 E. Skelly Dr., Tulsa, OK 74105-7202. Phone (918) 740-6801. Refer to Job order number 005227. Ad paid by an Equal Opportunity Employer.

Architect of architectural intern. Northeast regional A/E firm is actively seeking one or more individuals with a minimum BArch. degree and four years experience. Experience in school design a plus. If you enjoy working in an active team environment, are creative, and are dedicated to quality and providing service to clients, send us your resume in confidence. Compensation and advancement commensurate with demonstrated capability. Thomas Associates PC, Ithaca, Garden City, Princeton. To: Geoffrey Wetzler, AIA, acting Human Resource Manager, 2560 N. Triphammer Rd., Ithaca, New York 14850 (EOE by choice).

Architect/Construction Program Manager: Provide professional services in the theoretical and practical program management of multi-million dollar architectural design and construction management projects. Responsibilities include feasibility analyses, development of construction documentation, construction management and contract negotiations. Assist client in obtaining bids and awarding construction contracts. Supervise administration of construction contracts, using techniques to minimize litigation risk and assure delivery of products on time, on budget and built under strict quality control. Prepare detailed construction schedules, studies and reports. Use microcomputers for Computer-Aided Design, project management and project control using the Primavera Project Planner and Expedition software packages, word processing, spreadsheet and database programs. Minimum requirements are a Master of Architecture Degree in Advanced Building Technology. Construction Technology or Building Engineering management, and three years experience in Construction Program Management. Salary $33,000 per year. 40 hours per week. Send resumes to New York State Department of Labor, Job Service Division, 68 West Huron - 2nd Floor, Buffalo, New York 14202. (Job No. 0703416). No Calls.

Technical Sales & Marketing: Technical Sales Manager - technical degree a must. 5+ yrs. exp. Excellent salary, bonus & relocation package. Please send resume or call Eileen K. Ward & Assoc. 5500 Main St., Suite 220, Williamsville, New York 14221. (716) 694-4194. EOE.
WANTED FOR SALE bedrooms, 2 adjacent studies, living, dining, and Hardwick, VT. A play of open spaces embracing 3 post-modern House II, situated on 109 acres in Collector's Trophy: Peter Eisenman's inquiries invited: (212) 496-0897. superb condition. $1.1 million. serious kitchen areas, 1 1/2 baths, full basement. all utilities. $1,100,000. serious inquiries invited: (212) 496-0897.
The Froebel Gifts 2-6 were designed in 1836, and used by Frank Lloyd Wright as a young child, “the maplewood blocks are in my fingers to this day,” FLW at age 88. 114 pcs hard maple $195. 1-800-621-4660.
SPECIAL SERVICES architectural license seminars (310) 208-7112 box 6488 los angeles california 90064
WANTED • herman miller • furniture
Eames • Nelson • Noguchi shipping arranged 1-800-292-8189

COMPUTER SOFTWARE

The Basics on Invoicing
The AEMAS Plus Invoicing system is automated, flexible and efficient – your billing will always be on time and your invoices will include the detail and text that you choose.
Take charge of your invoicing with AEMAS Plus, our integrated accounting/project management software for engineers and architects. Call for FREE demo disk.

Business Opportunity
Exceptional Opportunity. Turn-key interior design firm with complete facilities available for a remarkable price. Well-respected, on-going design firm established in 1979 is now available at an extremely reasonable price. Solid client base in office interiors with continuous repeat and referral business. Two full floors totaling approx. 4,000 sq. ft. with direct individual elevator access to each. Perpetual rent stabilized live/work Loft lease of $3850/mo. for both floors. High end built out costing over $400,000. Fine west midtown location. Upper living space consists of 8 rooms of custom cabinetry, lighting and fine furnishings; including private master bedroom suite, with approx. 12x8 walk-in dressing area and full bath including whirlpool and bidet. Two additional bedrooms, living area, dining area plus eat-in kitchen, laundry/storage room, additional bath plus atrium. Office floor includes secretarial/receiving area, swing space with bathroom and shower, 5 workstation areas, offices for 2 principals, conference room, extensive library, sample area, pantry, plus all custom cabinetry, fixtures, furniture, office machines, phone systems, etc. Principal wishes to relocate, but can remain with business for up to 12 months. Excellent opportunity for small company looking to grow, larger company wishing to diversify into office interiors, or out-of-town company wishing to establish a strong foothold in Manhattan. Complete turnover operation for home and office. Move in and start working $475,000. BO-7075, AR.

To Reply to Box Numbered Ads:
Address separate envelopes (smaller than 11” x 5”) for each reply to:
Key number from ad
Architectural Record
Post Office Box 900
NY NY 10108

The National Fund for the U.S. Botanic Garden
With the cooperation of The Architect of the Capitol announces
A Request for Design Proposals

The U.S. Botanic Garden announces
3 Features for the National Garden

This request for proposals is a one-step selection process for a designer or design team for three prominent features of the National Garden of the U.S. Botanic Garden, which is to be located on a three-acre site adjacent to the U.S. Capitol in the District of Columbia. The three features are: Environmental Learning Center, Water Garden and Rose Garden. Landscape architects and architects who are licensed in one or more jurisdictions of the United States are invited to submit a design proposal. Other designers and artisans may also participate, but only as a member of a collaborative team headed by a landscape architect or architect. Full-time landscape architecture and architecture students or student teams are eligible to submit a design proposal. To register, a non-refundable registration fee ($35.00 for professionals, $5.00 for students) must be submitted, postmarked no later than November 16, 1992. Registration fees, made payable to the National Fund for the U.S. Botanic Garden, by check, money order or bank draft, and accompanied by the respondent’s name(s), address and telephone number, must be addressed to:
Ms. Cyndi Sherwood
The National Fund for the U.S. Botanic Garden
245 First Street, S.W.
Washington D.C. 20024

Registration packages will be distributed to registrants beginning October 1, 1992. Employees or consultants currently associated with the Architect of the Capitol, The National Fund or its Design Advisory Committee and EDAW Inc. are not eligible. The deadline for submission of design proposals on a maximum of three boards is January 12, 1993. Selections are expected to be announced in February 1993. Cash awards will be presented as follows: $6,000 for the First Place Design for each major feature of the Garden and $3,000 for the Second Place Design for each major feature.
THE MILLENNIUM COLLECTION

Introducing a new Millennium of spirited design. It starts with your inspiration and culminates with Stark Ceramics' Millennium Collection. A peerless structural glazed ceramic wall product for exteriors that lets you design a building that's modern and sleek or warm and inviting. Create your next masterwork with Millennium. 1 800 321 0662

Circle 65 on inquiry card

Architect: WBDC Group
Western Michigan University Library
Kalamazoo, MI

Stark Ceramics, Inc.
Product Literature Showcase

Here are some building products, catalogs, brochures, and technical literature available in the architectural market today. To receive your copy of any of them, circle the corresponding number on the Reader Service Cards bound to the back of this issue.

**WOVEN WIRE STORAGE LOCKERS**

Woven Wire Storage Lockers from Wire Crafters are the heaviest lockers available for multifamily building storage areas. Choose from single or double tier styles. A variety of standard sizes, and custom units are available. Specify the best for building owners and residents. Choose Wire Crafters for your next storage area project.

Wire Crafters
Circle 66 on the inquiry card.

**Free X-Ray Room Planning Guide**

New guide illustrates user-designed installations of CLEAR-Pb Lead-Plastic Modular Barriers and Windows in hospitals, radiation therapy centers. CLEAR-Pb is a transparent, lead-impregnated plastic sheet in lead equivalencies from 0.3 to 2.0 mm; over 200 stock sizes up to 6 x 8 ft. (larger on special order).

Nuclear Associates
Circle 67 on the inquiry card.

**CHADSWORTH COLUMNS**


Chadsworth Incorporated
Circle 68 on the inquiry card.

**New 88-Page TimberForm Site Furnishings Catalog**

More than 350 products made of cast iron, perforated metal, steel, welded wire & wood are offered in a dozen different design series in styles from traditional to contemporary. Ash receptacles, benches, bike racks, bollards, litter containers, picnic & game tables are presented in design coordinated families. Over 170 designer colors available. Photos, technical data & product dimensions are shown. Call 1-800-547-1940 (ext. 502).

Columbia Cascade Co.
Circle 69 on the inquiry card.

**Simply, Sophisticated Interior Design**

CADKIT - a computer program used for commercial or residential interior design, layout, pricing & space planning. Create in minutes floor plans, elevations & 3D perspectives for spaces such as offices, kitchens, baths, laboratories, closets, garages, stores, restaurants, entertainment centers etc. 1-800-223-5480.

CADKIT
Circle 70 on the inquiry card.

**Lifetime Warranty On Tectum Ceiling System**

The Tectum Inc. AcoustiTough ceiling system now carries a lifetime limited warranty against panel breakage. Featuring the well known Tectum abuse resistant acoustical panels and a special clip that repositions panels if they are pushed up from the grid, the system has been proven in school applications where replacement is a major cost item.

Tectum
Circle 71 on the inquiry card.
ANCOR GRANITE TILE

Ancor produces close to three dozen No. American and imported granites in a full range of colors and finishes for residential, commercial and institutional use. Standard format is 12 x 12 x 3/8"; other sizes up to 18 x 18 x 1/2" available. Ancor's honed finish tile is particularly suitable for high traffic commercial areas. 435 Port Royal West, Montreal, Quebec, H3L 2C3, Canada. Ph# (514) 385-9366, Fax# (514) 382-3533.

Skywall, Inc.

Circle 72 on the inquiry card.

New Engineered Skylights Catalog

Create striking effects. Capture nature's energy. Design your next project with Skywall Translucent Skylights & Curtainwalls. Virtually shatterproof, impact resistant & maintenance-free. The lightweight of these skylights makes it possible to use them in many ways not possible with other systems. All styles available, including new SkyCurve & custom configurations. Complete staff available to help with drawings, specs & load calculations. Call 1-800-251-3001.

Dataprint Corporation

The new Dataprint 1992 Catalog features a complete selection of brand name drafting, plotter, and graphic supplies at discounts of up to 60% - with same day shipment. This 80 page catalog features new plotters, new drafting/art tables, an expanded graphics section, and more. FREE CATALOG. Dataprint Corporation. Toll-Free 800-227-6191.

Dataprint Corporation

Circle 73 on the inquiry card.

Drafting, Plotter & Graphic Supplies

Exterior Fire Retardant Wood

Exterior fire retardant treated lumber, siding and plywood meets code requirements for exterior decks, stairways, siding and many other applications. Available in cedar, pine, douglas fir, redwood and other softwood species. UL listed. Treatment has little effect on wood color and it can be stained or painted.

Hoover Treated Wood

Circle 75 on the inquiry card.

Commercial Window Treatments From Bali & Graber

Springs Window Fashions Division, Inc. manufactures a comprehensive selection of commercial window treatments under its brand names of Bali & Graber. Our 36 page brochure provides detailed product & test data for Horizontal & Vertical Blinds, Pleated & Cellular Shades & Drapery Hardware. This extensive offering is supported by an authorized network of Commercial Contractors & Springs Window Fashions Division, Inc., Field Sales Mgrs. Sweats 12505/CAR

Springs Window Fashions Division, Inc.

Circle 76 on the inquiry card.

Pawling JOINTMASTER® Architectural Joint Systems

New 8-page introductory color catalog explains new line of versatile floor, wall & ceiling building joint covers for new & existing construction applications. Describes many special product features. Systems meet newest fire barrier acceptance criteria. Jointmaster®, along with our full line of architectural wall guards, handrails, corner guards & wall coverings, complements your interior design adding function & style to your plans.

Pawling Corporation

Kayliden, Inc.

The Clean Connection State-of-the-Art Hinge

The Clean Connection bi-fold door hinge beautifies & strengthens your bi-fold door. This easy to install hinge mounts directly on the door jamb, out of view, using existing pivot pins. Now your beautiful flooring will no longer be marred by ugly, dust catching brackets or tracks. For more information contact: R&D NASS, INC., The Clean Connection, 4545 Pratt Rd., P.O. Box 260, Hadley, MI 48440 or call 1-800-6-BI-FOLD.

R & D Nass Inc.

Circle 79 on the inquiry card.
McGraw-Edison's Credenza family of outdoor lighting makes an architectural statement. These fixtures provide an impressive blend of contemporary design sophistication & functional versatility, for an attractive dayform appearance that performs with superior results at night in every setting. For additional information, write Cooper Lighting, Highway 61 South, Vicksburg, MS 39180.

McGraw-Edison
Circle 80 on the inquiry card.

We've been developing products to meet increasing demands for porous paving for 10 years. You can count on Grassrings for features you want most: Flexibility, 100% grass coverage, excellent porosity/drainage, & fast installation - for vehicular & pedestrian traffic, with grass or gravel materials. For details about this proven, affordable system, call (800) 428-1333 or fax (303) 696-9757.

Rings, Inc.
Circle 81 on the inquiry card.

Dor-O-Matic's new handicap access door operator, the Middle-Swing features the same quiet, reliable electromechanical drive with simplified micro-processor controls. Moderately priced, for low or high traffic areas. Cost effective way of meeting ADA recommendations. Meets ANSI/BHMA A156.19 and U.L. requirements.

Dor-O-Matic
Circle 82 on the inquiry card.

Louisiana-Pacific offers a full line of all-wood, aluminum-clad & vinyl windows & patio doors. We combine top-quality materials & craftsmanship to create a product you'll be proud to include in your projects. And we have options that will meet any design. Simulated divided lites, dust-free muntin bars, snap-in wood grilles, high performance glass & special shaped windows

Louisiana-Pacific
Circle 83 on the inquiry card.

This new 16-page brochure is an overview of the capabilities of Ceco Building Systems in pre-engineered metal building construction. The Construction Professionals includes dramatic photography of completed projects, plus technical data including Frame Systems, Tilt-Wall Construction, Multi-Story Construction, Covering Systems, Roofs, Architectural Treatments, Retrofit, Accessories and Mini-Warehouses.

Ceco Building Systems
Circle 84 on the inquiry card.

Choose from classically detailed Metaphors acoustical coffers or VX veneer Wood Coffered ceilings. This information shows over 15 different coffered ceiling options. All coffers install easily on standard exposed tee grid. Ideal for renovation projects.

Armstrong World Industries
Circle 85 on the inquiry card.

AEasy Plus, new project management software designed specifically for architects and engineers, includes full departmentalization eliminating guesswork about which departments are most profitable. It also lets you void invoices any time, even months later, and get a new invoice out the same day. Disputed amounts won't tie up your cash flow.

AEasy Plus
Circle 86 on the inquiry card.
Product Literature Showcase

Specifier's Guide for Bentemp™, Bent Tempered Glass

This Glasstemp brochure provides a ready reference on bent tempered architectural glass. Design information shows how you can now have the exciting look of curved glass with the strength and safety of fully tempered glass. Detailed specs describe use for building exteriors, handrails, elevators, partitions, bay windows, skylights & other applications.

1001 Foster Ave., Bensenville, IL 60106. (708) 595-3750.

Glasstemp, Inc.
Circle 88 on the inquiry card.

REYNOBOND® ALUMINUM COMPOSITE MATERIAL

Architectural applications of REYNOBOND® panels are featured in a new color brochure from Reynolds Metals Co. Extremely flat and formable, the panels are used as cladding, soffit, fascia, column covers and beam wrap. REYNOBOND® is available with a fire resistant core which qualifies as a Class A material exclusive of the aluminum skins. Reynolds Metals Co., Construction Products Division, P.O. Box 27003, Richmond, VA 23261. (804) 281-3629.

Reynolds Metals Co.
Circle 89 on the inquiry card.

Rainhandler™ gutter alternative

RAINHANDLER - Patented maintenance-free rain dispersal system. On thousands of homes worldwide. Converts roof runoff back to rain and disperses it gently. Rainhandler™ Plus dispenses up to 30% more than best prior model. No clogging, no cleaning, no trenching, ever. Virtually invisible. Rugged aluminum - white, brown, natural. 25 year warranty. Free information. 800-942-3004

Rainhandler™
Circle 90 on the inquiry card.

Carrier Air Conditioning E-9000 Facility Management System

This full color brochure details the Carrier E-9000 Heating & Air Conditioning Facility Management System. By integrating the technically advanced E-9000 Packaged Terminal Air Conditioner/Heat Pump into the Carrier Comfort Network, the system can reduce energy consumption & operating costs by up to 35%. The System is capable of interfacing with existing front desk computers, enabling the operator to control individual room temps. & eliminate energy waste due to heating or cooling empty rooms.

Carrier Corporation
Circle 91 on the inquiry card.

Westchester Marble And Granite

WMG offers the widest selection of French limestones, in addition to a complete line of exotic marbles, granites, and other natural stones. All stone tiles are available in coordinating slabs for countertops, fireplaces, and other custom pieces. Complete brochure upon request. 31 Warren Place, Mount Vernon, New York 10550. Call (914) 667-1600 or Fax (914) 667-6244.

Westchester Marble
Circle 92 on the inquiry card.

Specifying upward acting doors made simple

WayneTec™, a computer-intelligent details and specification software package, eliminates the tedious process of specifying commercial/industrial upward-acting doors, and may be used effectively by specifiers with minimal experience. The WayneTec system will also provide product-specific AutoCAD® drawings and CSI-formatted specs.

Wayne-Dalton Corp.
Circle 93 on the inquiry card.

Coatings Brochure

EFCO Corporation introduces their new Coatings Brochure for commercial windows, storefronts and curtain wall systems. The brochure highlights EFCO's 17 standard Vitrasil® Silicon-Polyester and Fluoropon® a Fluoropolymer Coatings. To find out how EFCO can enhance your design flexibility, contact your EFCO representative or call EFCO direct 1-800-221-4169.

EFCO Corporation
Circle 94 on the inquiry card.

The Galleria Area Light by McGraw-Edison

McGraw-Edison's brilliant new area performer comes to work with a dayform appearance that's crisp, clean & architectural, that delivers nighttime performance second to none. Also available is the new Galleria small area & the Galleria parking garage light which all can accommodate numerous wattages & reflectors for the optimal mix of beam patterns. For additional information, write Cooper Lighting, Highway 61 South, Vicksburg, MS 39180

McGraw-Edison
Circle 95 on the inquiry card.
VELUX Roof Windows and Skylights


Velux-America Inc.
Circle 96 on the inquiry card.

High Performance Curtain Wall System

Create comfortable, energy-efficient indoor environments with the VISIONWALL high performance window & curtain wall system. Features R-8 glazing, extruded aluminum frame with 3-inch deep thermal break, great resistance to condensation, & excellent acoustical attenuation characteristics. Custom designed & precision manufactured for commercial, institutional & industrial applications.

Visionwall Technologies Inc.
Circle 97 on the inquiry card.

Decorative Grilles

Unusual visual effects emerge when our grilles are designed for area effects. Versatility is the theme. R&G offers architects & interior designers many ways to express the changing forms of metal with the integrity of R&G’s architectural grilles. Custom or standard finishes are available plus any grille can be made in matching color to blend with your decor. 202 Norman Avenue, Bklyn, NY 11222. 800-521-4895, fax 718-349-2611.

Register & Grille Mfg., Co.
Circle 98 on the inquiry card.

Worthington Group

Introducing the Classical Tuscan Column, based on designs of Vitruvius and Vignolo; and crafted in pine. Our large volume allows us to offer these authentic replications of classical designs at a price far more reasonable than other companies. Worthington also offers fiberglass balustrading, plaster moulding and much more. Shipped factory direct. 44 page color catalog. Call (800) 872-1608.

Worthington Group
Circle 99 on the inquiry card.

Open & Private Offices A Single Source

Transwall combines these two basic wall requirements for today’s high tech office with its Sounddivider open plan system and the full height Corporate series. The two systems offer complete interchangeability of wall mount components, as well as compatibility in design and appearance. Modular furniture blends with panel mounted worksurfaces. Electrical and electronic support is system integrated.

Transwall Corp.
Circle 100 on the inquiry card.

High-Efficiency Water Loop Heat Pump

An efficient, quiet, environmentally sensitive space-conditioning option. Transc water loop heat pumps are a reliable, cost-effective alternative to conventional heating and cooling systems. New high-efficiency units, developed in partnership with EPRI, provide additional advantages, including simplified maintenance, reduced noise and improved air distribution and quality.

The Trane Company
Circle 101 on the inquiry card.

Flexco Company Resilient Flooring

Flexco produces premium rubber & solid vinyl flooring products for a wide variety of commercial uses. Their unique color palettes & styling offer high design potential for environments with even the heaviest traffic. Flexco products combine beauty & function and are sold through an int’l network of over 125 distributors. Catalog features complete line. Catalogs or info. Call 1-800-933-3151, Fax 404-454-9435.

Flexco
Circle 102 on the inquiry card.

DODGE CORK FLOOR TILE

Ideal for kitchens, family rooms, hallways, libraries, stages, music rooms, dance floors, TV studios & multipurpose areas. Its unique molecular structure of compounded cork particles makes it naturally impact resistant, shock absorbing & sound deadening. Innovators & renovators have chosen Dodge Cork Floor Tile for over 60 years. Fashionable & flexible, Dodge Cork Tile is offered in a variety of shades & finishes & two standard thicknesses, 3/16-in & 5/16-in. Call for info: 800-322-1923.

Dodge-Regupol Inc.
Circle 103 on the inquiry card.
Looking for quality fireplaces that combine efficiency and aesthetics? Call for our brochure on energy-saving built-in gas or woodburning fireplaces. Including see-thru, three and four sided glass fireplaces, inserts for pre-existing fireplaces or our direct-vent (no chimney) gas fireplace available with remote control. Call 612-890-8367.

Vulcraft Steel Joists, Joist Girders & Steel Deck
Colorful new 22-page brochure from Vulcraft, the largest producer of steel joists in the country. Brochure details the advantages of steel joists and joist girders. It also presents interesting case histories from across the country that document the use of Vulcraft joists, joist girders and steel deck in a wide range of buildings.

Concrete Waterproofing by Crystallization
Applied as a slurry coating, Xypex is a chemical treatment that waterproofs by penetrating the concrete with a crystalline formation that 'plugs' the pores of the structure preventing water seepage. Xypex is ideal for use on the 'inside' of wet underground structures.

Concrete Reinforcing Steel Institute
Produced by the Concrete Reinforcing Steel Institute, this 16-page, 4-color brochure pictorially highlights the advantages and benefits of cast-in-place reinforced concrete. Thirty-seven structures are featured in nine categories, including: Parking Structures, Housing, Commercial Buildings, Educational Buildings & Recreational Facilities. All show the strength and versatility of concrete.

Concrete & Plaster Bonding Agents
Catalog details data for quick reference and direct specification regarding three chemical bonding agents - Weld-Crete heavy duty bonding agent for concrete and Portland cement plaster; Plaster-Weld for interior use only, to bond gypsum and lime putty plaster; Acrylic Admix 101 integral bonding agent bonds cementitious mixes to any structurally sound surface.

Historical Arts & Casting, Inc.
At Historical Arts & Casting, our commitment to excellence in service and craftsmanship made it possible to be involved in a wide range of projects across the country. From custom metal furniture and railings to historical lighting and storefronts, our experienced staff is anxious to assist you design and engineering services, shop drawings, manufacturing and installation. Call (800) 225-1414 for product information.

Kewaunee Fume Hoods
Visionaire offers excellent airflow dynamics to safely contain and exhaust harmful fumes. What's more, a special angled sash and overhead vision panel allows for greater visibility throughout the entire hood. For more information and a free brochure, contact Marketing Services Dept., Kewaunee Scientific Corp., P.O. Box 1842, Statesville, NC 28687.

Fire Rated Wood Frames Install Quickly
Prestige... Warmth... Beauty... These are the hallmarks of candor frames from Algoma Hardwoods. Specifying Architectural wood frames by candor broadens design capabilities and allows the architect and owner to create an environment with the richness of wood that is unique, distinctive and beautiful.
**Steamin' Hot Dispenser**

Steamin' Hot Dispenser with filter provides better-tasting odor-free water. A convenient alternative to bottled water & expensive filtering devices, the InSink-Erator Steamin' Hot Hc water dispenser features the new Fresh Taster filter that eliminates rust, sand, silt, sediment, chlorine & unpleasant odors from tap water. The dispenser provides cold water & 190 degree cooking-hot water at fingertip touch. Product benefits & features are described in a free 4-page, color brochure.

*Insinkerator*

Circle 112 on the inquiry card.

**Versiweld Single Ply Roofing Capabilities Brochure**

Goodyear's Versiweld roofing systems are composed of a heat-weldable EP rubber membrane. Available in white for mechanically attached applications, or black for ballasted, Versiweld installs easily and offers superior resistance to tears, punctures and moisture. WARRANTED for up to 15 years, Versiweld is perfect for both new and retrofit applications. Catalogs or product info, 1-800-992-7663. In OH 1-800-231-5867.

*Goodyear Tire & Rubber Co.*

Circle 113 on the inquiry card.

**Amerc Sauna & Steam Quality Products since 1963**

Amerc pre-cut and modular sauna kits can be customized to fit virtually any size room. All Amerc sauna rooms utilize grade A, kiln-dried Western Red Cedar for lasting beauty with proven durability and performance. Amerc products are manufactured with pride in the U.S.A. Please call 1-800-331-0349 to request an architect's specification kit.

*Amerc*

Circle 114 on the inquiry card.

**Barrier-Free Entrances With Swing Door Operator**

Our EasyAccess swing door operator makes complying with the ADA 1990 mandate "readily achievable." ADA defines this as "easily accomplishable... without much difficulty or expense." The EasyAccess operator, installed without structural modifications, creates an affordably priced, barrier-free entrance for the physically disabled. Automatic operation with a push of a button.

*Horton Automatics*

Circle 116 on the inquiry card.

**Natural Stone Fireplaces Resource Guide**

TULIKIVI Fireplaces and Bakeovens combine an internal contraflow combustion system with nature's finest material for retaining heat: soapstone-to provide a highly efficient and clean-burning fireplace. A brilliant 2 hour fire radiates heat for up to 24 hours. Call 800-843-3473 for a FREE 28-page, color Resource and Planning guide.

*Tulikivi Group*

Circle 117 on the inquiry card.

**RUEGG...For the World's Best Fireplaces**

Deluxe Prisma or new Prismette. Swiss-built, energy efficient and heat circulating, these zero-clearance fireplaces with sliding, one piece glass doors offer homeowners the opportunity to return 38,000-55,000 Btu's/hr of clean refreshed air into up to three rooms. Once you've experienced a Ruegg fireplace there can be no other choice.

*RUEGG Fireplaces*

Circle 118 on the inquiry card.

**New Building Image**

Quickly transform the architectural design & increase the value of old high & low-rise buildings with a Senergy engineered retrofit system, while ensuring minimal disturbance to occupants. The ERS provides simple guidelines for cost-effectively covering a variety of exterior wall substrates with a Senergy exterior insulation & finish system (EIFS). The new highly insulated EIFS facade provides the appearance of stucco, granite, marble or other natural stone finishes in a wide choice of colors & textures. Made with 100% Acrylic Polymers. For more info: Call 401-467-2600.

*Senery*

Circle 119 on the inquiry card.

**CFMS (Computer-based Financial Mgt. System)**

Harper and Shuman develops, sells and supports financial management software specifically for architects. The only system of its kind sponsored by the AIA, MICRO/CFMS runs on PCs and CFMS runs on the DEC VAX. A modular approach lets you buy only what you need. Call today 1-800-275-2525. Harper and Shuman, Inc.
Responder III Plus Touchscreen Nurse Call System

The system features an easy-to-use full English touchscreen nurse master which guides staff through different functions and displays patient calls on remote television sets. Local systems can be networked together to transfer control between systems and also be interfaced to a pocket page system to instantly notify staff of incoming calls.

Rauland-Borg Corporation
Circle 120 on the inquiry card.

Commercial Insulation Catalog Aids Specifying

New 16-page catalog provides complete product descriptions, specifications and application of fiber glass insulation products for office buildings and other light commercial work. Information includes availability, sizes, R-Values and other thermal data.

Certainteed
Circle 121 on the inquiry card.

S-Series Brochure

S-Series Brochure features the new & ADA-approved S-Series Keyed Levers from Schlage: your specification solution to meet all ADA compliance requirements for light/medium duty commercial & multi-housing applications. Available now, the cost-effective S lock is design compatible with the Schlage family of handicap approved levers. Contact your Schlage rep. or Schlage Lock Co., Commercial Mktg., 2401 Bayshore Blvd., San Francisco, CA 94134.

Schlage Lock Co.
Circle 122 on the inquiry card.

Georgia-Pacific Building Products Catalog

Inside, customers will still find extensive, up-to-date information about G-P's wide range of products in an attractive, easy-to-use format. Color tabs help direct readers to information on decorative panels, engineered board products, gypsum, hardwood plywood, insulation, lumber, metal products, millwork, roofing, siding, & structural panels. Detailed specification charts & suggested uses for each product, along with product highlights & dozens of full-color photos.

Georgia Pacific
Circle 123 on the inquiry card.

Manniglas Slipsheet Fire Resistant Barrier

Roofing system brochure highlights company's unique Manniglas Slipsheet product, a lightweight flame barrier for U.L. Class A and B single-ply roofing systems. Manniglas Slipsheet is used over both combustible and non-combustible roofs to prevent penetration and spread of flame. For more information contact Lydall Manning Nonwovens: 518-273-6320.

Lydall Manning Nonwovens
Circle 124 on the inquiry card.

NO-TOUCH PUBLIC WASHROOM EQUIPMENT

Intersan battery operated electronic passive infrared sensor faucets, washfountains & lavatory systems are highlighted. Brochure describes the unique INTERSAN passive detection system that permits hands-off operation 5+ years with single battery. Hygienic, water conservation, barrier-free & ease of installation are characteristic of INTERSAN'S passive electronic products. Call 1-800-999-3101, Sweet's 15440/INT buyline 6242.

INTERSAN MFG. CO.
Circle 125 on the inquiry card.

SILICONES IN THE CONSTRUCTION INDUSTRY

Silicones provide excellent water repellency & maintain outstanding water vapor permeability. They can withstand extremely high & low temperatures & resist weathering, UV radiation & microorganism growth. Because of their versatility & durability, silicones protect a variety of substrates from virtually all outside elements. This guide is an introduction to Wacker's silicone products for the Construction Industry.

Wacker Silicones Corp.
Circle 126 on the inquiry card.

Keep Dodge In Your Plans!

Don't forget to provide your local Dodge Reporter with the details and plans for your next job. You don't want them to miss out on the best bid for your next job. Contractors can't bid on jobs they don't know about. Thank you for your input. We appreciate your cooperation. F.W. Dodge, MCGraw-Hill Construction Information Group.

F.W. Dodge
Circle 127 on the inquiry card.
Sanitary Acoustical Panels

MBI SanPan PVF ceilings are attractive and provide a quiet environment for patients and health care professionals. SanPan PVF is the cleanest looking, non-bacteria-supporting, sound absorbing ceiling available. SanPan is suitable for the entire hospital including food preparation, operating & laboratory areas.

M.B.I. Products Company
Circle 128 on the inquiry card.

Higher Security and Lower Cost!

Whether your gate slides, swings, is a vertical lift or barrier arm, we can demonstrate better security through self-locking, lower costs through less maintenance and better reliability and performance through the use of industrial hydraulics. Call today for detailed information 800-321-9947.

Hy-Security Gate Operators
Circle 129 on the inquiry card.

Classic 2000 Leisure Pavilion

The new Classic 2000 Leisure & Pool Pavilion combines Danpalon® state-of-the-art standing seam dry-glazing technology with design detailing like extended eave lines, glass perimeter walls, concealed fasteners and motorized opening roof. The motorized roof system may also be used in skylight applications where natural light and outdoor ambiance is desired.

Solar Structures
Circle 130 on the inquiry card.

Allied Fibers Guide to Specifying Commercial Carpet

"Allied Fibers Guide to Specifying Commercial Carpet" is one of the industry’s most valuable working tools. It covers everything from choosing an installation contractor to subfloor preparation and post-installation clean-up. It also includes the advantages of Allied Fibers’ 100% nylon Anso HTX – High Technology Cross-X-Bonding – commercial fibersystem. For a free brochure, please call (800) 545-ANSO.

Allied Fibers
Circle 131 on the inquiry card.

limited Numbered Edition

ARCHITECTURAL RECORD’s first issue (1891) is reprinted to celebrate our centennial. 150 pages, 64 illustrations. Every architect should have this collector’s issue. Only $16.95 ppd. For more information call: 212-512-3443.

ARCHITECTURAL RECORD, Circulation Department, 1221 Avenue of the Americas, New York, NY 10020.

Architectural Record
Circle 132 on the inquiry card.

Inner - Seal Siding System

A complete line of exterior products made from Inner-Seal OSB - lap and panel siding, soffit panel, trim and fascia board - with a protective overlay that’s pre-primed to hold paint and stain longer. Uniformly strong and consistent composition throughout. Exceptional moisture resistance to prevent warping, splitting and buckling.

Louisiana Pacific
Circle 133 on the inquiry card.

The New Post Top Brochure from McGraw-Edison

Enhance any outdoor environment with a selection from the Post-Top Collection. From contemporary to traditional, Post-Top luminaires and poles can complete residential, institutional or public settings while providing crisp, energy efficient light with High Intensity Discharge (HID) lamps. For additional information, write Cooper Lighting, Highway 61 South, Vicksburg, MS 39180

McGraw-Edison
Circle 134 on the inquiry card.

A Practical Solution to Roof Paver Stone Applications

New bulletin shows a better way to transform a roof into a patio, terrace, balcony, walkway, plaza podium, promenade, or just plain roof deck, using the Pave-El Pedestal System. Designed to elevate, level, and space paverstones for drainage in any weather, Pave-El reliably protects roof, paver stone, membrane and insulation. Ellicott Station Box 119, Buffalo, NY 14205. 416-252-2090.

Envirosepec
Circle 135 on the inquiry card.