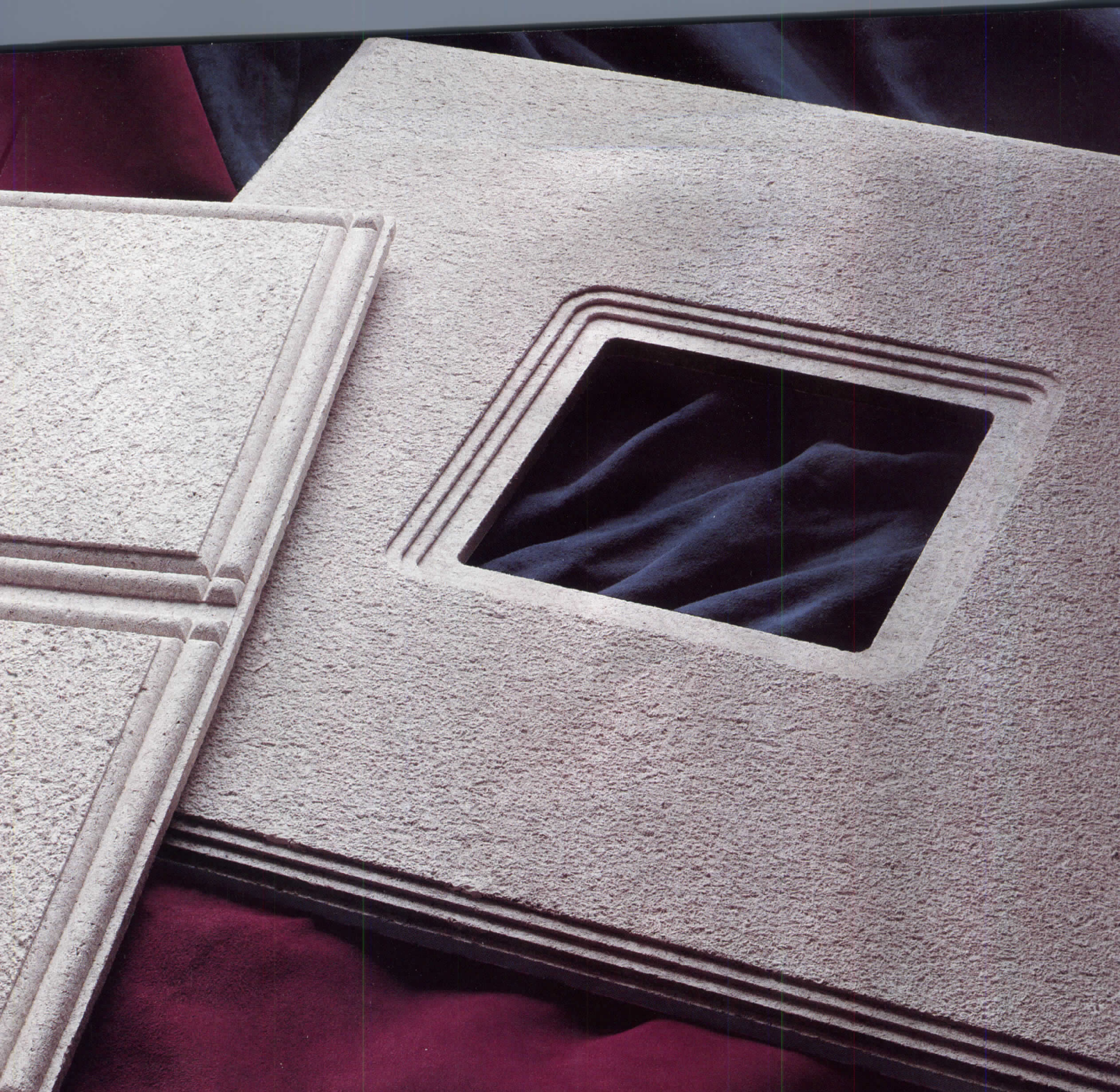


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Managing diversity

Congratulations on your February editorial [RECORD, page 11]. Perhaps the greatest part of the whole article lies in the last sentence—"What we need is the basic awareness, by managers and staff alike, that no two individuals are alike." I have been in this business for 45 years, and firmly feel that each person has to be treated as an individual; anything short of that is chaos. *Philip J. Meathe, Chairman and Chief Executive Officer, Smith, Hinchman & Grylls Associates Detroit*

I could hardly believe the narrow viewpoint expressed in your February editorial! The architectural profession in America has been culturally diverse since the country began. Women alone have been members of the AIA for over 100 years, and a great number of the most internationally renowned architects are minorities. Minority architects have received every conceivable award and honor from their professional peers.

What I do see changing, and what I think you mean, is that the rules of the game are changing. The "white male system" is being, and will continue to be, changed by contemporary culture. The elitist thinking and perception of "white male" cultural superiority prevalent throughout our profession has demanded a sameness of demeanor and conformity of outlook from those who desired distinction. Happily, these opinions of elitism and superiority are being left by the wayside, and healthy cultural diversity is being openly expressed among architects.

I say "Bravo!" to the integration of our professional cultural val-

ues with changes in mainstream American life. We all service clients involved in the contemporary mainstream. We need to change with the times or we will be left behind.

Dorothy Probst, Architect Chicago

Point taken

In your review of James Holston's *The Modernist City* [RECORD, February 1991, page 61], you state that Oscar Niemeyer was Brasilia's chief designer. That is an error. Brasilia was designed by Lucio Costa. Niemeyer designed most of the public buildings, but Costa was responsible for the city's urban design.

Henrique Kempenich White Plains, N. Y.

End of an era?

In his article, "End of an Era," [RECORD, December 1990, pages 40-41] Timothy B. McDonald paints a very biased picture of the future of the forest products industry in the Pacific Northwest. Old-growth is being replaced by vigorous second-growth as a result of concerted, scientifically guided public and private efforts to husband some of the best timber-growing land in the world. The alternative is eventual conversion of coniferous forests by wildfire, and/or insect and disease epidemics. Recently, economists at Oregon State University examined the timber supply situation. At current rates of growth and harvesting, Oregon will have 2.4 million acres of timber, 160-years and older, 100 years from now. This is less than the existing 3.2 million acres, but this hardly suggests that the "end of an era" is near.

There will, however, be an arti-

April 2-May 4

"Contemporary Architectural Drawings: Donations to the Avery Library Centennial Drawings Archives," Arthur Ross and Wallach galleries, Columbia University, New York City. For information: 212/854-6738.

Through April 28

"Architectural Drawings of the Russian Avant-Garde," 1917-1935, Wexner Center for the Arts, Columbus, Ohio. For information: 614/292-2354.

May 1-4

International Tile Exposition, Miami Beach, Fla. For information: 417/747-9400.

May 6-10

A/E/C Systems '91, including CMC Spring and Facilities, Washington Convention Center, Washington, D. C. For information: 800/451-1196.

May 17-20

1991 AIA National Convention and Design Exposition, Washington, D. C. For information: 202/626-7395.

Through May 19

"Designed in the Eighties: Recent Acquisitions," Museum of Modern Art, 11 West 53rd Street, New York City. For information: 212/708-9750.

June 11-14

NEOCON 23, The Merchandise Mart, Chicago. For information: 312/527-4141.

June 16-21

Bare Bones: 1991 International Design Conference in Aspen. For information: 303/925-2257.

June 28-30

Construction Specifications Institute 35th Annual Convention and Exhibit, San Diego. For information: 703/684-0300.

Through June 30

"New Chicago Architecture," Chicago Athenaeum, John Hancock Center, 875 N. Michigan Ave., Chicago. For information: 312/829-9650.

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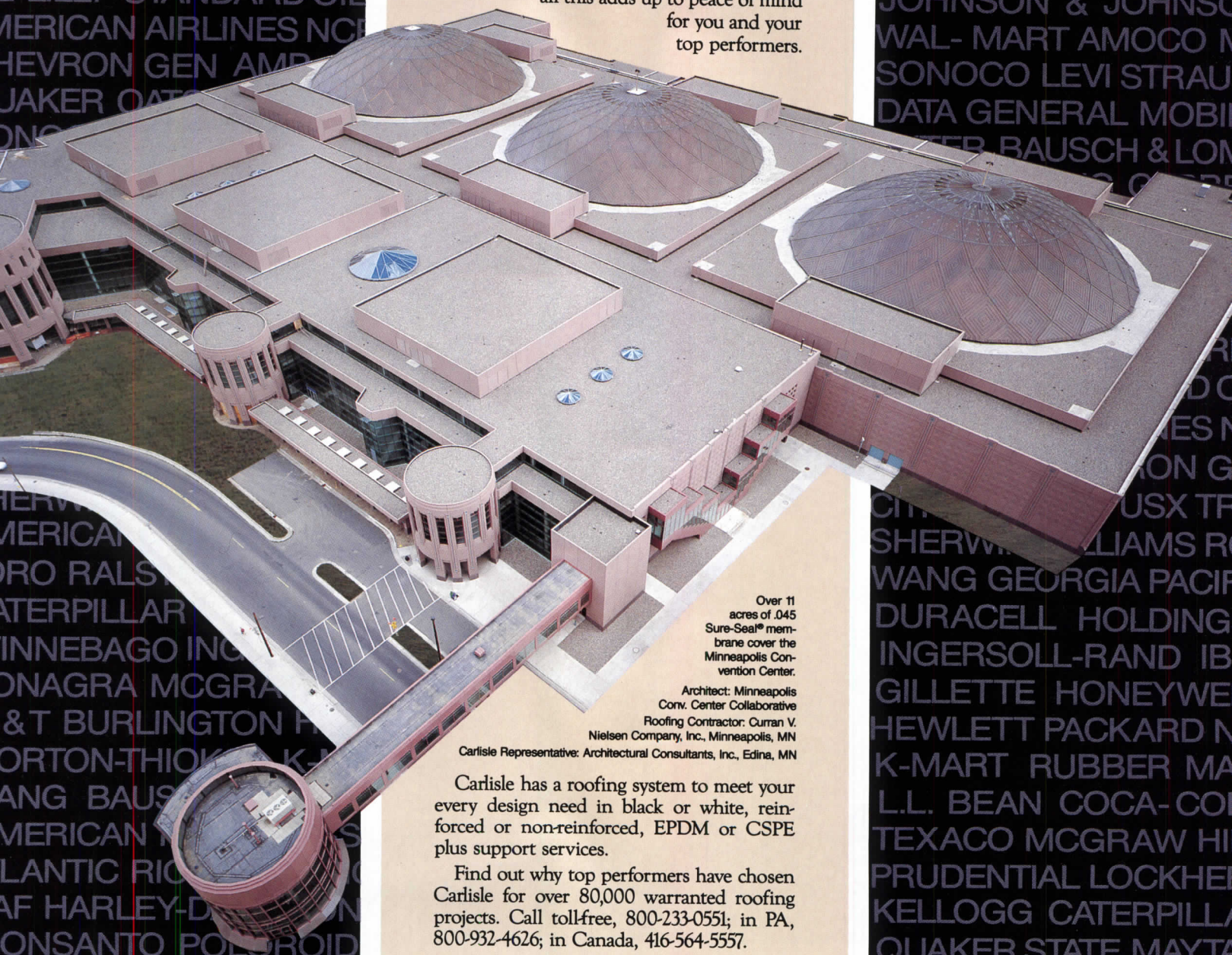
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Now the war is over the time has come to deal once more with the sticky question of the architect's real role in American society.

The 1980s saw many architects justly celebrated for creating dramatic forms in the cityscape. But the image of a hired gun brought in to provide pizzazz for an image-conscious client neglected to highlight the real planning, technical, and management sweat that lay behind the rich facades and sumptuous lobbies. It did nothing to change the public view that the architect comes along to make it pretty.

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But consider. Have you as an architect actually thought about your *real* value to the public? This value is not so much in designing a building but as problem solver, as someone who saves the client money rather than spending it, who knows products and materials, energy use, zoning, and other matters that don't necessarily have to be used on an actual building—someone to be consulted on any sort of problem having to do with property or real assets. You include rich clients and poor, not forgetting those of little influence looking for better places to live, play, shop, work, and be healed.

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Architects, and those who speak for them, should come up with guidelines for this type of practice. As it is, armies of consultants (CM's, value engineers, builders) poach on the architect's preserves by offering bits and pieces of what the architect himself should be offering as a full range, one-stop consulting package.

Last June on this page we urged, as point 16, rebuilding the architect's sense of worth. There's no better time than the present downturn to lay the groundwork for the role of architect as unique problem solver. Whether a building emerges is moot. What counts is the professional service. *Stephen A. Kliment*

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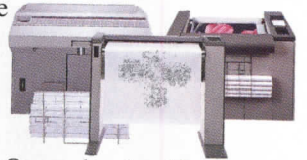
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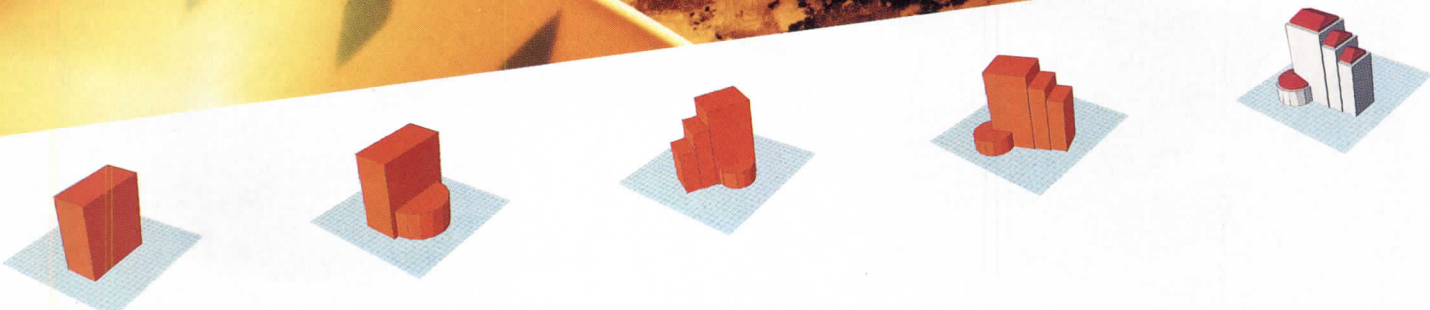
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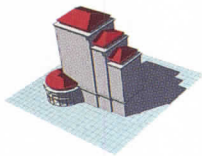
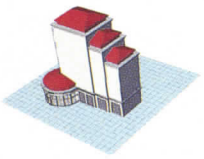
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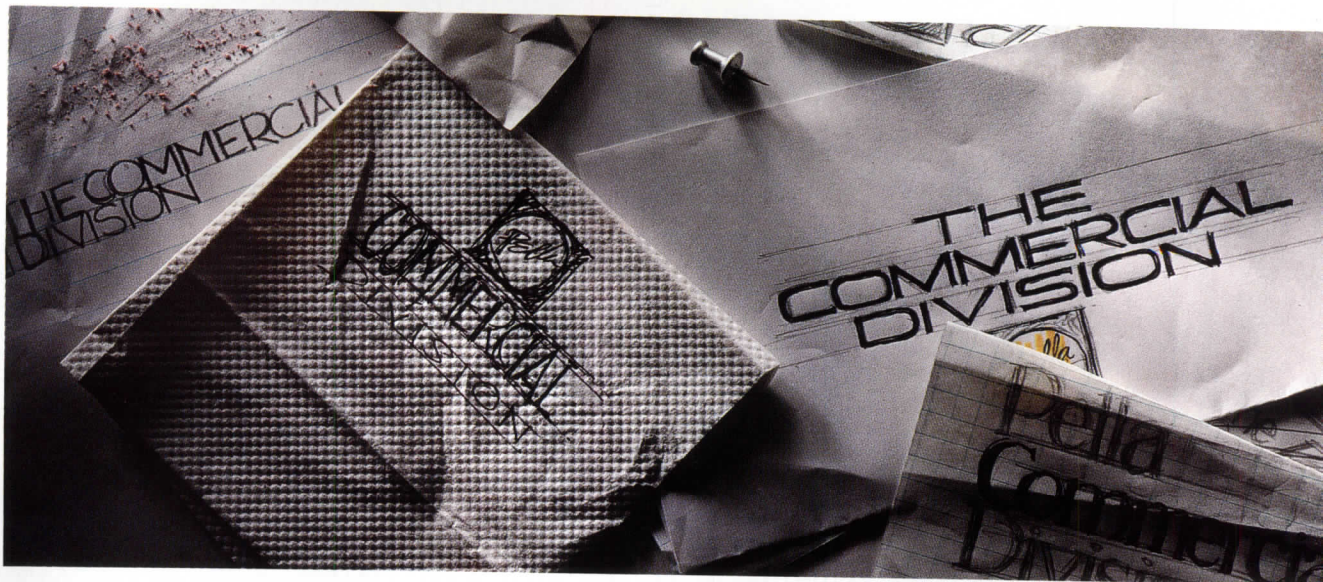
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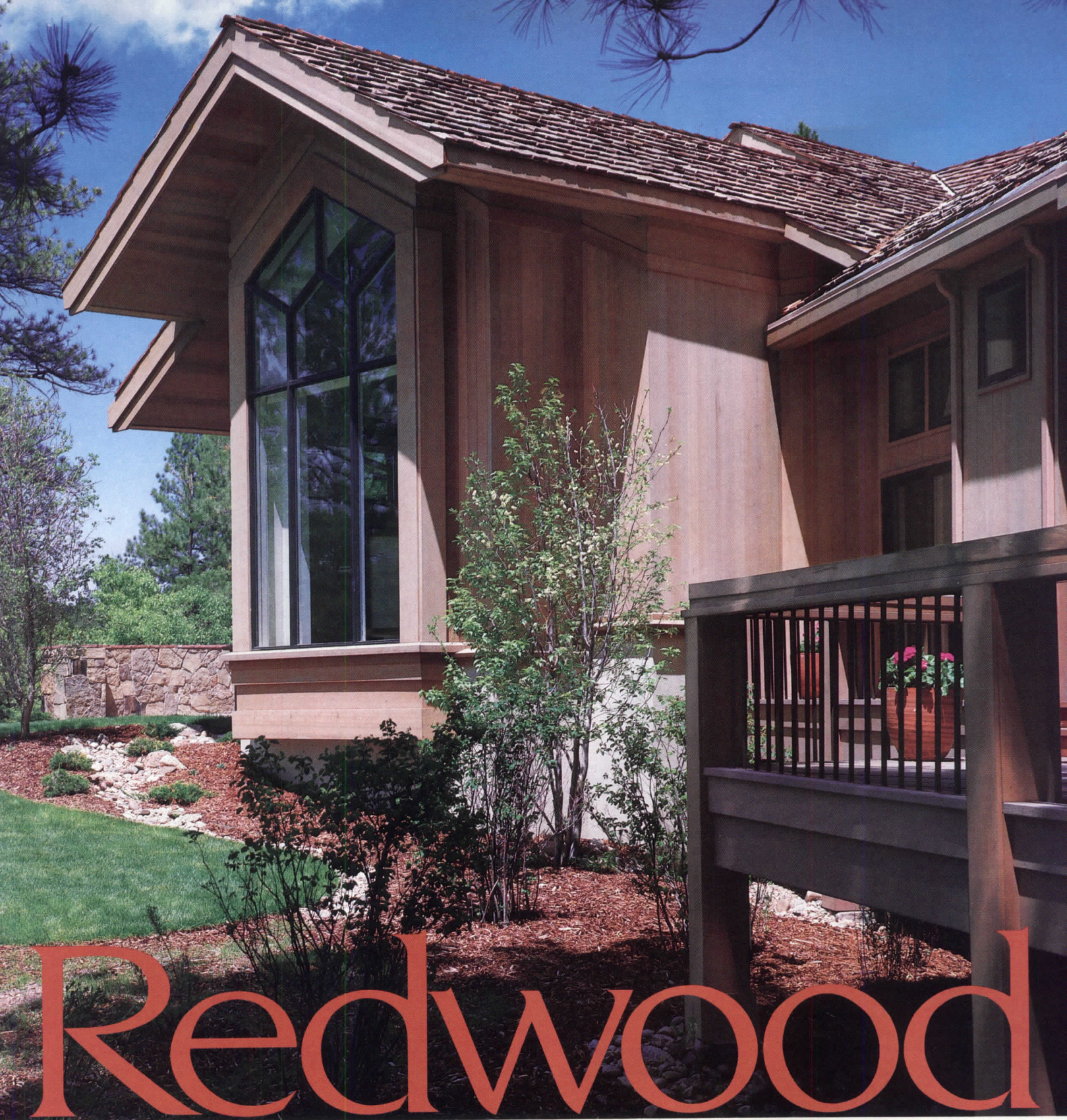
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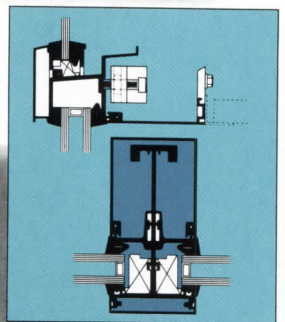
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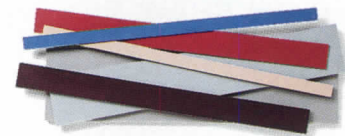
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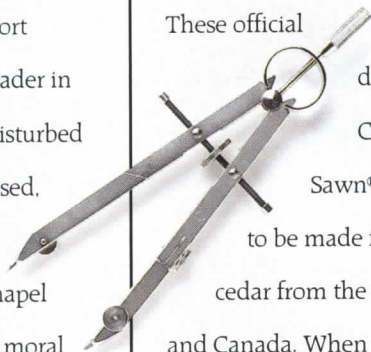


Fay Jones' Creative Edge.

The Lena Pope Home in Fort Worth, Texas, is a recognized leader in the treatment of emotionally disturbed youngsters who have been abused, neglected or abandoned. The Marty Leonard Community Chapel was built to serve as a place for moral and spiritual development as well as a community center.

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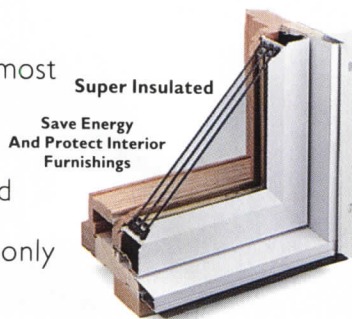
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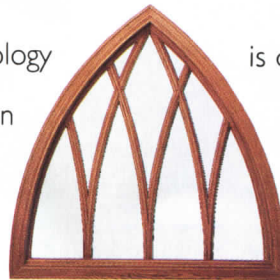
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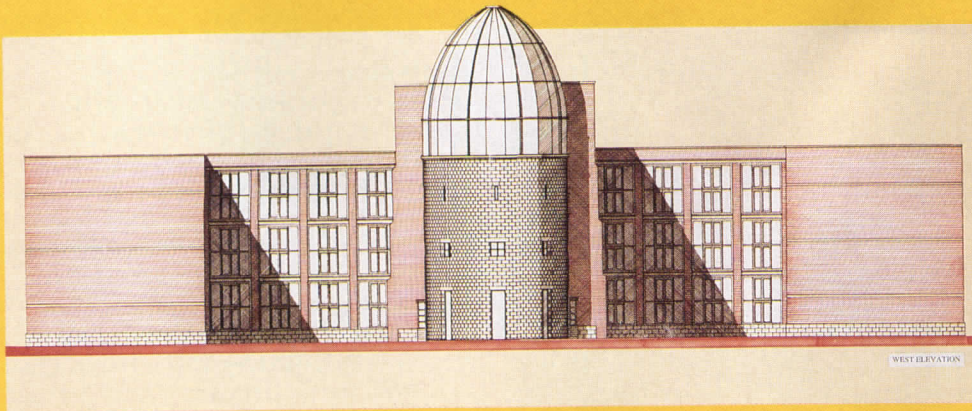
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Holland

Rossi Museum for Maastricht



Planning is underway for the Bonnefanten Museum, designed by Aldo Rossi at Maastricht, Holland's southernmost city. Set at right angles to the River Maas, Rossi's plan strings three parallel wings from an entrance pavilion that faces the city. The

museum is the linchpin of a plan to revitalize the industrial section of this provincial capital; the new residential and business quarter—the "Sphinx Ceramique"—takes its name from a nearby ceramics factory that is part of Rossi's plan. ■

California

Legorreta Reshapes Mall

They tried to tone down the Tustin Marketplace, but they failed. Orange County patriarchs had the purple wall facing the freeway repainted in more subtle hues. But an outcry, including voices from the Mexican community, arose, and soon the wall was purple again (somebody also painted "Viva Legorreta!" on it—honoring the designer of the 750,000-sq-ft shopping mall, Mexican architect Ricardo Legorreta). Acting as consultant to Leason Pomeroy Associates, Legorreta accepted the basic tilt-up construction and vast parking lots around which such malls are grouped, but added color and landscaping. In addition to the purple, red, and ochres that define the buildings, he devised closely spaced pilasters that denote the entrance, tall lighting stanchions, and sloped gravel mounds to mark the central intersections. *Aaron Betsky*

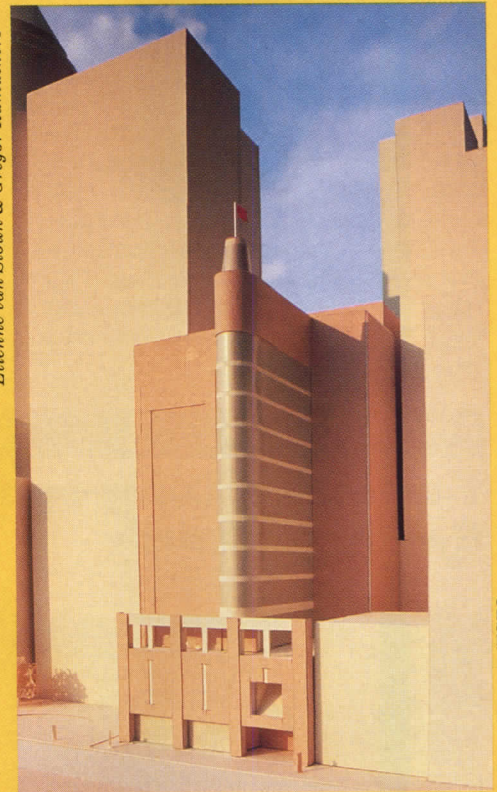


Jay Hyma Photography



New York

Midtown Lighthouse



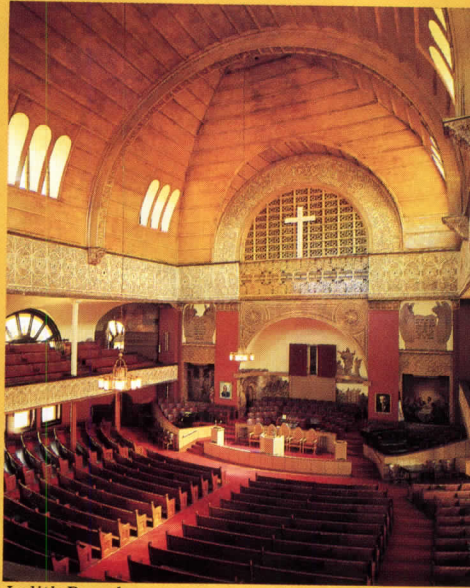
Etienne van Sloun & Gregor Ramaekers

© Scott Francis/ESTO

This 14-story infill structure is Mitchell/Giurgola Architects' preliminary design for the Lighthouse, Inc., a full-service facility for the visually impaired. Plans for the interior of the 170,000-sq-ft building—which will largely replace the organization's existing structure in mid-Manhattan—respond to the difficult urban setting. "The whole notion is to bring a great deal of light into a narrow, through-block site," says Jan Keane of MGA. "We're opening up large spaces where now there are clusters of tiny boxes. The design works off the north-south corridor of the site, and offices on the south end have interior glazing for borrowing light from the north." Key to the widely varying needs of the Lighthouse clientele—and much of its staff—is a repetitive quality to the floor plans, says Keane, "so you feel you've come to a familiar place." *P. D. S.*

Sullivan Revival on Chicago's South Side

Restoration is complete at the Pilgrim Baptist Church, one of Adler & Sullivan's enduring structures on Chicago's South Side. Architect John Vinci directed the three-month, \$75,000 project, which restored some of Sullivan's finest ornamental work—especially the arch over the ark and organ loft. Clerestory windows, painted over during World War II, were uncovered, and the barrel-vaulted sanctuary ceiling was repainted to evoke the original oak paneling. However, the interior still lacks the decorative sheet metal that covered the clerestory until the 1930s. Dedicated as a synagogue in 1891, the building was considered an unusual mix of Venetian and Romanesque styles. Sullivan disagreed: "It has no historical style. It is the present. What school does that represent? None. The church spire in the city is a thing of the past." *Lee Froehlich*



Judith Bromley

Turned-on Congregation Rebuilds Church



Donald Vasietini photos



In Brooklyn's burned-out East New York neighborhood, architect Theo. David had a less distinguished church to restore. But an enthusiastic 600-member congregation "pitched in across the board," says David, and raised some \$630,000 to rebuild the

Bethelite Institutional Baptist Church, which since reopening in December has become "an anchor in the community." David followed the program spelled out by the congregation: "We need a place where we can forget the world outside." *P. D. S.*

Briefs

Decisions

Thomas Beeby, Arthur Erickson, Michael Graves, and Charles Moore are the four finalists announced in the international competition for Washington State Historical Society in Tacoma, to be built at the city's Union Station. The winner will be announced May 4.

Media alert

Oculus, the newsletter of the New York City AIA chapter, has been offering its 3,500 readers something different since Suzanne Stephens became editor last summer: blunt criticism, along with a spicy mix of news, profiles, and discussion—not to mention gossip. But some grumble that there isn't enough news on chapter members, meetings, and minutes. So Stephens mailed a lengthy questionnaire with the March issue, to uncover the depth of support for her approach. Results in June.

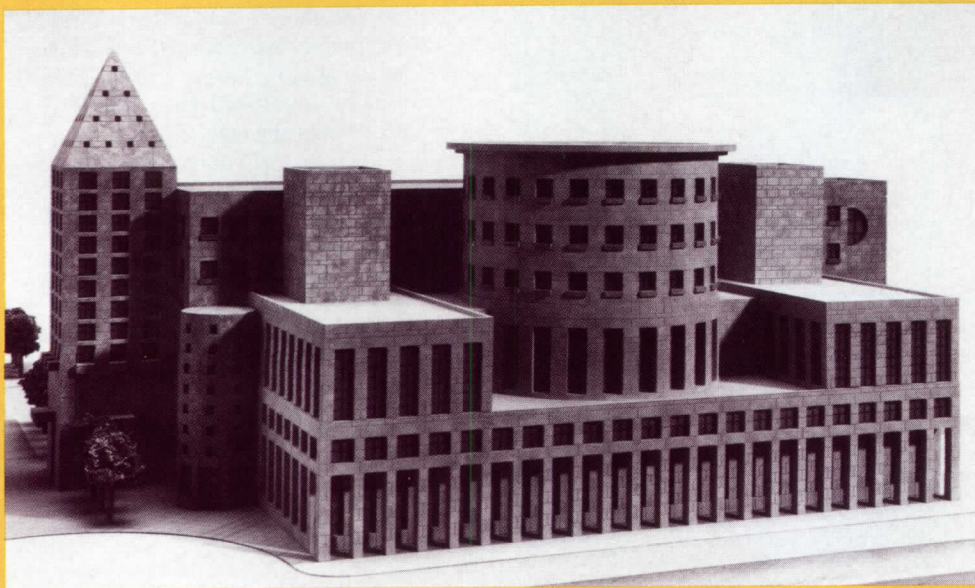
News follow-up

Scuttling plans for a 47-story, on-site office tower [RECORD, February 1991, page 17], the Supreme Court refused to hear the challenge filed by St. Bartholomew's Church in Manhattan. Trustees had sought to overturn the church's landmark designation, which they claimed interfered with their right to the free expression of their religion. But the justices let stand an appeals court ruling against the church.

Competitions

American Society of Architectural Perspectivists' Sixth Annual Exhibition of Architectural Delineation; deadline, June 7. For information: 617/846-4766.
Metropolis magazine and Parsons School of Design Furnishings Design Competition. For information: 212/722-5050.
 Center for Better Living, Tokyo, International Industrial Design Competition. For information: Center for Better Living, International Div.; 1-6-19 Akasaka Minato-ku; Tokyo 107, Japan; 813/3586-4903.
 AIA-Sunset Western Home Awards biennial competition. For information: Western Home Awards, Box 92345, Menlo Park, Calif. 94025.
 Shinken-chiku Residential Design Competition 1991. For information: Entries Committee, Shinken-chiku Residential Design Competition 1991; Shinken-chiku-sha Co., Ltd.; 31-2, Yushima 2-chome, Bunkyo-ku; Tokyo 113, Japan. ■

Graves Wins Denver Library Competition

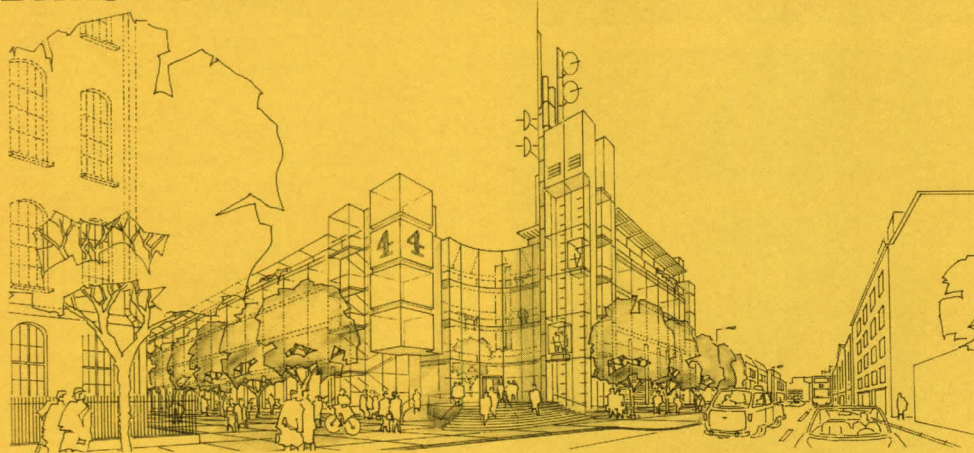


The Klipp Partnership of Denver, with Michael Graves as associate architect, has been chosen as designers of the new \$64-million, 450,000-sq-ft Denver Public Library. Selected by competition from three final designs, the winning design retains the in-

tegrity of the existing historic library building but creates a distinctive structure intended to hold its own with the strong forms of nearby civic buildings. Groundbreaking is due in early 1992 with completion in 1995. *David Ballast*

United Kingdom

Rogers Partnership Wins British Channel 4 Contest



A public garden forms the heart of Richard Rogers Partnership's winning design in a limited competition for the headquarters of Britain's Channel 4 television network, near Victoria Station in London. Two wings unfold at right angles from a circular base, opening

onto the large landscaped garden, which forms the approach to a four-story glass-fronted concave entrance hall. The full-height glazing offers direct views into the building, which includes production studios, offices, and a cinema. Opening is set for 1994. ■

Have Fun, Moore Urges Architects

AIA Gold Medal recipient Charles Moore warned architects at the Institute's recent Accent on Architecture festivities in Washington's National Building Museum not to take their work so seriously as to take all the fun out of it. Citing Mies van der Rohe's dictum, "I don't want to be interesting; I want to be good," Moore said this didn't mean architects should not try to be good, but that "part of the urgency [was] to ward off the petrification that comes of fear. Especially the fear of slipping into schlock. I'm sure that schlock is not something that any of us seeks. But I'm also sure that too morbid a fear of falling into it restricts our energies in devastating ways." Moore urged the profession to build on "the great storehouse of energy our history provides."

William Taylor

Finally, he cautioned architects not to think they can "do it alone. For a building to be adequately endowed with human energy, many people—the architects, the financiers, the builders, and especially the inhabitants—have to invest their energies."

Moore, with former partners William Turnbull, Donlyn Lyndon and Richard Whitaker, received the AIA's Twenty-Five Year Award for their condominium at Sea Ranch, California. Some proceeds of the event, sponsored in part by McGraw-Hill's Construction Information Group and Rhone-Poulenc, Inc., went to the Tropical Forest Foundation, which promotes sound management of the world's tropical forests. *S. A. K.*

New York

Restored Lalique Windows in New Bendel's



Prosperity Builds New Visions



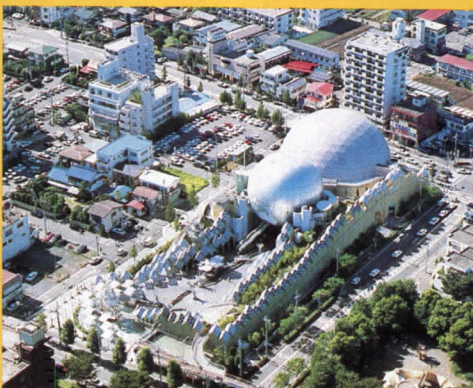
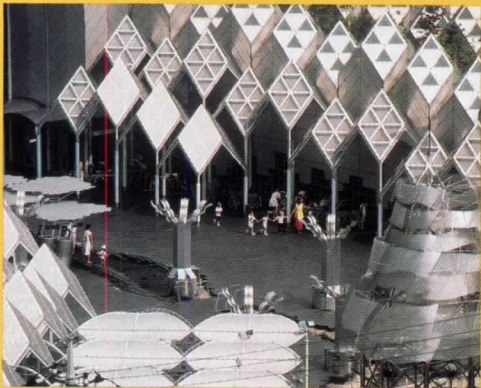
Osamu Murai

In the past, a concrete shell often sufficed for Japan's public buildings, but in today's climate of prosperity, architecture is increasingly viewed as a cultural asset. Six new projects illustrate the shift.

This spring, Tokyo will finally have a monument to call its own, when Kenzo Tange Associates' New City Hall is to be completed. The New City Hall (1), which will bring 13,000 city employees under one (figurative) roof, occupies three blocks at the edge of Shinjuku Central Park—an area where high-rise office buildings coexist amiably with a lively entertainment district of tiny bars and nightclubs. The individual spires of the symmetrically disposed twin 48-story City Hall Tower I emerge at the 32nd floor and are crowned by observation decks. Adjacent to Tower I is the 34-story City Hall Tower II, with its stepped profile. A seven-story assembly hall, on axis with Tower I, encloses the semi-circular Citizens Plaza. Gridded surfaces, composed of two shades of honed granite, reflective glass, and concrete panels, suggest the rhythms of traditional Japanese windows.

The Civic Theater (2, 3), designed by Itsuko Hasegawa Architectural Design Studio, opened last fall in the Shonandai Culture Center (3), itself a larger Hasegawa design outside Tokyo. Housed inside a sphere, the Civic Theater's space soars to 75 feet at its apex. The matte-black interior shell, covered with catwalks and state-of-the-art lighting and acoustical apparatus, is meant to recall both Piranesi's prisons and a *Star Wars* spaceship.

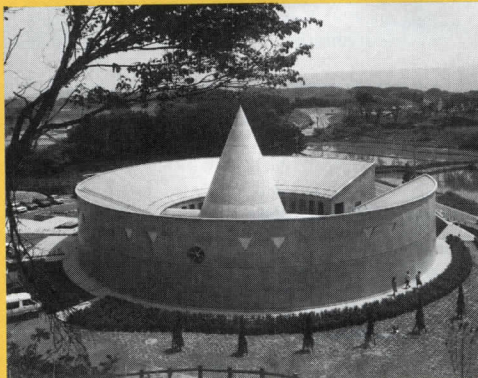
In Kumamoto City on the island of Kyushu, the recently completed Kumamoto-kita Police Station (4), designed by Kazuo Shinohara Atelier, also takes visual cues from aerospace imagery. The architect divided the five-story building neatly into two pieces. A rectilinear building of reinforced concrete houses the police station and jail; an inverted pyramid, balancing on cantilevered steel beams, contains municipal services—including judo and kendo rooms for neighborhood children. The reflective glass skin of the latter conceals the interior during the day but reveals budding black belts practicing at night. A further space-age touch is the black cylinder appended to the rectangular form and containing air-conditioning equipment.



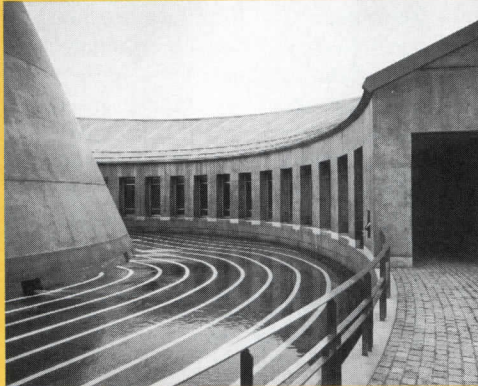
Circular form dominates three regional museums by Kisho Kurokawa Architect & Associates. In 1989 the town of Konouracho in northern Japan opened its Memorial Hall for the Shirase Expeditionary Party to the South Pole (5, 6), commemorating a 1910 expedition led by a native son. Kurokawa evokes the spirit of Antarctica through simple geometry. Symbolizing an iceberg, a 60-foot-high cone stands within an oceanlike pool surrounded by a 150-foot-diameter ring. Covered corridors anchor the cone, which houses special events, to its circular enclosure, with exhibition, study, and service spaces.

The atomic bomb that flattened Hiroshima made the city a symbol of international peace but destroyed its architectural identity. Kurokawa's Hiroshima City Museum of Contemporary Art (7)—devoted, appropriately, to post-World War II art—is a recent attempt to rebuild that identity. Sited on the ridge of Hijiyama Hill, the two-story museum overlooks the city like a glistening, aluminum-clad acropolis, and functions as a figural key-pin of Hijiyama Cultural Park. Approached along a colonnaded plaza, the circular form is exposed to the sky in the center and severed at the point of entry, creating a hinge that links permanent and temporary exhibition wings on either side. Much of the 40,000-square-foot building is below grade; skylights and sunken exterior exhibition spaces bring light into subterranean galleries.

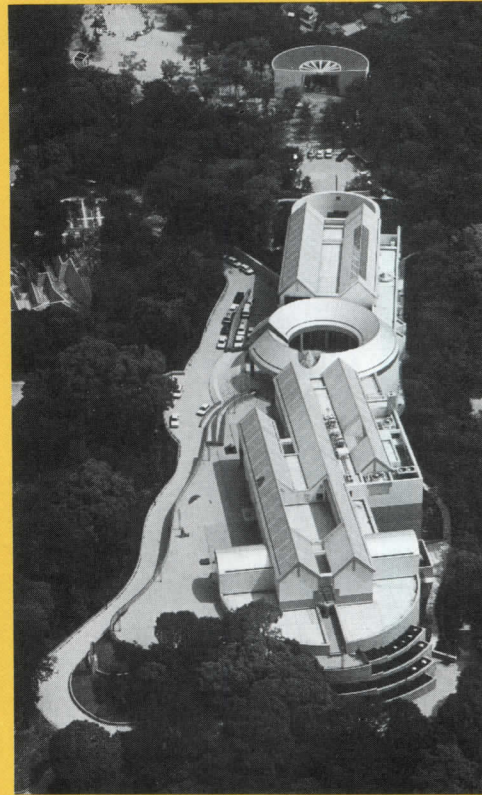
Earlier this year Kurokawa's Honjin Memorial Museum of Art (8) was completed in Komatsu City. Located on the former site of Komatsu Castle, the 3,600-square-foot museum combines the tile-clad masonry and sharply peaked roofs of traditional Japanese storehouses with contemporary reinforced concrete construction and aluminum roof details. Gallery and service spaces are contained within a two-story outer layer, which peels away from the double-height lobby core. The museum's overall circular form is divided by a wedge that is expressed in the roof plane by a skylight and in the ground plane by a bridge leading up to the main entrance. The building sits in a shallow pond enclosed by a gridded screen, creating a transitional space, similar to the outer corridors surrounding traditional Japanese buildings. *Naomi R. Pollock*



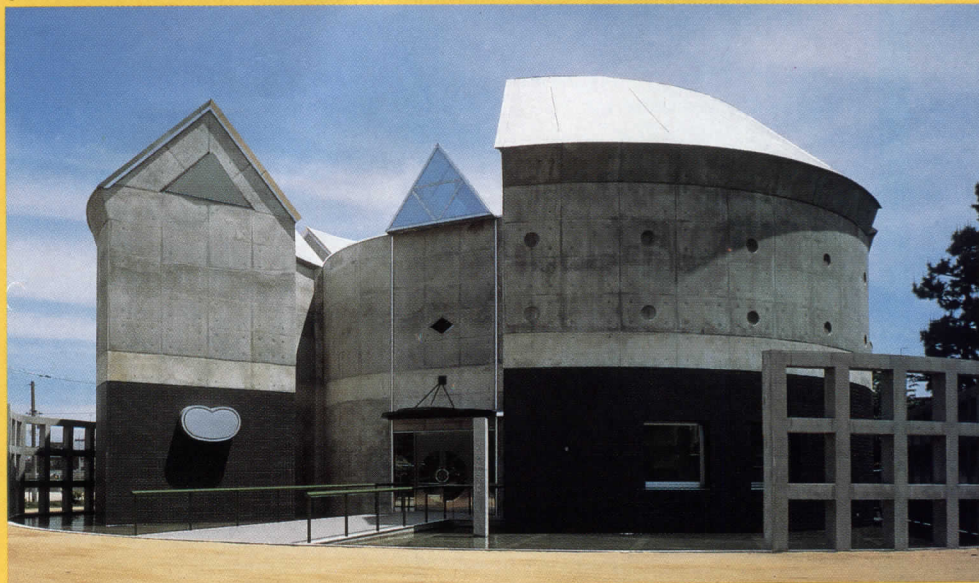
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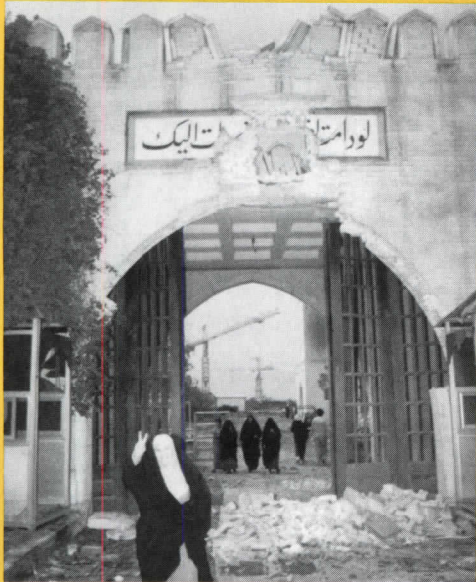
While these four architects' design approaches differ significantly, they do share the boldness of their handling of form and material. From Tange's monumental City Hall to Kurokawa's museums, as well as in Hasegawa's theater

and Shinohara's police station, dramatic expression tends not to be sacrificed to technical or budgetary considerations. Instead, Japan's resources and the continuing effort to rebuild are allowing architects to realize visionary designs.

Tomto Ohashi photos this page

Kuwait

Open for Business



AP/Worldwide

Operation Desert Storm is being followed by an equally ferocious battle for contracts to rebuild small, oil-rich Kuwait. Because of inflation, the costs could equal those for rebuilding Europe after World War II—a minimum of \$45-50 billion over five to seven years for new sewers, airports, harbors, hotels, office buildings, pipelines, and mosques. Other estimates place the total outlay as high \$100 billion. Reconstruction of Kuwait City alone, which housed most of Kuwait's two million residents, has been compared to the total rebuilding of a city the size of, say, Phoenix, Arizona.

Who is getting the contracts: So far, American contractors, architects, and engineers are winning that battle against foreign competition, and there seems to be enough work to go around that small and minority firms might get part of the action. "At present, it's mostly large firms with the ability to mobilize in a hurry that are invited in for the initial \$45-million, three-month phase for cleanup, damage assessment and estimates," says Fawzi al-Sultan, a Kuwaiti executive director of the World Bank in Washington who set up the original team to

launch the reconstruction effort. Other sources set the figure much higher: \$800 million to \$1 billion for basic infrastructure—electricity, food and distribution systems, and sanitation.

Who calls the shots: Kuwait has now organized its own Emergency Recovery Program task force, headed by Ibrahim al-Shaheen working until early March out of a hotel in Dammam, Saudi Arabia. For the initial phase, the task force works through the U. S. Corps of Engineers. It has awarded contracts to, among others, Bechtel (oil cleanup and reconstruction of oil wells), Blount International (\$6 million in repair of public buildings), and Muhammed A. Karafi (\$5 million in repair of public buildings). The U. S. Arab Chamber of Commerce in Washington said in late February that 175 contracts had been signed by the Kuwait task force with foreign firms, most American.

Who may get contracts: After the first phase, it's going to be open season for everyone—more or less. Says al-Sultan: "Small firms can go in now as subcontractors to the big ones. But after local engineering firms have re-established themselves and have set up their offices in Kuwait, another route would be to contact them directly." Al-Sultan says his fellow countrymen "need project managers"—perhaps the most pressing need. Design and construction firms with experience in the country and many prequalified for work there by the Army Corps can be identified in *Kuwait Reprint* published by ENR Reprints (Kuwait), Room 4188, 1221 Avenue of the Americas, New York, N. Y., 10020 (212/512-4178).

Washington connections: The U. S. Commerce Department has a special office to help U. S. firms get work in Kuwait (202/377-5767 or 5737). There is also a U. S. office of the Kuwait task force, headed by Dr. Abdul Hadi Al-Awadi and responsible for followup on signed contracts and contract negotiation at 1510 H Street, N. W., Washington, D. C. 20006 (202/508-0250, fax 508-0256). *Peter Hoffmann, Washington, D. C.*

Conventions

Showtime in Washington

The Capital hosts two major gatherings of importance to architects this May.

AIA. On the 17th through 20th, the AIA will hold its annual convention. The theme: "1991 Issues." It describes a diverse agenda much in keeping with that of the incoming president's own (see *Building on the Tried and True*). Among workshops: *Optimizing the Small Firm*, *Interpersonal Skills for Architects*, and *Hot Markets* (212/626-7395).

A/E/C. The other gathering is A/E/C Systems '91 on May 6th through 10th, the annual conference and exhibition of the latest in computers for architects, engineers, and contractors. "CAD managers cite hardware-software incompatibilities and lack of trained people as their biggest problems," reports a survey by the sponsors. They mean to correct this with a variety of products, seminars, and tutorials (800/527-7943). ■

Leadership

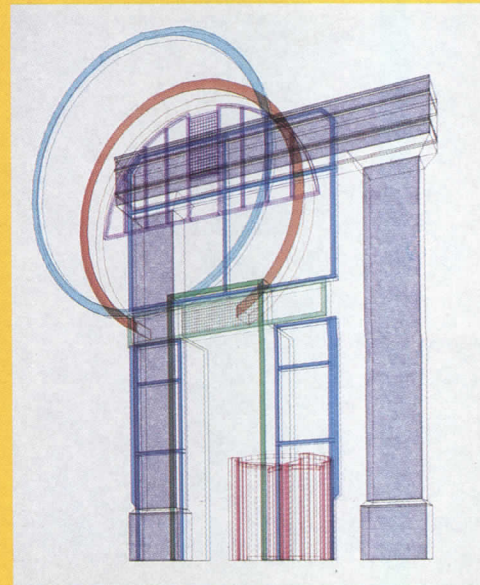
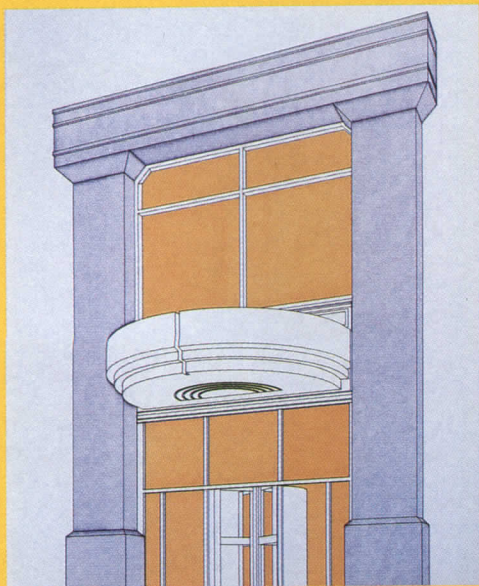
Building on the Tried and True

"Is one year enough to carry through new programs?" asked C. James Lawler at RECORD's annual lunch for the incoming AIA president. Probably not. Instead, he plans on pursuing those programs that have shown promise in the past—increasing professionalism within the field and educating the public on architecture's value.

On professionalism: He noted that down times in construction have meant increasing competition in which the least qualified practitioners resort to tactics that weaken public perception—including free designs or "giving away what architects have to sell." He assailed the current tendency to "run from project administration." And he hoped that the slowdown would give architects a chance to design buildings that future generations can learn from—more than by being examples of mistakes not to repeat. *C. K. H.*

Designed With 3-D CAD Components

The architects designed the entrance for the ORDA Corporation in New York City by creating a library of 3-D shapes that could be assembled into differing solutions for comparison and evaluation. The solution, top right, was selected.



By Hans-Christian Lischewski

Most of today's architectural modeling programs require tedious methods to enter 3-D data. Hence many designers stick to sketches and plans. Only after the design solution seems satisfactory are 3-D databases generated by specialized people who produce perspective views. By doing this, designers end up restricting 3-D systems to traditional techniques.

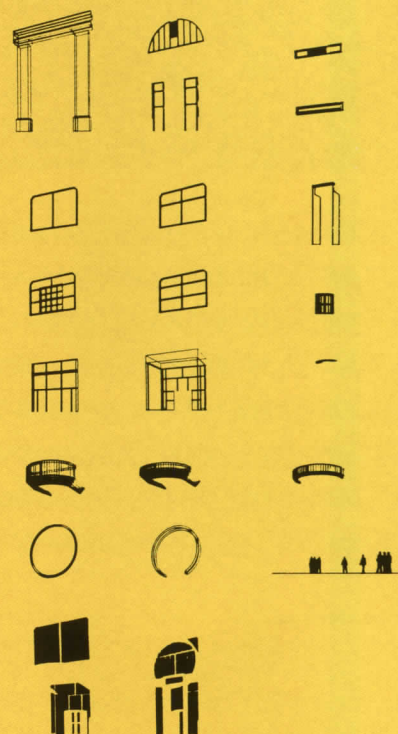
At Russo + Sonder, Architects, now part of Perkins & Will R + S Health Design Group, we took computer-aided modeling a step farther. We looked at those characteristics that are unique to the process. One is the capability to generate, store, and reuse any shape and number of 3-D building elements. These can be of any complexity and, most importantly, can be reassembled in any configuration to produce design variations. To test this, we selected a relatively small project (photos and caption), which was to win a local chapter award. The models were produced on a Hewlett-Packard 900 workstation, which was enhanced with a Silicon Graphics Iris processor. Databases

Mr. Lischewski is director of CAD services in the New York office of Perkins & Will R + S Health Design Group and an associate professor and director of architectural computing at the Pratt Institute's School of Architecture.

were generated by using ARVIEW modeling software, developed by SKOK Systems, which was recently acquired by Cadworks, Inc. This configuration allowed efficient production and instantaneous displays of perspectives in wireframe *or* shaded models. Slides of shaded views helped the evaluation process. For presentation boards, hidden lines were removed from wireframe perspectives, which were then translated into 2-D drawings and rendered at a large scale in dense hatch patterns by standard CAD drafting methods.

The technique has proven invaluable in the design process, and we apply it now on larger projects like master planning or fitting new-building designs into existing environments. Such a computerized design approach can be expanded to allow the user to generate, reuse, add, and integrate design data during all design phases. It can even test structural behavior, and estimate costs of construction and maintenance.

Image quality on low-cost systems is still poor when compared with slide resolution. But improved computer-graphics displays and high-definition video will merge to provide a superior design and visualization tool. And improved modeling systems, suited for specific applications during different design phases, will make more architects embrace these computer tools. ■



Patterns with a Past



1



2



3



4



5



6

Plus ça change . . .

Color comes and color goes, but a good pattern is a joy forever. Some of the fabrics in Brunswick & Fils' current collection are not necessarily new, but rather fresh, re-colored versions of existing motifs, some hundreds of years old.

1. English Leopard, based on an early 19th-century document in the Winterthur archives, was originally indigo. Now the cotton print comes in red and blue as well as the green pictured. **2.** Reminiscent of the neat multicolored woven stripes used in the late

1700s, Kiev is moiréd viscose and cotton rep available in 15 colorways. **3.** Concorde is a replica of an Italian Deco velvet of the '20s.

4. Myrtil Linen, a block-print taken from an old embroidery, dates from 1958, but was used in a beach house by Richard Lowell Neas last year. **5.** Rock Garden print is a 1990 adaptation of a detail from a flowering-tree palampore done on the Coromandel coast, 1700-1750, in the collection of the Royal Ontario Museum. **6.** Arbre Japonais Glazed Chintz, new in 1957, was used in Mario Buatta's 1990 redecoration of a sitting

room in Washington, D.C.'s Blair House. Brunswick says that many new designs color themselves, but that the ultimate decision-maker for both pattern and color selection is the customer. Introductions get up to five years to find a market, and though old patterns can always be ordered from the original screen engravings, only what sells stays in the line. Palettes are updated as showrooms let the head office know when the same color is requested more than twice. Brunswick & Fils, New York City. ■

Circle number 300

New Fixtures for Kitchen and Bath

For more information, circle item numbers on Reader Service card.



301



303



304



305



302

301 Discreet dispenser

An ice-and-water unit is recessed in a plinth-like panel set into the refrigerator door: a built-in within a built-in. Panel, trim, and glasswell come in nine colors to match or contrast with the refrigerator/freezer door panels; pin-striped pewter trim is shown with black-slate doors. Sub-Zero Freezer Co.

302 Cooktop components

Drop-in gas and electric burners can be placed almost at random on a countertop—parallel, perpendicular, or diagonally. The kitchen above, by design student Tracy Gib-

bons, has dual gas and electric burners side-by-side, flanked by a grill, a downdraft fan, and a griddle. GE Appliances.

303 Commercial-style range hood

Stainless-steel hood conceals a large-volume (up to 1,200 cfm) exhaust fan capable of clearing the high temperatures put out by commercial-style ranges. Backsplash holds fold-up warming racks. Broan Mfg. Co.

304 Italian design

The Sottini Collection includes a large-scale cross-handle faucet-set with turn-of-the-century lines. American Standard, Inc.



306

305 Claw-foot tub

From the traditionally styled Epoque suite, cast-iron tub is 5 ft long, with a rolled-edge white enamel interior. The exterior may be painted or left unfinished. Porcher, Inc.

306 Sybaritic shower

Nothing traditional about the J-Dream, the world's first whirlpool shower. Taking up the same space as a 5-ft tub, it has 16 hydrotherapy jets, a steam-bath, three adjustable shower heads, and a waterfall-like cascade, as well as a built-in seat and concealed closet for towels and robes. Jacuzzi, Inc. ■

Generic CADD for Mac and DOS

By Steven S. Ross

Since Generic Software merged with Autodesk (the AutoCAD people) about a year ago, the two organizations have been kept separate. But Generic's entry-level products are becoming more capable—and more compatible with AutoCAD itself. This month we look at the latest Generic CADD products—CADD 5.0 for MS-DOS and PC-DOS computers, and CADD for the Macintosh. Both are 2-D drafting programs. The DOS version, in particular, has a wide array of add-on products available.

Both are cheap to buy and cheap to keep—they run on small computers, and there's no software maintenance fee or fee for the telephone help line. They produce compatible files—you can move back and forth between them quite easily—and both can write a DXF file that can be imported into

Generic CADD 5.0

Equipment required: IBM PC or compatible with fixed disk and 640 kilobytes (2 megabytes or more recommended), DOS 3.0 or higher (DOS 3.3 recommended). VGA (640 by 480 resolution or higher, depending on the graphics board) recommended; will run with Hercules, CGA, or EGA as well. Mouse (recommended) or digitizer. Math coprocessor chip (8087, 80287, 80387, etc.) strongly recommended. Generic CADD 5.0 does not use extended memory directly, so users with 80386 or 80386SX-equipped computers may need a memory-manager program to turn extended into expanded memory.

Vendor: Generic Software, Inc., 11911 North Creek Parkway South, Bothell, Washington 98011. Phone 206/487-2233. \$395. AutoConvert 5.0, for moving files between Generic CADD and AutoCAD (through version 11), \$99.95. The Generic 3-D add-on, for 3-D modeling, is \$349. Symbol libraries are from \$49.95 to \$74.95. Upgrades from earlier versions are typically \$100. Support is unlimited and free; you pay for the long-distance call.

Manuals: Three simple paperbacks, well-written and adequately indexed, cover general user information, a tutorial, and a command reference. The tutorial does not

cover attribute defining, but the reference manual does—not quite accurately.

AutoCAD. Going the other way is trickier, but the conversion program for DOS computers will go back and forth between Generic CADD and all versions of AutoCAD, including the newest release, 11. There are lots of little changes that make Generic CADD 5.0 more generally useful than earlier DOS versions. A complex curve, for instance, can be used as the border for a fill pattern. And the underlying database, instead of being inches-only, is now truly unitless (as with the Mac version). You set the units you want in the initial configuration program. You can match a new entity to an old one (by length, orientation, or other attribute) with the new "like" command.

In both the Mac and the DOS versions, dimensioning is associative. That is, if you

cover attribute defining, but the reference manual does—not quite accurately.

Ease-of-use: This is a straightforward program with easy side-menu command system, associative dimensioning, command macros, symbol library, and underlying database. The database, for storing attribute information (cost, supplier, and composition of a door, for example) can be exported to "comma-separated variables" ASCII or Lotus WK1 (not older WKS) files. Installation is easy, if your goal is simply to get things up and running. Fine-tuning requires some detailed knowledge of your equipment, and of MS-DOS or PC-DOS. The menu bar can be edited to make it easier to get at your favorite drawing tools. Using the right mouse button for menus and the left for placement takes a half-hour or so to get used to.

Error-trapping: Good. Multistep commands can be aborted or changed between steps. There's an undo command, and an un-undo command. Generic CADD 5.0 automatically stores part of your drawing on disk if it runs out of random-access memory. How do you know if you've run out? There is a memory status indicator, but the giveaway is when things slow to a crawl.

dimension an object, then change its size, the dimension that appears in the drawing will change automatically. And lettering looks great. Letter and line spacing are easily adjusted on-screen.

Perhaps the biggest problem existing Generic CADD users will have is figuring out how the new products fit with the old line. On the DOS side, Generic started out with versions 1.0, 2.0, and 3.0. After 3.0, Generic split its offerings. There was a simple Level 1, better Level 2, and more complete Level 3, which was really the update of 3.0. Level 2 was also sold as the "Generic CADD Starter Kit." Because the "level" series was really release 4.0, the new version is 5.0.

The levels are no more. There's just 5.0, and the Starter Kit (at a new low \$149 price).

Generic CADD Macintosh

Equipment required: Macintosh Plus or later with 1 megabyte of memory (2 megabytes or more strongly recommended), two 800 kilobyte floppy drives or a fixed disk and a floppy drive (strongly recommended). Math coprocessor recommended for models smaller than Macintosh II. System 6.0.5 or higher. Generic expects to be compatible with System 7.0 as well.

Vendor: Generic Software, Inc., 11911 North Creek Parkway South, Bothell, Washington 98011. Phone 206/487-2233. \$595. Includes MacPlot from Microspot. Support is unlimited and free; you pay for the long-distance call.

Manuals: There's a comprehensive spiral-bound user guide and a small paperback reference manual, along with a manual for MacPlot.

Ease-of-use: As the manual says, if you can use a Mac, you can use Generic CADD; it follows the standard interface closely. Re-setting printer and plotter choices may require moving back to the Chooser, outside Generic CADD. Symbol libraries can be easily created. You can set the computer to redraw last objects first, then use any key to stop the redraw as soon as you have enough on-screen to add the next entity. Unlike

Generic CADD for the Macintosh replaces Generic CADD Level 1 for the Mac—there never was a level 2 or 3.

The Mac version is not ideal for large practices—it is too easy to lose track of symbols, for example, and there's no 3-D modeling. But it runs smoothly, and file compatibility with the DOS version (you can build a 3-D model there) provides a nice bridge between the two platforms.

The DOS version (with a fair database link) is getting close to a production environment, however. And both programs can be used for casual at-home use by designers, or as AutoCAD extenders.

For more information, circle item numbers on Reader Service Cards. 307

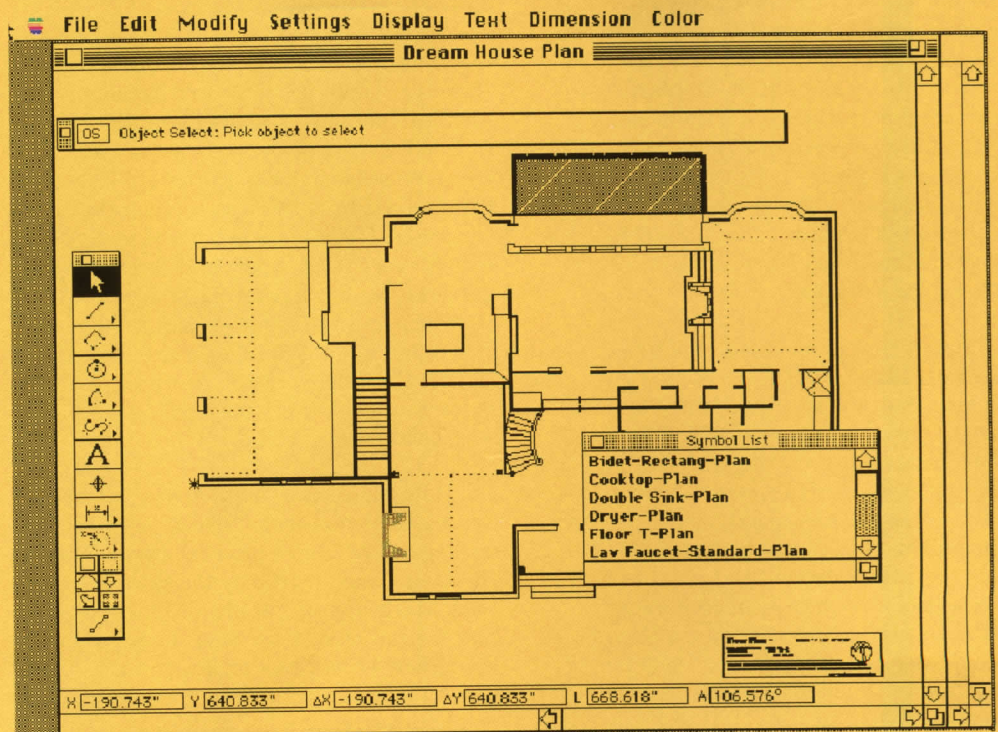
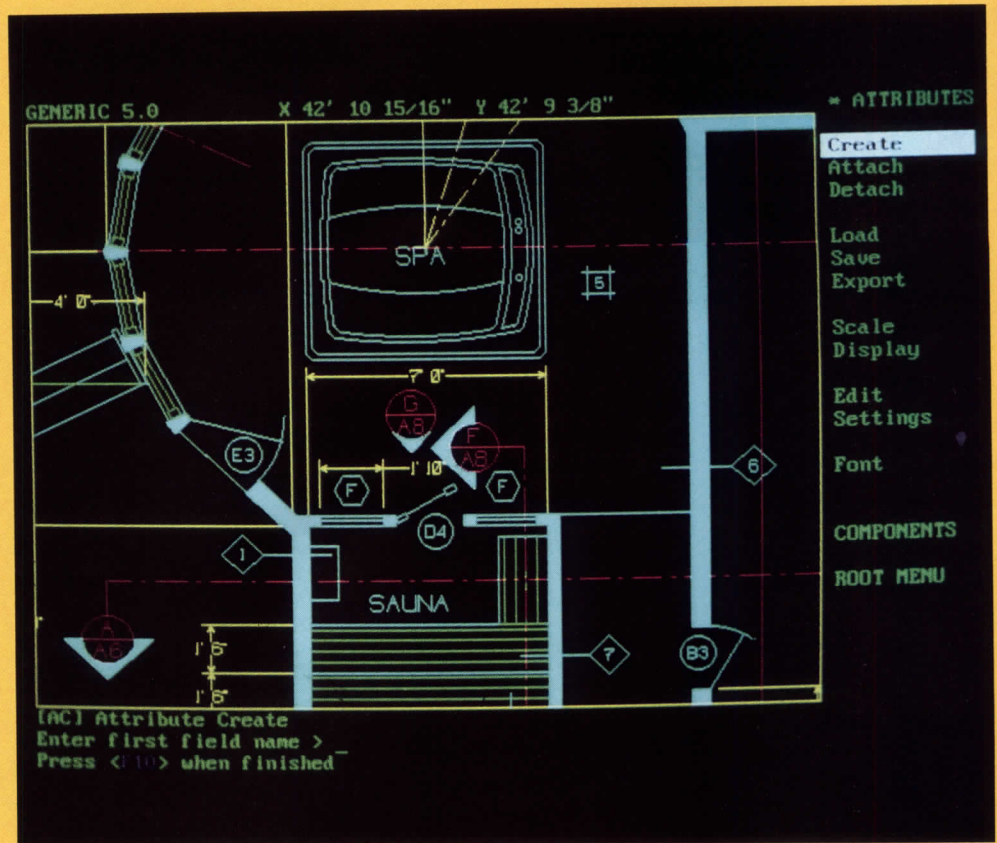
some Macintosh 2-D CADD programs, Generic CADD allows saving drawings in 32-bit or 64-bit floating point format—as precise as any DOS or UNIX system. That makes the system run a bit slower; backward redraw helps.

Error trapping: Most commands (even the undo command) can be undone. You can also discard the current drawing and use the last version saved—a move that requires confirmation, but which cannot be undone. The biggest flaw in the undo command is that it cannot undo deletion of an entire layer. You should probably get used to saving symbols as you create them. Otherwise, you can lose them on your drawings.

For more information, circle item numbers on Reader Service Cards. 308

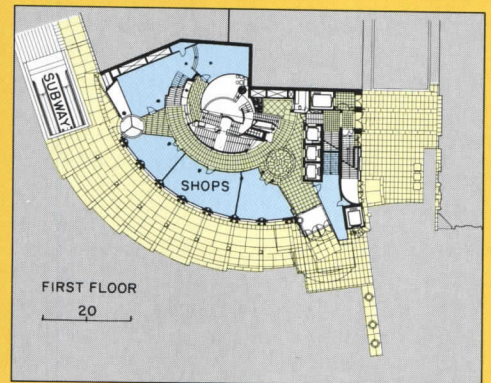
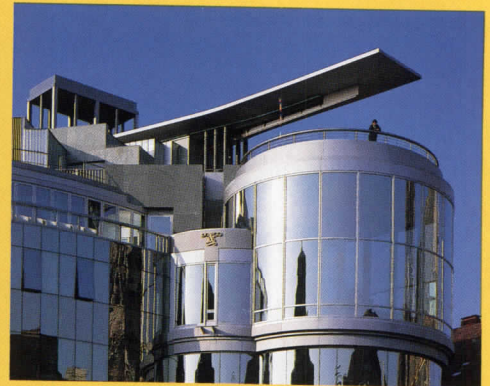
Below: In the generic CADD DOS version you create an attribute one field at a time. Each attribute can hold 128 fields, and each field can be up to 80 characters.

Some characters (including slash) are not allowed. Bottom: With the Mac version, palettes can be moved easily. Symbol lists can be moved around the screen.



Rewriting the Rules: Hans Hollein Builds a Mall in Vienna

© Richard Bryant photos



By Tracy Metz

In Vienna, city of pastries, there is a certain cookie, a thin wafer with chocolate called 'Manner Schnitten'. It comes in tins decorated with a picture of St. Stephen's, the cathedral at the heart of Vienna and the city's most beloved icon. Little could architect Hans Hollein have suspected in 1985 how important a role this morsel of popular culture was to play in the public debate that engulfed the Haas-Haus, his new building facing the cathedral.

Although he had long achieved international acclaim, Hollein had never built anything big in his home city; the Haas-Haus would be his first large-scale commission in Vienna. It was made possible by the unwavering political support of socialist mayor Helmut Zilk. Located as it is on the most sensitive site imaginable, this complex of shops, offices, and rooftop restaurant and cafe has provoked a controversy at times verging on the vitriolic. Detractors claimed the Haas-Haus would ruin the view of the cathedral everyone knew and loved—i.e., the view on the 'Manner Schnitten' tin. "But that was a 19th-

century artist's impression," Hollein protests. "That view never existed!"

Going back to what did exist, Hollein retraced the configuration of old Roman fortifications and discovered that the rounded corners of the castrum (or fort) are still perceptible in today's property lines. Fanning out from this corner are three urban spaces, their borders blurred by time but still very much a part of Vienna's physical form: the Graben, an old Roman moat; the Stock im Eisen-Platz, dating from medieval times; and the Stephansplatz, once the cathedral's graveyard and now its square. By dint of its location, the building on this site functions as a hinge.

Hollein's Haas-Haus is the third structure of that name on this spot. The first, a home-furnishings store named after its owner Philip Haas, was built in 1866 by the same architects who designed the Vienna Opera House. The original Haas-Haus was destroyed in World War II, and was replaced in the '50s by a dull plastered building, recessed 15 feet to create space for a bus station. In 1985 a

Across from St. Stephen's Cathedral (above left), the Haas-Haus sits at the historic heart of Vienna. Although built of modern materials, the complex echoes the rounded corner of an ancient Roman fort that once stood on the site.

consortium of municipal banks and insurance companies bought the building to prevent its falling into the hands of a low-priced department-store chain. A remodeling plan was soon dropped in favor of an entirely new building, to be designed at Mayor Zilk's instigation by Hollein.

"This was Vienna's last chance to correct the errors of the past," says the architect. "The old building line could be re-established, and it would be at least partially possible to separate the cathedral square from the adjacent urban space, both architecturally and in terms of use."

Each of the Haas-Haus's elevations responds to the character of its surrounding space—a deft interweaving of architecture and urbanism that distinguishes Hollein's

With its glittering skin and tradition-busting geometry, the Haas-Haus has caused a stir in the heart of historic Vienna.



The glass tower and sculptural roof canopy of the Haas-Haus (top opposite) offer views of downtown. Inside the shopping complex, Hollein created a dynamic environment anchored by a 'mountain' of stairs (above).

best work. Along the Graben, for example, diagonal panels of light-green Amazonite stretch across the curved facade, with square openings that evoke the 'punched hole' windows common to Vienna. But above the Stock im Eisen-Platz, the stone peels away to reveal reflective glass.

There is no trace, however, of the idea that the outside of a building should be related to the functions on the inside; indeed, the retail area of the Haas-Haus is an entity unto itself, a discrete homage to consumerism with no visual link to the outside urban fabric. In the restaurant and cafe, on the other hand, the view of cathedral and square is the whole point, and in the third floor record shop Hollein has added a pert little 'love seat,' projecting like a glass pod out of the side facade. A similar gesture is the tilted

stone cube marking the transition between the horizontal planes and the vertical glass cylinder cantilevered out over the subway. "I wanted an irritating element," says Hollein of the cube.

The building's cylindrical tower terminates in a sort of diving board, part of the sculptural roofscape Hollein uses as a modern-day counterweight to traditional Viennese rooftop decoration. Behind this bit of architectural folly stands a tempietto, reminiscent of the entrance pavilion at Hollein's art museum in Mönchengladbach. Just across the Graben stands Otto Wagner's Anker Building with its famous glass cupola, now the studio of painter-architect Hundertwasser.

From the start, retail consultants for the Haas-Haus objected to Hollein's plans for the project's interiors: Viennese shoppers would never venture above the ground floor, nor would they take the elevator up to the rooftop restaurant and the cafe in the out-sized bay window. Hollein has proved them wrong. The restaurant and cafe are packed, and shoppers blithely climb his 'mountain' of staggered stairs and escalators, much to the chagrin of the ground-floor shopkeepers who pay 10 times the rent of those above and below.

Between the entrance and the atrium stands a typical Hollein rotunda, complete with gilded ceiling. The mountain of stairs, executed in light-yellow Beauvillon Ruban limestone with highlights of red and green marble, ends in a bright red Chinese bridge, a sky-blue wall, and a tree.

The upward swirl of the interior is enhanced by such suggestive elements as a Jugendstil female statue holding a neon strip aloft, and a one-person lookout cantilevered out over the atrium. The translucent ceiling of the atrium, resembling the cross-section of a shell, can be back-lit to suggest daylight, twilight, or—at closing time—a somewhat inhospitable blue light.

The project also allowed Hollein to redesign the urban spaces outside the building, a task he had performed in 1978 for a competition that was halted when jury chairman Carlo Scarpa died. Given the opportunity to create

a stage for his own performance, Hollein sunk lights encased in red granite into the sidewalk, placed an arc of pedestals with lights around the front, and provided visitors with a few front-row seats on a zigzagging bench of green stone. One essential element is yet to come: three granite columns, to be placed along the line where the Stock im Eisen-Platz meets the Stephansplatz. Only then will the demarcation suggested by the tall cylinder between spaces sacred and profane become an urban statement.

To make it possible to build a non- (anti-?) historicist building like the Haas-Haus, Vienna had to alter its building code. Just 15 years ago, the city ratified Article 85, requiring all new buildings within a landmarked area (including the entire historic center) to resemble their neighbors in style, height, and color. When the Haas-Haus project threatened to become entangled in law suits, the city council reworded the article. "It's now called Lex Hollein," grins the architect. "Other architects have already profited from this precedent: without it Coop Himmelblau could not have had their plans approved for the remodeling of a theater here in the center of Vienna."

Compliance with Article 85 would have been difficult, given that the neighboring buildings range from Renaissance and Baroque to Biedermeier and on through the 19th and 20th centuries. Hollein, though, acknowledges Vienna's architectural evolution. But instead of trying to imitate previous styles, he has added yet another layer to the mix of buildings and styles. Given this, Hollein's approach to the Haas-Haus's urban context is clearly respectful, enriching our experience and awareness of the city's historic fabric.

But in its brashness, in particular the banal glitter of its reflecting glass, the Haas-Haus screams for attention, pushing itself to the fore. In spite of Hollein's claim that the controversy over context had no influence on his design, the final result flaunts a modernity so strident that it almost becomes a gratuitous gesture of defiance. In its juxtaposition to the cathedral, the Haas-Haus comes down heavily on the side of the profane, in this case the commercialism and hedonism of the late 20th century. ■

The Story of His Success

I. M. Pei: A Profile in American Architecture, by Carter Wiseman. New York: Harry N. Abrams, 1990, 320 pages, \$49.50 (cloth).

Reviewed by David Mohnhey

In this engaging and unorthodox book, Carter Wiseman crosses a sympathetic biography of I. M. Pei with a selective narrative of the firm that bears his name. The biography is largely anecdotal, told through scores of stories and recollections from an impressive variety of sources. The narrative focuses almost exclusively—and in great, even personal, detail—on only eight projects from the firm's substantial body of work. But just when the reader begins to feel too close to the proceedings, Wiseman closes each chapter with a paragraph of cogent criticism. The result is a compelling story of the complementary and conflicting forces involved in the process of building today.

Of the eight projects Wiseman chose to examine, six are primarily Pei's: the National Center for Atmospheric Research outside Boulder, Colorado; the Kennedy Library in Boston; the Dallas Municipal Administration Center; the National Gallery East Building in Washington; the Fragrant Hill Hotel near

David Mohnhey is a principal in the firm Chan and Mohnhey Architecture.

Beijing; and the Louvre project in Paris. Two other projects are by Pei's longtime partners: the John Hancock Tower in Boston by Henry Cobb, and the Javits Convention Center in New York by James Freed. Other Pei designs that relate to the topic of each chapter, such as Myerson Hall in Dallas (below), are touched upon only in passing. A complete chronological listing, partially illustrated, is provided as an appendix.

Pei's prominence in American architecture is due almost solely to his buildings (and perhaps to his substantial charm, which Wiseman documents throughout the book). Pei doesn't write or lecture much, and his involvement with academia is minimal. But what he does do is build.

Pei's practice had its origins in an unlikely place, the offices of New York developer William Zeckendorf. Arriving from Gropius's Harvard in 1948 as a talented but inexperienced professor, Pei quickly transformed himself into an active participant at the developer's side. Pei's involvement in the building process—including program, planning, and cost, as well as design—set a standard for the rest of his career.

Although different in almost all aspects, Pei and Zeckendorf developed a close relationship—a pattern that Pei has repeated throughout his professional practice. From

maverick scientist Walter Orr Roberts at NCAR to François Mitterrand at the Louvre, Pei has established remarkable rapport with his clients, a habit that has overcome (usually) significant cost overruns, technical or fabrication problems, and numbing delays.

Wiseman provides a detailed, and often emotional, view of Pei's process of executing selected designs. One only wishes he had been able to consider even more projects in the same detail and had applied the same scrutiny to the design process itself. He might also have examined more thoroughly the relationship between Pei and his partners. But these are minor criticisms. Wiseman's portrait of Pei reveals the depth of the architect's belief in the power of design and the personal and professional consequences of that belief. ■

Briefly Noted

The New Japanese Architecture, by Botond Bogner. New York: Rizzoli, 1990, 224 pages, \$50 (cloth), \$35.50 (paper).

An overview of work from the 1980s, this well-illustrated book includes an introduction by John Morris Dixon, and essays by the author, Hajime Yatsuka, and Lynne Breslin. Essays analyze the role of the avant-garde, Japanese urbanism, and basic design trends. Projects by 23 architects are presented with short texts, many of which were written by the architects themselves. The book is the first (along with *The New French Architecture* by Wojciech Lesnikowski) in a series of volumes on contemporary international architecture.

Spanish Contemporary Architecture: The Eighties, edited by Xavier Güell. Barcelona: Editorial Gustavo Gili, 1990, 192 pages, \$58.50 (cloth).

As Joseph Rykwert observes in his introduction to this handsome book, "Spain has been Europe's great surprise." In the past decade the country has pulled itself out of its Franco-induced isolation and encouraged a talented new generation of designers. The short introduction and brief written descriptions play second fiddle to the drawings and photographs of 28 different projects by architects such as Pep Bonet, Santiago Calatrava, and Rafael Moneo. ■



Courtesy Harry N. Abrams

Stop \$75 million from going up in smoke.

Money seems to be no object when it comes to making a high rise impressive. Yet, too often, budgets seem to run dry when it comes to fire containment systems that improve occupant safety.

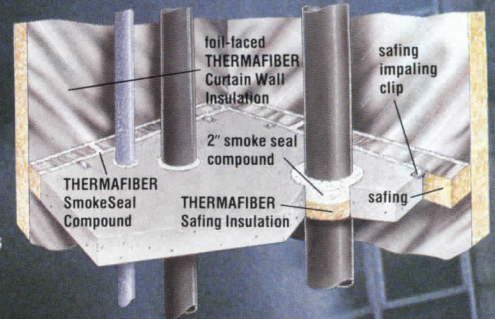
Cut corners by specifying low-melt-point foam or glass fiber insulations, and risk the spread of fire and deadly gases when they break down. Install sprinklers to improve fire safety, but smoke and fire still might not be effectively contained, causing fatalities away from the source.

A tested, reliable method for containing fire and smoke to the floor of origin is the THERMAFIBER™ Fire/Smoke Stop System. By sealing off all perimeter openings with foil-faced THERMAFIBER® curtain wall insulation, safing insulation and SMOKE SEAL™ compound, and filling poke-through openings as well, fire and smoke can be effectively contained.* The added protection costs little more than assemblies using insulations that are not fire resistant.

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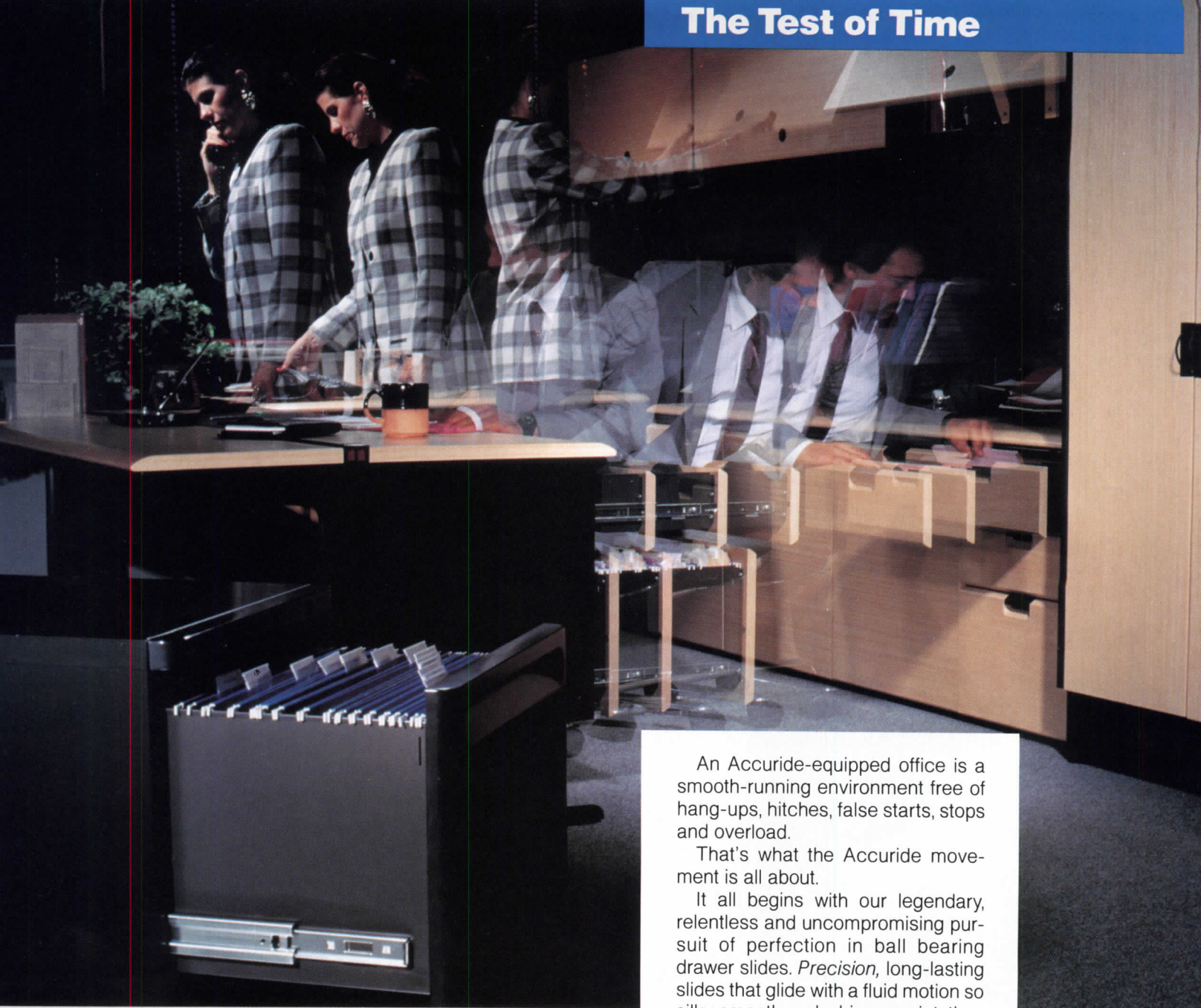
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1989

IBD/NY AUCTION Committee Members: Bonnie Scott Sorman BSC Inc. Richard Carlson Swanke Hayden

1990

1983

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Cidny Hammeger
Hammeger Design Studios
John Lauruska
EL Designs, Ltd.

1984

Michael Stark
Schaefer Cassety, Inc.
Mario Riservato
O'Brien-Riservato
Len Johnson
W.B. Wood Co.

1985

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Furniture Consultants, Inc.
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Empire Office Equipment

1986

1979

Wendy Jorgensen
Milliken Contract
Susan Saunders
Swanke Hayden
Connell Architects
Meryl Zassman

1980

Sherri Simko
The Gunlocke Company
Sydelle Hird Kinzler

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Design:
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Swanke Hayden
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1982

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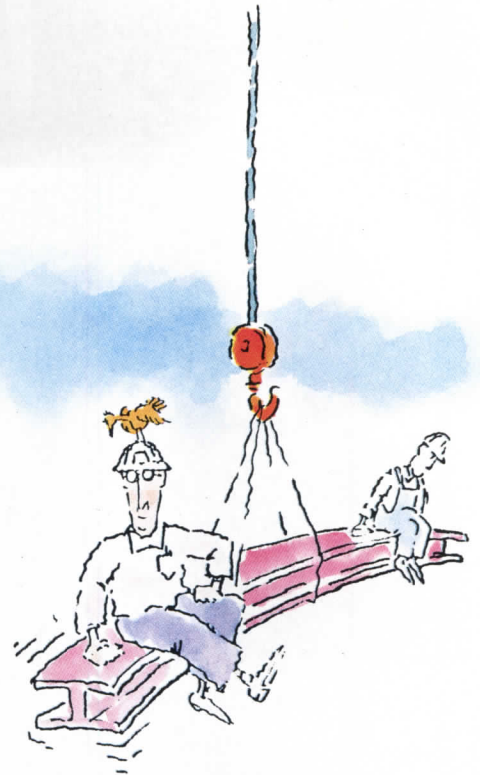
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Architect: Thompson, Ventulett,
Stainback & Associates, Inc., Atlanta

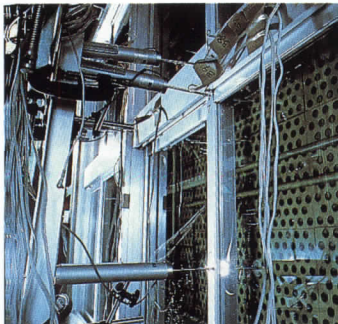
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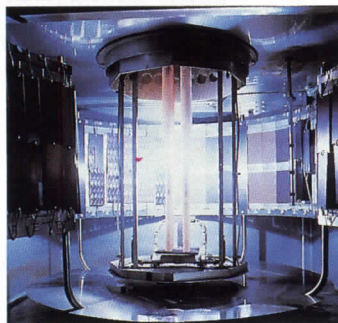
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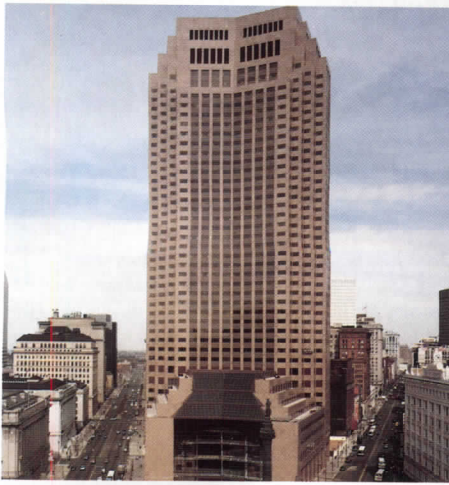
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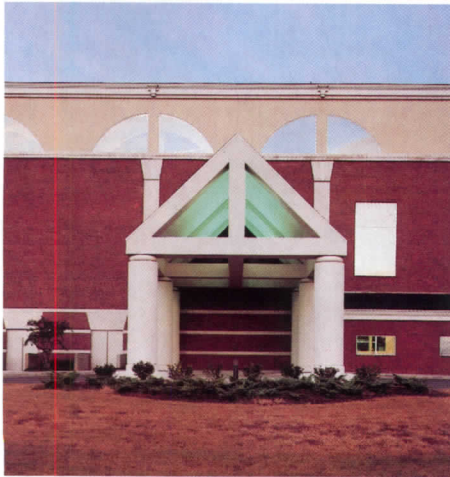
BP America Building, Cleveland, Ohio
Architect: Hellmuth, Obata & Kassabaum, Inc.
Photo: Bill Schuemann



Imperatore Library, Englewood, New Jersey
Architect: Bohlin Powell Larkin Cywinski
Photo: Christopher Barone



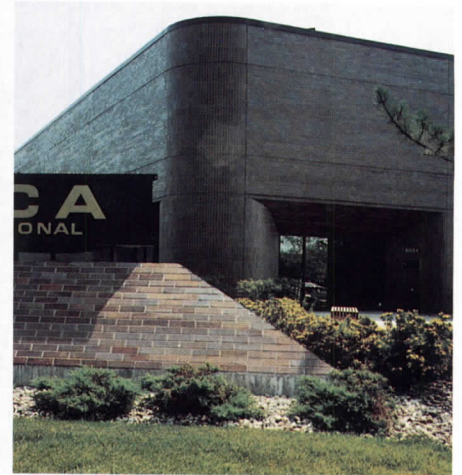
The Humana Building, Louisville, Kentucky
Architect: Michael Graves
Photo: Pashall/Taylor



Frank Moody Music Building, University of Alabama, Tuscaloosa, Alabama
Architect: Fitts & White
Photo: Balthazar Korab Ltd.



Unity of Dayton Church, Huber Heights, Ohio
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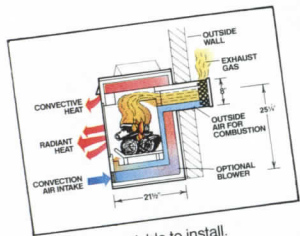
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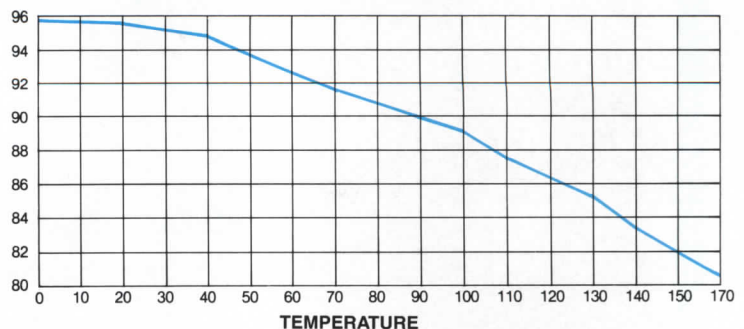
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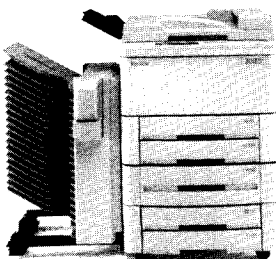
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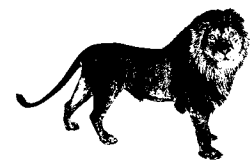
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Building Types Study 690/Record Houses 1991

Thirty-five years ago, RECORD introduced what was to become one of the most enduring and popular editorial features in our century-long history—an annual issue given over to the year’s most significant works of residential architecture. In that first issue of RECORD HOUSES, the editors talked about “The New House for Family Living,” a title that explained as much about American postwar society and its frenzied, family-oriented move toward the suburbs as about the single-story, glass-walled Modernism that characterized domestic design of the period.

The 10 completed houses and one work in progress that we present in this issue of RECORD HOUSES likewise reflect the current condition of the American family—clients include married and unmarried couples with and without children, older couples with grown children, a single woman who cares for her elderly mother. What is more, they collectively tell a story of late 20th-century stylistic freedom, tempered by environmental concerns and finite financial resources. They range from a tiny shore-front vacation cabin in the Pacific Northwest to a Texas-sized ranch near Austin made of elements recycled from an abandoned cement plant.

In 1956, RECORD reported that “houses built now are outwardly an expression of our industrial age and of our American manner of living.” To determine just how much—and how little—things have changed over the past three and a half decades, turn the page and judge for yourself. *P. M. S.*

Freedom of Assembly



*A house in northwestern
Connecticut evokes New England's
vernacular architectural tradition.*

*Bargonetti House
Kent, Connecticut
Steven Harris & Associates,
Architect*



If history-book illustrations were the sole source of architectural inspiration, the house that Steven Harris has designed for Phyllis and Arthur Bargonetti in northwestern Connecticut might have turned out as some variation on a white-painted-Colonial theme. But Harris, who runs his four-person practice out of a loft in downtown Manhattan, is part of an expanding group of American architects whose work owes a substantial debt to buildings that never quite made it into the pages of Bannister Fletcher. "I am fascinated by ordinary buildings that have an authentic relationship with the landscape and depend on pragmatism for their form," Harris acknowledges. "These buildings mean something, they are an integral part of a region's culture."

For the Bargonettis, Harris began by looking beyond the carefully composed pre- and post-Revolutionary domestic architecture that has made this corner of Connecticut a favorite haunt of New York City's weekend gentry. The architect investigated the pumping stations, sheds, silos, and other artless utilitarian buildings associated with the area's agriculture, forestry, and water management, and he found that these workaday structures shared two important characteristics: they tended to be grouped in random clusters with ad-hoc additions, and they often boasted exaggerated, even eccentric, proportions. Their naive plainness seemed an ideal point of departure for clients who imposed relatively few programmatic or stylistic constraints, asking only that their new house be comfortable, unpretentious, and modern.

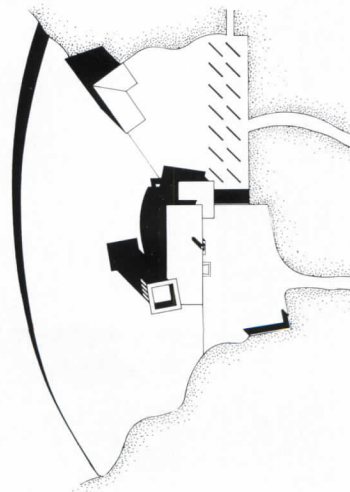
The result is a freely assembled, late 20th-century version of a New England farmstead—a 2,300-square-foot building ensemble, clad in white-cedar shingles and comprising three principal elements that Harris likens to the agrarian typologies of barn, shed, and silo. Set atop a ridge overlooking the Housatonic River valley, the house encompasses a 23-foot-high barrel-vaulted main living space (the barn), a pent-roofed kitchen wing (the shed), and a 32-foot-high tower (the silo) housing the master bathroom and Arthur Bargonetti's study. (A separate two-car garage and 500-square-foot guest studio are situated in a second shed, just down the hill from the main house.) There is no way, of course, to mistake this exercise in rustic recall for a real working farm: details like a flaring entrance canopy, horizontally divided corner windows, and a cantilevered wood deck are obviously the stuff of architect-designed Modernism. But when Harris shows a visitor locally taken snapshots of a small shed-roofed grandstand, a pair of oddly juxtaposed barns, and a zigguratlike wood tower, the vernacular influences on his work become clear.

Inside, Harris avoided dividing up the main section of the house into a warren of small rooms, electing instead to leave much of the central space as a two-story living/dining room that rises 23 feet to a barrel-vaulted ceiling of tongue-and-groove maple planks. To insure that one fully experiences the house, the architect devised a deliberately circuitous circulation path, which takes visitors through the vaulted living room to the kitchen wing, up a narrow stair, and back across the living room along a steel catwalk. (The catwalk was specifically requested by Phyllis Bargonetti, who wisely foresaw striking interior and exterior views from this 10-foot-high perch.) The walkway terminates in the master-bedroom suite, which is joined to the tower study by a circular stair. If none of this seems very rustic, look again: the master bedroom resembles a hayloft and is separated from the living room by a pair of red-painted sliding barn doors. *Paul M. Sachner*

© Langdon Clay photos



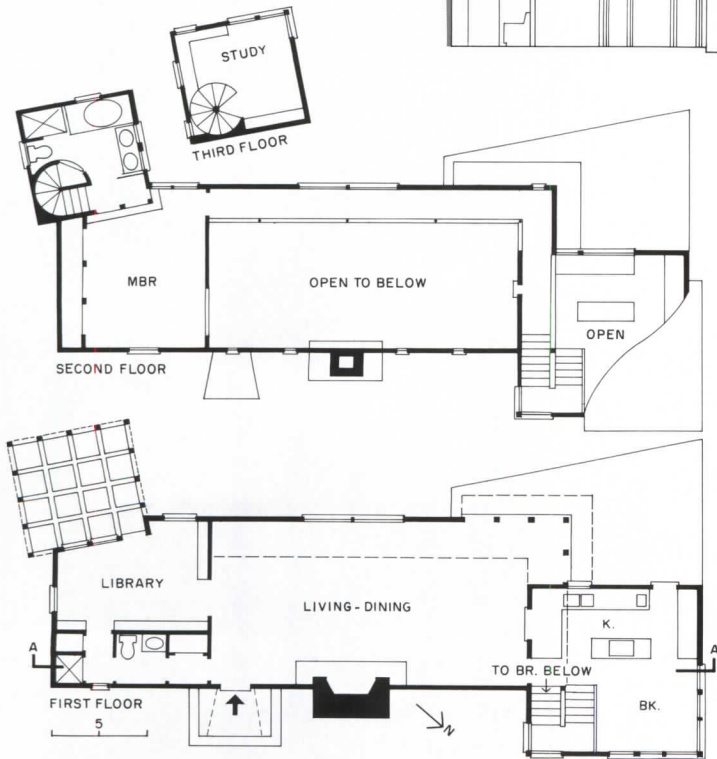
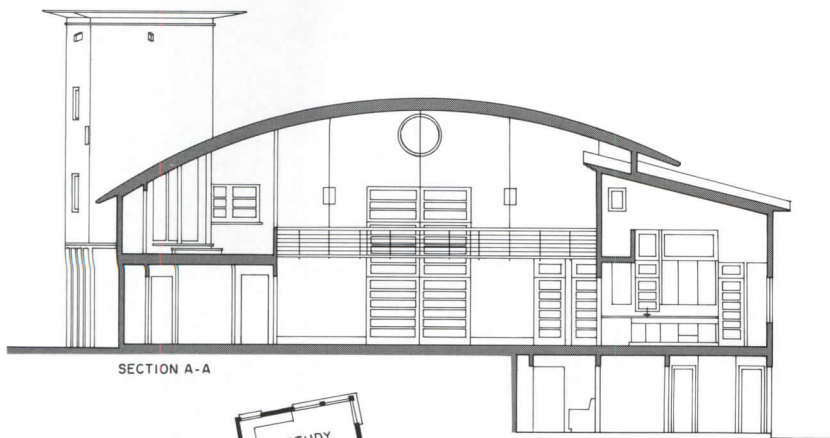
The Bargonetti House is located on a 12-acre site at the end of a winding gravel road, surrounded by a forest of hemlock, fir, and silver birch. The building's orientation was dictated partly by an excavation made by the parcel's previous owner, but mainly by views of the Housatonic valley and distant Catskill Mountains. That vista, together with Harris's wish to maximize daylighting and passive solar gain, led to extensive double glazing on the south facade, especially the 16-foot-high living-room window (above and opposite). By contrast, the north-facing facade (overleaf) is a solid wall enlivened by a stucco-clad concrete-block chimney and fieldstone firebox. The house is a structural composite of platform framing in the kitchen wing and balloon framing in the barrel-vaulted main section and tower. Reinforcing steel set into the shear walls of the main section helps resist wind loads.







The Bargonetti's master-bedroom suite overlooks the living room past sliding barn doors (left). The bedroom is reached via a three-foot-wide steel catwalk, which functions structurally as a wind-resisting horizontal truss braced to the south-facing shear wall with diagonal tie rods. A three-foot-wide slice of the shed-roofed kitchen wing intercepts the living room (opposite), its mottled yellow walls harmonizing with the color of the building's exterior cedar shingles. The kitchen's sky-blue ceiling, seen from the living room through high openings, mimics the real thing visible through small upper-level windows on the north-facing wall. On fine days, sun floods the living room through horizontally divided windows and a four-foot-diameter oculus on the south facade (a second, three-foot-diameter oculus allows nighttime stargazing from the master bedroom). The living-room fireplace is constructed of flat, dry-laid native field-stone and was inspired by stone walls that Harris viewed in the Spanish town of Cadaques, near Barcelona.



Credits

*Bargonetti House
Kent, Connecticut*

Owners:

Phyllis and Arthur Bargonetti

Architect: *Steven Harris & Associates—Steven Harris, partner-in-charge; Michael Kuhling; Lucien Rees-Roberts, assistant*

Engineer: *Ross Dalland, P. E. (structural)*

General Contractor: *Carlson Builders*



Tree House



*On a wooded preserve three miles
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Elam and Bray designed a
linear house where a fallen tree
had made a clearing*

*Chmar House
Atlanta, Georgia
Scogin Elam and Bray Architects*



Designing buildings that defer to nature without becoming completely subservient to it is one of architecture's greatest challenges. Mack Scogin, Merrill Elam, and Lloyd Bray achieved this in the 4,000-square-foot house they recently completed for Tod and Linda Chmar. Their feat owes as much to the skill of the three architects as the merits of the Chmars' property—2 3/4 wooded acres next to a nature preserve, just three miles from downtown Atlanta. And in what may seem like a bit of divine intervention, space for the house was made nature's way, by a fallen tree.

The fortuitous clearing was not lost on the architects, whose assignment for their first residential commission was to provide an open living room, dining room, and kitchen, the usual assortment of bedrooms, and accommodations for visiting parents, and, at the same time, to disturb the site as little as possible. The architects responded by raising the volume of the main house into the foliage on concrete foundation walls that step down to the north, leaving the hillside otherwise untouched.

Nearly perpendicular to the main house is a semidetached guest wing that spans the driveway, creating a sheltered entrance and carport. In plan, the house resembles an open switchblade (page 81), its sharp edge a master-bedroom balcony poking into the woods. In elevation, the house is a visual sleight of hand: from a distance, the wood-framed structure, coated in a hybrid cementitious stucco finish the color of army camouflage, disappears, leaving redwood window frames as the only remaining traces of its presence among surrounding oaks.

In organizing the interiors of the main house, which is 130 feet long and bulges to 20 feet wide in the living room, Scogin looked to the spirit, if not the exact form, of the architecture of Japan, where the Chmars themselves find daily inspiration. Indeed, the clients' practice of Japanese rituals touches not only the removal of shoes after entering the front door (where the architect actually built a low bench and shoe rack), but also includes the daily "giving and receiving of light" in a Goshinden room, which houses an ancestral altar.

Scogin arranged the rooms according to ceremonial use and meaning: the long staircase to the Goshinden room, immediately visible upon entry (pages 82-83), cannot be reached until one passes down the hallway and up steps into the "heart" of the house, where it hovers above the living-room seating area as a birch and glass shell. Opposite the Goshinden room staircase is the hallway to the master bedroom, lit by a rib cage of windows swelling out into the woods, creating a forced perspective toward the sharp prow of the master-bedroom balcony. Another staircase leading to second-floor bedrooms, current domain of baby Ian, is hung from ceiling joists by steel rods and is framed by birch and plywood panels that resemble pressed flower petals.

The architects adeptly blurred the transition between inside and outside by specifying a variety of window sizes and shapes, which frame views of massive tree shafts as well as adjacent parts of the house. Daylighting is generous throughout the house and often used to dramatic effect. For example, skylights bathe the back wall of the Goshinden room, and holes in a nearby glass-encased wood door transmit an otherworldly glow from outside (page 84 top left). The ground plane of the house sweeps out into the woods in a triangular deck off the kitchen, punctuated by five 60-foot-high leaning telephone poles, which, like the house itself, are both firmly planted and freely soaring. *Karen D. Stein*

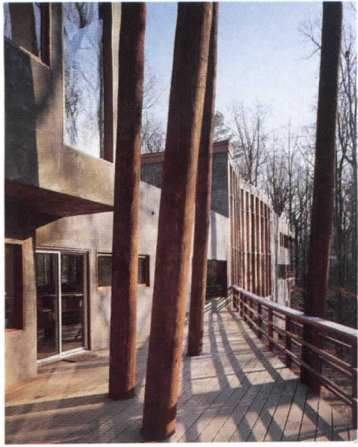


© Timothy Hursley/The Arkansas Office

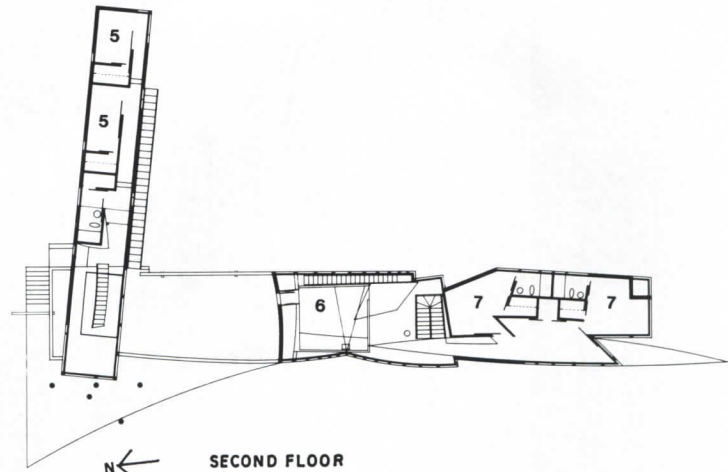
The entrance to the house (above) is beneath the stepped guest wing (opposite top), which also serves as a carport. The wing is supported by concrete foundation walls and steel building jacks, which the architects used as slim, bonelike columns. Standard industrial metal steps on inclined steel beams form a staircase to the roof terrace. Redwood window frames and copper scuppers contrast with the gray-olive concrete-stucco finish (opposite bottom right). A cantilevered deck and roof, both shaped like the blade of a Swiss army knife, jut out into the woods (opposite bottom left).



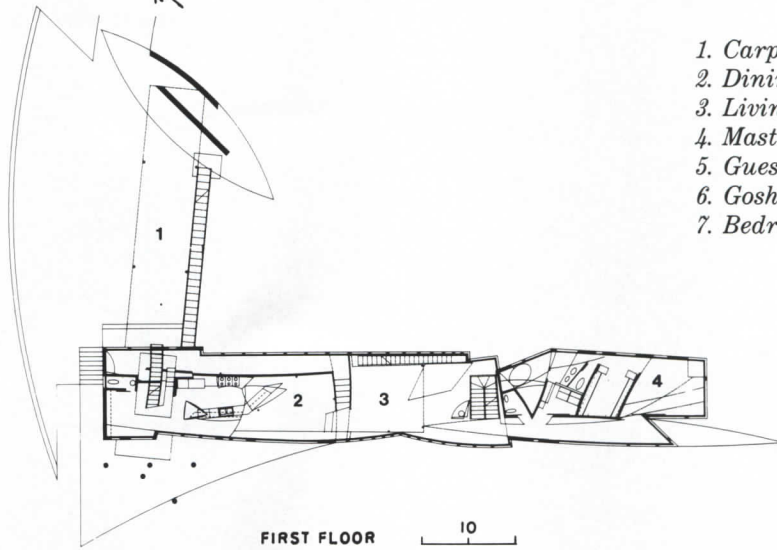




"If you don't put them in, no one will miss them. But if you do, no one will forget them," is how Mack Scogin convinced the Chmars to install five leaning telephone poles in their kitchen deck (opposite and above). The poles, however, are not just testimony to Scogin's powers of persuasion; these former trees act as a counterpoint to the house's dominant horizontality, and are a playful segue from the manmade to the natural. The main house and guest wing form an L (right).

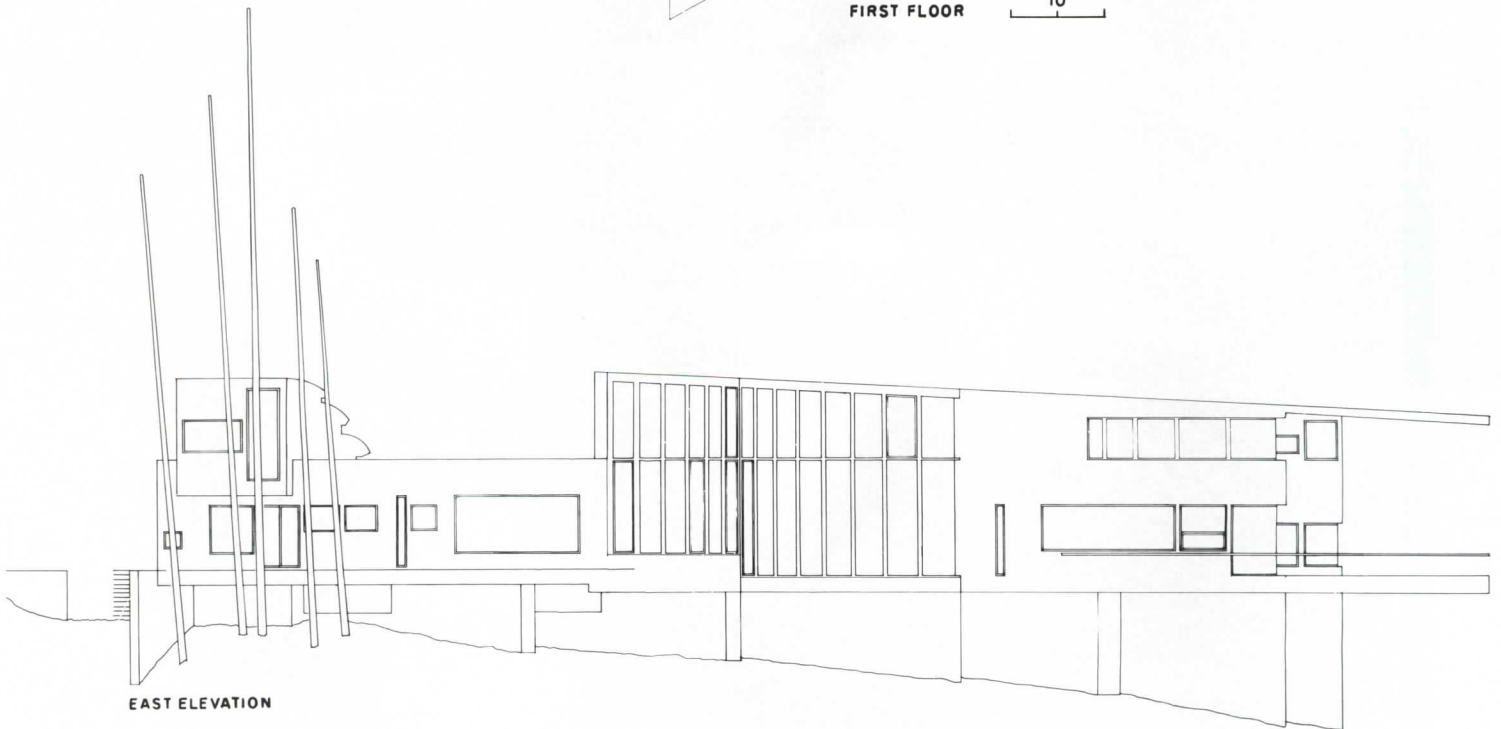


SECOND FLOOR



FIRST FLOOR

1. Carport
2. Dining room
3. Living room
4. Master bedroom
5. Guest room
6. Goshinden room
7. Bedroom



EAST ELEVATION







The living room of the Chmar House (overleaf) is bracketed by two staircases—one a minimal but highly crafted orthogonal composition of birch and redwood, which gradually climbs the daylight east side of the house to the Goshinden room (top left), and the second, a sculptural assemblage of petal-shaped birch and plywood panels and curved steel, which leads to second-floor bedrooms. Three grades of flakeboard flooring, fastened to a concrete sub-floor by bronze screws, echo the pattern of dirt paths and fallen leaves outside. Built-in benches flank an open kitchen (bottom left), where birch- and laminate-clad surfaces repeat lozenge shapes found elsewhere in the house.

Credits

*Chmar House
Atlanta, Georgia*

Owners:

Linda and Tod Chmar

Architect: *Scogin Elam and Bray Architects—Mack Scogin, Merrill Elam, and Lloyd Bray, principals-in-charge; Susan Desko, design team*

Engineer: *Pruitt Eberly, Inc. (structural)*

General Contractor: *Welch Tarking, Inc.*





Industrial Evolution

*Carraro House
Kyle, Texas
Lake/Flato Architects*



The long industrial shed of a Texas cement plant has been cut up and recycled into an unusual house north of San Antonio.



For years architects David Lake and Ted Flato admired the straightforward esthetic of the Alamo Cement Plant in central San Antonio. Built in the 1920s but now demolished, this local icon of industrial Modernism had the clear geometry and functional directness that have inspired many postwar architects. Lake and Flato especially liked Alamo Cement's elegant steel-framed sheds, so when Francine and Henry Carraro came to the architects two years ago with a proposal for a new house on a tight \$100,000 budget, the architects seized the chance to salvage some portion of the complex.

The Carraros—Henry is a computer analyst, Francine is a writer—were receptive to the notion of adaptive use, and initially considered buying, moving, and reassembling a spacious stone barn. When that proved too expensive, Lake and Flato took the couple to Alamo Cement. Even though the plant's "truly Piranesian scale" made most of the structures unusable, the smallest building on the lot—a 40-by-180-by-20-foot-high shed—had recycling potential. The architects dismantled the shed's eight-bay steel frame and trucked it to the client's hill-country site, a 40-acre parcel of oak-studded bottom land 30 miles south of Austin. Cutting the long structure into three pavilions, Lake/Flato enclosed 6,400 square feet of space for a fraction of the budget, overlaying repetitive industrial elements with fragments of the local vernacular.

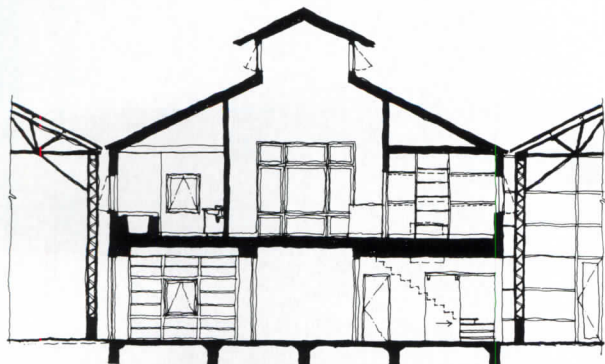
The one-bay-wide central pavilion, a dog-run entry with a master-bedroom suite on the second floor and a small study on the first, is wrapped in a shiny galvanized skin with yellow-painted projecting steel elements. To the south, three open bays cover a parking area for cars and tractors; to the north four green bays are tautly stretched with screening into a Texas-sized porch. In the corner of this largest pavilion hunkers a stone cube, a cavelike retreat from the wide open spaces. Constructed in two colors of soft local limestone, this living-room and kitchen block shelters the south-facing porch areas from winter storms, and appears as a ruin incorporated within the larger, protecting steel structure, a house within a house.

The Z-shape of the reassembled sheds orders the site by loosely defining a motor/entry court to the west and a living court to the east, connected through the central breezeway. Though still imposing in scale, the largely transparent house fits easily into its rural setting. The only solid materials, stone and galvanized siding, are common in the regional vernacular. Flato intended the stone, laid in the German smear technique, to be an elegant contrast to the cheap steel and sheet metal. While the character of the house was influenced by the old steel frames, the architects felt no design constraints imposed by the modular structure. They are fully satisfied with the result, which avoids "wasting another nice thing," in Flato's words, while perpetuating the memory of Alamo Cement. *Gerald Moorhead*

© Paul Hester photos



A combination of industrial and rural images is tied together with the lacy steel structure salvaged from the Alamo Cement Plant in San Antonio. Texas limestone and corrugated galvanized steel, common materials in local barns and farmhouses, enclose the sleeping and living areas. Lake/Flato built up the plan in a cellular fashion, adding simple spaces the way a one-room log cabin grows in increments. The original cement-plant shed was divided into three pavilions, the largest a four-bay, Texas-sized screened porch (overleaf and opposite). Metal screening is stretched over long runs, further emphasizing the building's large scale. (The steel frames are 20 feet tall at the eaves.) Each pavilion is painted a different color: green for the semi-outdoor porch, yellow for the entry pavilion, and red for the machine shed.







The dog-run entry (top left) is lined with smooth, galvanized sheet metal, its folded sheet-metal light fixtures made by Graham Martin. The steel frame and stairs leading to a second-floor guest room were salvaged from Alamo Cement (middle photos). In the living room (bottom), a deep fireplace alcove is constructed of recycled cement kiln bricks. The soft creams and rusts of Texas limestone are complemented by the deep ochre of Mexican brick porch paving (opposite), which is laid over sand to allow drainage.

Credits

*Carraro House
Kyle, Texas*

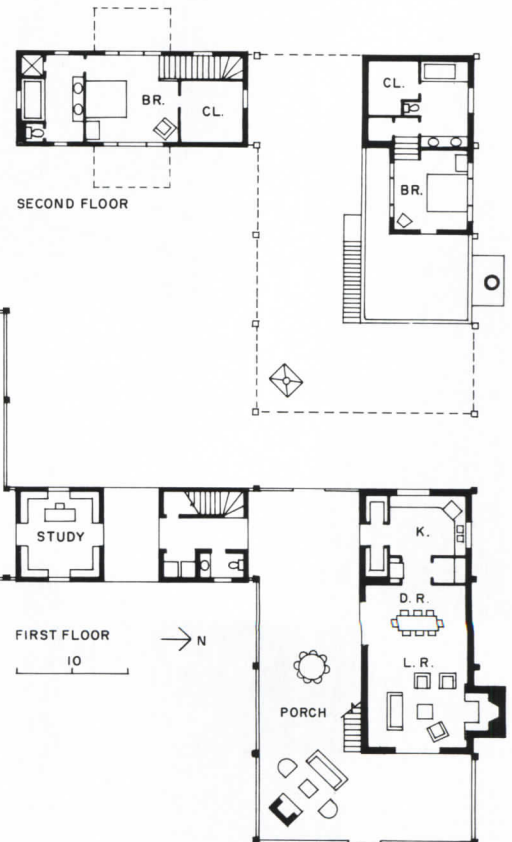
Owners:

Henry and Francine Carraro

Architect: *Lake/Flato Architects—Ted Flato, David Lake, Graham Martin*

Engineer: *Reynolds-Schlattner-Chetter-Roll, Inc.*

General Contractor: *Allen Custom Homes, Inc.*





Turning the Corner



*For their own house in Chicago,
Joseph Valerio and Linda Searl
tested their marriage by
collaborating for the first time.*

*Valerio/Searl House
Chicago, Illinois
Joseph Valerio and Linda Searl,
Architects*



Over the years, Joseph Valerio and Linda Searl have developed distinct approaches to architecture. Valerio works with a hard-edged Modernist vocabulary, while Searl employs more traditional forms related to the Arts-and-Crafts movement. Running their own firms, they both have grown accustomed to having the last word. So when they collaborated on the design of their own house in a transitional neighborhood west of the Chicago Loop, they knew it wouldn't be easy. "It was a long process of sketching, rejecting, and redrawing," recalls Valerio. "It was really rough."

At first glance, Valerio seems to have won most of the arguments. A concrete-block shell with exploded corners defined by either glass or open wood framework, the house seems to be thoroughly Modern. Searl's hand, though, comes through in the tall proportions of windows punched into masonry walls and especially in the tightly crafted staircase that serves as a subtle but important anchor to the house's floor plan. While the two architects come from different design backgrounds, Valerio admits, "In the end, we put aside our prejudices." As things turned out, it was Searl, the traditionalist, who insisted on painting the 4-inch-high (almost brick-sized) blocks white, a color identified more with the International Style than the Prairie Style.

Because the house sits across the street from a nondescript brick school in a part of town where ranch houses from the 1950s abut multifamily residences, the issue of relating to an existing context was minimized. The neighborhood's lack of a consistent style allowed Valerio and Searl to pursue their own design course, setting their house apart from its neighbors without seeming rude. A measure of the neighbors' acceptance of the house, notes Valerio, is the absence of any graffiti on its temptingly white walls.

Due to the structure's location at an intersection, "The most important urban feature is the corner, not the street edge," explains Searl. In both elevation and plan, the corner serves as the dominant theme. For the entry to the house, the architects carved out the corner, then erected a wood frame as a kind of ghost element. In the living room and again in the kitchen, they treated corners as oversized "dormers" with glass on two sides. As for the plan, Valerio and Searl placed the living and dining rooms perpendicular to each other, thereby emphasizing the intersection of the two spaces—the corner. And at the center of the plan, the beat goes on with a four-cornered staircase winding tightly around a storage shaft. Not surprisingly, everyone involved in the project calls it "the corner house."

At only 1,700 square feet, the house can't afford to waste space. By forsaking an axial layout for one based on an L-shaped living-dining area, the architects were able to eliminate corridors on the ground floor. And by popping out corners with lots of glass at the top, Valerio and Searl flooded the interior with light and created the illusion of space. Upstairs, two small bedrooms serve Valerio's two sons when they visit.

Originally, the architects maintained an all-white palette inside as well as outside the house. They soon realized, however, that color was needed to animate wall surfaces and prevent the interior from being too static. So they added a soft mustard hue inside the kitchen's windowed corner, a subtle green to that of the living room, and a chalky blue to the wall wrapping around the staircase. The result is a more complex and dynamic interior, especially when sunlight streams through the high windows of the house's trademark corners. *Clifford A. Pearson*



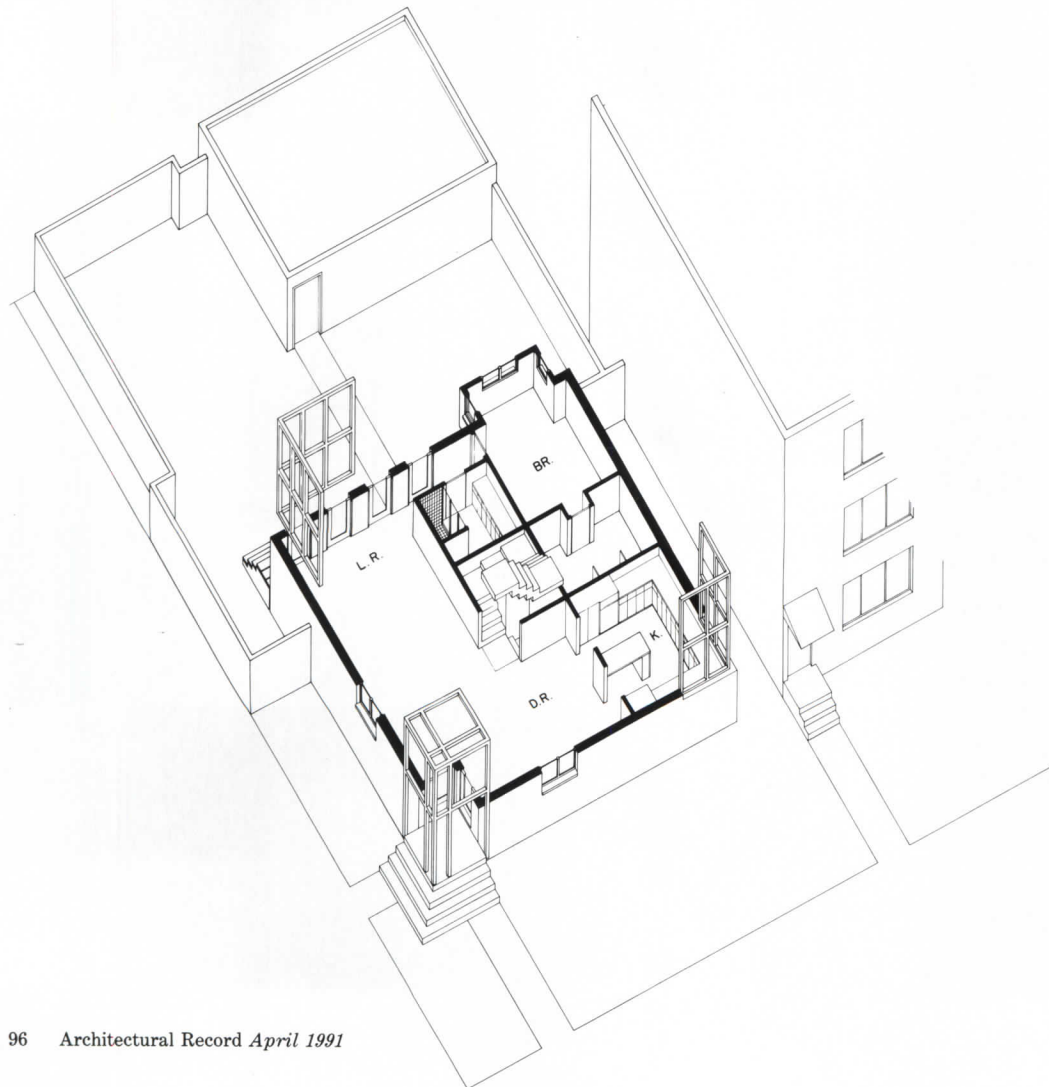
In a departure from traditional rules of composition, Valerio and Searl emphasized the corners rather than the centers of their house's street elevations (overleaf and opposite). Structurally, the house is traditional, with load-bearing masonry walls and wood corner elements. To add texture to the concrete-block walls and highlight their masonry structure, the architects turned a few of the blocks perpendicular to the wall plane (opposite). The rear of the house (above) opens onto an enclosed yard defined by a 6-foot-high privacy wall and a detached garage (not shown).

© Jamie Padgett/Karant & Associates (exteriors)





© Barbara Karant/Karant & Associates (interiors)



Birch cabinets reminiscent of overscaled rusticated columns separate the kitchen from the dining room without sealing it off (left). Sliding birch doors close off the staircase at the intersection of the living and dining areas (far left in photo). After these photographs were taken, the architects painted the wall wrapping around the stair a chalky blue and added subtle tones of yellow and green to the windowed corners of the kitchen and the living room (opposite). Sun streaming through the glazed corners helps animate the interiors. A set of four doors leads from the living room and bedroom foyer to the backyard. Like many Chicago houses, this one is served by a rear alley with a detached garage (axonometric below). Forsaking axial symmetry for a simple L-shaped plan, the architects were able to eliminate corridors on the ground floor of their 37- by 37-foot house. And by using easy-to-build load-bearing masonry walls, they kept construction costs down to \$100 a square foot.

Credits

*Valerio/Searl House
Chicago, Illinois*

Owners: *Joseph Valerio and
Linda Searl*

Architects: *Joseph Valerio and
Linda Searl*

Engineers: *Stearn-Joglekar
(structural); Wallace-Migdal
Engineers (mechanical/
electrical)*

General Contractor: *Richard
Van Pelt*

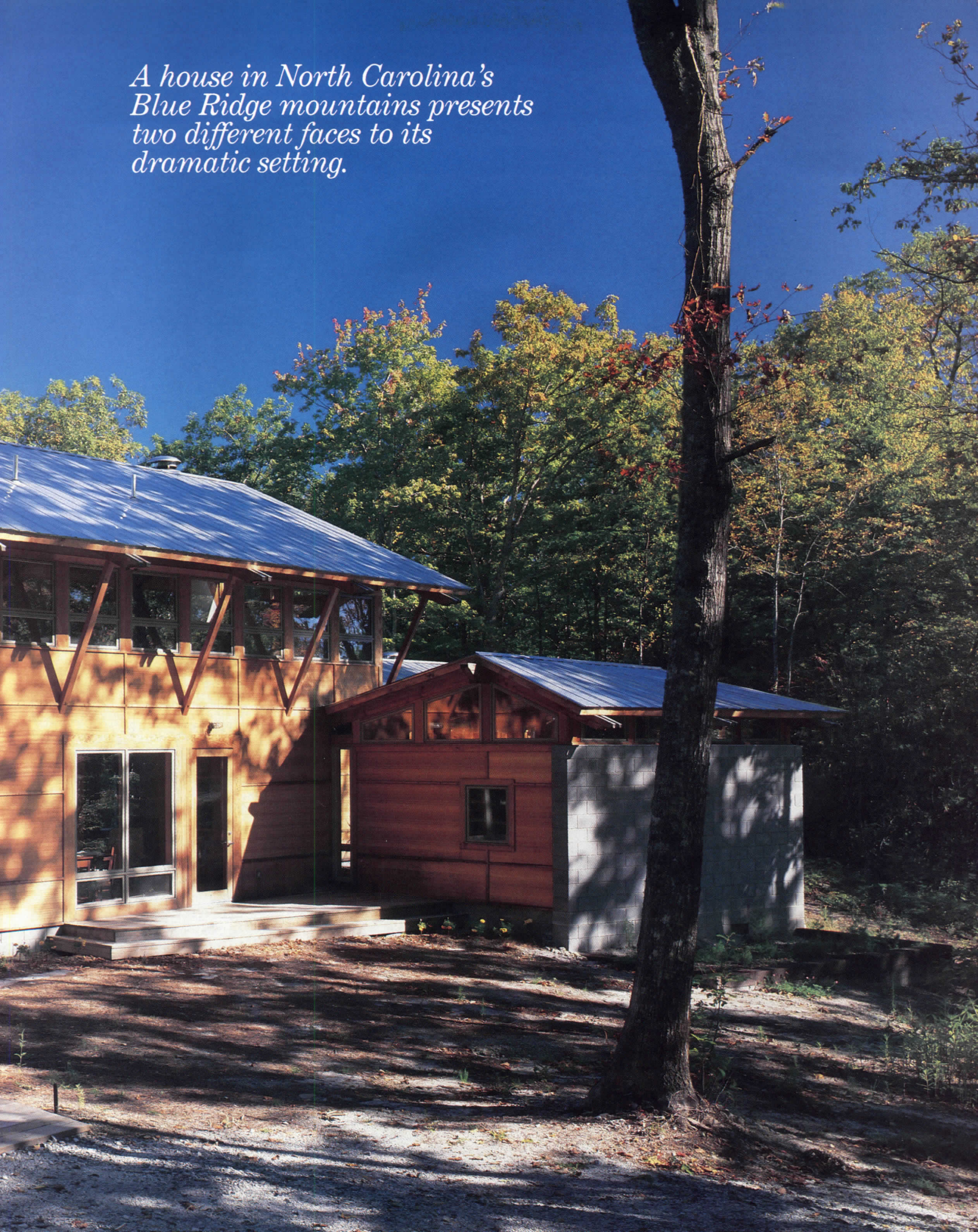


On The Edge

*Moore House
Cashiers, North Carolina
Marlon Blackwell, Architect*



*A house in North Carolina's
Blue Ridge mountains presents
two different faces to its
dramatic setting.*

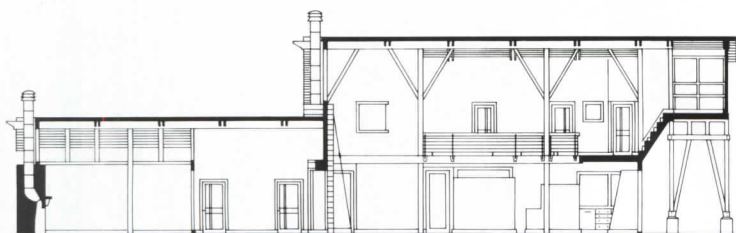


When speaking of the Moore House in particular and his work in general, Marlon Blackwell often mentions the importance of “polar oppositions.” Set on a granite ridge with spectacular views of mountains to the north and woods to the south, the 2,300-square-foot house responds to its site with two different kinds of facades. If not exactly polar opposites, the elevations are at least flip sides of the same coin. Approached from the south, the house is a formal composition of wood and concrete boxes with overhanging rafters and tin roofs. From behind, however, it shows a more ad-hoc, idiosyncratic character, with fragments of a stair and part of a bedroom emerging from the interior. The house’s split personality, says Blackwell, reflects the opposing natures of owner June Moore, an energetic 60-year-old widow who is both adventurous and conservative.

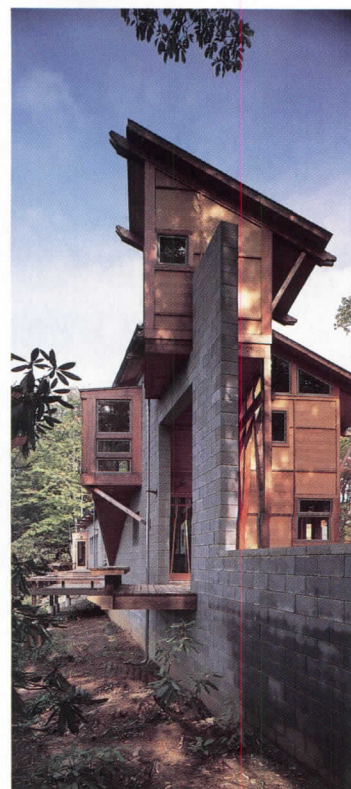
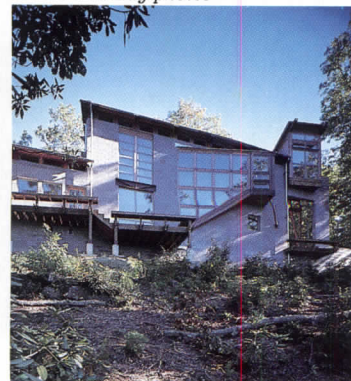
What holds the house together, both literally and figuratively, is a concrete-block wall aligned with the mountain ridge. To reinforce its importance, the wall extends beyond the body of the house and anchors an entry tower framing a view of the mountains to the north. By keeping the tower open on the first story, Blackwell ties the distant view to the foreground and to the house itself—a technique the Japanese call “borrowed landscape.”

The materials on the front of the house, mahogany plywood siding with fir battens and one-foot-thick insulated concrete block, reflect Blackwell’s interest in polarities—in this instance, the natural and the man-made. While wood holds the upper hand on the front elevation, concrete predominates on the rear.

Inside the house, spaces unfold along the spine established by the concrete-block wall and the mountain ridge itself. As visitors enter from the west side of the house, the living room flares out along the angled north wall and expands vertically into a two-story space. An array of windows climbs the back of the house along with the stairs, offering panoramic views of hills and a valley. Beyond a concrete fireplace terminating the living room lies the master bedroom, which like the stair breaks through the north facade and opens onto the view. Along the front of the house, a dining room looks onto a simple concrete terrace and leads into a bedroom suite for the owner’s elderly mother. Upstairs a study occupies the entry tower with views both north and south, and two bedrooms serve the owner’s adult children when they visit. *Clifford A. Pearson*



© Kevin Latady photos



The north elevation (top) takes advantage of mountain views with extensive glazing and a wood deck. A concrete-block wall extends beyond the house (above) to anchor an entry tower (opposite). Sheets of ribbon-cut plywood and 1-by-2 fir battens allude to traditional mountain cabins in the area.





From the entrance at the west end of the house, the interior space expands laterally and vertically. The two-story living room (left) is separated from the single-height dining room and kitchen by a freestanding partition (left in photo). The 11.5-degree angle formed by the intersection of the site's granite ridge and the major access road is reflected in the house's floor plan and in the profile of metal stair and balcony balusters (2 and 4, opposite). In designing the interiors, Blackwell used a 4-foot module, beginning with the width of the entry and ending with a concrete-block fireplace in the master bedroom (1, opposite). To accommodate the owner's 90-year-old mother, the house is made handicapped-accessible with a wheelchair ramp along the driveway, an open kitchen, and a barrier-free bathroom (3, opposite).

Credits

Moore House

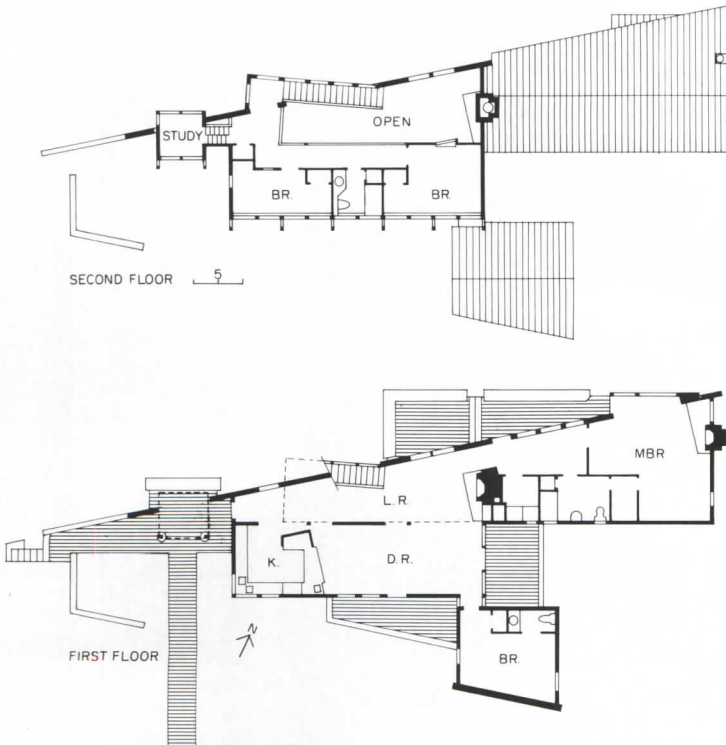
Cashiers, North Carolina

Owner: June Moore

Architect: Marlon Blackwell, project architect; Kent Duckham, Tim Mulavey, Chuck Rotolo, assistants

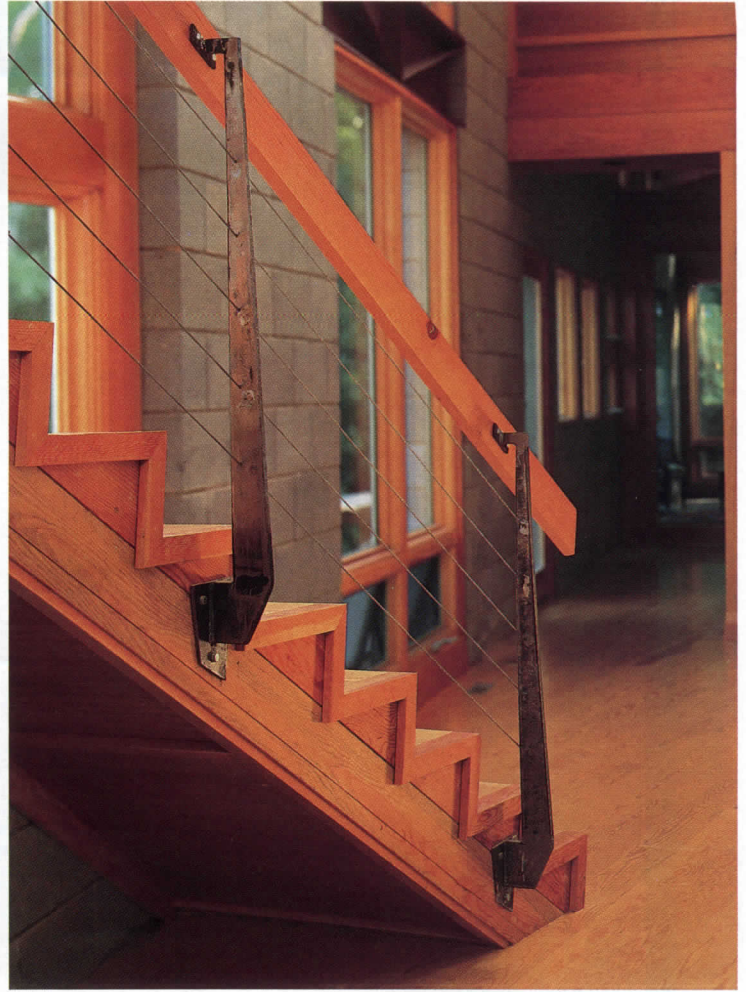
Engineer: John Looney (structural)

General Contractor: Cashiers Valley Construction—Cecil Houston, project manager





1



2



3



4

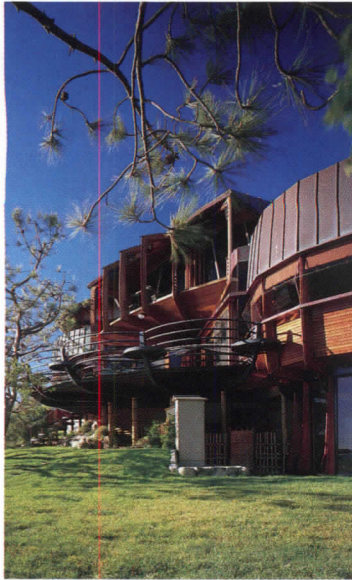
Fantastic Voyage



*The house that Bart Prince
designed for Joe and Etsuko Price
is a journey of discovery.*

*Price House
Orange County, California
Bart Prince, Architect*





Bulging with rooms that overlook the ocean, the Price House is framed in composite redwood members fastened with red-painted steel bolts and clad in layers of shingles and copper.

Imagine you are having a fever dream about one of those Southern California beach houses of the stars. It appears to you on a typical suburban street, with two-car garages and cul-de-sacs, its waves of weathered shingles bulging out to swallow you into its deepest recesses. Inside, you find no doors, only sliding panels and platforms stepping down the cliff. Colored-glass windows warp views of the Pacific Ocean until you lose all sense of direction. You wander among spoked redwood trees through a maze of enclosure and release, alternately suffocating in a Gothic split level and soaring in the spaces of cantilevered Modernist bravura.

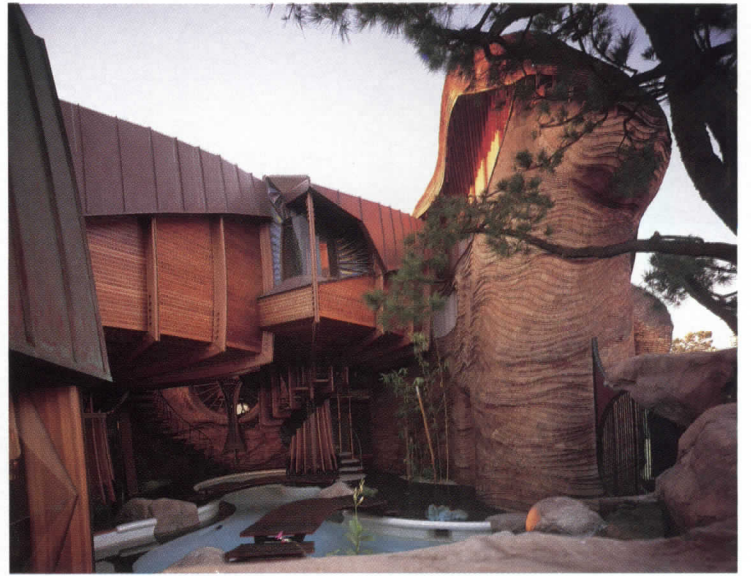
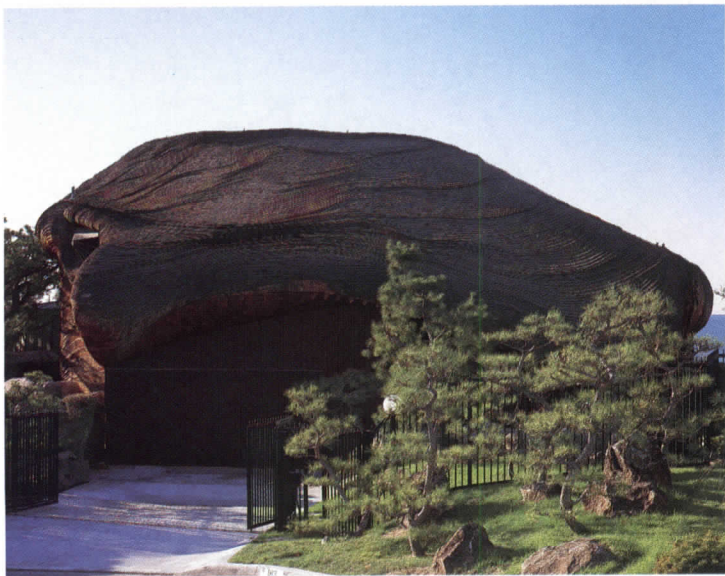
If you turned down such a street in Orange County, you might actually find that vision, built to the designs of Albuquerque architect Bart Prince as the home of Joe and Etsuko Price.

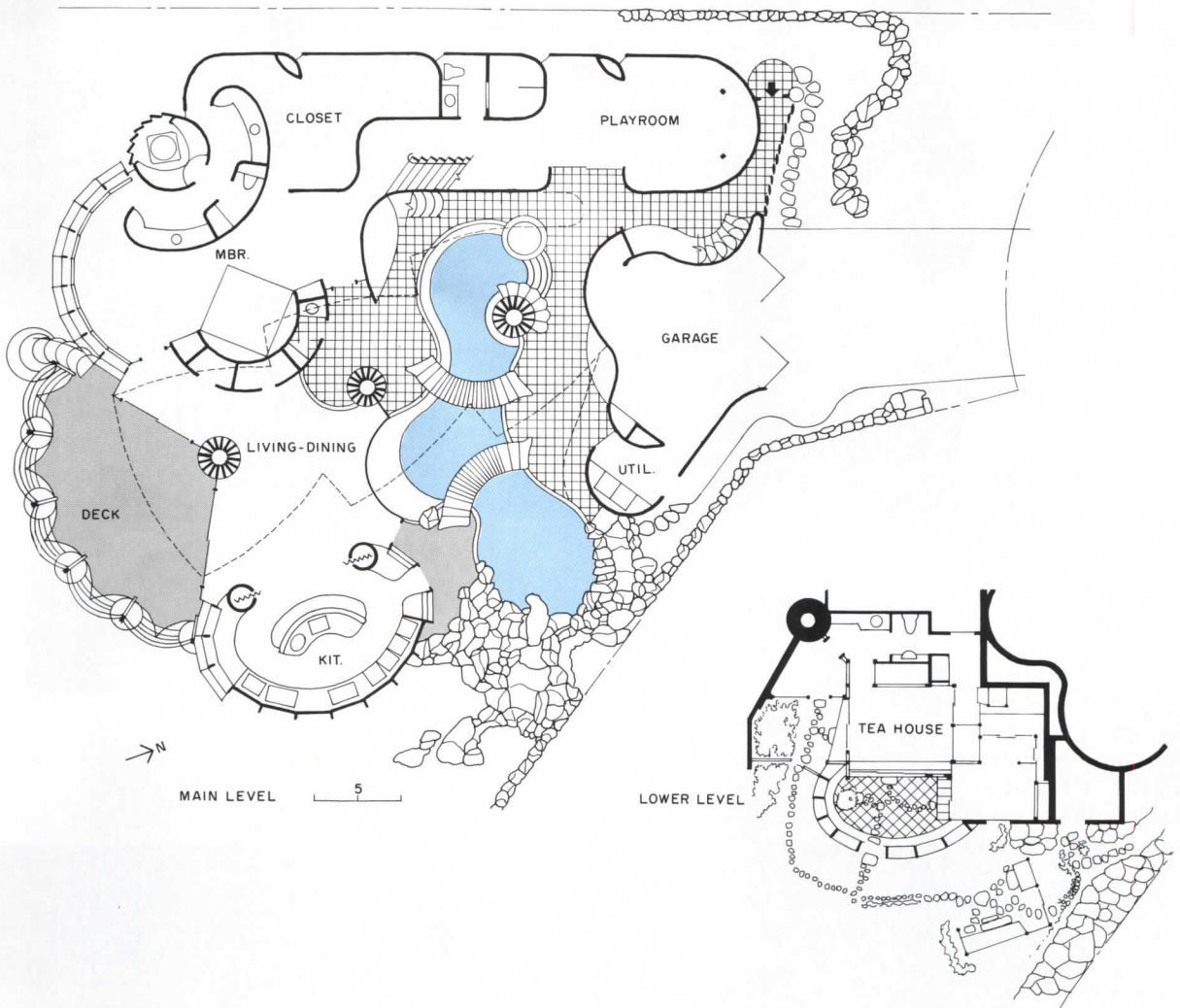
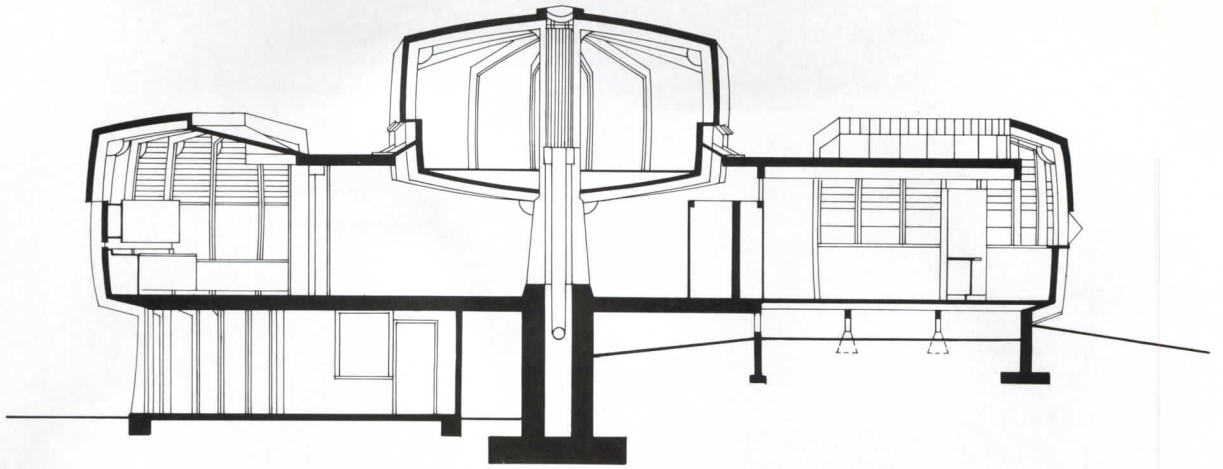
In 4,500 square feet, Prince has created the ultimate oceanfront ranch. For client Joe Price this is the latest in a career as architectural patron that began when he asked Cliff May, inventor of the California ranch, to design his parents' home in Bartlesville, Oklahoma. Price is famous among architects for convincing his father to let Frank Lloyd Wright design the Price Tower for the family oil-services company, and for his own house by Wright disciple Bruce Goff. Captivated by naturalistic architecture, Price traveled to Japan, where he was entranced with the country's culture and met his future wife. He assembled one of the largest collections of Japanese art outside of Japan, and had Goff design a Los Angeles study center for it. When Goff died, he asked his successor, Prince, to complete the project [RECORD, September 1988, pages 92-99] and to design a home nearby.

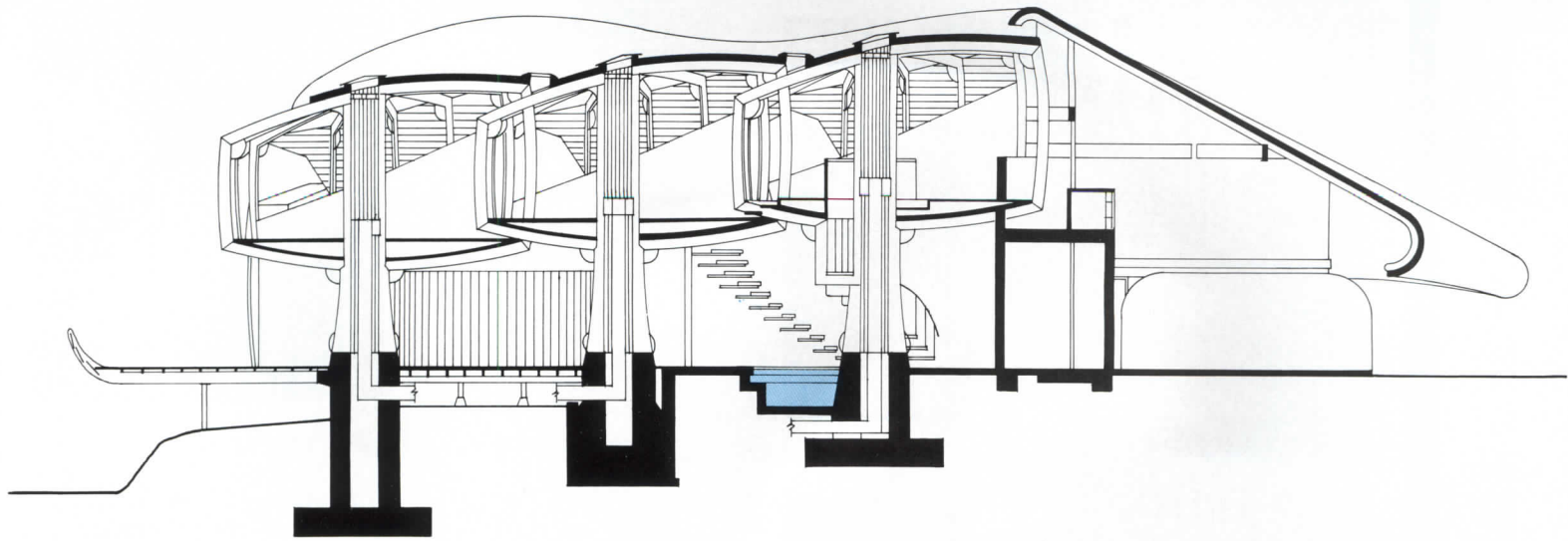
A journey through the Price House is a voyage of discovery. Once you enter the windowless folds of shingles that face the street, you pass a narrow passage up a dark staircase into the office (page 110), where Price, seated at a wood desk that belongs on an organic sistership to the Starship Enterprise, controls the hidden front gate. A wall moves back, and you step down three platforms of sheepskin-covered seating—a living room/bar overlooking the ocean. Clad in teak, the space is so copiously detailed it makes your head spin. That is all you would see of the house, if Price didn't slide away one seat to reveal steps winding around a redwood column. Descending over an outdoor pool, you find your way to the family room—a relatively calm space focused on a U-shaped kitchen counter, from behind which Mrs. Price dispenses meals, in typical Japanese fashion.

Beyond this public realm is another world of bedrooms tucked beneath rolling eaves and arched redwood frames. Separated into three worlds, the house gives new meaning to the term split-level. "The amorphous roof forms create privacy and shelter, while the three pods offer a contrasting geometry across the site," says Prince. What's more, it's all done without doors.

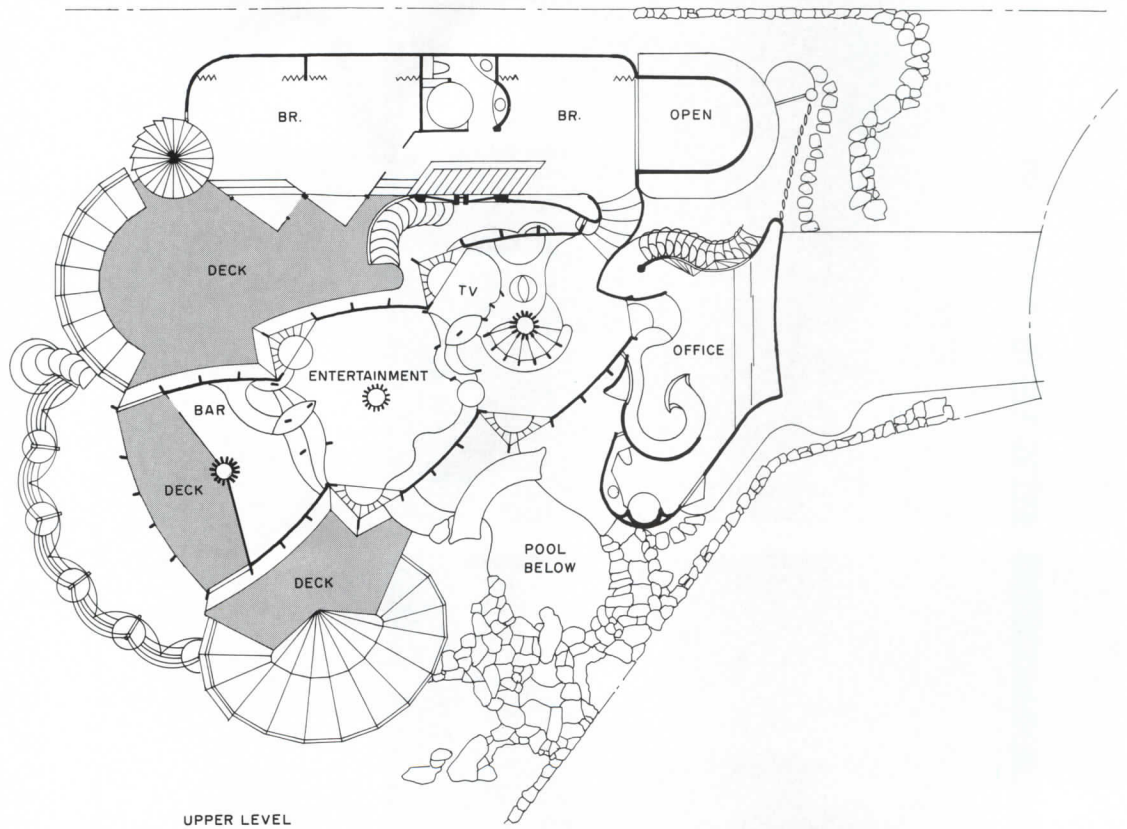
The journey ends beneath the family room in a traditional tea house erected by Japanese craftsmen who have been assembling select woods without nails for over 17 generations (page 110). This minimal space contrasts dramatically with the house in whose underbelly it lies. It's as though Price brought the American tradition of organic architecture, nurtured in the Midwest, to fruition on the West Coast, and combined it with the Japanese ideal, washed up from the other side of the Pacific. The tea house is a comment on the architecture in which it hides—a reminder of a rigorous discipline overshadowed here by a dream of domestic freedom that spreads out above its humble forms. *Aaron Betsky*

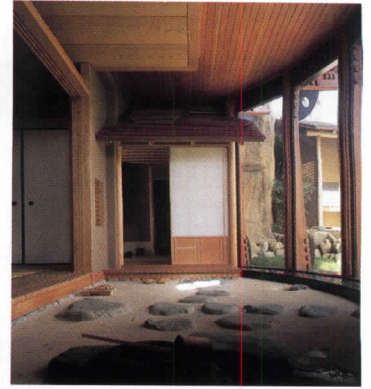




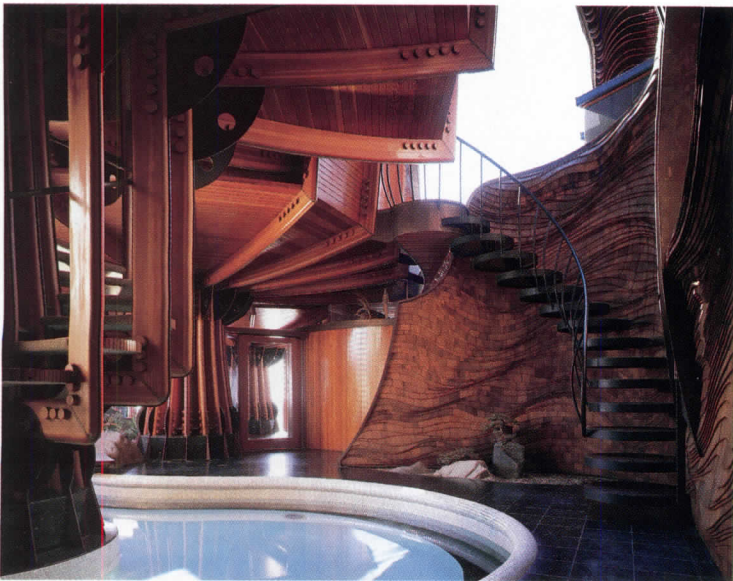


The complex experience of the Price House results from an ingenious plan. The second level (right) is organized around a diagonal axis leading from Joe Price's office to the ocean by way of three interconnecting spaces that fan out to the view. Children's bedrooms are along the north, separated by a deck. On the lower, more private level (opposite), the axis disappears among interlocking circles that define the garage, swimming pool, family room, kitchen, deck, and master bedroom. A traditional Japanese teahouse is tucked beneath, sheltered from ocean winds. The plan's sophistication is even more remarkable given that the house is technically a "renovation," built on existing foundations. The centerpoints of the circles are structural "trees" (sections above), which also contain air ducts. Instead of orthogonal roofs, floors, and walls, a continuous membrane of laminated wood beams forms an undulating shell.





"It's amazing what you can get out of a craftsman if you give him pride in his work," says Joe Price of the surfaces and connections that crowd his house. From the meticulous carpentry of Price's desk (top left), by San Diego artist Rick Cross, to the laminated "2 bys, 1 bys, whatever bys," as Bart Prince puts it, cut and spaced on site for the continuous planes of the office (middle left) and nearby stairwell (bottom left and opposite), the house is a woodworker's dream. Not restrained by traditional notions of good taste—as exemplified in the authentic Japanese tea-house (above)—Prince combined craft with a futuristic, almost James Bond sensibility, using colored glass (in custom stained-glass windows and skylights), Lucite, and other synthetic materials as he saw fit.



Credits

Price House

Orange County, California

Owners: *Joe and Etsuko Price*

Architect: *Bart Prince*

Architect—Bart Prince, principal-in-charge; Bill Kleinschmidt (working drawings)

Engineer: *Engineering Associates*

General Contractor: *Eric Johnson, project foreman*



Little House in a Meadow

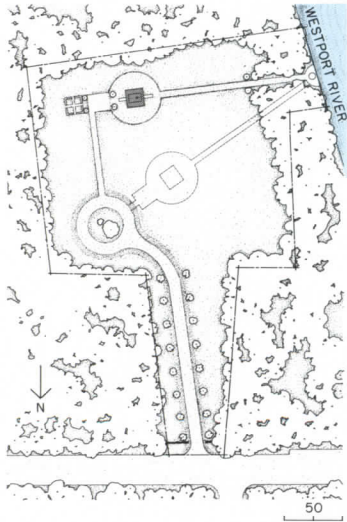
*Hanley/McGuire House
Head of Westport, Massachusetts
Perry Dean Rogers & Partners, Architect*





Combining homage to Palladio with bows to the carpenter-architects of early New England, the Hanley/McGuire house occupies a generous four-acre field in the heart of the tiny village of Head of Westport.

Oriented to the Westport River on the west, the little house also engages the portico of a 1798 Tuscan-style stone house on the opposite bank. Although the house is shielded by thick woods, a pop-up top-floor studio offers broad views. When fully landscaped, the present house and a second house planned for the site will rest on large discs of lawn surrounded by a wildflower meadow.



Among their souvenirs of a four-year sojourn in Italy, architect Frank McGuire and his wife Deborah Hanley cherish especially their pilgrimages to Tuscany and the Palladian villas in and around Vicenza. Back in Boston they were drawn to the similar countryside just inland of the southern Massachusetts coast—a gentle land of rolling hills, tidy fields, and thick stands of oak and ash, all interlaced with broad tidal estuaries—familiar to Hanley from childhood summers. There they turned to seek the perfect site for a planned vacation retreat, and there they found four acres of riverside meadow in the tiny Colonial-era village of Head of Westport, where the Westport River flows canal-like in a mannerly stream contained between rough stone walls overhung with trees.

Though veiled for much of the year by the foliage of bordering woods, the site not only is large (it was a shipyard in the 1750s) but occupies a prominent position in “downtown” Head of Westport—which may help account for the three years it took to obtain a building permit. Certainly the high visibility of the house was a factor in McGuire’s decision to anchor its design in the familiar Greek-Revival style of the region, while recalling the Palladian originals the couple so admired. “Porticos,” they reminisce. “Piani nobile.”

Although their initial vision of the house as “one big room” was amended to one big room plus two small bedrooms upon the arrival of Amanda Hanley-McGuire, now three years old, the notion of the piano nobile was given a literal boost by the site’s classification as a 100-year flood plain. Accordingly, the ground floor was raised well above grade on filled concrete-masonry piers screened by a break-away skirting of 1 by 10 boards. Both the added height and the bi-axial symmetry, emphasized by matching exterior staircases turned to the river and a neighboring farm, give the little house an authority that belies its 1,050 square feet, as does the Monopoly-house studio perched atop the main level and wrapped with an open deck.

The four-square form with its weathered-shingle cladding is also sturdy enough to carry the overlying freight of tongue-in-cheek Palladian fancy McGuire has sketched over it in stock lumber. Pilasters of wide boards frame pretend porticos on all sides (including those with no entry); cornerboards take the guise of rusticated quoins; Roman grilles interrupt the “parapet” wall around the upper porch, which itself rises from a substantial false cornice; and slender glass doors contrast with small square punched windows. As a finishing touch, globes balance at the corners of the upper porch.

Lightheaded and lighthearted, such reminders evoke their sources with an authenticity of spirit that, to the bemused delight of the architect-owners, prompted the local historical society to include the newcomer in its annual house tour. *Margaret Gaskie*



Only 29 feet square, the simple stick-framed structure makes the most of its 1,050 square feet of space with an axial plan that leads the visitor past small bedrooms, kitchen, and bath/utility areas, and around the chrome-yellow chimneypiece and fiery red spiral stair that supply the house's only color, before opening out to a house-wide living/dining room (top left) with a view of the river. Except for small square windows and slim French doors at front and back, glazing on the lower floor is fixed. The upper-level studio (right), open to the room below, acts as a shaft that pulls air through the house to vent from the glass doors to the rooftop deck.

Credits

*Hanley/McGuire House
Head of Westport,
Massachusetts*

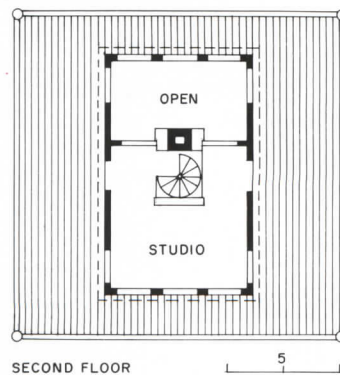
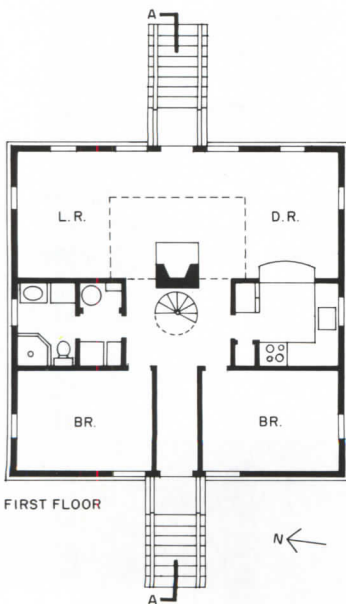
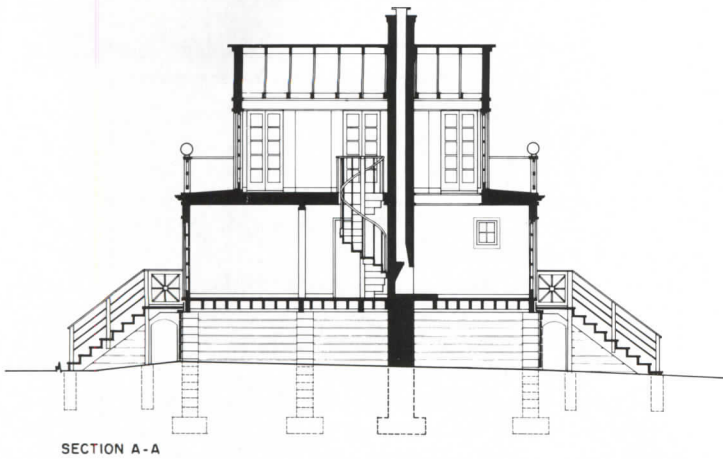
Owner: Francis D. McGuire Jr. and Deborah R. Hanley

Architect: Perry Dean Rogers & Partners—Francis D. McGuire Jr., principal-in-charge; Michael Oldakowski, presentation drawings

Engineer: Boston Building Consultants Inc.—Llewellyn Brown (structural consultation)

Consultant: Sitec Inc. (site survey/utilities/approvals)

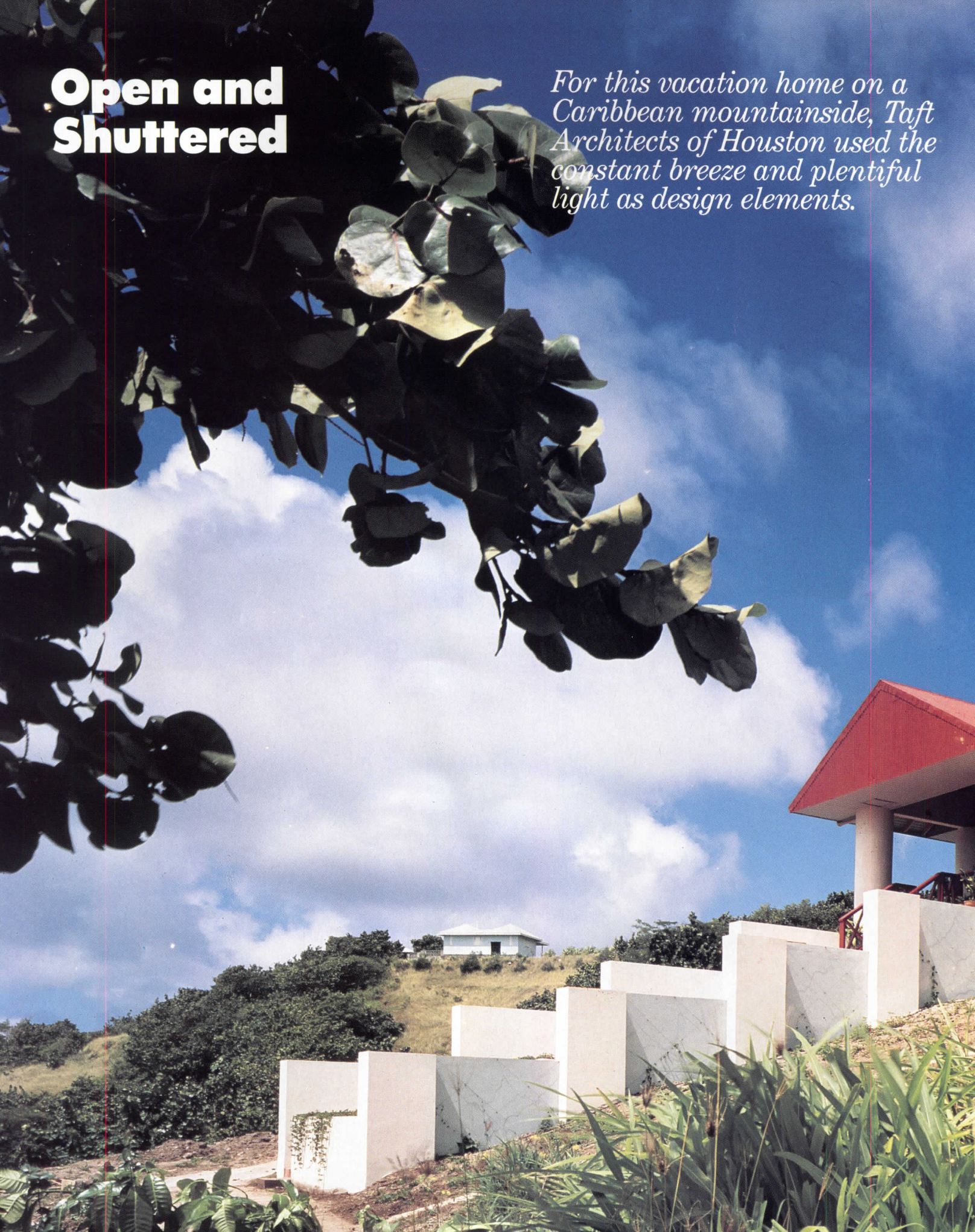
General Contractor: Yankee Builders, Inc.





Open and Shuttered

For this vacation home on a Caribbean mountainside, Taft Architects of Houston used the constant breeze and plentiful light as design elements.



*Olson House
Nevis, West Indies
Taft Architects*



The warm trade winds that blow continually across the windward side of the island of Nevis keep right on going when they reach the Olson House, set into a cliff above the Caribbean Sea. Taft Architects of Houston knew from previous work on the island that glazing was unnecessary, and could even be dangerous in this hurricane-prone region. So the wind climbs the grand staircase, drifts along terraces that wrap around the house, through open windows and under pavilion roofing before it shoots around the mountain and out to sea.

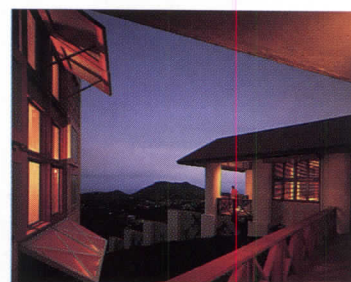
The architects wanted the bright light and clean air of the West Indies locale to define the house as much as their building materials. "Our earlier house on Nevis was modeled on Colonial architecture," says Robert Timme, one of the three Taft partners who designed the house collectively. "This was a more conscious attempt to deal with island traditions, a reinterpretation of island attitudes toward living." To that end, they created a series of terraces and walkways—which they refer to as the "spaces in between"—that telescope down from and step around the pavilion and insure a flow of activity from indoors to outdoors and back. "The interiors were all open to the outside from the beginning of the design," adds Taft's Danny Samuels.

The pavilion, stairway, and tower are the major components of this 1,000-square-foot vacation home, built for an American couple who have been coming to Nevis for about 15 years. Lee Olson, in retirement, spends alternate months there; his wife, Helen, joins him when possible, and grown children and their families come on vacation. So built into the program—and the modest budget of \$120,000—were requirements for multiple bedrooms and baths, and for the ability to close the house for extended periods. Thus, in place of window glazing, the architects employed louvered, aqua-blue inside shutters, which even when closed allow sunlight and air to penetrate when the Olsons are in residence. When they are not, the house is sealed with salmon-pink, solid wood shutters on the exterior. The shutters, made to order in the Dominican Republic, can be raised or lowered from inside.

A five-foot-wide grand stair climbs past the pavilion to a tower that thrusts 40 feet above grade and dominates the site as it looks out on the island of Montserrat, some 10 miles away. "The tower height is uncommon for the island," says Taft's John Casbarian, "but it recalls the wooden storage towers and windmills of the sugar plantations." The four-level concrete-block tower, built on a 16-foot square, holds a utility shed at grade. Level with the living pavilion, the master bedroom occupies a full floor one story above grade; the floor above it is divided in half for two additional bedrooms. The top level contains a covered terrace. The staircase allows private entry at each level. In contrast to the masonry tower, the pavilion and staircase are poured concrete and covered with plaster; the stairs are poured concrete on concrete block. A terra-cotta-colored corrugated metal roof tops the pavilion, which contains a living room and kitchen. Hidden under the stair are bathrooms, the electrical system, and additional storage areas, with shuttered windows set into the stair wall. The architects eschewed solar power: "There's just too much sun."

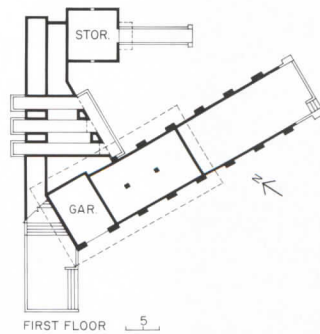
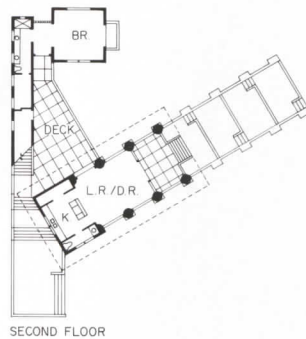
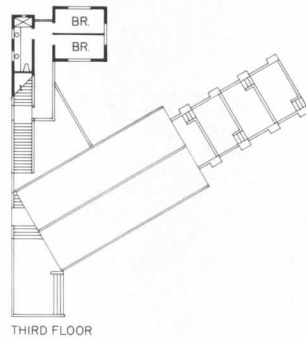
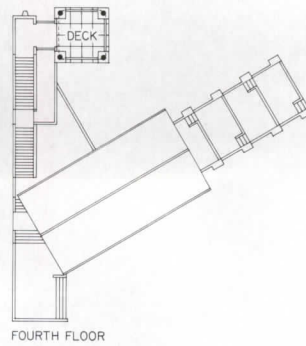
Taft's effort to put outside and inside on an equal footing extends beyond the island's plentiful supply of natural light and air. The Olson House also takes advantage of the clean rain that washes over the mountainside: the steep overhang of the pavilion roof helps runoff for the 25,000-gallon cistern, dug out of a rock bed directly under the pavilion and lined with concrete. It is the house's only source of water. *Peter D. Slatin*

© Paul Warchol photos



As the grand stairway (opposite) climbs to the four-story masonry tower, providing access at each level to bedrooms and top-floor terrace, it gives on to a series of decks and walkways that descend from the main pavilion and wrap around the house. The poured-concrete-over-concrete-block stairs are red hued, the same color as the pavilion floor.





Facing the sea on a windswept mountainside (top left), the site is vulnerable to the hurricanes that ravage the Caribbean annually. The Olson House has already weathered Hugo, helped by the alternating layers of louvered (interior) and solid (exterior) wood shutters that filter air and light during gentler times. The architects avoided glass as too dangerous. A five-foot-wide staircase (bottom left) contains bathrooms and storage space, and shelters a stone terrace against the mountain behind it. Wood trusses support the corrugated-metal roof of the 16-by-20-foot, poured-concrete pavilion (opposite). The roof's wide overhang drains rainwater into a huge cistern, dug out of the rock beneath the pavilion. Light streams through the closed shutters into the living room and kitchen.

Credits

Olson House

Nevis, West Indies

Owner: Helen and Lee Olson

Architect: Taft Architects—
John J. Casbarian, Danny
Samuels, Robert H. Timme,
partners; Larry A. Dailey,
senior associate; Robert
Bruckner, Steve Hecht, Eric
Morris, Mark Volpendesta,
project team

General Contractor: Noral
Lescott Construction Company



Home Alone

*Noyes/Ryan Cabin
Decatur Island, Washington
The Miller/Hull Partnership,
Architects*





© Michael Shopenn photos



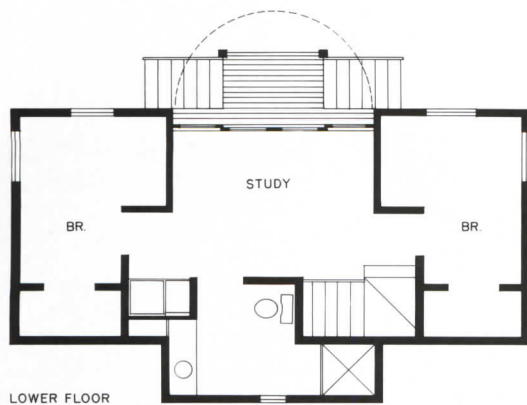
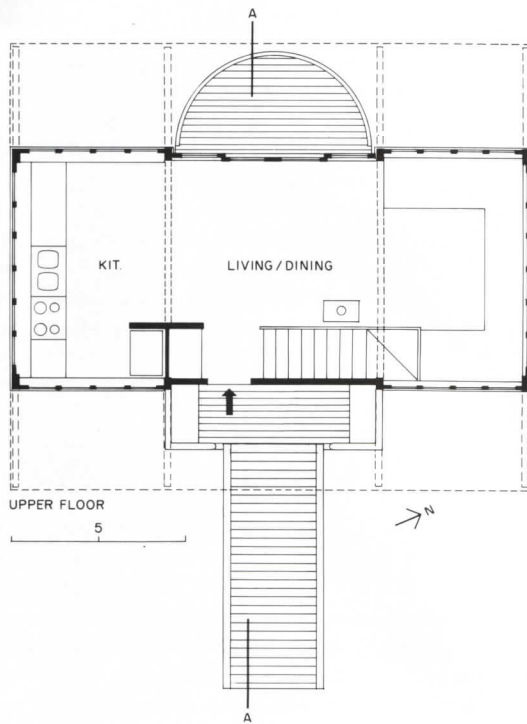
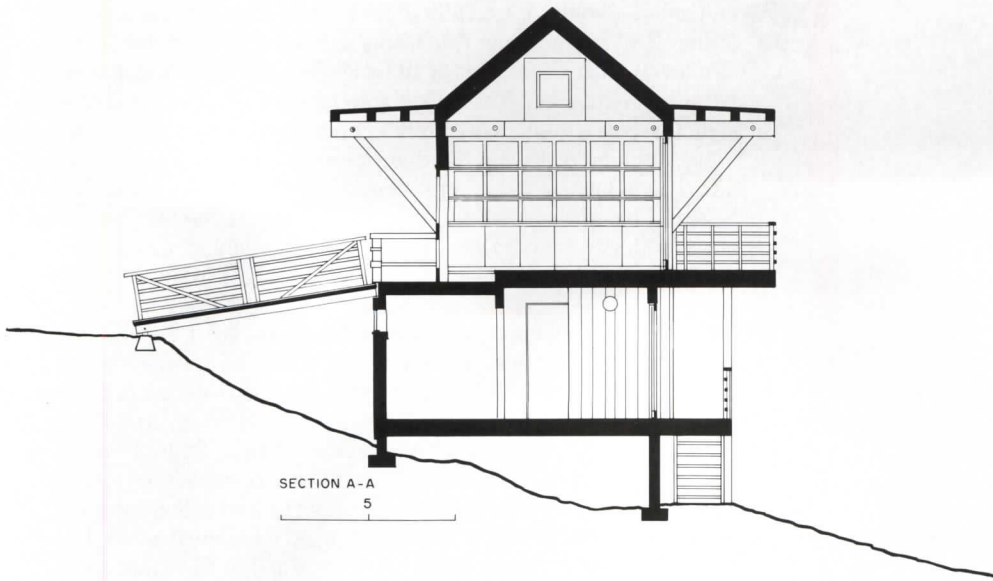
Surrounded by Douglas fir and red-berried madrona, the Noyes/Ryan cabin is a post-and-beam structure clad in rough-sawn cedar drop siding (opposite). Double-glazed windows in the gable ends have oversized frames, giving the cabin a monumentality that belies its modest size, while windows on the lower floor were placed to frame specific views. In between, a band of windows encircling the entire living area is meant to evoke Japanese shoji. Future landscaping will attempt to return the site to its original appearance.

“Don’t call it a house, it’s a cabin,” insists architect Bob Hull, of the Miller/Hull Partnership. And a tiny cabin it is: 840 square feet on two levels with a footprint of 13 by 30 feet, not including a small bathroom extension. But packed into this diminutive post-and-beam structure are a good many architectural ideas, executed with a clear understanding of Pacific Northwest craftsmanship. The cabin is situated on a densely wooded hillside on Decatur Island, northwest of Seattle. One of the smallest and most isolated of the San Juan Island chain in Puget Sound, Decatur is reachable solely by private ferry or float plane, and all provisions have to be brought in by air or water.

The clients are two married couples, one from Seattle and the other from Arizona, who take turns using the cabin as a weekend and vacation retreat. The cabin’s upper level, entered from the road over a wood bridge, contains a single living space banded all around by windows that make the most of spectacular views of Puget Sound and neighboring islands. One end of the space accommodates a linear kitchen. The cabin’s lower level contains the bathroom, two bedrooms, and a study that is frequently used as a guest room. Like the berths on a ship, the bedrooms were designed to the exact size of built-in double beds: there is no freestanding furniture in these rooms, and storage is beneath the beds and in a large crawl space below the floor.

Some islanders refer to the cabin as the building with a “black hat” or “nun’s hat”—a reference not only to the structure’s somber charcoal-brown color but also to the scale and prominence of the roof and the way that it seems to rest upon the multipaned windows. Although the roof form also appears vaguely oriental, Hull denies any such Far Eastern influence. Instead he likens the cabin to the Pacific Northwest’s ubiquitous woodland fire-lookout stations, which have solid wall panels that are raised on struts when the stations are in use until they form winglike projections. The cabin roof, with its six-foot-wide overhangs and supporting struts, has a similar profile. Here, though, the struts and shear connectors provide rigidity as well as support for the roof structure, taking wind loads to the solid walls beneath the glass.

In contrast to the dark exterior, the cabin’s living space glows with the sheen of polished wood: fir for the floors and walls, with variations of color and texture, and pine for the ceiling. Across the tall main volume composite beams are built of small members fastened together with exposed bolts. Larger members were prohibitively expensive because they would have had to be brought in by barge. If this is one of the limitations imposed by building on an island that allows no cars and trucks, the cabin’s views, solitude, and rustic simplicity offer some spectacular compensations. *Donald J. Canty*



The cabin's 14-foot-tall living area (opposite) has the appearance of a finely crafted wood boat, emphasized by the white metal stair rail and a semi-circular water-facing deck. Built-in seating is wide enough to be used as extra guest sleeping. Beneath it—and in every conceivable nook and cranny of the cabin—is storage. A wood stove is the cabin's sole source of heat. Under Decatur Island regulations, supplementary heat would have reduced the allowable amount of glass in the living area. Six-foot roof overhangs shield the double glazing from winter Pacific storms and summer sun. They are supported by struts that also stiffen the cabin against lateral loads. Composite beams held together by large exposed bolts span the living area. (Since all materials had to be brought to the site by barge, large structural members would have been too expensive. Transportation costs also limit the use of concrete on the island.)

Credits

*Noyes/Ryan Cabin
Decatur Island, Washington*
Owners: Cynthia and Mac Noyes; Judy and Ken Ryan
Architect: The Miller/Hull Partnership—Robert Hull, partner-in-charge; Craig Curtis, project architect
Engineer: Greg Hiatt (structural)
General Contractor: Habitat Construction—Pete Pederson



Secret Garden

Ricardo Legorreta brings the bold colors and forms of his native Mexico to Southern California.



*Greenberg House
Los Angeles
Legorreta Arquitectos, Architect*



Usually, I dream of color, walls, mystery, intimacy, and other qualities that matter in particular to me as a person, and as a Mexican," wrote Ricardo Legorreta of his design process in a new University of Texas Press monograph on his work. How dream can become reality is revealed in the 9,500-square-foot house he just completed for Arthur and Audrey Greenberg in the Brentwood section of Los Angeles.

When Legorreta was commissioned to design a new structure for a two-acre site, he was asked to replace a one-story neo-Spanish Colonial hacienda, the Greenberg family home for some 25 years. His clients had long admired the work of Luis Barragán, and they turned to compatriot Legorreta for the monumental simplicity and solidity that their work shares, finding the bold plaster-coated wood-frame forms and deeply recessed windows as appropriate to the climate of Southern California as to the architects' native Mexico.

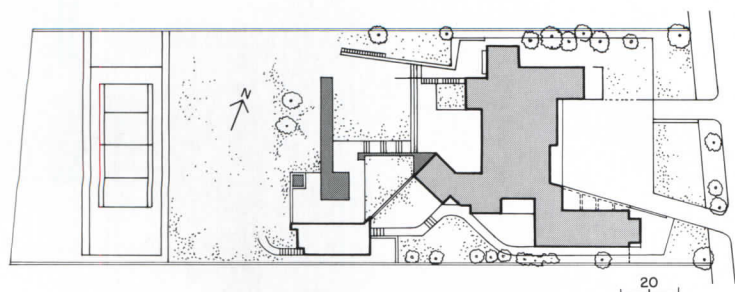
Mexico is both home and inspiration to Legorreta, who established his own practice there in 1963. Over the past 25 years, he has built his reputation on large-scale Mexican projects, including resort hotels for Club Med and a factory for Renault. Recently, he has been working more in the United States, most notably on a mixed-use business community in Solana, Texas, masterminded by developers Maguire Thomas. Because these projects are in harsh, dry climates, Legorreta has refined his approach accordingly, making color and light his design tools as much as shapes and surfaces. Although Legorreta's forms are not the pure geometries of, say, Aldo Rossi, they reappear throughout his work, and like Rossi's, are drawn from his native countryside. Legorreta speaks, for example, about the traditional Mexican wall that "rises to protest outside influences," while creating a protected inner sanctum.

This vision of architecture as refuge or secret garden was clearly on Legorreta's mind when he designed the Greenbergs' house, which presents a serene, even somber facade to the street with its shades of sand-, yellow-, and mustard-colored plaster (overleaf) set atop a limestone base that extends through the house as flooring. Eighty-foot palm trees are dramatic accents. An unobtrusive front door leads to a more exuberant interior focused on a rolling landscape of coral trees, yucca plants, and jacarandas (culled from the Greenberg's previous garden) surrounding a pool and tennis court. Living room and flanking gallery are arranged between two two-story towers—one containing the master-bedroom suite, the second, rotated at 45 degrees, a library—to enclose the backyard. Throughout, there's the unexpected play of light and shadow, color, and even water. Turning the corner toward the library stairwell, for instance, visitors pass a lemon-painted skylight, which casts a golden glow on a hand-troweled wall (page 133). Here, perhaps more than anywhere else in the house, Legorreta's vision is fulfilled. *Karen D. Stein*

© Tom Bonner photos



Water follows steps down from the house into the backyard (opposite). A second exterior stair leads to a study off the master-bedroom suite. Adjacent to the lap pool is a shaded terrace with hot-pink-painted sun louvers (top) and a hot tub (bottom).











A reflecting pool bathed in lavender from painted window frames separates the entry courtyard from the kitchen (top left). Skylights brighten the hallway to the dining room (bottom left) and stairwell to the library (opposite).

Credits

*Greenberg House
Los Angeles*

Owners: Arthur and Audrey Greenberg

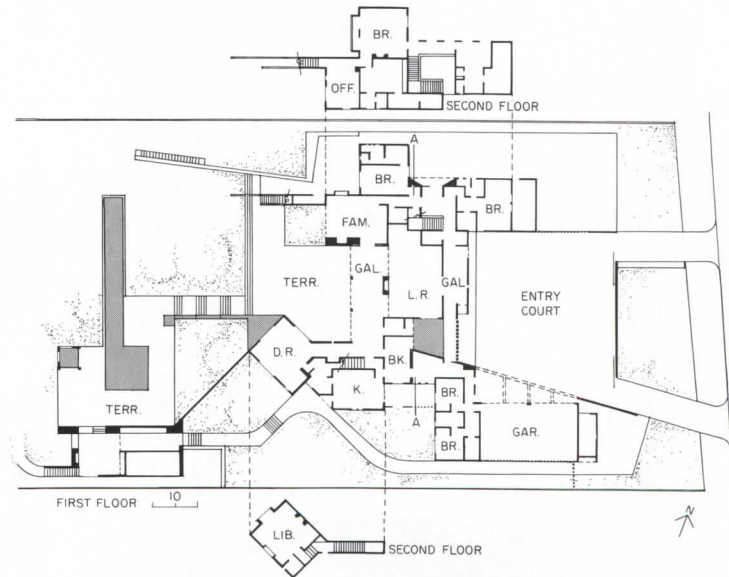
Architect: Legorreta Arquitectos—Ricardo Legorreta, Noe Castro, principals; Gerardo Alonso

Associate Architect: Sheriff and Associates—Garth Sheriff, principal; Bill Bernstein, project architect; Aley Vassil, project manager

Engineers: Kurily Szymanski Tchirkow (structural); G&W Consulting Electrical Engineers (electrical); MB&A Mechanical Engineers (mechanical)

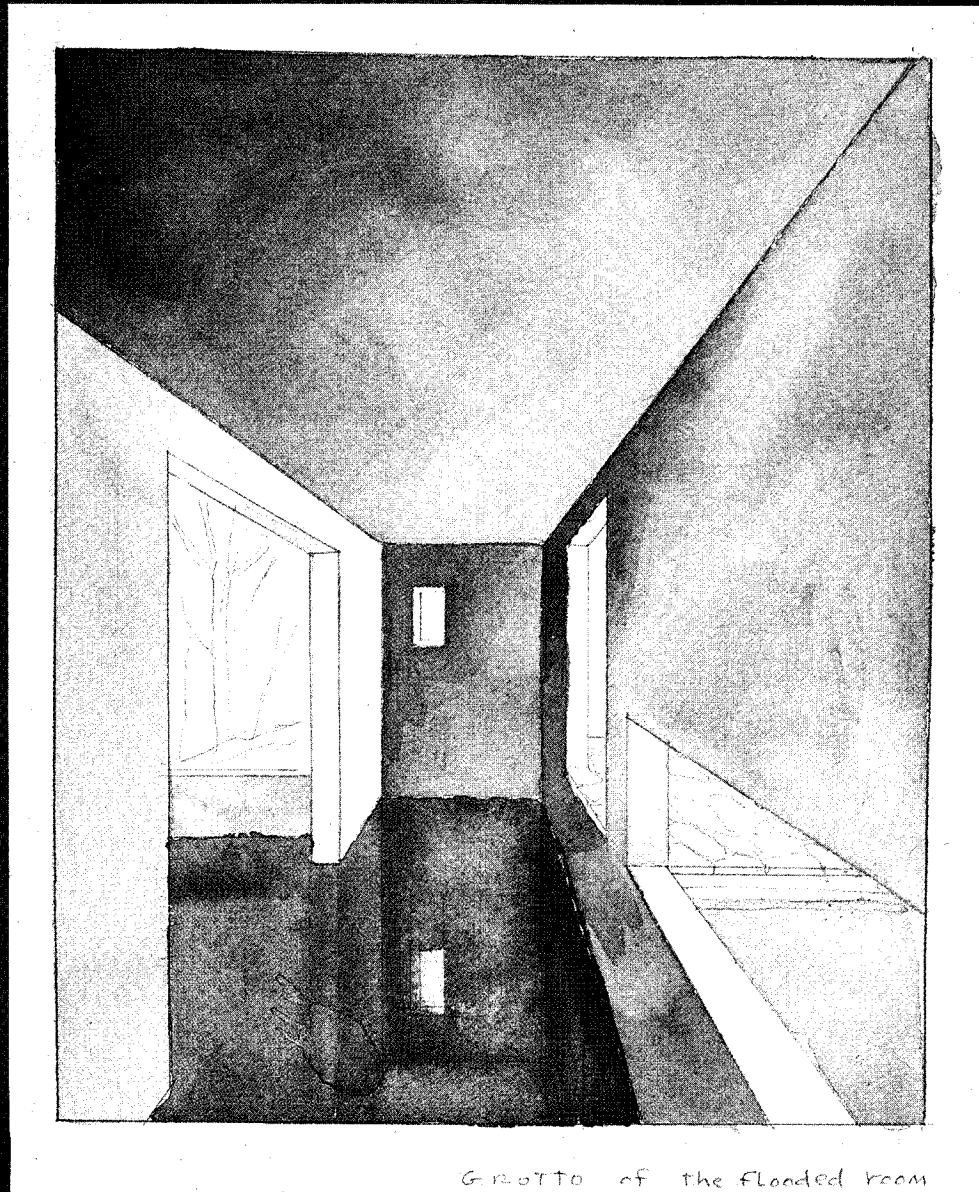
Consultants: James P. Sams, Inc. (interior design); Lehrer & Sebastian (landscaping)

General Contractor: L. B. Bovee & Sons





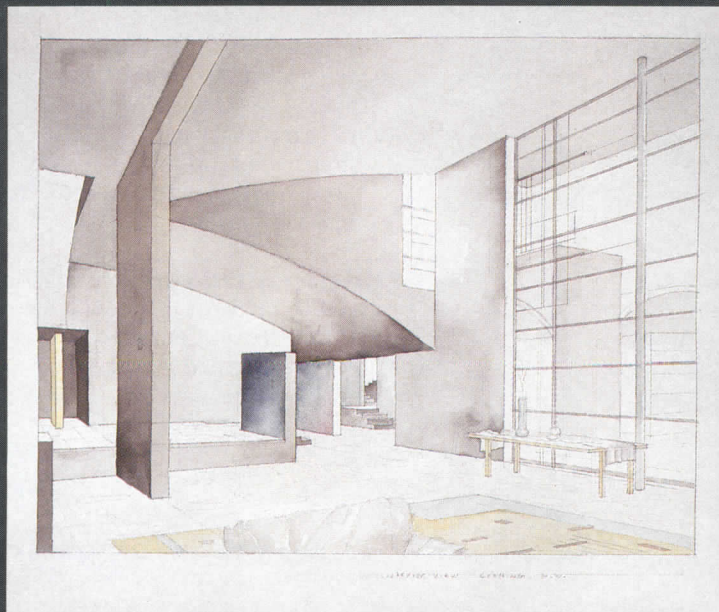
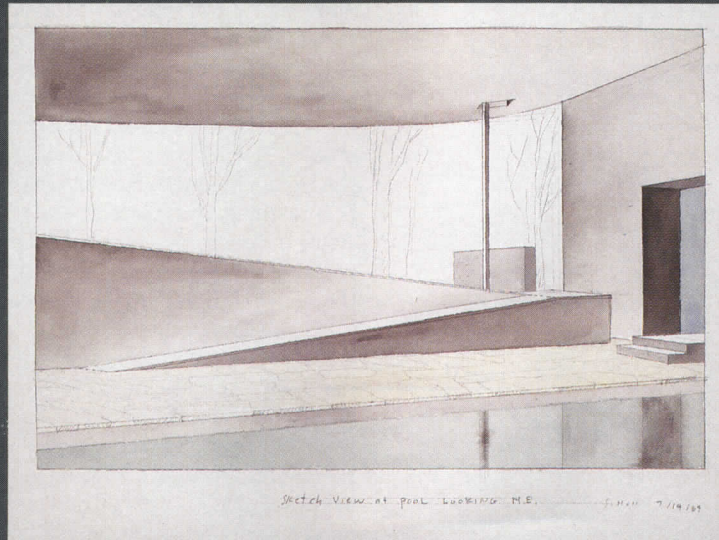
Work in Progress



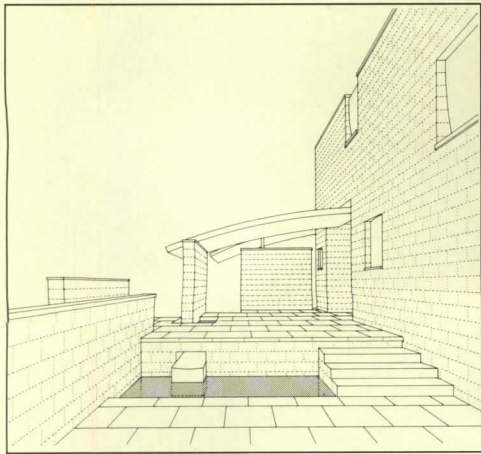
Grotto of the flooded room

A flooded room represents Holl's vision of the house as a dam for existing ponds on the site.

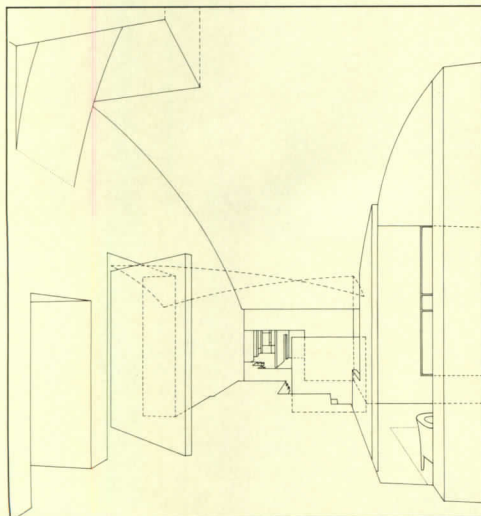
Steven Holl's design of a house in Texas brings a new approach to architecture as frozen music.



Integral plaster walls and steel-framed windows make up a neutral interior palette.



SOUTH TERRACE



VIEW NORTH FROM ENTRY



The south terrace (top drawing) and view north from the entrance (bottom drawing) are shown above. Steel elements, which Holl calls “noddles in space,” form a frame of doubly curved metal roofs, shown under construction (above).

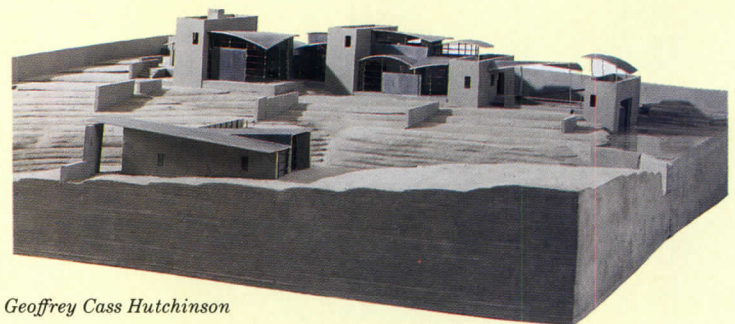
Steven Holl’s Stretto House is an examination of a specific site as much as a theoretical study in which disciplines outside architecture, in this case music, impinge. RECORD examines a work in progress and lets the architect explain his approach. *K. D. S.*

“The beginning of any project, of course, is visiting the site. In this case there were four ponds and four dams already there. I wanted somehow to embrace the condition of water flowing over the dams. Other concerns were the Texas vernacular of concrete block and metal, and the heat—hence the need for roofs that would overhang. Another pragmatic element went into the project: the clients wanted large blank wall areas to display their Modern art collection.

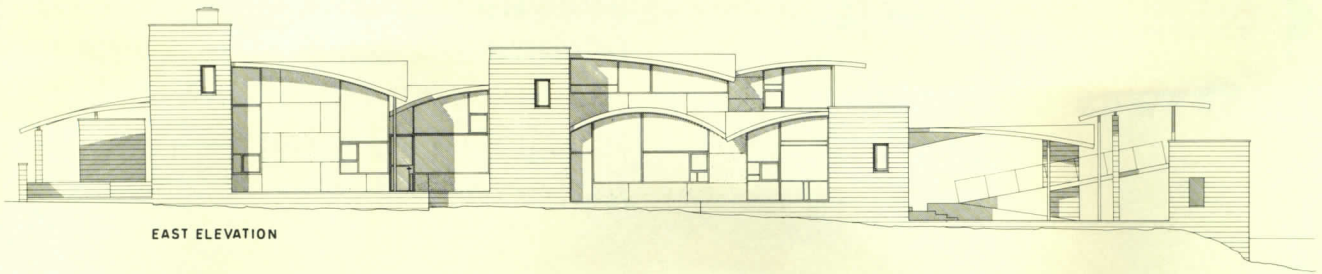
“I was searching for some way to make a connection to the idea of “flowing.” I have always been interested in [links between] architecture and music. The idea of water overlapping in space is analogous to a condition in music called *stretto*, where one set of melodies or tones overlaps another, like in a fugue. A student of mine came to me with Bartók’s music for Strings, Percussion, and Celeste. I have studied Bartók for a long time, because he composed according to the Golden Section. He combined Modern and archaic forms. There is something architectonic about the way his music is structured. After choosing this music, I listened to it every day while I was working on this project. It became a parallel form for the form of the house. I’m not saying there’s a one-to-one relationship, but there are some things that are one to one. The piece is in four movements; the house is in four measures of heavy and light [the concrete “spatial dams,” and the metal roofs in between] . . . I also wanted a clarity between the plan and section. The plan is orthogonal—a series of overlapping spaces. The section is curvilinear. In music there is something called a row and a retrograde row, where you play the same set of notes upside down and backwards. So the guest house is an inversion: the plan is curvilinear and the section is orthogonal.

“The idea of aqueous space is continued on the interior. Inside the concrete-block dams are terrazzo floors that drop a few steps into the main space beyond. There are diagonal views of overlapping spaces. The views are cascading. In the entrance there are a series of cast glass windows that are a hint—as if water is frozen in that first spatial dam. The last spatial dam is an empty room that is flooded [by an existing pond]. Here, the water of the site comes back into the house.

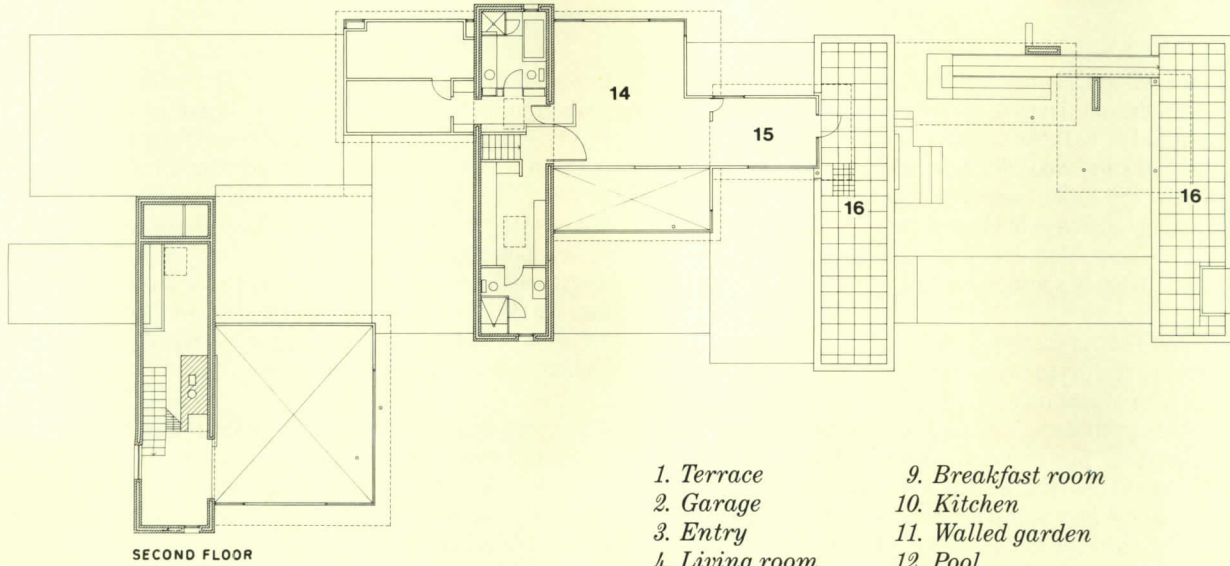
“The way to design a big house is to break it down into parts that can be rendered in different materials. Or a big house can be designed the way Palladio did it—a composition with a center and wings. I wanted to make a big house another way. Some argue that Modern architects can’t make a big house. I disagree.”



Geoffrey Cass Hutchinson

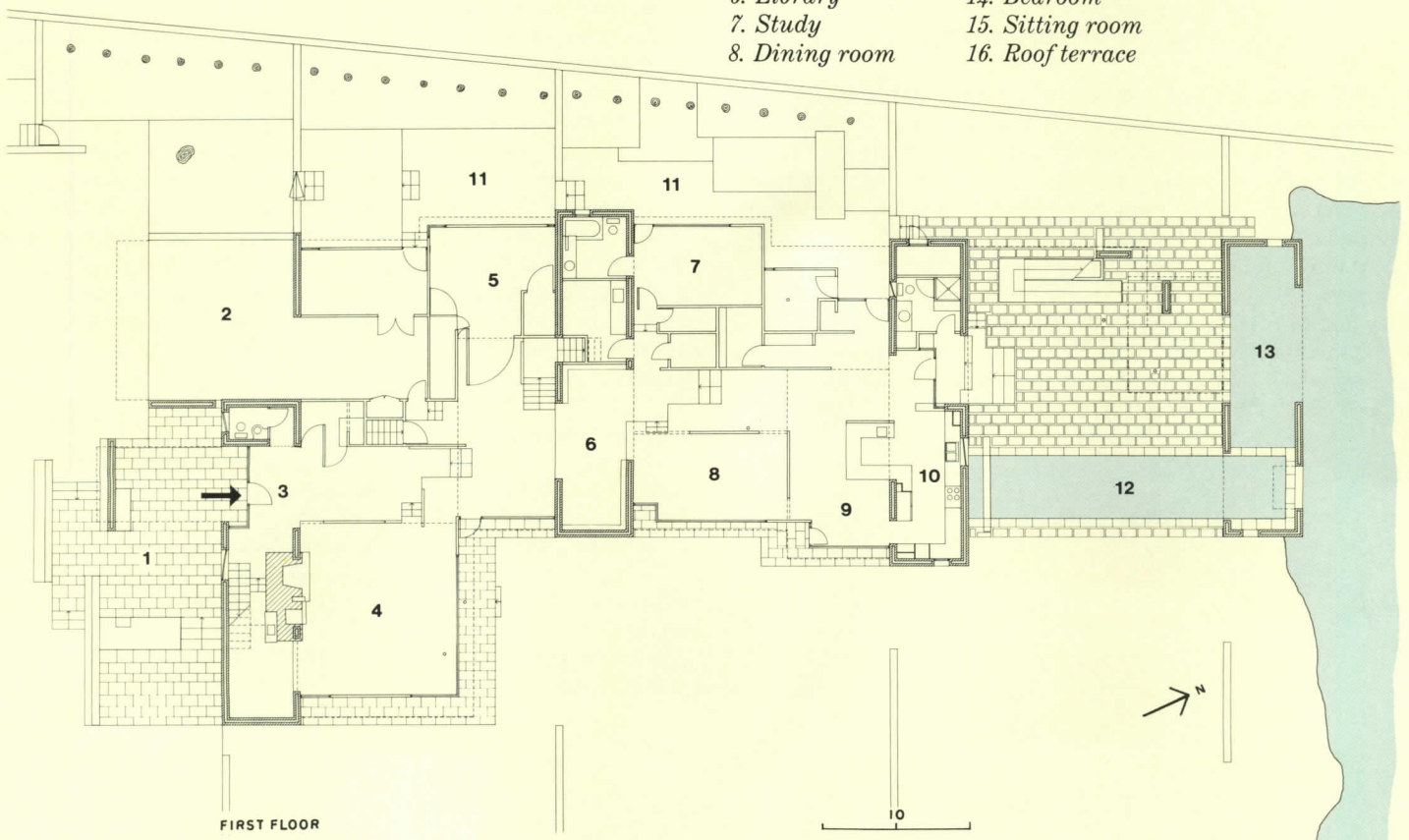


EAST ELEVATION

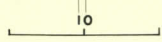


SECOND FLOOR

- | | |
|----------------|-------------------|
| 1. Terrace | 9. Breakfast room |
| 2. Garage | 10. Kitchen |
| 3. Entry | 11. Walled garden |
| 4. Living room | 12. Pool |
| 5. Art storage | 13. Flooded room |
| 6. Library | 14. Bedroom |
| 7. Study | 15. Sitting room |
| 8. Dining room | 16. Roof terrace |



FIRST FLOOR



Modular Goes to Town

Modular housing has moved beyond the boxy suburban ranch to become a lower-cost solution for scattered urban—even historic—sites.

Now would seem the worst time to consider factory-built housing. With all starts dramatically lower than they were, hungry “stick” builders usually equal or beat the price for modular or panelized construction, and conventional wood framing offers virtually unlimited design flexibility. Nevertheless, various in-factory techniques have seen a slow but steady increase in their share of both multifamily and single-family housing. Modular systems, in particular, are increasingly seen as a flexible solution for tight infill sites.

“The architect’s myth about factory-built housing is that it can be an expression of technology,” comments architect Deborah Berke, who has developed a series of modular prototypes (opposite, and pages 140-141). “The industry, though, is geared to making it look as unindustrial as possible.” Steven Winter, an architect who has both designed modular housing and consulted with manufacturers, explains, “Factory builders appreciate it when the architect brings in a buyer. But then they turn around and try to obviate his services by selling the client an off-the-shelf product.” Though these conflicts are not likely to disappear, architects searching for affordable housing in older neighborhoods are finding that modulares are well-suited to the plans and proportions of much existing housing stock.

Established communities, even landmarked districts, have successfully encouraged modular construction for working families. Architects in and around Boston have transformed the low-slung suburban ranch houses typically found in catalogs (pages 142-143). The city recently held a design competition to find lower-cost modular solutions applicable to hundreds of city-owned lots. Finalists proposed two-family, row-house, and triple-decker schemes—common types in Boston. Infill “twins” are planned in Camden, New Jersey (pages 144-145). Modular housing accounts for 30 percent of the units produced so far by the New York City Partnership, a non-profit organization that participates in the city’s ambitious plan to create 84,000 “affordable” housing units.

In higher price ranges, modulares may also be competitive. “Several years ago, when the housing boom began in the Northeast, there wasn’t nearly enough skilled labor, and factory-built housing filled the void,” comments Winter. “Since then production capacity has doubled.” In the current slump, the cost advantage of modular housing has largely disappeared, but many housing-industry experts have concluded that shortages of labor—especially of skilled crafts—will increase over the long term. The cost advantages of pre-fabrication have long been touted but are often difficult to realize. “Modulars are not always cheaper,” notes Winter, echoing the sentiments of most experienced hands.

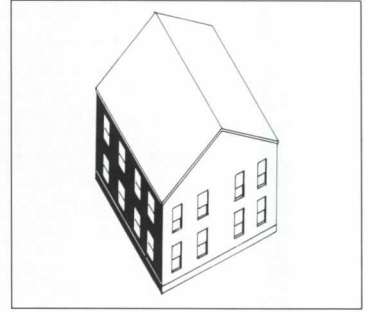
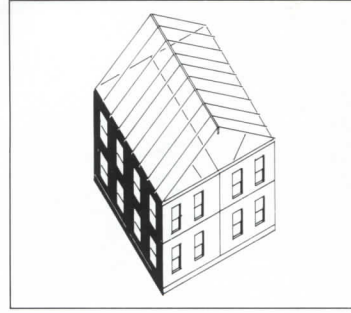
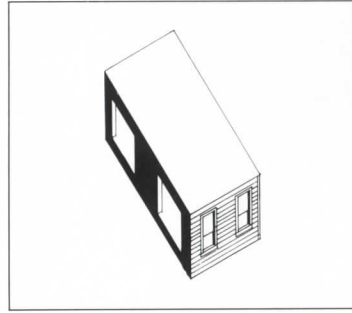
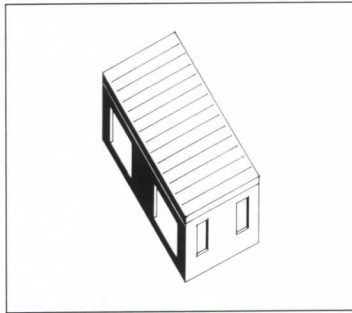
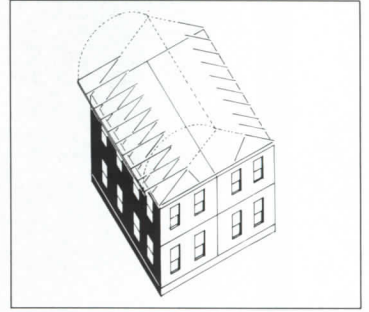
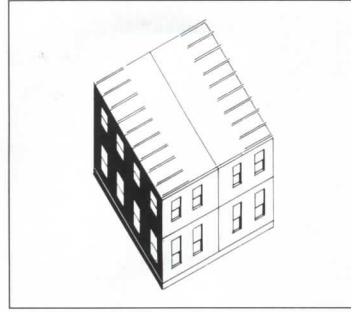
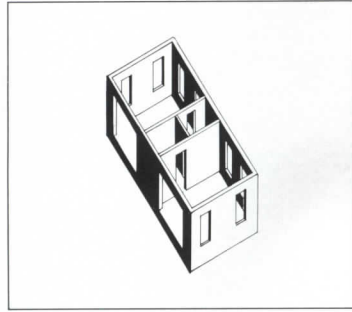
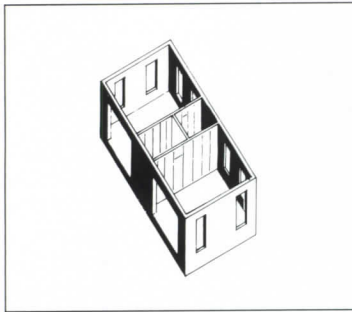
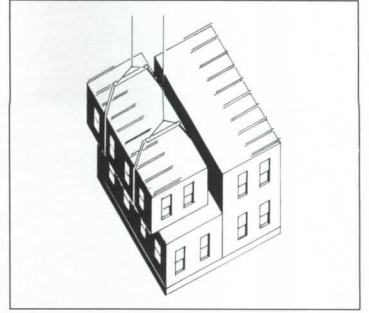
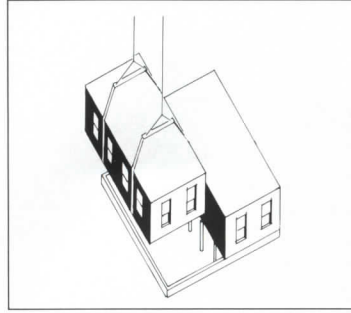
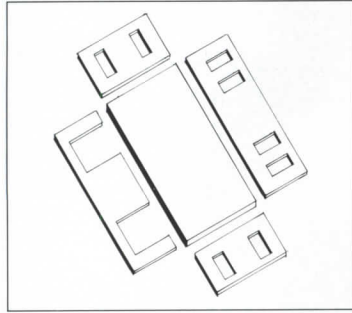
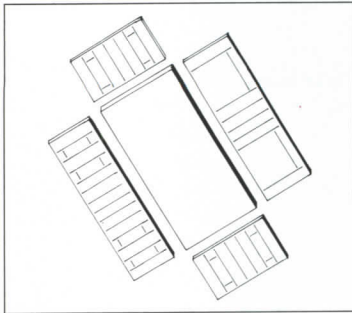
Who today is the technological leader in this field? Swedish, Danish, and Japanese builders market houses built in highly automated factories to meet energy-conservation standards that may not be achievable at the site. Swedish factories, for example, offer houses with triple-glazed windows and a variety of stud depths to accommodate thicker insulation (the studs themselves are made of composites, which have higher resistivity than conventional studs). Infiltration has been reduced through the use of compression gaskets and interlocking panel joints. With tolerances as low as 1/32 in., these houses are so well sealed that it is profitable to employ house-scaled heat-recovery units to warm fan-driven supply air. Models are also offered with minimum-flow plumbing fixtures. In the U. S., prototypes, designed by the Berkus Group, with details addressing a wide variety of disabilities and “smart” systems-control technology, have been built for the National Association of Home Builders show. Winter comments, “Right now, buyers won’t pay a big premium for this kind of quality.” If energy costs skyrocket, though, or government regulations mandate ever-more sophisticated homes, manufactured housing could make these improvements financially accessible to most home-buyers through engineering and economies of scale. *James S. Russell*

Further Information

- *National Association of Home Builders, Building Systems Councils, lists manufacturers. 15th and M Streets, N. W., Washington, D. C. 20005 (800/368-5242, ext. 576).*
- *Automated Builder, covers the manufactured housing industry. P. O. Box 120, Carpinteria, Calif., 93014 (805/684-7659)*
- *Beasley, Ellen. “Factory-Built Housing: Finding a Home in Historic Neighborhoods,” Number 43 in the National Trust for Historic Preservation’s Information Series, 1989, \$5. To order: 202/673-4189.*

The nomenclature of factory-built housing can be confusing: Modular houses combine single-story boxes factory-built and 90 to 95 percent complete in a wide variety of configurations (below). Sitework can vary from minor "buttoning up" of two adjacent surfaces to the addition of elaborate siding, trim details, roofs, and porches. Panelized systems offer nearly as much flexibility as conven-

tional wood framing. One-side-open or fully closed walls are fabricated with the higher quality control possible in a manufactured environment. Mobile homes are completely built in a factory and shipped on a wheeled chassis. Precut lumber kits and houses built using prefabricated components—such as roof trusses—are not considered manufactured housing.

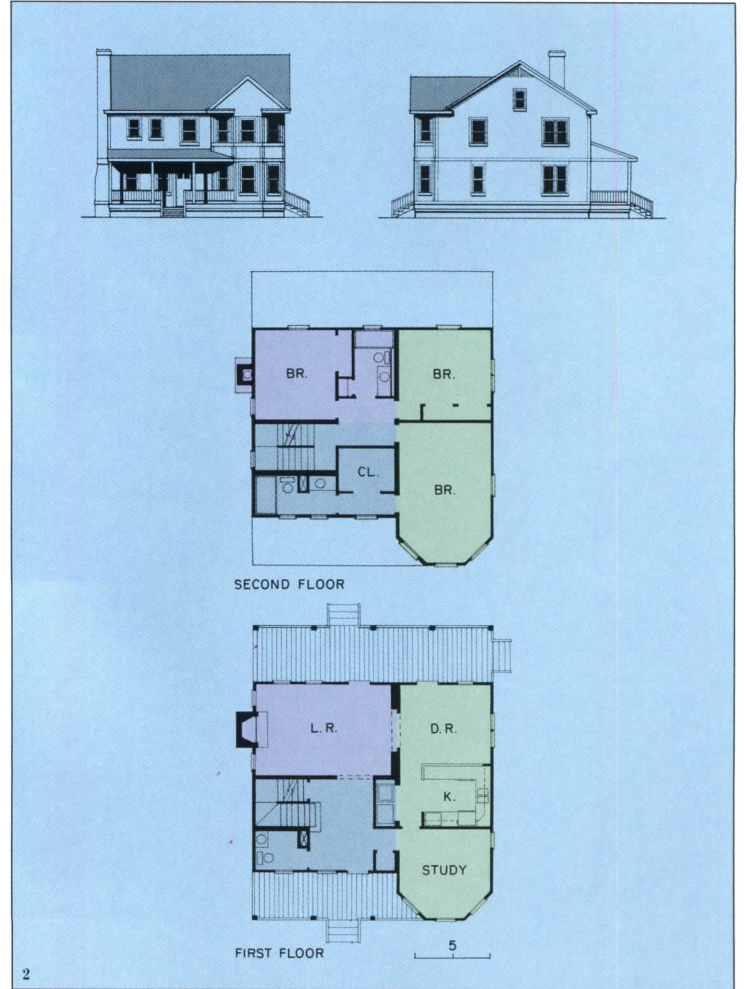
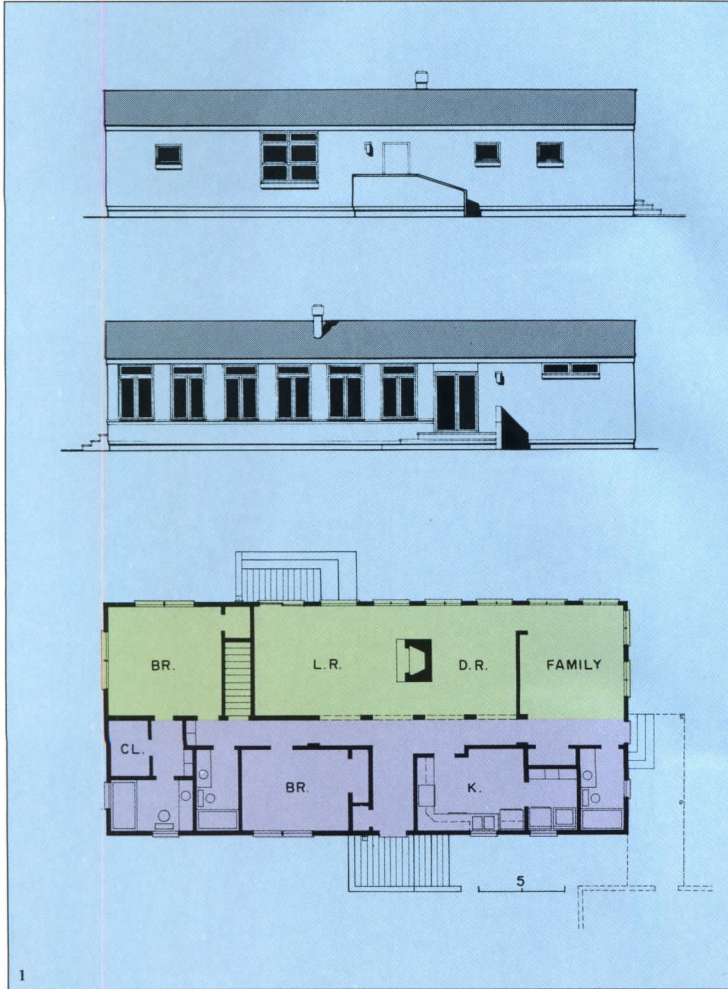


Berke & McWhorter

Modular Houses with Traditional Proportions

When homebuilding grew rapidly in the 1980s, Harvey Gerber, a builder-developer in Newtown, Connecticut, turned to modular. He explains the advantages he found: "Interest is your highest soft cost. Individual stick-built homes take 10 to 12 months; modulars a matter of days. A stick builder can compete head-to-head with modular in a subdivision because if you are doing 50 to 100

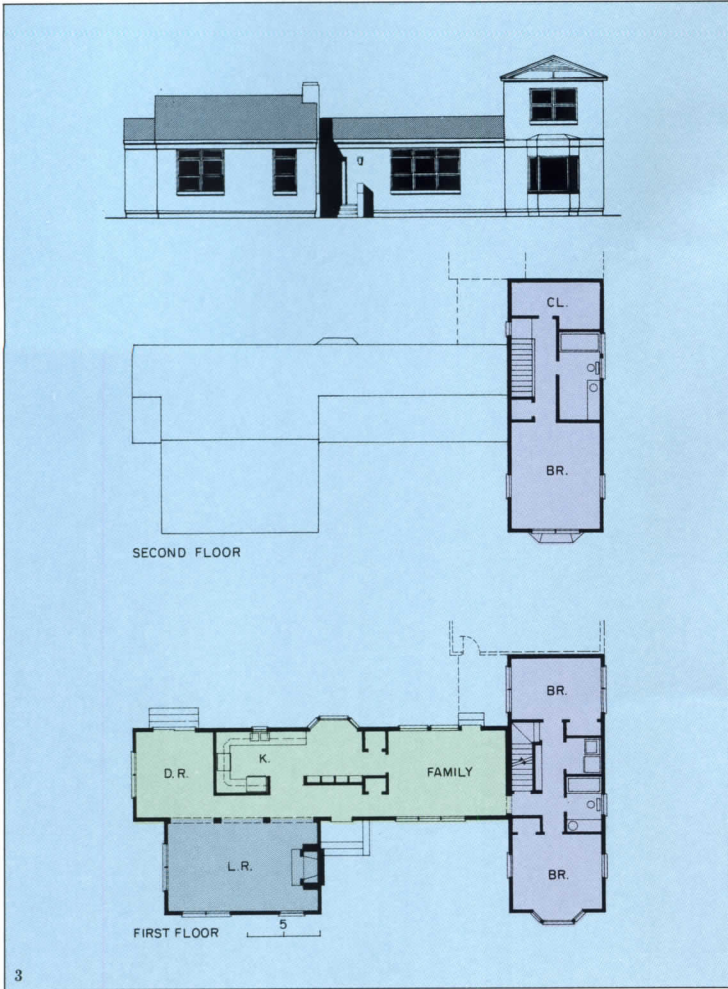
houses in a season you can buy materials for the same dollars that manufacturers pay. You can employ your crew steadily and afford a skilled foreman. When you are doing one or two houses, though, it takes much longer because each sub has to fit you into his schedule, and then they don't show up. You're not able to have the same skilled foreman to coordinate."



Berke & McWhorter

Architects Berke & McWhorter designed 12 modular houses for Gerber, which homebuyers may order from a licensed factory in Pennsylvania. They range from a basic 1,800-sf model the architects call "doublewide" (1, opposite) to a bay-windowed type suitable for many city sites (2, and photo opposite bottom) and a sprawling ranch (3), to a fully fitted-out, 3,500-sf version for the developer him-

self (4, and photos this page). Among their hints: Make mating-wall surfaces simple, turning corners, for example, to disguise any minor misalignment of units. Site-applied work (such as siding) typically costs double what it would if done in the factory.



Tria Giovan photos this page

Three-deckers for Mattapan

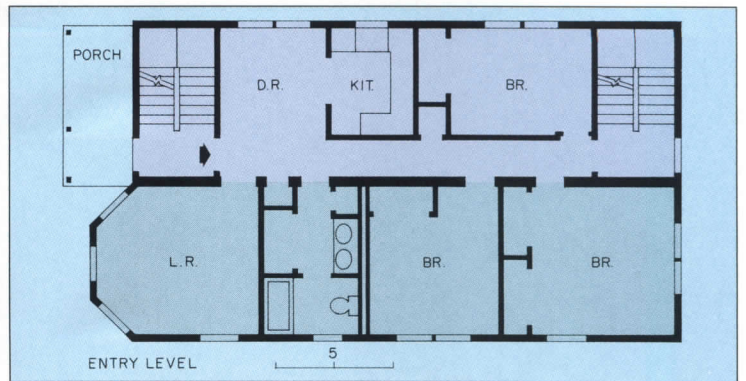
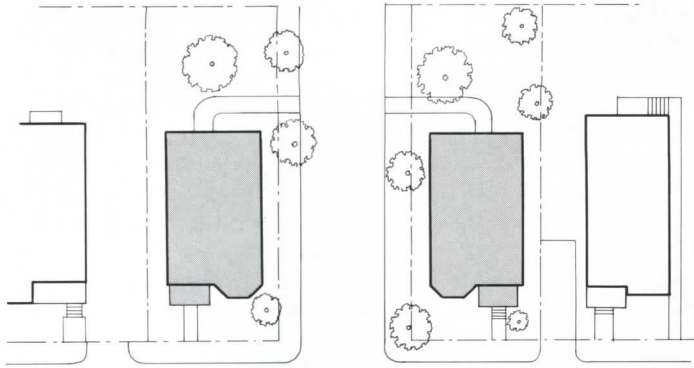
Because units can be fabricated and shipped to the site in as little as 10 days, "most factories won't begin production until permits, foundations, and backfilling are all completed," explains Peter Papesch, of the Boston firm Papesch Associates. Papesch found the financing and permission processes to be the most significant time constraints, being both long and unpredictable. (Most

states have established a regulatory process to avoid conflicts with local codes.) Factory-built techniques typically achieve their economic edge by lowering "soft" expenses, including interest and such "general conditions" as office overhead, site supervision, pilferage, and waste—precisely the items that push costs of stick-built houses on infill lots to unacceptable heights.



© Peter Vandewalker photos





Papesch Associates designed two unit types for Mattapan, a working-class neighborhood in Boston. A 3-story, 6-unit model required 36 modules; the 3-unit buildings shown on these pages have identical owner-occupied apartments on each floor. To make the units affordable to families with annual incomes as low as \$19,000, the city donated the vacant lots, the State of Massachusetts offered first-

time homebuyer mortgages at 5.4 and 8.4 percent, and the developer complied with strict multifamily code requirements while agreeing to a fixed construction-cost ceiling.

Credits

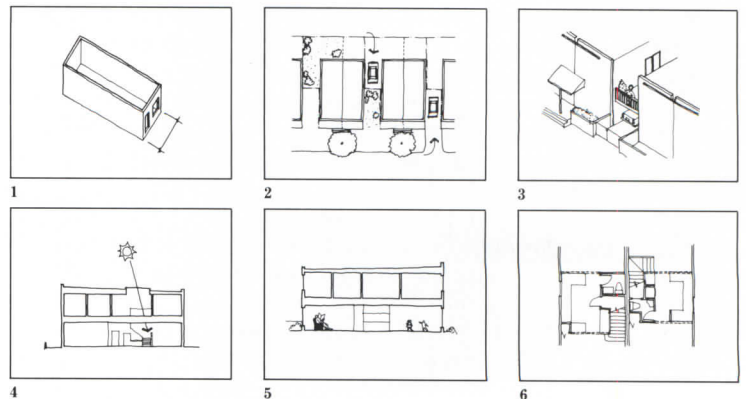
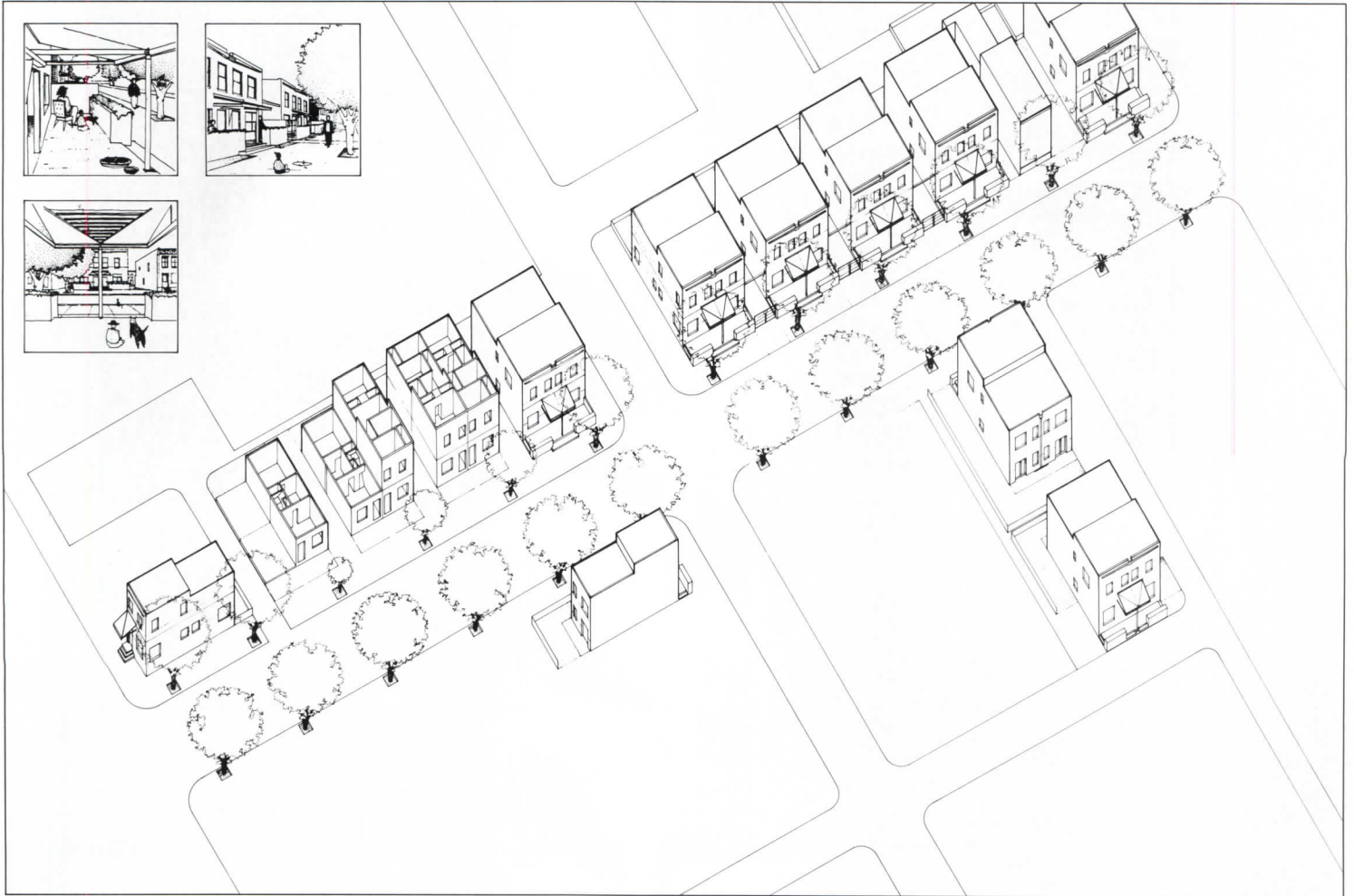
Architect: Papesch Associates
Developer-Builder: Consalva & Sons

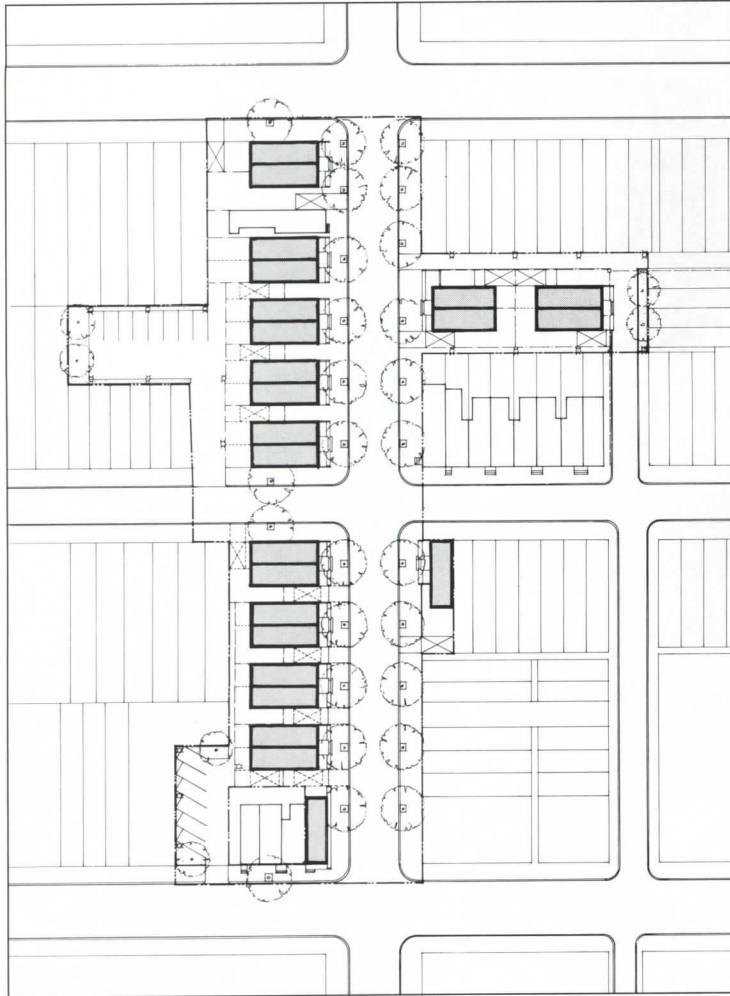
Manufacturer: Contempri Homes, Inc.

Twins Return to Camden

Adèle Naudé Santos has long investigated solutions to vacant lots—the “broken teeth” in troubled yet viable neighborhoods. Camden, across the Delaware River from Philadelphia, is arguably New Jersey’s poorest city, but is well situated to take advantage of expanding employment in the area as well as a waterfront that is being redeveloped. William’s Row seeks to continue

the revitalization of a nearby historic district through the use of 24 two-unit “twins,”—a familiar type in the city. “We built flexibility into the units to suit familial arrangements, such as single moms,” explains Leslie Bain, the project coordinator. “To make them affordable, middle-income buyers could buy a twin and rent out one of the units. Some of the rentals will be subsidized.”



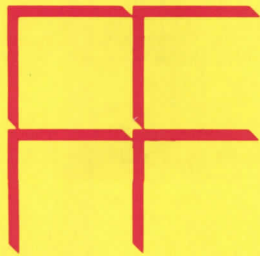


Each building in William's Row (which was conceived as a modular development, but which will be built for the sponsor, the City of Camden, using a substantially similar Swedish panelized system) contains two 14-ft-wide units (1, opposite). The twin configuration meets site-density needs and leaves open space for decks, parking, or gardens (2, 3). The property lines are split so that

units have either the front or rear half of a side yard. A skylight brings light to the central kitchen core (4), which separates living areas so that different activities can go on at the same time (5). Kitchen areas can be closed off from one or both living spaces (6). Upper-floor baths have room for a laundry. Completion is expected later this year.



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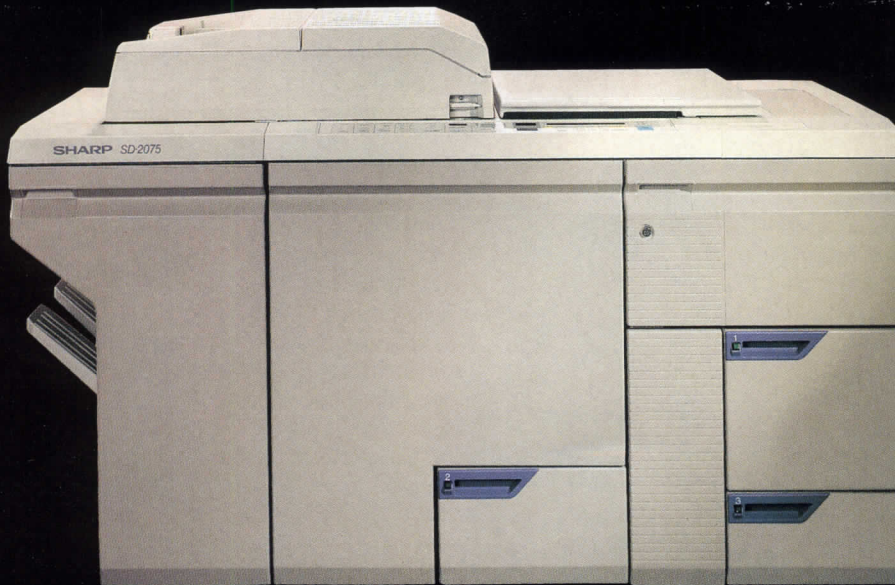


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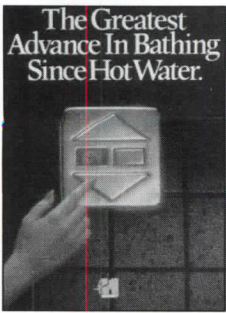
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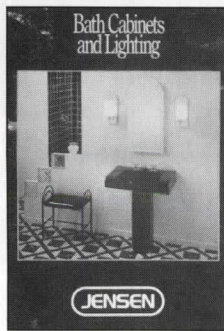
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The Greatest Advance In Bathing Since Hot Water.

Push-button Shower

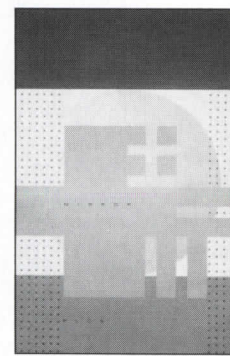
The Ultravalve delivers water at the temperature called for on its LED display, regardless of pressure changes. Off/on and warmer/colder work at a touch. Memry Plumbing. **400**



Bath Cabinets and Lighting

Bath Storage

Dozens of styles include wood-framed mirrors, corner cabinets, and European frameless designs. Color catalog includes all dimensions and lighting options. Jensen. **401**



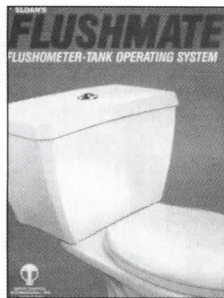
Mirrored Cabinets

Brochure describes the Mirror Plus system as modular, dimensionally expandable cabinet and lighting components for the bath. Options include mirror de-mister and interior outlet shelf. Robern, Inc. **402**



Modular Faucets

Contemporary Concentrix handles offer interchangeable grooved grip rings in chrome, brass, and glacier finishes that let the designer coordinate bath, tub/shower, and kitchen fittings. Moen. **403**



FLUSHMATE FLUSHOMETER-TANK OPERATING SYSTEM

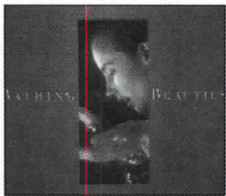
Low-consumption Toilets

Brochure explains how pressure-assisted flush action prevents line clogs. Water-saving models by five manufacturers illustrated. Sloan Water Control International. **404**



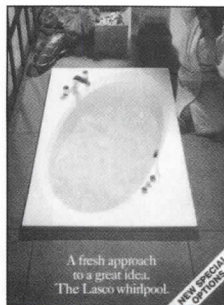
Faucets

Single- and two-handle designs for kitchen and bath covered in a 36-page catalog. All finish, handle, and spout options shown in room-setting vignettes. Delta Faucet Co. **405**



Bath Fittings

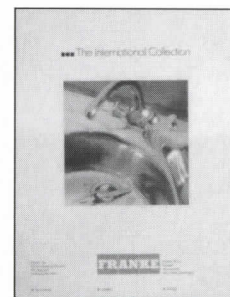
Traditional, contemporary, high-tech, and waterfall-type faucets featured in a 40-page color catalog. Matching cabinet hardware, bath accessories, and towel racks included. Harden Industries. **406**



A fresh approach to a great idea. The Lasco whirlpool.

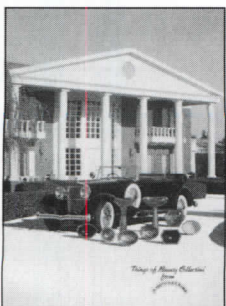
Whirlpool Tubs

Acrylic/fiberglass tubs come in colors that match china fixtures by major manufacturers. Features include lumbar-massage jets and installed grab bars. Lasco Bath Fixtures. **407**



Sinks

Corner units, large colored sinks, and small stainless-steel models included in a 20-page catalog. Color-coordinated accessories also shown. Franke, Inc. **408**



Lavatories

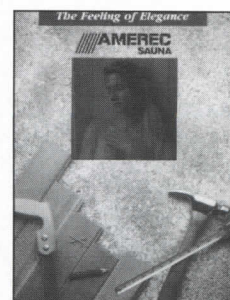
Pedestal and drop-in basins come in deep tones such as malachite, luxurious marble and polished gold, and hand-painted florals. Custom design and decoration a specialty. American China. **409**



1.5 Gallon Ultra-Saver

1.5-gallon Toilet

An Ultra-Saver brochure answers questions about low-flush toilets, and includes a chart to help calculate the volume of water used by different types of buildings. Universal-Rundle. **410**



Saunas

Detailed color brochure has full dimensions, design specs, and suggested layouts for Amerrec freestanding, built-in, and kit-supplied sauna baths made of red cedar. 8 pages. Nasscor, Inc. **411**

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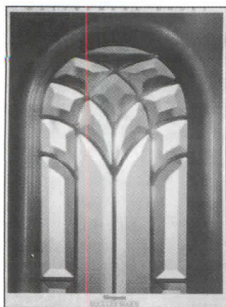
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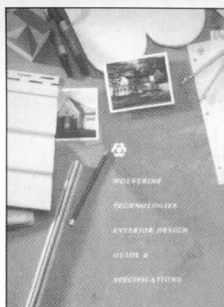
For more information, circle item numbers on Reader Service Cards.



Residential Entrances

Raised-panel designs in fir and hemlock are shown with dozens of decorative glazing and sidelight options. Solid-wood traditional-style doors are included. 24 pages. Simpson Door Co.

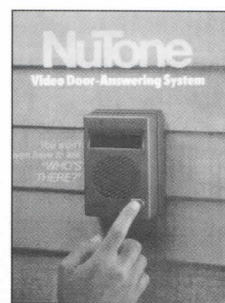
412



Exterior Design

A 28-page guide to architectural vinyl siding and trim components is illustrated by case studies of homes in five geographic regions. Material-test data and installation tips are included. Wolverine Technologies.

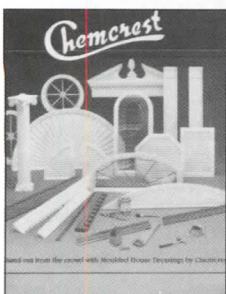
413



Door-answering System

Brochure explains the home-security features offered by a compact audio/video unit. Said to be easily installed in new or existing homes, system gives a clear view of callers. NuTone.

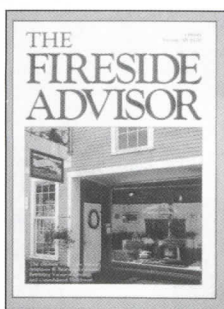
414



Decorative Details

Architectural moldings, ceiling medallions, louvers, and pilasters made of molded plastic can be stained or painted for interior or exterior use. Decorative windows and door surrounds included. Chemcrest.

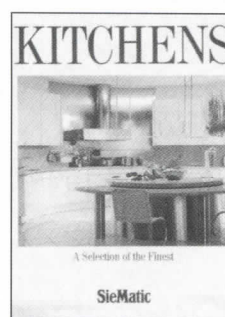
415



Stoves/Fireplaces

Clean-burning wood stoves, fireplace inserts, and heaters shown in an informative 84-page *Fireside Advisor* catalog. Hearth accessories, enamel colors, and other options pictured.

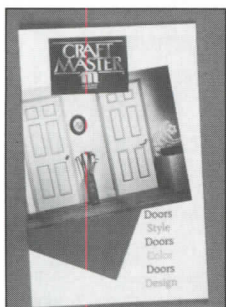
Vermont Castings. **416**



Kitchen Design

Fold-out poster illustrates German-made cabinetry for a broad range of budget and design requirements. Finishes include wood, stainless steel, laminates, stone, and solid-surface materials. SieMatic.

417



Interior Doors

Molded facings offer many decorating options in six-panel, two-panel, and four-panel configurations for interior use. A 16-page brochure shows doors in a variety of room settings. Masonite.

418



Wood-frame Windows

Written for the homeowner, a 32-page *American Album* places awnings, casement, sliding, round-top, and other window styles in different room settings that accentuate the design potential of

windows. French, sliding, and hinged patio doors are also included, along with the Georgetown line of true-divided-light windows and doors. Caradco.

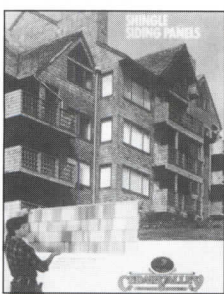
419



Resilient Flooring

Color catalog shows new Gold-line flooring used in kitchens, bedrooms, and baths. Material has been designed for superior impact-, puncture-, and moisture-resistance. Mannington.

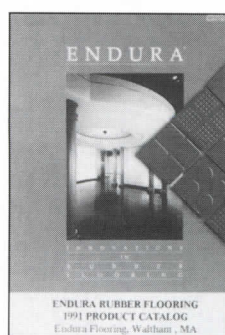
420



Cedar Shingles

Brochure highlights cedar siding used on homes and multi-family structures. Panels have 4-, 5-, or 7-in. exposures in any of 12 shingle styles, and interlock panel-to-panel, with no visible vertical joint. Cedar Valley.

421



Rubber Flooring

Design catalog highlights new floor colors ranging from Toucan Red to Coral and Teal. Tiles come in custom colors as well as 15 standard shades, and smooth, textured, and studded surfaces.

Endura.

422

A BLACK-AND-WHITE STATEMENT ABOUT THE MOST COLORFUL PAINTS

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Architectural Record April 1991 151

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Discover the color of money.

Elkay's Sculptura® sink is available in White, Almond, and a unique Granite look in Gray or Tan. Whichever color your customers choose, Sculptura translates to more money for you. Made of high-tech Decostone for strength and durability, Sculptura offers smooth, sleek, contemporary styling. One word says it all...



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just say **ELKAY**

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Product Literature

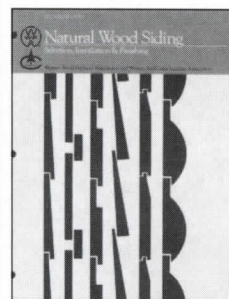
For more information, circle item numbers on Reader Service Cards.



Swedish Wood Finishes

Fact sheet explains how the clear Gold Seal finish system helps natural-wood floors withstand the traffic and hard use of kitchens and corridors. Worn spots can be touched up. Glitsa American.

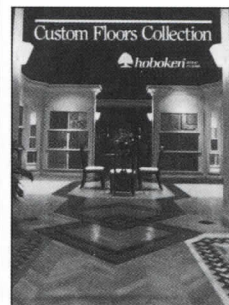
423



Wood Siding

A guide to selecting and installing natural-wood siding has data on lumber grades, surface textures, and finishes, and a chart on the most effective nail patterns for different sidings. Western Wood Products.

424



Hardwood Floors

Brochure illustrates parquet, plank, and strip flooring, and outlines the relative design priority of pattern, wood specie, grain character, and texture and finish in specific applications. Hoboken Wood Floors.

425



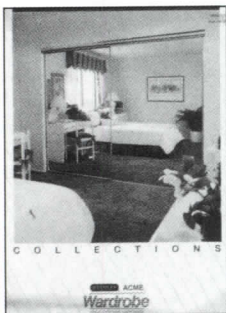
Laundry Layouts

An idea booklet demonstrates the flexibility possible in laundry design, explaining how equipment can be integrated into various areas of the home. Maytag Co.

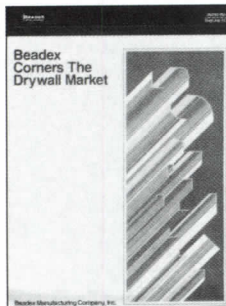
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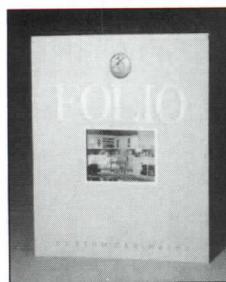
Specialty Flooring
New Timeless Series laminated wood-plank floors, offered in four woods and many stain colors, have a slightly beveled edge that defines each piece for a more linear look. PermaGrain Products.
427



Mirrored Doors
Space-expanding mirrored-door treatments illustrated. Track and hardware options allow sliding, pocket, and bi-fold configurations, in frameless as well as aluminum- and oak-framed styles. Stanley Hardware.
428



Corners
Drywall edge treatments shown include Softline products for rounded inner and outer corners with 3/4- and 1 1/2-in. radii, and off-set beads for angles larger than 90 degrees. Beadex Mfg.
429



Kitchen Cabinets
A 70-page portfolio illustrates kitchens and baths created by well-known architects and designers. Accessories include pull-out sewing tables, file drawers, and bottle shelves. Rutt Custom Kitchens.
430

More literature on page 167

Discover euro-flexibility.

Elkay's new Calais faucet with pull-out spray provides incredible style and versatility. In single- and two-handle models. Chrome, almond, white and glossy black. For a full line of quality products to enhance your kitchen...



© 1989 Elkay Manufacturing Company

just say **ELKAY**

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Its colorful personality reflects on your bottom line.

Customers are attracted to the stainless steel elegance of Elkay's Contemporary Gourmet sink line. Featuring our exclusive Lasting Beauty™ finish, these sinks coordinate perfectly with any kitchen color. For lasting customer satisfaction, bigger profits and better margins, there's only one word to say...



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RECORD INTERIORS 1991

The editors of ARCHITECTURAL RECORD announce the 22nd annual RECORD INTERIORS issue. Architects and interior designers are invited to submit recently completed interior design projects in all categories; work previously published in other national design magazines is disqualified. There are no entry forms or fees; however, submissions must include photographs (transparencies, slides, or prints), floor plans, and a project description—bound firmly in an 8½-by-11-in. folder—and be postmarked no later than April 30, 1991. The winning entries will be featured in the September 1991 RECORD INTERIORS. Other submissions will either be returned or scheduled for publication in a future issue.

Submissions should be mailed to:

KAREN D. STEIN
RECORD INTERIORS
ARCHITECTURAL RECORD
1221 Avenue of the Americas
New York, New York 10020

New products

For more information, circle item numbers on Reader Service Cards.

309 Compact lap pool

The SwimEx pool, 12 ft long by about 6 1/2 ft wide, combines lap swimming exercise with the appearance of a spa. The user swims in place against a broad, even current created by a concealed paddle-wheel propulsion system. The freestanding, laminated-fiberglass pool, which requires a load-bearing capacity of 425 lb psf, can be installed in- or above-grade; it is sectional, and will fit through 36-in.-wide openings. Options include a non-chemical ozone water purification system and underwater stereo speakers. Base price for a 50-in.-deep model is about \$23,500. SwimEx Systems, Inc., Warren, R. I.

310 Composite entry

A new style using new materials, the Vintage residential entry has door faces of oak-grained polymer over an insulating core. Surfaces may be stained or painted. Triple-glazed lights have leaded glass. Peachtree Doors, Inc., Norcross, Ga.

311 Cooktop

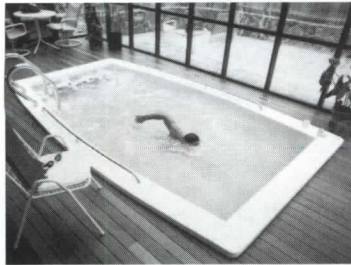
Glass-ceramic components in the Expressions cooktop series fit flush into countertops, and offer a choice of halogen, radiant, solid cartridge, or conventional-coil elements. Finishes come in black, white, or stainless steel. Jenn-Air Co., Indianapolis.

312 Media framework

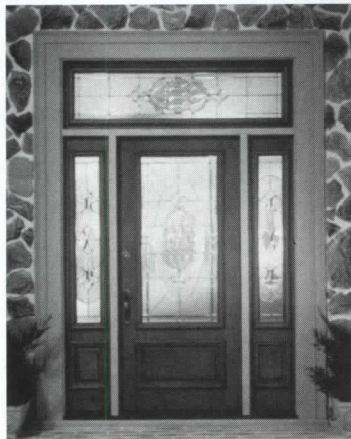
A specific application of an Italian display/support system, the Zero Movie is an open assembly of gray epoxy-coated steel. The unit is acoustically transparent, with no resonant cavity effects; the thin screen seems to float. Zero US Corp., Lincoln, R. I.

313 Decorative resilient

A wood-flooring look in 3- by 9-in. tile, Blockwood vinyl comes in seven realistic grain colorations. Also new are coordinating wood- and marble-patterned border and corner tiles. Azrock Industries, San Antonio, Tex.



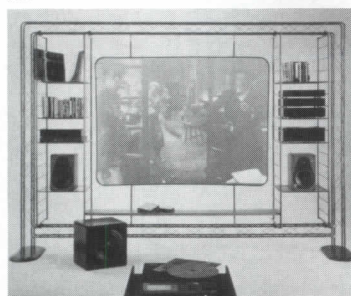
309



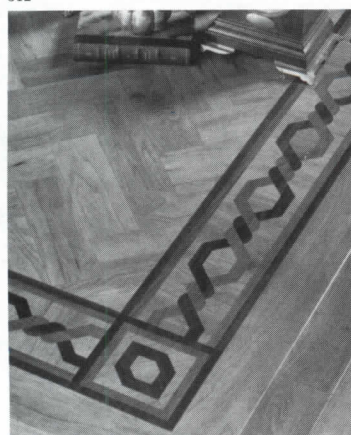
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311

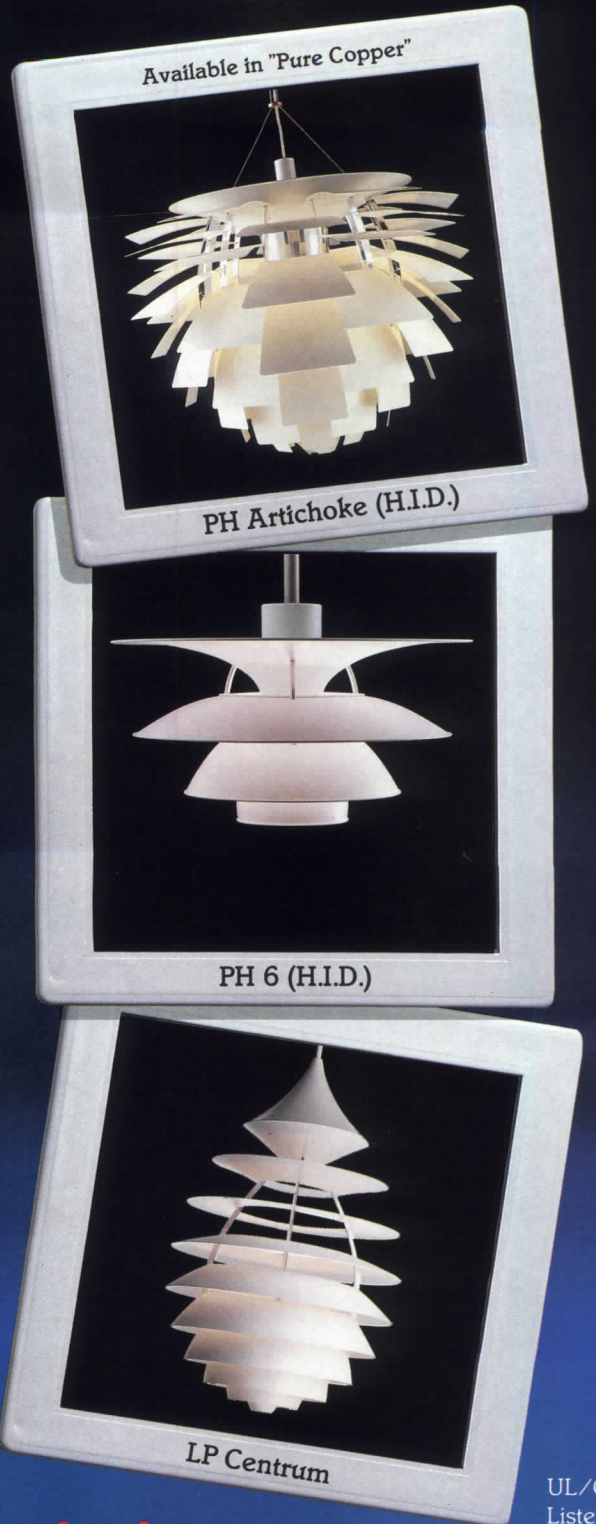


312



313

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Circle 43 on inquiry card ►

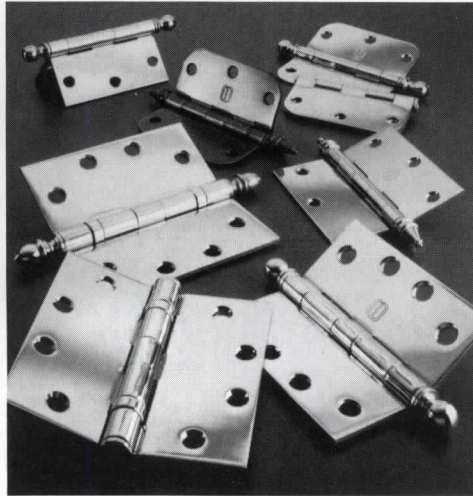


314

New Products

314 Pedestal basin

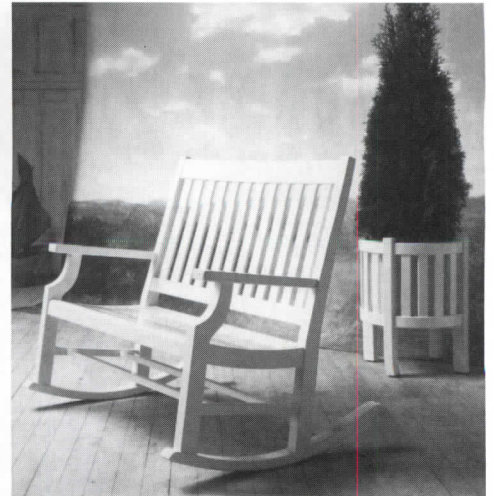
The Harmonia pedestal lavatory pictured is 39-in. wide, providing a place to put the toothpaste tube. A smaller, 28-in.-wide size, and a two-bowl/single-base configuration are also available in the same flaring style. Color range: black or white. Kallista, Inc., San Leandro, Calif.



315

315 Brass hinges

A new product, solid-brass door hinges come in both standard and residential weights, made of rolled metal so that the hinge leaves are interchangeable. Offered in polished, satin, and shaded finishes in brass or chrome, hinges offer a choice of button, ball, crown, and steeple decorative finials. Omnia, Cedar Grove, N. J.



316

316 Rocker for two

An unusual double rocker has been added to Weatherend's line of mahogany landscape furniture. Both rocker and the Southport planter pictured are constructed using boatbuilding techniques and come in a glossy white finish as well as clear mahogany and natural teak. Weatherend Estate Furniture, Rockland, Me.



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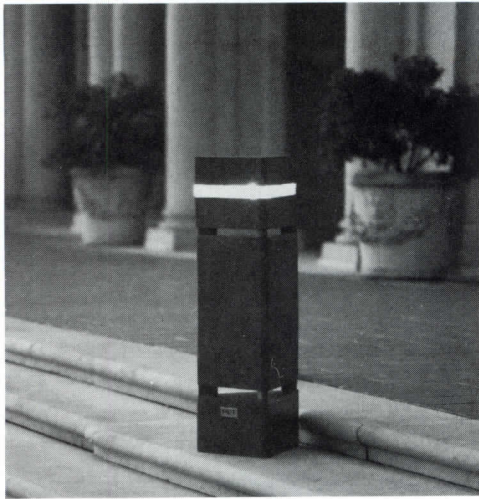


GARAVENTA

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CLIENT: GARAVENTA (CANADA) LTD.
AGENCY: WOLF WENZEL GRAPHICS
PUBLICATION:

Circle 44 on inquiry card



317

317 Outdoor light/speaker

The Garden Speaker combines an acoustically superior high-fidelity speaker and soft illumination inside a freestanding stonelike acrylic enclosure. Available in this 35-in.-high rectangular column as well as a triangular shape, it provides nondirectional sound over 360 degrees. All components resist severe climate conditions, including salt-spray exposure. Pioneer Electronics Technology, Pomona, Calif.



318

318 Weatherproof windows

A new design said to provide an energy-efficient alternative to the traditional double-hung window, the Slide/By operates like a double-hung set on its side. Sash are easily removable from the inside for cleaning. Weather-resistant features include flexible gasketing and high-performance glazing. Weather Shield Mfg., Inc., Medford, Wisc.



319

319 Architectural elements

This French Waterleaf molding is part of an extensive line of classic details offered in carved wood and reinforced plaster. Products include load-bearing columns in lengths of up to 30 ft, Federal- and Georgian-style pedimented entrances of hand-carved mahogany, and sharply detailed cornices in cast plaster. Worthington Group, Ltd., Atlanta. *More products on page 168*

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discriminating
palates.

Create a masterpiece with our aesthetically appealing range of over 20 vibrant colors of granite wall and floor tile.

Unsurpassed polishing techniques, perfected by our 40 years' experience as domestic quarriers and manufacturers, enhance the exceptional beauty and durability of American Granite tile.

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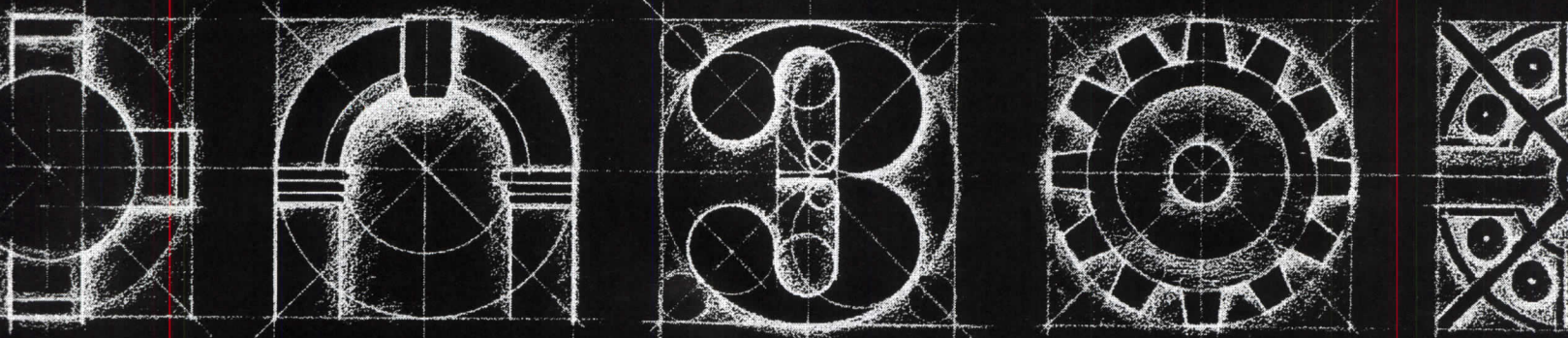
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"Today, Federal design projects continue to transform visionary concepts into reality, producing buildings, landscapes, and products that meet human needs by combining performance with inspiration and utility with art."

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Call For Entries

To recognize successful achievements in federal design and to honor those individuals who have made outstanding contributions to federal design, the White House is pleased to invite entries for Round Three of the Presidential Design Awards.

Eligibility

Works sponsored, authorized, commissioned, produced, or supported by any department or agency of the U.S. government and that have been completed and in use between January 1, 1981 and January 1, 1991.

Who May Enter

Current federal employees, former federal employees, federal contractors, state

and local governments, or non-profit organizations that have completed design works for the United States government.

Deadline

Entries must be received by 5:00 p.m. EST, Monday, June 24, 1991.

Entry forms are available through:

**Design Arts Program
National Endowment for the Arts
1100 Pennsylvania Avenue, NW
Washington, DC 20506**

For further information, call:

Thomas Grooms, (202) 682-5437

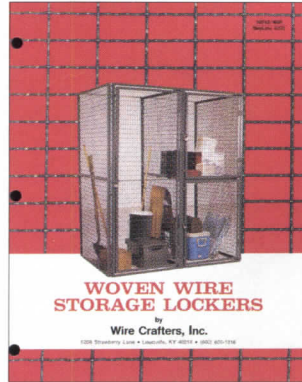


P R E S I D E N T I A L
Design Awards
1 9 9 2

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, just fill out and return one of the special Reader Service Cards bound into this Product Literature Showcase.

Storage Lockers



A heavy duty, all steel woven wire locker for storage areas in multi-family buildings. Choice of single or double tier units, in stock or custom sizes. Easy to install. Many advantages over solid wall lockers. Send for free brochure or call 1-800-626-1816.

Wirecrafters, Inc.

Circle 500 on the PRODUCT LITERATURE SHOWCASE inquiry card.

Custom Made Oak Rolling Ladders



Putnam Rolling Ladder Co. has been manufacturing rolling ladders since 1905. Great for homes, home libraries, offices, stores and lofts. Each ladder is custom made in oak, ash, maple, cherry, Honduras mahogany or birch. Other woods and finishes available. Track and hardware come in four finishes including black, brass plated and chrome plated.

Putnam Rolling Ladder Co.

Circle 501 on the PRODUCT LITERATURE SHOWCASE inquiry card

Chadsworth Incorporated

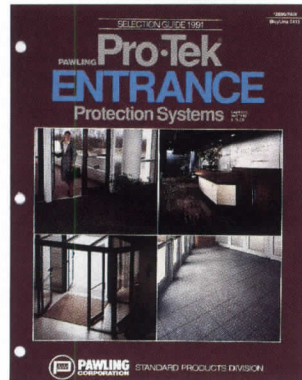


Authentic Replication Columns follow the specs derived from the fifteenth century Renaissance master architect, Vignola. Architectural Stock Tuscan, Contemporary and Art Deco columns in pine, redwood and other wood species. Diameters - 6"-36". Heights to 40'. CHADSWORTH - Expect the Best! Catalogs or information Box 53268, Dept. 9, Atlanta, GA 30355. Ph. 404-876-5410. Fax 404-876-4492.

Chadsworth Incorporated

Circle 502 on the PRODUCT LITERATURE SHOWCASE inquiry card.

Pawling's Pro-Tek® Entrance Flooring Systems



"First line of defense" carpet floor finishes, mats and matting protect expensive interior flooring from tracked-in-dirt/water. Ideally suited for interior/exterior entrances, lobbies, vestibules, elevators—any high traffic area requiring high style yet low maintenance. Styles/colors available. 16 page Pro-Tek Entrance catalog. 800-431-3456, in NYS 800-942-2424. Standard Prod. Div., 157 Charles Colman Blvd., Pawling, NY 12564-1188.

Pawling Corporation

Circle 503 on the PRODUCT LITERATURE SHOWCASE inquiry card.

Roll Formed/Extruded/Acrylic Walkway Covers

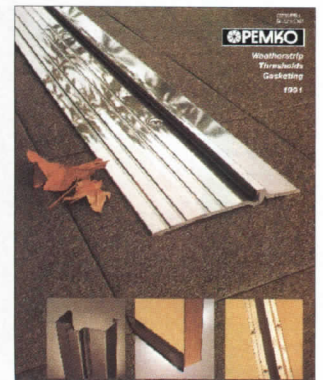


Mapes Industries provides a complete line of canopy and walkway cover solutions. Styles include roll formed, extruded, acrylic, pyramid and barrel vault designs. Standard designs can be used to create custom appearances at a fraction of the price. A free catalog and design details are available from Mapes Industries, Inc., P.O. Box 80069, Lincoln, Nebraska 68501 — 800-228-2391.

Mapes Industries

Circle 504 on the PRODUCT LITERATURE SHOWCASE inquiry card.

Weatherstripping/Thresholds



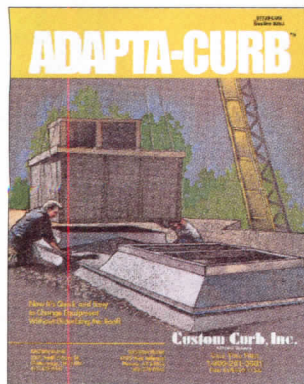
Pemko's all new full-line catalog exhibits our complete line of residential and commercial products, including thresholds, gasketing, astragals, automatic door bottoms. Pemko's many new products and finishes are shown, including white and brite-dip gold anodized product line, adjustable thresholds and spring-bolt astragals. Pemko (805) 642-2600, fax (805) 642-4109.

Pemko

Circle 505 on the PRODUCT LITERATURE SHOWCASE inquiry card.

PRODUCT LITERATURE SHOWCASE

Adapta-Curb



Informative color brochure illustrates the many configurations and options available with Adapta-Curb System that allows easy addition or replacement of rooftop equipment without disturbing the roof. It's designed for retrofit as well as new construction applications. The brochure outlines features and methods possible for easy addition or replacement of HVAC units and other rooftop equipment. 800-251-3001.

Custom Curb, Inc.

Circle 506 on the PRODUCT LITERATURE SHOWCASE inquiry card.

Natural Stone Fireplaces

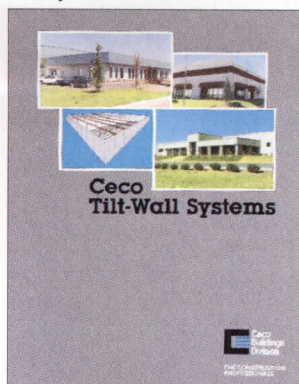


Bring the romance of a fire and the breathtaking character of stone into your customers' homes with unique fireplaces. An internal contraflow design from Finland, combined with nature's finest material for retaining heat: soapstone - provides a highly efficient, emissions-free fireplace. Call our new US sales office at 1-800-THE-FIRE (800-843-3473) to receive a free color brochure on TULIKIVI Fireplaces, Bakeovens, Cookstoves, Countertops, and the Dealer nearest you.

Tulikivi Group

Circle 507 on the PRODUCT LITERATURE SHOWCASE inquiry card.

Structural and Roof Systems for Tilt-Wall



Detailed drawings of innovative structural and roof systems used in conjunction with tilt-wall construction are featured in "Ceco Tilt-Wall Systems". Framing systems include Widebay™ bar joist system with open or solid web trusses, rigid frame, and Harley Systems Space Frame. Cecolok® and CRP16 standing seam roof systems are also featured.

Ceco Buildings Division

Circle 508 on the PRODUCT LITERATURE SHOWCASE inquiry card.

SONEX Acoustical Ceilings



SONEX Ceilings offer renowned acoustics plus the ability to create hundreds of truly unique ceiling designs. SONEX Ceilings are available in five tile patterns and in white, gray or beige colors. Each 24" x 24" tile fits into standard ceiling grids and can easily be cut. Represented by Architectural Surfaces, Inc., 123 Columbia Court North, Chaska, MN 55318. (612) 448-5300.

Architectural Surfaces Inc.

Circle 509 on the PRODUCT LITERATURE SHOWCASE inquiry card.

CycLoops™ Bike Racks in 170 Designer Colors

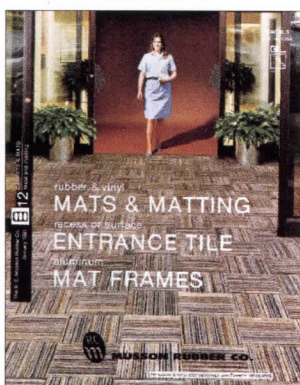


The Original CycLoops bicycle rack as well as the new Wall, Bollard and Super CycLoops variations are now offered in over 170 special designer color coatings plus the standard galvanized and stainless steel versions. Several standard colors and all sizes are available for QUICK SHIPMENT. Choose from embedded or surface mounting. Call 1-800/547-1940 (ext. 555) for free specifier literature.

Columbia Cascade Co.

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Mats and Matting Brochure

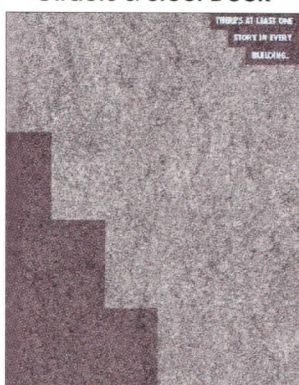


This Musson brochure produced in 8 color pages features recess and surface entrance matting made of rubber and vinyl along with fluff cord and traffic tile, aluminum/vinyl roll-up mats plus aluminum recess and surface mat frames. Illustrations, specifications and printed color samples are supplied to aid the buyer in satisfactory use and application. To request copies, write Musson Rubber Co., P.O. Box 7038, Akron, Ohio 44306.

Musson Rubber Co.

Circle 511 on the PRODUCT LITERATURE SHOWCASE inquiry card.

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. For more information, contact Joe Urey at 704/332-9071.

Vulcraft

Circle 512 on the PRODUCT LITERATURE SHOWCASE inquiry card.

Mirror/Structural Adhesives



Palmer Products Corporation offers a brochure and installation guide for Palmer Mirror-Mastic® and its other Mirror-Related and structural adhesive products. This four-page brochure includes descriptive product information as well as the various installation instructions and coverage specifications for Palmer's entire line of products.

Palmer Products Corp.

Circle 513 on the PRODUCT LITERATURE SHOWCASE inquiry card.

Skytech Systems Folding Glass Walls



Mirage is an exterior folding glass wall for commercial/residential use in bronze or white extruded aluminum. When closed, eliminates condensation build-up & its silicone-compatible rubber gasketing prevents air/water penetration. Installed to open left or right, includes sliding screens. Widths up to 20' and heights of 81-1/2" for exterior walls, 49-1/2" for new/replacement windows. Bronzefinished Low "E" glass. 800-437-5795.

Skytech

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Outwater Plastics

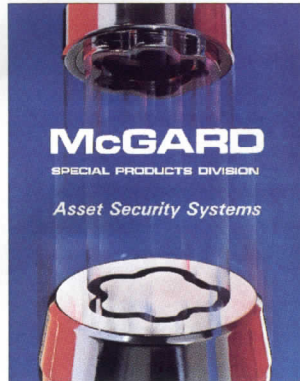


Yesterday's architectural elegance with tomorrow's technology here now. High-density polyurethane cornices, mouldings, ceiling medallions, niches, corbels, pilasters, columns and much more. Excellent for new construction, renovations and redecorating projects. Unbelievable sharp detail and relief. Primed, ready to finish. New catalog, free. Write: Outwater Plastics/Ind., 4 Passaic St., Wood-Ridge, NJ 07075 or call: (201)-340-1040.

Outwater Plastics

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McGard Special Products Division



McGard Special Products Division has designed The Intimidator Security Locks to protect against unauthorized access (or departure). Ideal for prisons or situations demanding tight security. Virtually impossible to defeat with strong-arm tools. Innovative design, space-age metals along with computer generated and controlled locking patterns add up to total security. 3875 California Road, Orchard Park, NY 14127, 800-669-6887. Fax 716-662-8985.

McGard Special Products Div.

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Duraflake FR

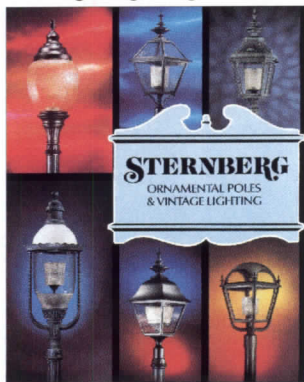


DURAFLAKE FR is a smooth, grain-free, Class I fire-rated particleboard panel designed to meet fire code regulations. It is an excellent substrate for fine wood veneers, high and low pressure laminates and vinyls in all wall systems, furniture and fixtures applications where fire codes and public safety are critical. Contact Willamette Industries, Inc., P.O. Box 428, Albany, OR 97321 or call (503) 928-5866.

Duraflake

Circle 517 on the PRODUCT LITERATURE SHOWCASE inquiry card.

Ornamental Poles and Vintage Lighting Fixtures

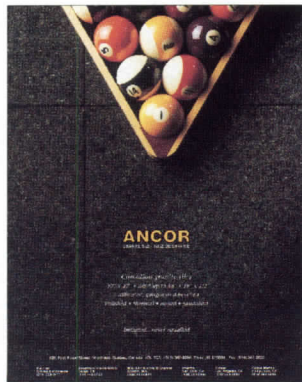


Historical elegance with unequalled performance. Ornamental lamp posts, fixtures and bollards of heavy duty cast aluminum, welded for single unit construction and durability. Minimum maintenance, vandal resistant. Illustrated 48-page catalog with prices. Photos show nationwide installations including photos of malls, retail stores and downtown shopping districts.

Sternberg Lanterns Inc.

Circle 518 on the PRODUCT LITERATURE SHOWCASE inquiry card.

Ancor Granite Tile



Free reprint describes a quick, easy way to customize construction plans using simple cut and tape techniques and an engineering copier. Beneficial reading for the custom builder. Xerox Corporation, 300 Main Street, Suite 4-102, East Rochester, NY 14445. Call 1-800-448-3400, Ext. 558 or circle reader service number.

Ancor Granite Tile Inc.

Circle 519 on the PRODUCT LITERATURE SHOWCASE inquiry card.

Shakertown Cedar Siding

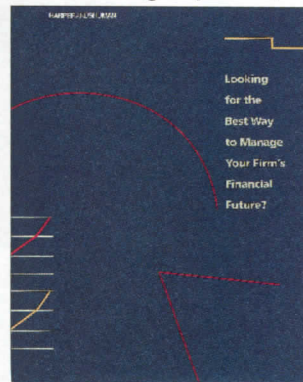


The natural Western Red Cedar shingles applied on 8ft. panels are available in the clear vertical grain Colonial face, or the rustic mixed grain Cascade Classic. Choose from exposures of 4-1/2", 7", or 14". Fancy Cuts decorative cedar shingles are available in 9 patterns of individual shingles as well as 8ft. panels. 1-800-426-8970. 1-206-785-3501 in WA.

Shakertown

Circle 520 on the PRODUCT LITERATURE SHOWCASE inquiry card.

CFMS (Computer-based Financial Mgt. Systems)



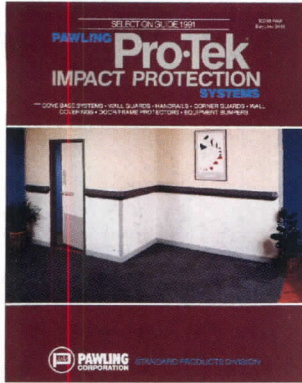
Harper and Shuman develops, sells and supports financial management software specifically for architects. The only system of its kind sponsored by the AIA, MICRO/CFMS runs on PCs and CFMS runs on the DEC VAX. A modular approach lets you buy only what you need. Call today (617)-492-4410 or (415)-543-5886. Harper and Shuman, Inc.

Harper & Shuman, Inc.

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PRODUCT LITERATURE SHOWCASE

Impact Protection Systems: Wall/Corner Guards

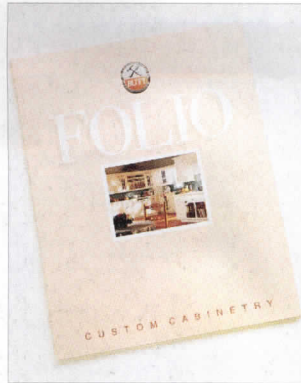


Catalog features wall/corner guards, handrail, cove base systems, wallcoverings and door protection to reduce impact damage in offices, hospitals, commercial and healthcare facilities. Pro-Tek® products work as a coordinated system, in matching or contrasting colors for a unified, finished look, or to identify areas or traffic patterns. 32 page catalog. 800-431-3456, in NYS 800-942-2424, 157 Charles Colman Blvd., Pawling, NY 12564-1188.

Pawling Corporation

Circle 522 on the PRODUCT LITERATURE SHOWCASE inquiry card.

Rutt's 70-page "Folio of Custom Cabinetry"



RUTT CUSTOM CABINETRY'S "Folio" demonstrates a wide selection of traditional, transitional, and contemporary styles, and the latest in custom design and decorating ideas for rooms throughout the home. Send request on company letterhead and also receive free our 270-page Specifications Guide. Enclose \$7.00 - Rutt, Dept. AR, P.O. Box 129, Goodville, PA 17528.

Rutt Custom Cabinetry

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Communication Station®



The Communication Station® modular product line includes ergonomic work tables, pedestals, overhead storage units, corner units, adjustable keyboard trays and accessories. Try this 1" thick laminate product line as an economical alternative to more expensive workstations. Contact Tiffany's customer service dept. at 1-800-331-6315 for literature. Since 1926, all Tiffany products are backed by a lifetime guarantee.

Tiffany Office Furniture

Circle 524 on the PRODUCT LITERATURE SHOWCASE inquiry card.

Energy Advantage™ Low-E Glass From LOF

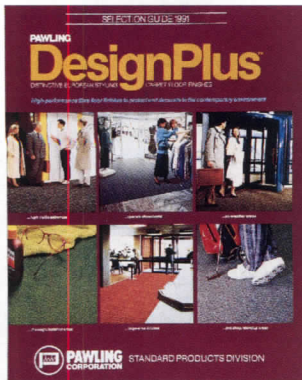


Energy Advantage™ Low-E Glass from Libbey-Owens-Ford Co. is a high-performance pyrolytic glass with unparalleled heat control and an appearance just like uncoated glass. Energy Advantage™ Low-E features: completely neutral color, high visible light transmittance, high solar transmittance, and reduced UV transmittance. And Energy Advantage™ Low-E Glass meets proposed energy codes.

Libbey-Owens-Ford

Circle 525 on the PRODUCT LITERATURE SHOWCASE inquiry card.

Pawling's Design Plus™ Carpet Floor Finishes



European style carpets are available in a wide array of colors and styles. Low maintenance and easy to clean, the Design Plus line is ideal for exterior/interior entrances, lobbies, vestibules, elevators, etc. where expensive interior flooring needs protection. Request our new full color Design Plus catalog. Call toll-free 800-431-3456, in NYS 800-942-2424. Pawling Corporation, Standard Products Div., 157 Charles Colman Blvd., Pawling, NY 12564-1188.

Pawling Corporation

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Impressions Are Important!!!

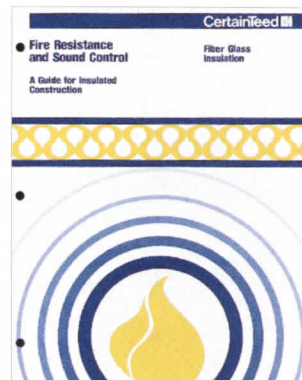


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Thomas Cases

For further information Call 1-800-544-7929.

Sound Control and Fire Resistance Brochure



New 12-page brochure offers architects data on the sound control and fire resistance properties of fiber glass insulation. Explains terminology, details existing codes and states standard measurement procedures. Also contains detailed drawings of more common wall assemblies for buildings.

CertainTeed Corporation

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Saino's Easytest* for Fire Doors

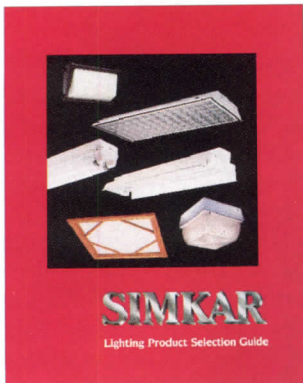


No more hassle to meet codes for testing manual sliding or folding fire doors. EASYTEST works with just a flip of the handle. Doors are free for everyday use, can be reset easily. EASYTEST is available on Saino fire doors or can be retrofitted to existing fire doors. For catalog FD1, call 1-800-345-1899. *patent pending.

Saino Manufacturing Co.

Circle 528 on the PRODUCT LITERATURE SHOWCASE inquiry card.

New SIMKAR Lighting Product Selection Guide



This new 32-page, full color SIMKAR Lighting Product Selection Guide catalogs, describes and illustrates all their lines of commercial and industrial lighting. Each lighting line is accompanied by a features and options chart, and representative product illustrations. Application photography is included throughout.

SIMKAR

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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 paver stones 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.

Envirospec, Inc.

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Slip Resistant Ro•Tile is Naturally Beautiful

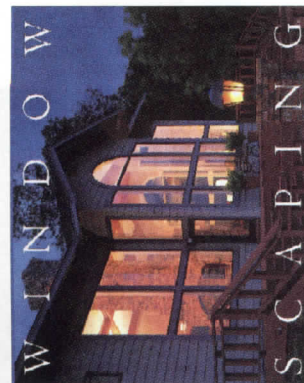


Ro•Tile is a cement-bodied tile that combines beauty and durability in a low maintenance floorcovering. This 12-page full color catalog contains design ideas and technical data, together with available colors, sizes and shapes. Ro•Tile is ideal for both residential and commercial projects, new construction or remodeling.

Ro•Tile, Inc.

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Windowscaping



Create visual "Windowscapes" with Pella windows, doors, sunrooms, and skylights. Our 22 page Windowscaping brochure will show you how to make an artistic statement...to transform the ordinary room into a spectacular space. Windowscaping design with Pella brand products is beautiful, but only the beginning. You'll also find greater energy efficiency, thoughtful features, and exacting craftsmanship.

Pella/Rolscreen Company

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Window and Door Ideas



Discover a world of window and door ideas in a new full color brochure from Weather Shield. The 22-page brochure features a broad selection of styles and shapes for your next home building or remodeling project. Learn why "There's More to See in a Weather Shield Window." 800-477-6808.

Weather Shield

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Self Closing Double Action Doors



Self Closing Double Action Doors. Eliason Easy Swing double action doors are illustrated in a new eight page, four color brochure. Literature contains complete specifications, usage and application data. Doors are gravity operated, open with a light nudge and close automatically. Specify and purchase direct. A three ring price/spec catalog will be sent to all architects and spec writers.

Eliason Corporation

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Best Buy: Ruegg Prisma



A deluxe steel zero-clearance unit, this refractory fireplace with cast-iron components features a three-sided panoramic glass door that tucks away into the unit when not in use. Its filtered air-exchange system combines room air with outside air for maximum heating efficiency (about 80 percent). The output is up to 50,000 Btu/hr.

Ruegg Fireplaces

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Timberline Software Corp.

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Frank Lloyd Wright Building Covered By Thermo Materials' Thermo-Lastic Cold Process Roofing System

**Gammage Center
For The Performing Arts**
Tempe, Arizona
Frank Lloyd Wright, Architect

Arizona State's Gammage Center for the Performing Arts, was one of Frank Lloyd Wright's last designs. During the 1950s, Mr. Wright's designs were characterized by circular themes and concrete ornamentations. The Gammage Auditorium is built on

a curved site and consists of two enormous circular structures that appear pushed together. Typical of Wright's progressive style, the unique building features two large arches decorated with concrete ornamental light fixtures that serve as a bridge from the auditorium to the parking lot.

Registered architect Craig Walling said that although it was an honor to work on Wright's building, those responsible for the renovation were presented with a real challenge requiring expertise and

extensive planning.

Pioneer Roofing was commissioned to replace the roof. The project required a light-weight and flexible roofing system. Thermo Materials' Thermo-Lastic Cold Process was specified.

The choice of specification was a joint effort on the part of the owner's representative, the architect, the contractor and the manufacturer. The choice was also aided by the architect's and contractor's extensive use of and satisfaction with Thermo products and assemblies.

The contractor installed an elastomeric waterproof membrane. Because the transition is highly visible, an elastomeric coating was custom mixed to match the original color. Sand was added to the coating in order to provide the desired surface appearance and texture.

Thermo Materials' Cold Process system meets the Underwriters Laboratories Class A requirements for new and retrofit roofing. For more information call Tom Russell at Thermo Materials, (800) 882-7007 or (619) 272-0061.



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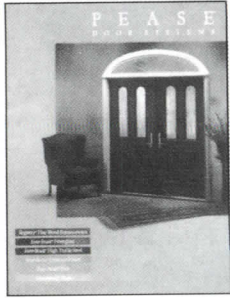


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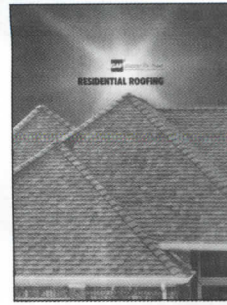
431



Slate Shingles

A checklist of correct slate roof details explains proper techniques, laps, and exposures, highlighting the textural interest and color range of natural slate. Vermont Structural Slate.

435



Wood-shake look

Brochure on residential roof products features the Ultra, the newest, heaviest Timberline shingle. Said to create a pronounced shadow-line, Ultra comes in five blended colorways. GAF.

436

More literature on page 178



Exterior Paints

Sample booklet contains chips of 42 new Earth Shade colors for residential siding and trim. Collection includes burgundies, reds, and mineral-tones available in flat, gloss, and satin finishes. Sherwin-Williams.

432



Architectural Millwork

Moldings, window surrounds, stairs and railings, casework, and other product profiles shown in a 20-page catalog. Available woods range from Ash to Zebrawood. Kentucky Millwork.

433



Siding and Trim

Catalog covering architectural vinyl siding illustrates applications of all 12 colors, as well as the full range of profiles and exposures. Trim options include dentil moldings, pediments, and pilasters. CertainTeed.

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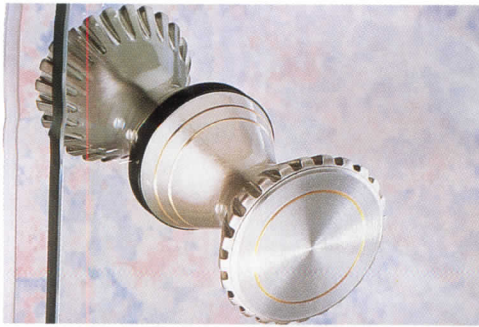
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320

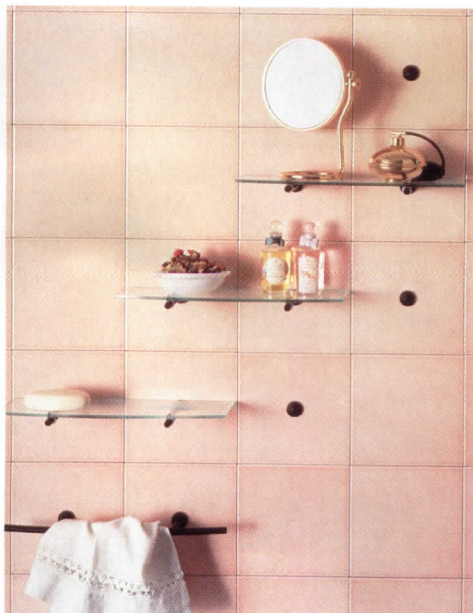


321

Products continued from page 157

320 Coordination. Glass shower doors can have handles that match faucets; brushed-chrome Bravura is shown. Kohler.

321 Decorator colors. A space-saving oval lavatory, Margery, comes in new pastel and deep-tone colors. Briggs.



322

322 Accessory system. The Key Point tile has a fused-in-place metal screw-thread that holds matching steel and glass shelves, hooks, and other accessories. Unused holes are concealed by a decorative steel button. 30 colors of both solid-face and socketed tiles. Hastings Tile & Il Bagno Collection.



323



324

323 Victorian style. Competitively priced AN faucets feature cross handles in white, almond, gray, black, and red. EPIC.

324 Countoured shapes. New Legacy designs feature classic bell-shaped escutcheons. Handle options include the swirled lever shown. Chicago Faucet.

Grate Designs for Great Designers

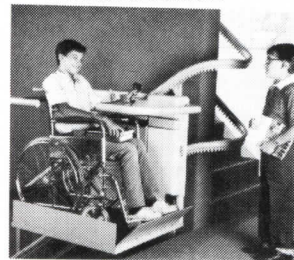
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325



326

325 Tone-on-tone. Excelon vinyl comes in bright new colors like burgundy, Delft blue, emerald, and terra cotta. Armstrong.

326 Colorful. An expanded rubber-flooring palette offers 50 shades that enhance a wide range of spaces; raised-dot surface allows two values of the same color. Freudenberg.



327

327 Maple flooring. American maple now comes in random-length 3/4-in.-thick planks. Grain and warm color are protected by a factory-applied Swedish finish. Robbins.

328 Deep-color tile. A new, colored-through-body unglazed tile, Expressions is stain- and slip-resistant enough for kitchen



328



329

use. Colors include navy, azure, onyx, pewter, and spruce. Seneca Tiles.

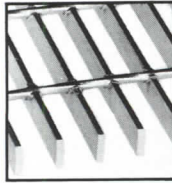
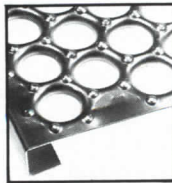
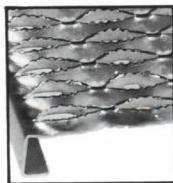
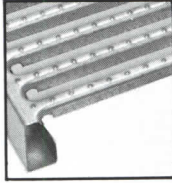
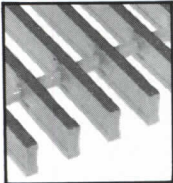
329 Cast marble. Honed finish minimizes care for tile in heavy-traffic areas. Installation shows Glacier White and Peach Sand tiles with diamond accents of polished Warm Mahogany. ArmStar. ■

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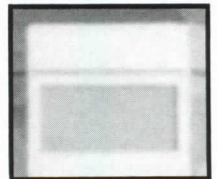
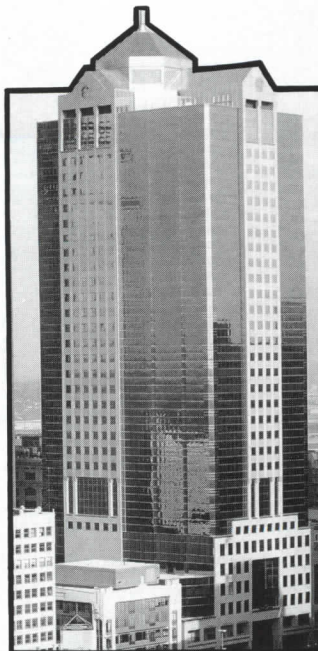
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Manufacturer Sources

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 70-75

Bargonetti House
Steven Harris & Associates, Architect
Wood-framed windows and entrance: Marvin.
Rolling barn doors: custom by Carlson Builders.
Exterior trim and interior paint: Benjamin Moore.
Sconces: Koch + Lowy. Sofa: Palazzetti (Pierre Chareau). Upholstery: Clarence House. Paint on metal gallery: Hunting Specialty Products (Hammerite). Countertop: Marble Technics. Cabinets: IKEA. Maple ceiling finish: Minwax (one-coat stain/sealer).

Pages 76-85

Chmar House
Scogin, Elam and Bray Architects
Redwood windows: custom, fabricated by TrimLine Sales. Entrance door: Peachtree Door. Locksets: Schlage. Sliding panels: Eggers. Hardware: Grant. Ceiling lights: Swivelier (Lite-Flex). Staircase: fabricated by Welch Tarkington, Inc. Eames lounge, chaise, and plywood chair: Herman Miller, Inc. Noguchi table: Herman Miller. Raku on coffee table: Linda Chmar. Paints: Martin Senour. Kitchen countertop: Snaidero.

Pages 86-91

Carraro House
Lake/Flato Architects
Corrugated steel roofing: MBCI (Galvalume). Corrugated FRP panels: Filon Div., BP America. Wood-framed awning windows: Marvin. Laminated glazing: PPG Industries. Doors: Peg & Plank Guild; Wimberley. Locksets: Schlage. Hinges: Hager. Paints: Kelly-Moore. Exterior fixtures: custom by Graham Martin.

Pages 92-97

Valerio-Searl House
Joseph Valerio and Linda Searl, Architects
Paint on concrete block: Monsey Products, Inc. (Modac). Exterior lighting: Prisma. Fencing: Mendia Iron Works. Entrance: Simpson Door Co. Locksets: Schlage. Wood windows: Marvin. Vinyl windows: Norandex. Dining-table top: KLT Marble & Granite. Chairs: Lowenstein. Pendant: Artemide. Uplighting: Hubbell. Kitchen cabinetry: LPI. Cabinet hardware: Hewi. Laminate surfaces: Formica. Sofa: Palazzetti. Standing lamp: Koch + Lowy. Paints: Benjamin Moore. Lever-handled hardware: FSB.

Pages 98-103

Moore House
Marlon Blackwell, Architect
Insulated concrete block: Kor-Fil. Windows: Peachtree Door. Tile: Dal-Tile. Lighting: Stonco. Laminate surfaces: Formica (Color-Core).

Pages 104-111

Price House
Bart Prince, Architect
Cabinetwork: custom by architect, fabricated by Sicola. Desk: custom by architect, fabricated by Rock Cross.

Pages 112-115

Villa Amanda
Francis D. McGuire, Perry, Dean, Rogers & Partners, Inc., Architect
Finish on white-cedar shingles: Cabots (Bleaching Oil). Wood-framed windows and customized French doors: Morgan. Locksets: Schlage. Bolt-type closers and cabinet hardware: Baldwin. Trim paints: Tripp Marine. Railing: custom by architect, fabricated by Yankee Builders. Faux finish on pine flooring: Allen/Cavanaugh. Tile: Natural green slate. Lighting: Lightolier.

Pages 122-125

Noyes/Ryan Cabin
The Miller/Hull Partnership, Architect
Shingles: Western Red Cedar. Stove: Vermont Castings. Floor finish: Glitsa. Uplights: Juno. Windows: Custom by Quantum. Sliding doors: Pozzi.

Pages 126-133

Greenberg House
Legorreta Arquitectos, Architect
Sheriff+Associates, Associated Architects
Limestone flooring: Veola Marble. Wood windows and doors: custom by Glendale Mill. Locksets and cabinet hardware: Baldwin. Skylights: Bristolite.



Normandale Lake Office Park
8500 Tower
Developed by Trammell Crow Company
Bloomington, Minnesota
Architects: Wilson/Jenkins & Associates, Inc.

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Letters...

Continued from page 4

ficial timber shortage if preservationists succeed in pushing their agenda. This "silvicultural Armageddon" would affect 18 to 23 percent of the nation's softwood consumption. Protecting the northern spotted owl need not raise havoc with wood product consumers. Seeking court injunctions in the name of the protection of wetlands, biodiversity, and neo-tropical birds is just one of the stratagems used by preservationists to thwart legitimate demands for wood products. Many grassroots organizations—including sports fishermen and hunters—realize that the preservationists want to exclude most users from forest land.

The South may not be able to pick up the slack created by the preservation of more forest land in the West because private forest-land owners in the South face increasing pressure to restrict timber harvesting. As a consequence, consumers will have to pay more for wood products or rely more on environmentally inferior substitutes. The U. S. will become more dependent on wood products from Third World countries, which could have dire environmental consequences since scientifically-based forestry is not practiced in the Third World.

*Mark Rey
Executive Director
American Forest Resource Alliance
Washington, D. C.*

Although Timothy McDonald is to be commended for the mass of facts he has assembled ["Decline of a Commodity," RECORD, December 1990, pages 42-43], his presentation might lead the unwary to believe he is presenting a balanced picture. He is not. Increased second-growth production should not change architectural performance expectations for western structural lumber. The fact remains that published strength and stiffness properties for structural grades of lumber are impacted to a far greater degree by grade-controlled characteristics like knots and slope of grain than they are by the differences between the density and strength of clear wood fiber. Consequently, the same grades of lumber made from juvenile or adult resources can be intermixed with complete confidence.

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If the 32 million wood homes constructed in the past 20 years had been built of non-renewable alternative materials (all with energy requirements in multiples of that necessary for lumber), what environmental implications would that have had? And what of the future, ever more in need of structures for human habitation?

*Don E. Wallace, Architect
Technical Director
Western Wood Products Association
Portland, Oregon*

Timothy B. McDonald replies: The land, as well as the trees within the boundaries of the national forests, belongs to the people of the nation. It is a legacy from previous generations. Our stewardship of this resource will determine what we pass on to the next generation. What Mr. Rey and Mr. Wallace refuse to see is that a tree farm, though it might have as many trees as a forest, is radically different and cannot be considered a replacement for the complex old-growth ecosystem.

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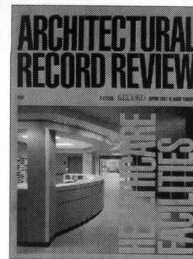
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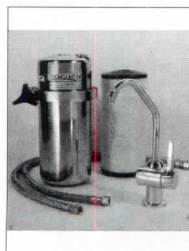
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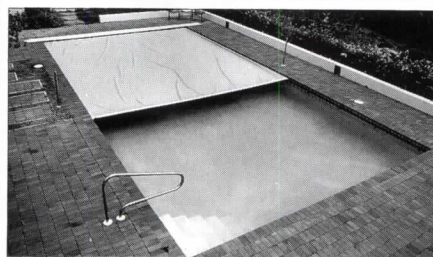
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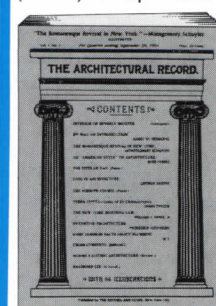
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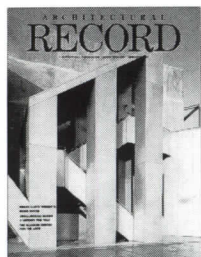
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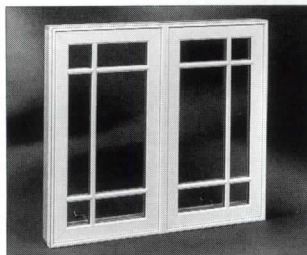
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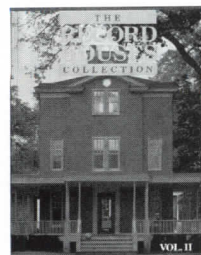
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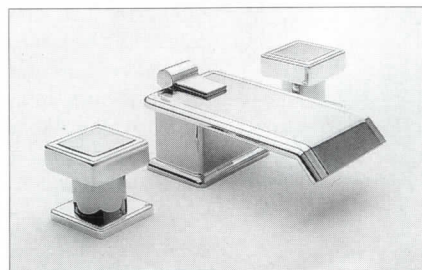
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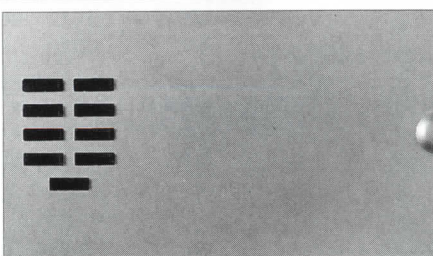
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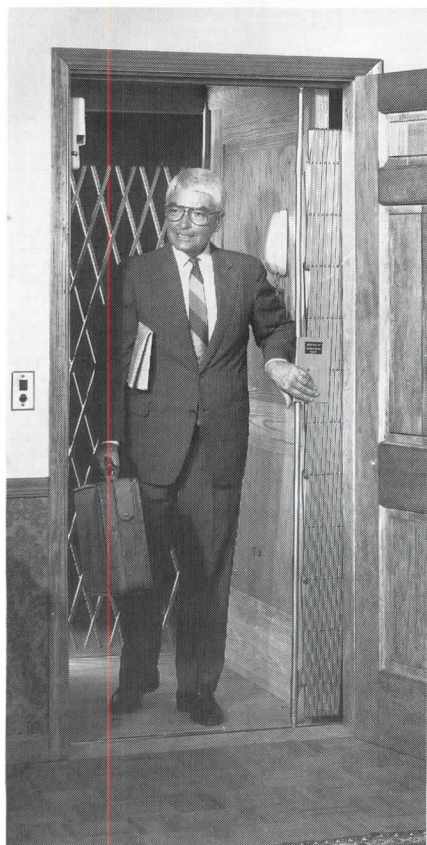
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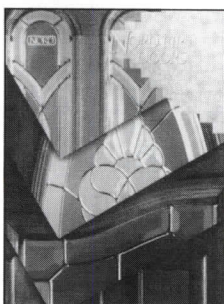
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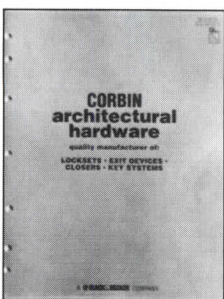
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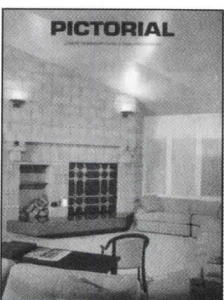
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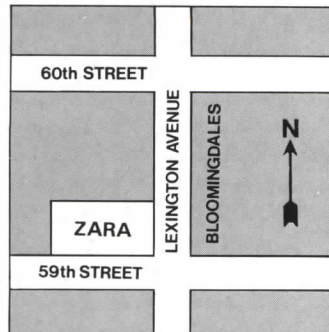
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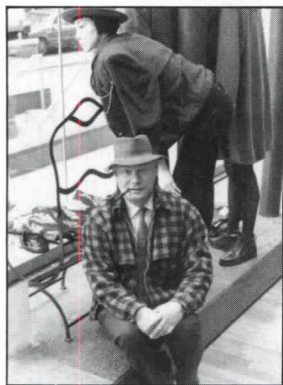
The next time you're at Bloomingdale's in New York, take a walk across the street.

"There's a marvelous new store in town called *Zara*, and it's just diagonally across the avenue from Bloomies at 59th and Lexington. *Zara* is a "fast fashion" (they change inventory completely every ten days) retail chain that started in Spain a few years ago, and has exploded to more than a hundred stores all across Europe. The new New York store is their flagship in the States, and it's already a success. The range of fashion styles on each of the store's three levels, the bright palette of colors, and the electric sense that there's something new and exciting happening every day, all make it a fascinating, if hectic place to visit when you're in the city. Of course, if you're the guy who supplied the store's slate surfaces, they might let you take a break and sit down in one of the window areas.



That's me in the picture with the dummy. I'm sitting.

"And what I'm sitting on is Norwegian Black Lace Slate. (Isn't that a great name?) It's from the tiny village of Otta in central Norway, and we used it in two different finishes at *Zara*. We covered the platforms of the window display areas, one of which you see here under me, with a natural cleft surface. It's hand-split, of course, and has the just slightly uneven surface texture you expect in natural slate. But for the counter-top surface of the cash/wrap desk (the busiest place in the store), we cut and smoothed an almost polished-looking finish. What happens on that countertop is that the Norwegian Black Lace catches and reflects light at different levels, so that from some angles the surface almost seems to undulate, and I've seen customers at the desk rubbing their fingers across it, surprised to find that it's dead flat.



If you have ideas, we have lots more Norwegian slate. Vermont, too.

"Even if you're not interested in supercharged feminine fashion, the muted minimalism of *ISD's* excellent design of *Zara's* three-level retail space is well worth a visit next time you're in New York. While you're there, touch and feel the slate, and see how well it works in *ISD's* lighting/texture concept. We're proud of our contribution. We're looking for more interesting work we can be proud of. If you're considering slate for a quality custom project, don't worry about budget until you've talked to me, even if you're still just in the talking stage. That's fine, I love to talk. Try me: call me at 1-800-343-1900."

Bill Markcrow

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Shoppers' Oasis



Store entrance canopy membrane structure
H.E. Butt Grocery Company, Laredo, Texas.
Architect William H. Triplett, AIA.

A giant membrane structure shades shoppers by day...brightens the skyline by night.

When H.E. Butt Grocery Company, Texas' legendary food chain, was planning a new superstore for Laredo, Texas, they decided a huge shade structure could be an important attraction for customers in that hot part of the world. Their architect and Helios Industries' designers developed the spectacular tensioned membrane structure pictured here. Besides providing shade and shelter from rain, the 80' tall structure also gives the store a highly visual identity both day and night.

In the past twenty-five years structures of tensioned membranes have proved their usefulness in a variety of applications in every sort of

climate. Their very special attribute is the ability to span great distances between upright supports. Another is translucency, which reduces electric lighting needs by day, and with underside lighting, provides a welcoming luminous glow at night.

Large membrane structures are widely used for amphitheatres, gymnasiums, shopping malls and sports facilities. Smaller structures are popular as park performance stages, playground or picnic shelters, and open-air structures for outdoor dining or lounging.

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