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April 27
“19th Century Baltimore Architecture in an Age of Earnest Emulation” lecture by Charles Duff, Baltimore Architecture Foundation, 6:15 p.m. Call 410/547-9000 ext. 237 or 300 for more information.

May 5-8
AIA National Convention and Expo will be held at the Georgia World Congress Center, Atlanta. For more information, call 800/305-7737.

May 6
Walter Wagner Education Forum at AIA convention. For information, call Virgil Carter at 202/626-7300 or Steve Kilment, 212/512-3104.

May 23-25

May 27
“Health Care Architecture in an Era of Restraints” seminar, Union of Architects Public Health Group in conjunction with its annual meeting, Budapest. Call 011-49-211-4-5488-0 or fax 011-49-211-4-5488-50 for details.

Through May 15

June 5-8
A/E/C Systems will hold its 1995 conference and exhibit at the Georgia World Congress Center, Atlanta. Call Sharon Price at 800/451-1196; 203/665-0153, or fax her at 203/666-4782.

June 6

June 8-11
International Design Conference at Aspen will focus on “redesigning the idea of design.” Call 303/925-2257 or fax 303/925-8495 for registration information.

June 22-24
The New York Landmarks Conservancy conference on stained-glass windows in American buildings, Grace Church, 802 Broadway at Tenth Street, New York City. Call 914/278-2187 for information and reservations.

June 23-25
Construction Specifications Institute (CSI) annual convention and trade show, Minneapolis. Call 800/689-2900 for information.

Through June 24

Competitions
• A $15,000 prize will be awarded by the Royal Oak Foundation to the winning entry that displays “a sympathetic collaboration among the three disciplines of architecture, interior design, and landscape architecture.” Submissions must be received between April 1 and 15. Call 212/966-6565. 
• Portfolio submissions are due April 14 for the Burnham Prize competition sponsored by the Chicago Architectural Club. Eligible are architects under 40 who received their professional degrees after 1985 and are residents of one of eight Midwestern states. Call 708/940-9600 (ext. 1295) for more information.
• Submission deadline is April 28 for design of the Minamata, Japan, memorial to victims of mercury contamination—the “Minamata Disease.” Arata Isozaki will judge the entries. Call 81/966-63-1111.
• Entries for Southern Living magazine’s Southern Home Awards competition for outstanding residential design in six categories are due May 31. Call 800/566-4712 for information.
• The James Marston Fitch Charitable Trust will award a $10,000 research grant and other discretionary smaller grants to mid-career professionals in one or more of the following fields: historic preservation, architecture, landscape architecture, urban design, environmental planning, architectural history, and the decorative arts. Application deadline: May 1. Call the Trust for more information at the offices of Beyer Blinder Belle, 212/777-7800.
• The Young Architects Forum will hold a juried exhibit May 5 open to all architect interns. Write Rodney Dioni, 1215 Hightower Trail, Building B Suite 220, Atlanta Ga. 30350 for details.
• Design for Transportation Awards Program entries due May 15 in the following categories: architecture (passenger and freight terminals, stations, ports, other structures); historic preservation; urban design and planning; special interest (ADA provisions; mixed-use development). Call Thomas Grooms at 202/682-5437 for entry forms and further information.
• The End open-design competition entries are due May 31. The site is in central downtown Los Angeles, the theme is justice, the program, an urban memorial park to victims of violent crime. Registration fee: $50; first prize, $10,000. Call/fax 213/296-6226.
• Western Home Awards competition applications are due April 10. Contact AIA/Sunset Magazine Awards Committee, 80 Willow Road, Menlo Park, CA 94025 for more information.
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Frank Israel's contribution to the rebuilding of the fire-ravaged Oakland hills (page 82).

Next month
Projects include work by O.M. Ungers, Herzog & De Meuron, Renzo Piano, and Susan Maxman.

Building Types Study 726 features judiciary facilities.

Also in May
RECORD LIGHTING Supplement.

In The Profession
- ARCHITECTURAL RECORD's Second Annual Computer Delin­
eation awards.
- The digitizing of information and the design of research libraries.
- Reviews of new software and hardware.

| Introduction 61 |
|-----------------|-----------------|
| Spiral House    | Dean/Wolf Archi­|
| North Castle, New York | 62 |
| Private Residence | Frederick Phillips & Associates, Architect |
| Chicago, Illinois | 68 |
| Sarli Residence | Judith Sheine, Architect |
| Juniper Hills, California | 70 |
| Zumikon Residence | Gwathmey Siegel & Associates Architects |
| Zumikon, Switzerland | 74 |
| Casa Cai | Sottsass Associati, Architect |
| Tuscany, Italy | 80 |
| Studio Maestrelli, Associate Architect |
| Drager Residence | Franklin D. Israel Design Associates, Architect |
| Oakland, California | 82 |
| 31st Street House | Koning Eizenberg Architecture, Architects |
| Santa Monica, California | 88 |
| Lombard/Miller House | Brooks & Carey, Architect |
| Westby, Wisconsin | 92 |
| Barry's Bay Cottage | Hariri and Hariri, Architects |
| Ontario, Canada | 96 |

THE PROFESSION

| Indicators 25 |
| Small-City Practice | 26 |
| Regulations | 32 |
| Software Reviews | 34 |
| Kitchens & Baths Portfolio | 36 |
| Product Briefs | 42 |
| Construction Volume/Housing Starts, Sales Architecture Outside Major Metro Areas |
| ADA: Barrier-Free It Isn't AutoCAD Add-Ons from Softdesk and Eclipse |
| Natural Materials Used Naturally |
| New Products for the House |
| Editorial 9 |
| New A vs. E Dispute Is a No-Win Case |

Calendar 4
Design News 11
Observations 19
Manufacturer Sources 107
Product Literature 109
Classified Advertising 121
Advertising Index 122
Reader Service Card 123

Cover: Lombard/Miller House, Westby, Wisconsin
Brooks & Carey, Architect
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New A vs. E Dispute Is a No-Win Case

A horse long thought dead has been given a new lease on life ever since the National Society of Professional Engineers’ Administrative Council sent a letter on January 6 to the Antitrust Division of the Justice Department, urging a look into alleged activities by architectural groups (only NSPE and DOJ know which groups, and they aren’t telling) aimed at limiting engineers’ access to the design of buildings.

This would have been less of a shock had not the AIA in 1972 and again in 1990 undergone antitrust traumas over ethical rules restricting competitive price bids—events that ended in consent decrees after untold thousands of hours of staff work and millions in legal expenses. Understandably, neither the AIA nor its state components want to repeat the process, and that is why the letter, which at this mid-March writing is still a landmine on some Justice Department functionary’s desk, is causing such anxiety in the realms of organized architecture.

The issue has for generations roiled relations between architects and engineers—and, indeed, other groups competing for business in hard times. A very few states either allow engineers and architects to work in each others’ turf, or else forbid it totally. In most states, says NCARB general counsel Carl Sapers, licensing laws require buildings intended, in the language of the law, for “human habitation and occupancy,” to be designed by an architect (with certain exceptions, such as custodial buildings incidental to the operation of a structure such as a dam or bridge). Engineers for their part design structures and systems. Architects claim with good reason that a building is more than a mere assembly of products and materials that must not be allowed to fall down, burn, or otherwise endanger the health, safety, or welfare of occupants. Buildings also must meet human needs for comfort, light, air, and mental uplift; and face a great array of urban design and other challenges which architects spend seven years learning and another three in practice before taking a unique licensing exam. Engineers, unlike architects, specialize in highly discrete disciplines, from chemical to mechanical to civil to structural. How does this qualify them, architects ask, to design buildings for people?

Monte Phillips, who heads the 70,000 member-strong, heavily civil engineer-weighted NSPE, has a different slant altogether. He told RECORD that to him, it’s an issue of taking away the public’s right to select its building design services from any qualified source, including engineers. As he sees it, the intervention of local architectural licensing board members and local architectural organizations in some recent cases is nothing less than a “coordinated plan” to restrict freedom of choice. AIA president Chester Widom, who last April in Tucson signed a statement of cooperation with NCARB, NSPE and ACEC (an engineering society that is staying on the sidelines this time, to Phillips’ chagrin), says that all is covered under the Tucson agreement.

To Sapers, the idea of a concerted effort by architects to keep engineers away from building design is “palpable nonsense.” And he quotes Mario Salvadori from an NCARB survey of prominent engineers and architects: “It is inconceivable that an engineer who knows what architecture is would put up any building that is for human occupancy of any kind, without an architect.”

But in the long term the entire issue of turf is moot. Some day we are going to see so-called expert systems which will concentrate knowledge in great databases accessible to all, blur distinctions among the design professions, and spawn a whole new approach to licensing. Meanwhile, legislatures in most states seem to have assigned buildings for human occupancy to architects. Stephen A. Kliment
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Georgia Has the ’96 Summer Olympics on its Mind

With about 500 days remaining until the Centennial holding of the modern Olympic Games debuts in its city, Atlanta’s planning and construction activity picked up noticeably in mid-March. Many of the Summer Olympics ’96 sites are scheduled for near-completion in time for a dry run during the Pan Pacific Games this August.

Atlanta’s game plan for post-Olympics buildings is based on a break-even doctrine, imposed by the Atlanta Committee for the Olympic Games (ACOG) on all facilities. The 85,000-seat Olympic Stadium, for instance, a $209-million project, will be converted into a new home for the Atlanta Braves. The financial sponsorship and influence of broadcasting magnate Ted Turner’s baseball franchise on the stadium project has played a significant role in its evolution from a Modernist precast concrete-clad scheme to a traditional brick-arched, exposed-steel framework design, intended to evoke nostalgia for old inner-city ballparks.

The Aquatic Center, designed by two Atlanta-based minority-owned firms in joint venture, also will have life after the Olympics. The $17.5-million open-air facility, with its clearspan 300-by 200-ft steel-trussed roof and 13,000 seats (of which only 2,000 are permanent) will become the property of Georgia Tech after the games. It plans to remove the 11,000 temporary seats and their secondary structure and enclose the space.

The most memorable Olympic project may well be the one with the smallest construction budget, the shortest life span, and no athletic events—a 17-acre International Festival area, designed as a series of temporary, recyclable steel and fabric pavilions for ceremonies, displays, and entertainment. Plans for the open-air complex, by MSTSD Architects of Atlanta, call for a carefully planned hierarchy of high- and low-ceiling planes and vertical panels to provide intriguing interior-like spaces. John Hawkins
KPF Wins Competition to Design Nicosia's New Parliament

Kohn Pedersen Fox and D. Kythreotis and Associates have won a competition to design a new Parliament Building for Nicosia, Cyprus. The $32-million building is a 40,000-sq-ft square, dramatically sliced in two at an angle. The main, marble-clad foyer is anchored by a towering alabaster drum, which houses the Parliament chamber. Behind, the square dissolves into a massive garden, flanked by offices. In a democratic gesture, the garden connects with a parliamentary park to draw visitors into the site.

Los Angeles

The '60s Meet the '90s With Panache

Melvyn Bernstein's Uyemura residence in Newport Beach, Calif., wraps banal '60s tract housing into more subtly articulated spaces. The elegant design adds a new living/bedroom space to an existing garage and bedroom. A new roof breaks from gentle arc to "folded plane" as it moves from living area to master bedroom. The living area's focus is an enclosed garden, while the master bedroom overlooks the Pacific. In keeping with its origami theme, the street facade folds irregularly as well. The project received an AIA Los Angeles Design Award.

World-Class Velodrome and Swimming-Pool Complex May Help East Berlin's Growth

Berlin lost the year 2000 Olympic Games but gained French architect Dominique Perrault's velodrome and swimming-pool complex. Currently under construction, with 98,000 sq meters (1-million sq ft) of world-class sports facilities, the project will be an important impetus for growth in eastern Berlin. The minimalist design separates the two main programs into a circle for the cyclists and a rectangle for the pool (1). Each is submerged below a 10-hectare (24.7-acre) park to minimize the impact of the massive geometry. When finished in 1998, the flat roofs of woven-metal fabric and two-layer-thick glass will act as reflecting "pools" by day and scintillating jewels by night. The real pool (2) will, of course, have real water.

Claire Downey
Los Angeles

Architects for Shelter Build Tiny Houses For Small Fry

The Architects for Shelter recently auctioned off a dozen elaborate playhouses by a number of LA architects, raising $25,000 for the Ocean Park Community Center, which provides shelter and social services for children and adults. The houses are large enough to play in, and the designs range from ultrasophisticated to playfully absurd. Tim Felchlin designed a two-story “tree house,” with a turret that pops out on top, like a series of stacked crates (1). An ingenious house, designed by Richard Warner, looks like an unraveled paper lantern, and functions like a tent. Canvas is stretched over a faceted steel frame, and a wing-like roof seems to hover above (2). Kanner Architects donated a “swiss cheese” cube balanced on a slide and a climbing wall (3).

Design

Briefs

- Frank Lloyd Wright is still building. Monona Terrace, Wright’s design for a civic complex in his boyhood town, Madison, Wis., was thwarted by local politicians 57 years ago. But the vast project, which once included a railroad station and court houses, has now been revived as a convention center. The 4.4-acre project is scheduled to open in 1997.
- In Chicago, plans were announced to restore Wright’s Prairie-School-style masterpiece, the Robie House. The house, built in 1909, will open as a museum in two years.
- The Southern California Institute of Architecture is setting up a referral service. The SCI-Arc Network will put potential clients in touch with younger graduates through a 24-hour number (310/574-1123), and provide them with resumes and photographs of their projects.
- The Municipal Art Society in New York has opened Kid City, an exhibit that teaches children about architecture and the environment. The interactive show includes full-scale structural elements from a 1740 Dutch farmhouse, and “time telescopes” that let visitors examine the history of various landmarks.
- The American Society of Architectural Perspectives has received the AIA’s 1995 Institute Honor Award.

New Jersey

Head Start Competition Brings Architects’ Touch to Childcare Facility

For 30 years, Head Start facilities have been banished mostly to church basements. But a competition organized by the Early Child Facility Fund acknowledges the contribution architecture can make to a learning environment. Cambridge, Mass., Fardjadi, Fardjadi, Scott’s winning competition entry for a prototype school in New Jersey shows just how subtle that contribution can be.

The project rests on the back of a “turtle shell,” a shallow mound that subtly lifts children off the ground. A sweeping rooftscape slopes up from the building’s central spine, which feeds into classrooms and leads from the main entrance out to tree-covered grounds in the back. There, an indoor playground with a claw-like roof can be opened or closed to the landscape. Nicolai Ouroussoff
Beyer Blinder Belle has won the American Institute of Architects' 1995 Architecture Firm of the Year Award. Best known for its work in preservation, the New York-based firm has quietly and cleverly rehabilitated a massive number of landmarks in its native city over a 25-year period.

Twenty years ago, the firm designed the South Street Seaport Museum Block in lower Manhattan—a laudable adaptive-re-use project that signaled the direction the firm would take: melding the past with the present. The Seaport project was esthetically rooted in the cast-iron architecture of an earlier time yet skillfully adapted to its new purpose: attracting tourists and the businesses that follow them. The firm calls this work a "collaboration with the past."

“Our philosophy,” says John Belle, “is that buildings draw their solutions from their environment, their context, and their culture. That’s what has kept us lively.”

Since then, Beyer Blinder Belle has designed the Ellis Island Museum of Immigration, the Museum of Broadcasting on Fifth Avenue, the Henri Bendel Store in the restored Rizzoli and Coty Buildings, and, further afield, McKim Mead and White’s Newark Pennsylvania Station—all major projects that have had a tremendous impact on the fabric of New York City and environs.

Today, the firm is in the midst of two major rehabilitation projects. It is restoring Paul Rudolph’s Modernist masterpiece, the Art and Architecture building at Yale University; and, perhaps the penultimate restoration, Grand Central Terminal [RECORD, February 1995, page 13].

Further north, projects include a recreation plan for the Erie Canal and travel plazas on the New York Thruway. Each plaza caters to its region: stone, lodge-like buildings in the Adirondacks; timber, barn-like structures in the Catskills. “We’re now beginning [the] Albany to Buffalo [section],” says Belle. “We’ve touched every part of the state.”

The award will be presented in May at the AIA national convention in Atlanta.

Nicolai Ouroussoff
Roche Dinkeloo’s “Enduringly Significant”
Ford Foundation

One of New York City's few true Modernist landmarks was awarded the American Institute of Architects' 1995 Twenty-Five-Year Award. The Ford Foundation Building, designed in 1967 by Kevin Roche John Dinkeloo and Associates, got the award for its “enduring significance.”

Nestled at the surprisingly peaceful east end of Forty-Second Street, the Ford Foundation is an L-shaped, midblock office building that wraps around two sides of its famous atrium, which shimmers with foliage. The pristine, 12-story glass space opens up to the southeast, facing Tudor City and the East River.

This masterpiece was what others adapted (and debased), infesting American cities with a myriad of mundane atrium spaces. But none has ever replicated its chilling elegance. Here at the Ford Foundation, Roche once said, “It will be possible to look across the court and see your fellow man or sit on a bench in the garden and discuss the problems of Southeast Asia.”

Outside, the building’s massive granite columns and heavy upper stories give it a solemn, brooding air in keeping with its late Modernist language. But this impression fades when one enters the central space, the columns thinning until they almost disappear, the rusting steel structure hanging lightly between them.

The celebrated space is bucolic and serene—even aloof. Entering from Forty-Second Street, a gently rising brick stair follows the change in grade up to Forty-Third Street, bypassing the garden. The garden itself twirls down towards a fountain, the atrium’s delicate glass walls shooting upwards behind it. (Despite Roche’s prediction, there is, in fact, nowhere to sit in the space.) The committee noted that there have been no changes in the building’s use or design since it opened 28 years ago.

The award was presented at the AIA’s late-winter Accent on Architecture Awards ceremony in Washington, D.C. Previous winners of the Twenty-Five-Year Award include Frank Lloyd Wright’s Taliesin West and Eero Saarinen’s Dulles International Airport Terminal. Nicolai Ouroussoff
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Air Force Academy: Life and Times of an Icon


Reviewed by Jack Hartray

The size and symbolic importance of the Air Force Academy in Colorado Springs almost guaranteed that the project would help define the architectural style of its time. Modernism at Mid-Century reminds us of how short a time this was.

This book is almost too attractive. Its generous format and graphic quality suggest a coffee-table publication, but the text is a substantial collection of thoughtful articles and sidebars. These can be read in any order; but eventually we read them all, because the history of the Academy tells us so much about who we were in the '50s.

We emerged from the great war victorious and fully employed. A generation of veterans were granted entitlements to college degrees and the easy credit needed for housing and equipping new families. President Eisenhower may have expressed concern about the military-industrial complex, but to most of us both seemed benign.

The imagery of the Academy's buildings, furnishings, and cadet uniforms expresses a clear optimism that is now hard to remember. We turn the pages with the kind of shock we experience in browsing through our high-school yearbooks. In a thoughtful essay assessing the plan and design of the Academy, Robert Bruegmann explains the origins of its style and accounts for much of what followed. His chapter is the central organizing element of the book, but there are hidden gems in the supporting essays as well.

The discussion of landscape provides insight into the motives and methods of Dan Kiley, perhaps the only American landscape architect at that time who was prepared to work at the scale of the Academy. There is also an interesting digression on Hollywood's involvement in fashioning the cadet uniforms.

The chapter on photography and the public exhibition of the initial design includes a discussion of the relation between architectural symbolism and national policy. It also explains the importance of presentation techniques when the client is a democracy with unpredictable Congressional representatives. Then as now, the Congress was capable of derailing any presentation. Its comedic talent seems to be one of the constants of our national history. The Congressional investigation of the Academy's subversive "International" design with its "ungodly" chapel turned into a national farce. SOM sailed through this tempest with few compromises, proving how good they were at managing big egos and unruly events.

They were probably also great architects. They created consensus where previously there had not even been a precedent. The SOM version of the International Style, which evolved from Lever House and the Air Force Academy, owed more to the graphic arts than to previous buildings or modern construction techniques—for the simple reason that this new architecture had never been built before.

At the Air Force Academy, SOM built it. But those sleek, photogenic details were hard to figure out. The corner mullions of the clear-span dining hall, for example, had to accommodate over seven inches of movement in two directions while still looking thin. After it was designed, there was then the problem of getting it built. The construction industry did not share the revolutionary enthusiasms of the young designers. Neither did the group of old gentlemen who wrote the specifications. No aspect of the industry or profession was left unchallenged by this project.

The Cold War outlived Modernism. By the time the Soviet Union collapsed, the State Department was ensconced in Tory office interiors and our architectural avant-garde was laboring for Mickey Mouse's world empire. In retrospect, it seems that Modernism failed, but at least it was a failure of heroic proportions. Perhaps it should be judged by what was attempted.

Looking at the Academy in 1995 is refreshing. Like the Washington Monument and Lincoln Memorial, it projects a clear and constant sense of purpose. This may be inappropriate in our present historic predicament, but it might also indicate that it is time to resume the search for the truth that was hidden in Modernism.
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Reviewed by Madlen Simon

Architecture is a profession gripped by an identity crisis. Is it an art, a craft, a science, or a branch of philosophy or literature? The variety of venues for architectural education points up this confusion. University, technical school, art school, and atelier are variously touted as proper locations for the education or training of architects.

In The Architecture of Alienation, David Clarke, professor of advanced technical studies at the College of Technical Careers at Southern Illinois University, builds a strong case for a liberal-arts education as a foundation for architectural studies.

The book is a David Clarke reader, a compendium of diverse short pieces joined by the author's thesis that architectural education and practice will perish in isolation if not linked to culture.

The centerpiece of the book is a chapter entitled “French Revolutions,” which weaves an analysis of French architectural education throughout history into a fascinating narrative. Clarke starts off with an essay on the place and people, a flowing discourse showing both familiarity and love for French geography and culture. As he traces the roots of French architectural education in this civilization, he paints a sinister picture of a government suppressing the power of architects by educating them in a cultural vacuum, outside the universities, and in provincial isolation, out of communication with their peers in other regions and disciplines. “Architecture reflects civilization,” says Clarke, “only to the extent that architects are civilized.”

In “Investment vs. Consumption Spending,” Clarke examines American architectural education from the perspective of value for money. Curricula at a sampling of private and public institutions across the country are analyzed to determine the value received by students and, by extension, society (the beneficiary or victim of architectural practice) as a result of tuition and tax dollars spent. The heavy emphasis on research methodology and the lengthy listings of barely processed data, however, render this chapter inaccessible to all but a small cadre of interested academics.

In the essays, letters, and book reviews included in this book, Clarke focuses his analytical powers and witty prose on a range of topics, including architectural criticism and commentary on current practice.

“The client in the history of architecture,” asks Clarke, “ever sued an architect for negligence regarding formal/theoretical positions? Why do architects, in a spasm of self-destruction, insist on attempting to make architecture more important than anyone except themselves want it to be?”

“Because their self-importance is clearly against the general public’s interest and desire, they have succeeded in achieving the opposite of their goal: irrelevance. The audience has largely gotten up and left.” The Architecture of Alienation delivers a powerful plea for the reintegration of architecture with its culture.

Underpinning the text is the assumption that the culture of architecture is mainstream Western culture, a fairly prevalent notion as architectural education around the globe generally follows European models as exported by the British empire. At a time when multicultural diversity is being actively explored in universities and in the architectural profession, Clarke dismisses too hastily educational influences outside his own tradition. The value of contributions from other cultures is a difficult and touchy issue, but one which cannot be ignored in 1995.


First published in England last year and now distributed in the U.S. by Chronicle Books, this book combines brains with good looks. Welsh, who shook up the RIBA Journal when he took over as editor a few years ago, provides thoughtful essays to each of the book’s four chapters and a less successful introduction that tries to cover too much ground. Thirty houses, from architects such as Meier, Foster, Predock, Ando, Gehry, Botta, and Koolhaas are organized into four groups—“the model villa,” “structural solutions,” “organic houses,” and “urban compromises.” Lots of color photographs and high production quality make this book worth its somewhat steep price tag.


The second edition of a 1986 book entitled The Small House: An Artful Guide to Affordable Architectural Design, this volume shows 35 different works by American architects such as William Turnbull, Shope Reno Wharton, and Tigerman McCurry. Divided into chapters based on size (number of bedrooms), the houses tend to be Postmodern in style and modest in budget. Practical information, including circulation-to-total-area ratio and cost per square foot, is provided for each house. This book is a good nuts-and-bolts look at residential design. Too bad its own budget was kept so low that color photography is almost nonexistent.


Although the author often tumbles soul-first into the realm of the touchy-feely, this book offers an ecumenical look at how many different kinds of buildings express a sense of spirituality. Using examples from cultures around the world and quotes from sources as diverse as Anaïs Nin, Andrea Palladio, and Thomas Aquinas, the author covers a lot of territory. In the process, Lawlor—a practicing architect in Iowa—examines how siting, proportion, procession, light, and other key design elements affect the way people feel about buildings.
As a student in Rome, architect Al Fitzpatrick studied the design of St. Peter’s. “Daylight was used as a source of inspiration and tranquility,” he said.

He wanted to bring that same light here to St. Joseph’s—create a sanctuary in a hectic world. So he specified Andersen® windows. Said Fitzpatrick: “Andersen enabled us to use many sizes, configurations and special effects.”

Special effects, we asked? “In the sanctuary windows we angled the return of the Andersen head, jamb and sill to produce an uplifting yet tranquil effect.”

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Indicators

Mixed signals
Early 1995 construction volume signals both unexpected strengths and weaknesses. Single-family housing continues to slip, but not as much as analysts predicted. Nonresidential building grew 8 percent over its December level, but was only a tick higher than its last peak in August. Schools should remain an area of strength, says Dodge economist Robert A. Murray. Regionally, the South Atlantic and West posted the largest drops, with improvement in the South Central, the Midwest, and Northeast.

Housing continues to show strength...
Though volume is clearly slipping, many analysts feared that housing would plunge rapidly, after interest rates rose sharply in 1994. The rate spikes appear to have been cushioned by slower house-price growth and the availability of adjustable mortgages. Some analysts argue that builders have been too optimistic, which may lead to steeper drops in starts later. The optimists, however, may be bailed out by lower rates, predicted for later in 1995 on the assumption of subdued overall economic growth.

...but is a bigger slump imminent?
Sales of existing homes (including apartments) show a clear reaction to interest rates. In many parts of the country consumer confidence remains high and unemployment ebs. Sales, however, have shown a steady drift downward since mid-1994, especially in the once-strong South. In the fourth quarter, only the Midwest bucked the trend, posting a slight gain over the third quarter of 1994. All regions posted lower sales than during the equivalent period a year earlier, a decline of 6.7 percent nationally.

Short Takes

• What you think of us: Here's a sampling of what readers who filled out postcard and bound-in surveys had to say: Coverage of completed projects and design news was rated very important (though predictably some found it too cutting-edge, others too tame), but readers strongly feel a need for more technical information, with practice-oriented stories (especially focusing on small firms) right behind. Some readers are proudly computer illiterate, others want more information on how computers impact practice (we've already added more stories on this subject). Many liked our coverage of problems at Denver International Airport. Some complained about the number of ads (Hey, they keep subscription costs down!); others applauded their usefulness. Thanks to those who responded; we're listening.

• Partner and Mediate: A survey by a task force on dispute resolution found partnering and mediation the most preferred methods of alternative dispute resolution.

• Design/Build: Practice Management Associates is launching Design-Build Strategies, a newsletter. Info: fax 617/965-5152.
Making Architecture Happen Outside Major Metro Areas

By Wendy Moonan

Although Peter Zumthor was happy to teach at Santa Monica's SCI-Arc in 1988 as a guest professor, the 52-year-old Swiss architect reportedly refuses to build outside his home region of Haldenstein because he feels the work wouldn't be appropriate anywhere else.

Few American architects share Zumthor's regionalist zeal, but many choose to work outside the usual big-city environs because they're committed to the unique qualities of a place. They appreciate the freedom, lifestyle, and connectedness of such a practice, even if it requires them to travel far afield for work and involves economic sacrifice.

Why they are where they are

For all but one of the 15 architects interviewed here, the challenges and opportunities of working outside the big cities seem to outweigh the disadvantages. A number of the nation's most talented architects do distinguished work in smaller cities and towns not known for supporting innovative architecture. Many of these architects made a conscious decision to locate where they are today—often places far from where they grew up.

Though Peter Bohlin co-founded Bohlin Cywinski Jackson in Wilkes-Barre, Pa., he was born in New York City. After graduating from Cranbrook Academy, Bohlin had job prospects in the offices of Eero Saarinen and Gunnar Birkerts, but chose this former coal-mining center in northeastern Pennsylvania, where his parents had moved and he had worked during the summer. "I was anxious to get at doing buildings, and I felt I could do it more quickly there," he says. Working on a tight budget, Bohlin built a house for his parents. The house was published in The New York Times, which convinced him to launch his own practice.

Over the years the firm added offices in Pittsburgh, Philadelphia, and Seattle. It's now at 60 people and last year won the AIA Architecture Firm Award. Bohlin leads a nomadic existence, traveling often to Seattle to oversee construction of the William Gates house [RECORD, November 1994, pages 84-87] with Bohlin alumnus James Cutler. Was Wilkes-Barre the right choice? "If I had to do it again, I would," he says, describing the view from his house in nearby Waverly: a panorama of the region's "endless mountains."

In spite of the practice's far-flung work, Wilkes-Barre is still home: "We are still doing work here, and we're tickled to do it." The firm just won a competition to design a federal courthouse in nearby Scranton, continues to do expansions and renovations for the Wyoming (Pa.) Seminary, has a regional history center for Western Pennsylvania under construction, and is busy advising Wilkes-Barre on an Army Corps of Engineers plan to raise the town dikes. "I've always liked the idea of being out of the mainstream, in terms of where we lived, and yet being visible," Bohlin explains. "There's less static. In a way it may be easier to be insightful if you are a bit removed from New York City. There's more pleasure in not following the current, most stylish thoughts."

Growing with Aspen: The increasing affluence of Aspen, Colo., has permitted Harry Teague a much wider choice of commissions than the town's small year-round population would suggest. Though Teague continues to do modest retail and residential projects (such as the house —1 above—for his brother), he was also able to build the Joan and Irving Harris Concert Hall, an acoustically sophisticated auditorium seating 500 (2, 3). Teague has also done extensive work at the Anderson Ranch, a summer school for artists in nearby Snowmass.
Though architecture has been thought the quintessential urban profession, some of the best work has always come out of smaller, even rural places. Small-town architects describe both the special rewards and the special sacrifices of the practices they’ve chosen.

Aspen, Colo.-based architect Harry Teague is also originally from the New York City area (Alpine, N.J.). “My move West had to do with my personality and escaping the East and a prescribed path that was meant to happen after graduate school,” says Teague, who knew Aspen from his years as a ski racer at Dartmouth. He went to Colorado after graduating from Yale Architecture School in 1972, at the height of the counterculture movement. “I wanted to change things; I wanted to build. For me, it was the opportunity.”

Life was not easy. Aspen hadn’t yet become the millionaire’s playground it is today. “We camped out the first year. For seven years I built everything I designed. We were willing to live modestly, and we still live primitively. I sacrificed in order to do the work; I almost gave away my services.” But he found that clients were less conservative and he could do “serious architecture.”

Today, Teague has a staff of 12, with eight architects, and his workload is diverse. Recent commissions include the Joan and Irving Harris Concert Hall (for the Aspen summer music festival—opposite), the Hotel Lenado, the Aspen Center for Physics, a chapel in nearby Snowmass, an art park, a science center for children, and commercial interiors for Esprit and Steuben. He also works outside the region: there’s a zoo for the Millbrook School in New York State, and a large house in Pennsylvania. “In a small town, you can have an impact,” Teague says. “The best of all worlds is being able to have that connection with your community.”

**Coming home on your own terms**

Ray Huff, an architect who calls his work “Modernist but traditional,” tried to leave his home town of Charleston, S.C., but couldn’t stay away. “I went to New York, D.C., and San Francisco. Being a native, I knew people. And the South is very loyal. But it’s also very peculiar. I committed to come back to Charleston on my own terms. I came back as a new thinker in a place where old thinking prevails.”

Huff opened his own office in 1980 and now has six architects on staff. He is currently doing work for both South Carolina State and a university in North Carolina, is part of a team devising a reuse plan for a former Navy facility, and has completed a conference center (below). He is designing a Charleston fire station, a church, and some houses. In March he opened a second office in Columbia, S.C. “The South is hidden, mysterious, idiosyncratic and traditional,” Huff explains. “Oddness is permitted, but not outspokenness. If you stray from the norm, you are looked on with suspicion. It’s not very accepting. You have to let the South infuse you. It grows on you. I try to transform the quality of the place into architecture.”

W. G. Clark, with his partner Charles Menefee, III, found Charleston less congenial, even after designing some widely admired small projects and an aquarium that has yet to be built. After years in Charleston, and before that, in Philadelphia (with Robert Venturi and Denise Scott Brown), Clark, with Menefee, moved the firm to Clark’s native Charlottesville, Va., in 1992. Both partners also teach at the University of Virginia. “It’s extremely important for a young architect to associate with a place, to know a place very

Modern Traditionalist: Ray Huff can be considered an iconoclast: a Modernist in history-drenched Charleston, S.C. While clients may be attuned to columns and porches, Huff brings traditional social and environmental gentility to buildings using contemporary means. A case in point is this conference center for the 1890 Program at South Carolina State University (public areas, top elevation). He strings sleeping rooms (4 and above) through a forest, linked by a suspended metal canopy. Huff uses heavy masonry walls (for thermal lag), overhangs (to control light), and screened rooms (for ventilation), yet the materials are contemporary and each element is detailed to reflect a Modernist concern with “how it’s made.”
A small town can be good for raising children, but difficult to practice architecture in. “Some people here hate what we do,” says Dan Rockhill. “We were practically tarred and feathered for one building.”

well, so you can respond to it intelligently and begin to build a reputation for doing thoughtful work,” Clark explains. “What we are interested in is a response to a particular, localized place—not to do work that recalls that place. For years, it seemed that every good architect in the country was associated with a city. But with communications today, it’s no longer a necessity.”

**Rewards and pitfalls**

And what kind of work can these firms get? Most architects working outside major metro areas design a lot of houses, but many of those interviewed said they try not to specialize, even when it means losing commissions.

“Specialization is something an architect never really wants to do,” says Turner Brooks, a Burlington, Vt., architect who is currently teaching at Yale. (See page 92 for a recent Brooks house.) “You don’t want to limit yourself.” On the other hand, it can be hard to put out that word. As Brooks says, “I don’t want to be typed as a clapboardy, farmhouse type.” He thinks he’ll be forced to open a second office in New Haven or New York City, not only in the hope that he’ll receive more varied commissions, but for survival.

Peter Bohlin recalls, “At the beginning we turned down a house or two because we didn’t want to get typecast; we thought we couldn’t survive if that was all we did.”

In Oklahoma City, Rand Elliott says that diversifying his workload has come naturally. “I created a reputation by doing small projects most architects won’t do,” says Elliott, who now has a staff of 12, including eight architects. “In a smaller market, I can’t specialize. And I don’t want to.” Since starting his own firm at age 26 in 1976, Elliott says he has done some 500 projects, including banks, law firms, retail spaces, stone farmhouses, a Miesian glass house, a gateway for the Will Rogers World Airport, and the Route 66 National Museum.

“I like dealing with the guy in charge, not bureaucrats. For me, personal chemistry is everything.” He describes a recent project done for a minister who directs an international self-help organization called World Neighbors. Working on a very tight budget with off-the-shelf materials, Elliott patterned the 11,000-square-foot interior after a small African village, with distinct areas set aside for team conferences, computer work, and “gatherings (below).” Elliott explains, “It was our challenge to tell the story of World Neighbors in architectural form,” he says. The building won an AIA Interior Architecture award.

In Lawrence, Kan., Dan Rockhill is struggling to keep his practice diversified. “We like to do different kinds of projects because it’s more challenging,” he says. A native of New York City, Rockhill came to teach architecture at the University of Kansas in 1980 and stayed. He finds it affordable and a good environment to raise three children, but a difficult place in which to practice architecture. Most of his work is residential (half of it is historic preservation), but he says he wants to design “restaurants, museums—buildings that have more usage and design exposure than houses.”

His problem is finding the clients to do it. “I find Midwesterners are largely more conser-
ivative and more hesitant to embrace design," he says. "Some people here hate what we do. We were practically tarred and feathered for one building." Typical of Rockhill's work is his own just-completed house in the middle of a historic neighborhood on a street lined with modest bungalows. Sheathed in hand-troweled, unpainted stucco, the tall, narrow, two-story building is roofed in recycled corrugated aluminum. An outdoor stair is made of steel grating, a balcony is fronted with industrial grillwork, and steel angles frame doors and windows (below). It's pretty unconventional for Kansas.

In 1988, Rockhill opened a design/build firm, Rockhill and Associates. "We're trying to do things speculatively because clients are reluctant to take on things they can't look at," he says. "We build unusual houses and try to sell them." Buyers, he says, tend to be "people who have moved here from San Francisco or New York." Rockhill and his team of four build all their buildings "so it looks like it's been made by somebody. We do our own stucco. We form our own concrete. We do all the welding. It takes us a long time, but it gives us the opportunity to do anything we want." They also incorporate a lot of recycled materials into the work: screens from old freight elevators, pipes from the Kansas oilfields, salvaged bricks, plow disks, old counter tops, you name it.

Survival skills
Rockhill is one of several architects who still teach to bring in some revenue. Outside income becomes even more important when work is scarce, as it is for Mockbee/Coker Architects of Memphis, Tenn., and Greensboro, Ala. (for the moment). "Clients for contemporary architecture in the deep South are few and far between," says L. Coleman Coker, who teaches at Memphis College of the Arts. Samuel Mockbee is teaching at Harvard this semester. The firm is about to start construction on a house on the Tennessee River, and has done an addition to a Greek Revival shotgun known as the Wohner House in Canton, Miss. (where the firm's offices once were), but there could be more work. "We've both lived here all of our lives," says Coker. "It's never been an option to leave the South; we both love what the South offers us as architects." Nevertheless, Coker is a sculptor and Mockbee is a painter, so not all their creative output requires a client.

Like Mockbee/Coker, W. G. Clark and Charles Menefee have little work; both teach at the University of Virginia, where Clark has been chairman of the Architecture Department since 1988. The firm used to enter a lot of competitions, and it has won several awards, but the practice is currently suffering. "We get several calls a year from people who have seen the Croffead House," says Clark, referring to an award-winning concrete and glass house built in 1989 in Charleston [RECORD, mid-April 1990, pages 42-47]. "One by one, the projects seem to fade away."

Like a lack of clients, a poor economy can also dictate what kind of work is available. In Worcester, Mass., a city still suffering from the recession, architect Edward Healy, principal designer in a four-person firm called TASC, Inc., is grateful he has any work. "It's the worst period we've ever been in," he says, after more than 25 years in practice. "I'm
"We have to market our bums off," says partner Sarah Susanka of Susanka, Mulfinger & Mahady. "But it's a myth you can't make a living doing houses."

doing whatever comes in through the door." What has saved him is that he also acts as a construction manager-advisor to the owner. "We do very simple, cost-effective buildings." Because of the additional risk, though, "we're denied cost-effective liability insurance," he says. "We go bare."

Healy can build a church for $33 per sq ft, and he now has seven in various stages of construction. He calls them the "new New England Churches." They are like "the simple 17th-century churches built by farmers with their own hands." He says this is not the first time he has gotten church commissions when the economy was poor. What limits him is not only the bad economy but his firm's small size. "When a decent-size project comes along, it goes down the road to Cambridge or Boston," he says.

Some succeed by specializing
While most firms don't like to specialize, some of the most successful firms prefer to. Connie McFarland, a native of Oklahoma who opened her own firm in Tulsa in 1988, says her niche is designing health-care facilities in rural settings, although she also does office buildings, laboratories, and residences, including Tulsa's Ronald McDonald House. "For nine years, I'd been with another firm, as vice-president in charge of health-care work," she says. "They said there wasn't enough money in the field."

So she left to go out on her own, and now has a staff of nine, including four architects. "I really want to help; I want to make buildings that help people get well," McFarland says. "We're never going to make a lot of money but our clients send us home with a piece of pie." To date, she has worked on two long-term care facilities, three health-care clinics, and 10 acute-care facilities around the state and in Texas. She's also built an expansion of a local television station, and the state headquarters for the Oklahoma Special Olympics. "We get the projects with a heart," she says. But budgets are small and programs are functional. "You don't win design awards."

E. Fay Jones, in Fayetteville, Ark., says he has "aspired to stay small." Ever since 1953, when Jones returned to his home state to join the University of Arkansas faculty and opened his firm, he has found work. "I've been fortunate to stay busy," he says modestly. But 25 years ago, when his office had grown to 12 people, he was unhappy. "I was becoming an administrator trying to keep up with everything," he recalls. He didn't fire anyone, but after a couple of years natural attrition brought the firm size down.

"I found six people seemed to be optimum for working conditions," Jones says. "It means I have to decline larger projects that come along from time to time." Nonetheless, the 1990 AIA Gold Medal winner has commissions all over the country, including chapels in both Kansas City and Whittier, Calif., houses in Massachusetts, Missouri, and Illinois; and a summer camp in Mississippi. Similarly, Harry Teague in Aspen says he would like to do more regional and national work, but, "Our idea is not to get bigger in terms of numbers and personnel."

Selling it
Most of the architects interviewed, including Turner Brooks, Harry Teague, W. G. Clark,
Coleman Coker, and Fay Jones, said they never look for new business; they wait for it to come to them. Others embrace marketing. Oklahoma architect Rand Elliott's approach is fairly typical of the pro-marketing group. "We're very active in the community, and we've gotten business because of it," he says. He has been president of the local ballet and is a member of the Rotary Club.

He also has a full-time marketing person on staff, who has placed his projects in local publications, national newspapers, and design magazines in England, Japan, and Australia. He has won AIA awards, and last February, received an award from Interiors magazine. He wants the firm to grow, and he is succeeding in doing more national work. He recently built a contemporary glass house in Connecticut and is designing a rural credit union for a bank in Virginia.

Although Susanka, Mullfinger & Mahady is based in a big city, Minneapolis, the firm focuses on residential work, much of it for clients in rural areas. Sarah Susanka, a native of Kent, England, who co-founded the firm in 1983, a few years after graduating from the University of Oregon architecture school, says the firm markets its residential work aggressively because the partners need to let middle-class people know they can afford architect-designed houses. "We have to market our bums off," says Susanka. "But it's a myth you can't make a living doing houses."

The firm received many calls, for example, after it was featured last fall on an eight-part PBS television series on contracting to build your own house. (The producers had read an article on Susanka, Mullfinger & Mahady.) Both Sarah Susanka and staff architect Robert Gerloff frequently write articles, and Dale Mullfinger and Susanka lecture at the local home and garden show twice a year. Last year, the firm built a house on spec for a home-building show, and the work of the firm is regularly covered in the Utne Reader, Home, Better Homes and Gardens' Building Ideas, and Midwest Home & Design, all of which attracts new clients. The firm has devised an innovative three-tier fee system for the middle-income client. Most of its houses cost between $150,000 and $500,000.

For a 9-percent fee, the firm will give a contractor a set of working drawings. For 15 percent, it will supervise the entire construction. And for 4 percent, the architects will do schematic drawings that must be completed by a draftsperson. Clients can also select an hourly rate option to meet with the architects for discussion.

Firms in smaller cities are very specific about what they offer: time, trust, and effort.

• Time: "We're really quite slow," confesses Ray Huff. "We spend a great deal of time developing trust with the client. Once that's established, we can work toward some serious ambitions."

• Trust. "When dollars are attached to dreams, it's always a difficult time," says Sarah Susanka. "I tell clients, I'm going to hang in there with them and see it through."

• Effort. "To be a good architect today, you pretty much devote your life to the effort," says Coleman Coker. "We've come to this by choice."

Typically, they fail to mention their most important attribute: talent.

**Staying small**: Fay Jones + Maurice Jennings' neo-Gothic open-air chapels have caught the imagination of clients nationwide. Still, Jones turns down projects if he thinks the office will grow beyond his ability to do work hands-on. Currently underway is the Chapel for Rose Hills Memorial Park, in Whittier, Calif.
By Katherine Kai-sun Chia

Among regulations affecting the building industry, the 1992 Americans With Disabilities Act (ADA) is unique because it was enacted as a civil rights law. While architects and owners alike would prefer the certainty of a fixed set of regulations, this is not the way ADA works. In a political climate that questions some basic assumptions about the role of regulations, is ADA's open-endedness a blessing or a curse?

According to Liz Savage of the Civil Rights Division at the Department of Justice, “The ADA was never intended as a building code.” Instead it provides a set of guidelines for architects, officials, and owners. ACCESS, a federal advisory committee that studies the impact of ADA, provides a set of national recommendations known as ADA Access Guidelines (ADAAG). Kim Beasley, chair of ACCESS and managing principal of Paradigm Design Group, a consultant specializing in disabled issues, says that ACCESS is continuously comparing the ADAAG standards with ANSI A117.1—the standard referenced by codes prior to ADA—and revising them.

**Conflicts in local codes and enforcement**

ADAAG standards are, however, recommendations. Local code officials don’t enforce ADA. Enforcement only occurs at the federal level, through complaints filed by aggrieved parties. “The ADA is an absolute nightmare because there’s so much interpretation, and it lays the profession open to all kinds of liability,” says Architect Richard Hardaway. “In the case of Massachusetts, the specifics of the ADA may conflict with strictly enforced state codes. Architects usually follow the state code and hope that there are no problems with the federal laws.”

Jim Mahoney, of PDE Associates, in Boston, found that when he showed an accessible toilet room called for by ADA, but not by the state code, he was required by the state inspector to size the room according to state code, which is nearly twice the area of the room called for under ADA. “Could we please come up with one and only one code?” he pleads.

States can apply to have their building code reviewed by the Department of Justice for a certificate of ADA compliance which, in turn, gives building inspectors the de facto responsibility of enforcing federal accessibility guidelines via local codes. However, the recent certification of Washington state took three years and approvals for Texas, Utah, New Mexico, and Florida are still pending. Other states, such as Virginia, simply adopted the ADA as their code, verbatim. The Justice Department can only enforce

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*Katherine Kai-sun Chia practices in New York City and writes on architecture.*

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**Enabling a child:** To anticipate the needs of a client’s child that has cerebral palsy, Hardaway Associates designed wide hallways and doors and extra deep steps (left) in this Chestnut Hill, Mass., house. The child’s bedroom (plan) includes wheelchair-accessible clothes hangers and low window sills.
The Americans With Disabilities Act relies on good-faith effort over carved-in-stone rules. The result, however, has been to make interpretation of disabled requirements far more complex.

compliance and does not have the authority to take away a practitioner's license, nor can it enforce private claims of blame and compensation (who will fix the problem and pay for it).

With 1,300 active investigations, the department is currently backlogged with complaints, each one requiring compliance review. Two thirds of the complaints being filed with the Justice Department deal with barriers in existing structures, and there are several individual complaints against architects claiming a consistent failure to comply. A “wait and see” attitude may not meet Justice's test of a “good faith” effort. Recently, he was notified by a citizen that the design of a new two-story-high Duchess County, N.Y., town hall did not include an elevator. ADA requires an elevator for buildings higher than one story, but state law only requires one for public buildings over three stories. Rather than file a formal complaint, Mintzer immediately contacted the architect to have the design revised, which not only is courteous, but expeditious. “Once the building has been built, you have to file a complaint at the Department of Justice level under Title II or a lawsuit in federal district court,” says Mintzer, a laborious process.

Don’t overstep professional bounds
Jim Mintzer, Associate Advocate for the Eastern Paralyzed Veterans' Association, who has filed numerous complaints on behalf of disabled citizens, said that the ADA is enforced by pressure as much as by resort to legal action. Recently, he was notified by a citizen that the design of a new two-story-high Duchess County, N.Y., town hall did not include an elevator. ADA requires an elevator for buildings higher than one story, but state law only requires one for public buildings over three stories. Rather than file a formal complaint, Mintzer immediately contacted the architect to have the design revised, which not only is courteous, but expeditious. “Once the building has been built, you have to file a complaint at the Department of Justice level under Title II or a lawsuit in federal district court,” says Mintzer, a laborious process.

Alan Eisenberg, vice president of the federal legislative affairs department at the AIA, advises that it is easy to inadvertently overstep the boundaries of professional responsibility, especially in terms of existing buildings. “There is a distinction between questions of how to remove or add something, which is the architect’s realm, versus how many and under what circumstances, which is often decided by the owner and based on economic and legal issues.” This is the case because corrections may not be required when they pose an “undue burden”—a judgment the owner, not the architect, must make. On the other hand, the architect can assist in determining those actions that are “readily achievable” under the Act or that may not be required because their cost is Continued on page 113

Landmark ramps up: James Oleg Kruhly developed discreet solutions to improve access to two structures within a landmark complex in Wilmington, Del. A finely proportioned handrail protects a ramp at The First and Central Presbyterian Church’s Education building without disguising its front (above). Balustrades on the roof conceal a new elevator hoistway. To avoid placing an unsightly ramp at the front of the church’s main sanctuary (right), Kruhly designed a brick-paved ramp-cum-garden that begins to the left of the main steps and delivers celebrants to the vestibule through a side door (top right).
AutoCAD Add-Ons: Specialized vs. Do-Everything

By Steven S. Ross

It is little wonder that the world of add-on software for high-end CAD packages such as AutoCAD is so confusing for architects. There are more than 2,000 vendors and probably more than 4,000 separate add-ons for AutoCAD alone. It helps, however, to categorize add-ons not only by function, but also by scope. That's because sales demos for add-ons often concentrate on handling a few complex tasks in a flashy way, while hiding the true reach of a package.

Auto-Architect from Softdesk, for instance, is one of a select group of "comprehensive" add-on packages. You can draw with Auto-Architect, of course. But you can also adapt your drawing to be only one part of a database that can encompass your entire project.

Don't need a scope that wide? Drafting aids such as Eagle Point Advanced Architecture may fill the bill. You will be able to add more intelligence to your drawing later, and you get the drawing done on time.

Need something special? Most add-ons do just that—they help you add ductwork, plumbing, perhaps electrical service or wall details. Facade falls into that category—you use it to draw 3D models quickly. In fact, you can pull together exterior walls, with roofs and dormers, in just a few minutes if they are straightforward—brick and stick single-family homes, or boxy apartment buildings, or simple office blocks.

A good special-purpose add-on for more generic drafting won't preclude your using a comprehensive package on the project's drawings later. And of course, the functionality of these packages often overlaps. All three of the ones we mention here, for instance, can set up and draw a complicated stairway or complex roofline, for example.

This month, we look at Auto-Architect 7.0 from Softdesk, the first release since Softdesk took over competitor ASG, and the first since AutoCAD 13 was released. We also look at Facade 2.6 from Eclipse, a delightful special-purpose package that we've been playing with for months. We didn't have room to review it in detail here, however.

Auto-Architect and Core 7.0


Price: Core is $400; Auto-Architect $1,000. There's also an Architectural professional bundle that includes Softdesk Productivity Tools (data link, estimating, database query) for $1,750 total. Upgrades from the last versions of ASG or Softdesk cost $150 per module; previous ASG customers get Productivity Tools free; Softdesk customers get Core free. Most support is provided by local resellers; in addition, Softdesk offers a $600 support plan, five hours over 12 months, or a 12-month software upgrade and tech-support plan for 20 percent of product price. There's no additional charge for switching between Windows and DOS.

Equipment required: Computer capable of running AutoCAD 12.2 or later (we used AutoCAD 13 for DOS). A Pentium or fast 486 CPU is recommended, with 16MB of random-access memory.

The key point about this version is that it is evolutionary, not revolutionary. It is designed to bridge the gaps between Softdesk Auto-Architect and ASG Architectural (now that the two firms have merged), and between AutoCAD 12 and 13 (helping architects use both AutoCAD versions in the same practice). It does not take particular advantage of AutoCAD 13 features; Softdesk promises a Windows version by the time you read this, and a more Release 13-specific version later.

The Core software provides functionality in common for many Softdesk products. With the Core, you have layer control, symbols, an interface to data tables, drawing annotation tools, and basic drawing setup and project-management functions.

The Auto-Architect module adds an astounding range of functions—some of which are now offered (one way or another) inside AutoCAD 13 itself. Many are drafting tools, of course. But many are planning and project-management tools.

For instance, you get nice drawing tools for walls—you can draw them, clean up intersections, specify thickness and orientation, and so forth. The main advantage over AutoCAD itself, however, is in the variety of styles available.

Likewise, the door and window tools make it easy to place doors and windows from symbol libraries, working in 3D as well as 2D, and working in plan, elevation, or 3D views. You get a nice suite of commands for drawing ceiling grids, arranging fixtures, drawing elevators, escalators, fireplaces, stairs, roofs, and so forth. You can set the system to hunt for 3D symbols and use them instead of 2D.

You also get space-planning tools—allowing easy labeling of spaces, subdivisions or exist-
Auto-Architect from Softdesk is among a select group of "comprehensive" packages. Facade 2.6 is a drafting aid that can be enhanced with a comprehensive package later:

ing spaces, and area calculations. And you get tools for editing blocks, for sophisticated dimensioning, and more.

The Core settings and Auto-Architect settings allow you much better 3D control than within AutoCAD itself and better quality-control features—maximum wall thickness, for instance, and automatic numbering of attributes. To get the most advantage out of this product, spring for the Productivity Tools package; it offers nice database links. We didn't review it this time around, however.

Manuals: Core has one 168-page reference manual. Auto-Architect has a 259-page reference and 86-page tutorial—all small-format spiral-bound paperbacks. The manuals are well written and well illustrated.

Ease-of-use: Installation is slow but straightforward on a standard system; you install AutoCAD first, then the Core, then Auto-Architect. We tested only the DOS version. On a 33 MHz 486 with 16MB of random-access memory, we were comfortable with AutoCAD Release 12. But a 66 MHz Pentium (about 5 times faster) was much more comfortable running with Release 13.

Error-trapping: As with many add-ons, you can inadvertently duplicate keyboard macros from AutoCAD or other add-ons. Likewise, you can over-automate—making some entities part of a wall that is undergoing an intersection cleanup, for instance, when you don't want to.

Facade 2.6


Price: $189; upgrades $50; unlimited toll-call phone support.


Clever, clever, clever. Want a 3D model of a single-family home? Draw the perimeter walls—about a minute. Add a roof—perhaps two hip roofs, intersecting on an L-shaped plan. That's another minute. Add a few dormers—less than a minute each. Specify a roof overhang—another minute. Add some doors and windows—about 30 seconds each. You can do it with the client at your shoulder. Even better, the models are ready to render.

No, there are no booleans; this is not a solids-modeling package. Really complex plans and multi-height walls take enough time to give you pause.

But Facade does the standard things remarkably, stunningly quick. One of our reviewers laid out a 10,000-sq-ft retail-store exterior and placed the interiors—a counter and shelf-module at a time, duplicating modules as needed—in a half-hour in AutoCAD 12 for Windows. Shading took about as long. The design was rough, but the client had no trouble visualizing the idea.

Once you've loaded Facade onto your hard disk and told AutoCAD where to find it (it does not have to be on the same logical drive), you start Facade the way many specialized add-ons start—by loading a template file with default values, layer specifications, and so forth built in. AutoCAD then hunts around for Facade's command menu and adds it to its own pull-down menu system.

We found it slow on a 33 MHz 486, and a delight, even with AutoCAD 13 for Windows (it runs more slowly than 12) on a 66 MHz Pentium machine—both with 16MB of RAM. We also loaded AutoCAD 13 for Windows into Windows NT (32MB of RAM) and, a tad slowly, ran Facade with it.

Facade is a bit of a misnomer; it does have tools for basic interiors, stairs in particular. One key to Facade's ease of use is its presentation of dialog boxes that allows you to set standards for the symbols (walls, doors) you paste into walls, standards for intersections, roofs and overhangs, and so forth.

Manuals: A 142-page spiral-bound small-format paperback for command reference. Two excellent tutorials, one for stud-wall buildings, one for small multi-story buildings. Ease-of-use: Stunning on a fast machine. Interface for AutoCAD 12 and 13 vary slightly because of AutoCAD itself. Error-trapping: Good alert boxes and on-screen-presentation help. You are warned of almost all problems. The layer structure may be incompatible with some other add-ons, and should be checked, but the likelihood of a conflict is slight.

301 on Reader Service Card

Auto-Architect's space-planning capabilities allow users to add their own specifications to organize multi-shaped areas and perform automatic area correction through the Space Planning Database.
Industrial Chic in a Houston Highrise

A down-to-the-bare-concrete rehab of the 28th floor gave designer David Guthrie a blank slate for his client's rather institutional taste in kitchen and bath equipment. Lacewood-veneer cabinets stained teal green add color to a primarily metallic-toned kitchen. Drawer pulls—aluminum cleats from a marine-supply outlet—were nickel-plated to coordinate with the stainless-steel of the countertops and range hood. The new master bath (far right) has what Guthrie says is the only "organic" shape in the otherwise square-edged apartment: a free-form fiberglass tub/spa onto which the designer epoxied thousands of midnight-blue mosaic tiles. All exposed plumbing was nickel-plated.

**Designers:** David Guthrie, ZeitBauen + Design


Reflective Surfaces Lighten a Master Bath

A new bath placed within a 200-year-old New Jersey farmhouse used materials selected for their clarity, affinity for water, and purity. A white terrazzo tile, used on both walls and floor, has light-reflecting glass chips. The lavatory counter, a massive 1 1/2-in.-thick slab of glass, is held above storage cabinets on custom stainless-steel brackets that double as towel bars. Cutouts for the two drop-in wash basins were made—carefully—with waterjet high-pressure cutting equipment. Mirrors conceal cabinets and milk-glass diffusers shield incandescent picture bulbs placed above the counter.

**Architect:** Stamberg Aferiat Architecture

A portfolio of recent kitchen and bath projects illustrates how materials such as cast- and mosaic-tile glass and stainless steel are increasingly prominent in the architectural palette.

**Tight Tolerances**

After Harry Elson built out irregular walls to create a clean space, this Riverside Drive apartment kitchen had only 100 sq ft—so fit and finish really counted. Measurements for cabinetry and drywall were done only after the handmade tile arrived, to account for the space the tile and grout lines would need: no tiles were cut to fit. Quarter-sawn cherry, selected for its holographic horizontal pattern, gives a sense of depth and movement to the cabinets. The thin-concrete floor is sectioned by zinc terrazzo strips; counters are Pennsylvanian ribbon slate. All metal—refrigerator front, backsplash, separation strips—was orbit brushed.

**Architect:** Elson+Gold  
**Contractor:** McGraime Woodworking Inc.  

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**Illuminated Pullman Kitchen**

In a relatively large eat-in kitchen (270 sq ft) for a family of four on Manhattan’s East Side, David Ling pulled light into the interior space by using smooth, reflective materials and a palette of pale colors. Base and wall cabinets are faced in white laminate, outlined by waxed-steel strips for a deliberately Mondrian effect. The custom table near the window is made of the same sandblasted glass as the illuminated backsplashes; counters are hand-burnished stainless steel. The only real color is the bright-blue glass mosaic tile on the space-dividing accent wall.

**Architect:** David Ling, David Ling, Architects. Collaborator: Sofia Ames-Leek  
The Zen of Bathing

For the windowless bath of a Manhattan apartment, Margaret Helfand selected an unusual colored glass tile. The body of the Italian-made tile is clear, giving each tiny square an impression of depth, while copper dust applied to the back surface picks up the electric light and adds sparkle. Strongly-veined black granite, used for the vanity counter and tub surround, has a metallic gleam of its own. The custom-size tub itself is five-feet-square (and extra deep) so that no shower curtain was needed.

Architect: Margaret Helfand Associates; principal: Margaret Helfand; project architect: Marti Cowan
Sources: Glass mosaic tile: Bisazza Mosaico

A Room With a View

The kitchen in an extensively remodeled yet still fairly small turn-of-the-century home outside Boston opens onto a sunny conservatory space that brightens the room's muted grays and blacks. Custom-designed hinges allow a series of mullioned doors to fold back completely, opening the kitchen onto the sun space, or closing it off during colder weather. The Edwardian details of the dining room are visible through the connecting doorway. The client had requested that the Absolute Black granite counters remain uncluttered, so toaster, blender, and coffeepot hide inside the storage wall of cabinets.

Architect: Signer Harris Architects
East Meets West

Two recent San Francisco-area residential projects by Bruce Tomb and John Randolph of the Interim Office of Architecture (IOOA) illustrate different takes on California. The now-light-filled apartment kitchen shown top uses the aqua, yellow, and light-toned woods of 50s Moderne in a natural, not retro, manner. The long counter opposite the stove (left photo) has different materials in series: an integrally colored yellow-concrete counter (by Buddy Rhodes) butts up to a cast-concrete vegetable sink that gives over to a tapering clear-maple kitchen table. Mexican green-glass mosaics are used on both floor and counter backsplash. Black slate around the cooktop contrasts with maple-veneer base and wall cabinets. Pendant lights of frosted glass, steel, and aluminum were designed by the architects.

The bathing space shown below in a renovated North Beach House, is more eastward looking, with a deep Japanese-style soaking tub and light-sharing Shoji glazed in translucent fiberglass. The aluminum basin (fabricated by IOOA) is a piece of furniture—one that seems capable of walking away, trailing its rubber drain. The cast-in-place concrete tub is usually covered by hinged wood decking, letting it function as a draining floor for the wall-mounted shower.

**Architect:** Interim Office of Architecture  
**Contractor:** Matarozzi/Pelsinger Builders  
**Sources:**  
Addition in Keeping

The owners of a grand shingle-style home in Minneapolis wanted their new kitchen to have the same airy feeling as the large, added-on porch it replaced. Architect Joseph Metzler lined the walls with double-hung windows, and used period-style milk-glass lights over the counters and center island. The custom cabinetry mimics the look and heft of an old built-in buffet found in the butler’s pantry; tops are clear hard maple with an aniline stain. Plumbing for the island sink has been brought up through the legs of the unit. The owners designed—and hand finished—the stainless-steel kitchen sink and range hood.

Architect: Mulfinger, Susanka & Mahady Architects, Inc.—Joseph Metzler, project architect

Rugged Individualism

Commissioned to do the interiors of a house in Ormond Beach, Florida designed by William Morgan, Wayne Berg wanted to show two facets of the personality of his client: a smooth, polished public persona and the owner’s more rugged, sportsman side. The materials chosen for kitchen and bath spaces reflect both.

The long bath (photos right and opposite left) has walls and floors of the same Idaho quartzite, but in different finishes: honed and smooth on the floor and rough textured on the skylit walls. The brass framing of the Carrara glass on the facing wall picks up the grid structure of Morgan’s onyx wall beyond, which forms part of the shower enclosure. The onyx panels are always luminous, either receiving daylight via the central atrium beyond, as shown, or glowing to the outdoors at night, when back-lit by electric light. The doors between bath and bedroom and bath and shower are made of two layers of patterned glass, laminated smooth-surface-in so that both sides have the material’s characteristic texture. The brass shower is meant to patinate. Custom silvered cast-glass diffuses light from an incandescent lamp set into the wall and hides a medicine cabinet. Other walls are clear-coated birds-eye maple.

The kitchen (far right) is separated from the more-formal atrium by a thin screen wall made of maple like a piece of furniture. A metal framework helps support the wall and holds cookbooks. The cooking island is made of cast concrete colored by metallic powder sprinkled into the formwork before the pour; the countertop is natural teak routed in a self-draining pattern.

Architect: Pasanella & Klein, Stolzman & Berg; design partner: Wayne Berg; project architect/designer: Albert Ho. Interior-materials consultant: Tse-Yun Chu
The Biggest Little Kitchen in New York City

Lee Pomeroy sought inspiration from ancient principles of household management—a place for everything and everything in its place—when fitting Sarah Pomeroy’s professional-calibre cooking tools into a small kitchen tucked into the mansarded penthouse of a West Side landmark. Drawers under the granite counter hold appliances, garbage pails—even the fire extinguisher. Though small, the kitchen has distinct food prep, cooking, service, and cleanup sectors. Stainless-steel wire shelving holds often-used pots; a hinged glass enclosure above acts as a side-vented range hood to capture cooking fumes.

Architect: Lee Harris Pomeroy
302. Southwestern style
Made in Germany with the rounded-edge shape and softer colors ascribed to the American Southwest, Jado's new Santa Fe faucet comes in a brushed-nickel finish over the all-brass body. The style is also offered in matching shower and tub sets, and as cabinet knobs and door hardware. 805/482-2666. Jado, Camarillo, Calif.

303. Natural-stone "carpet"
Made of colorful marbles laser-cut and assembled in Italy, the Marmo-carpet is an area-rug-size (about 8-by 6 1/2-ft) Renaissance-style floor suitable for indoor and outdoor use. Each pattern (Urbinum is shown) comes as four 3/4-in.-thick sections mounted on aluminum honeycomb panels, ready to set into wood or tile floors. International Woods & Quarries, New York City.

304. Seashell basin
Part of a complete bath line inspired by shell shapes, the Coquille hand basin is a wall-mount, small-scale lavatory designed for powder rooms. Pedestal, drop-in, and semi-enclosed-style lavatories are also offered. 800/388-1756. Porcher, A Division of American Standard, Inc., Chicago.

305. Custom range hoods
A smaller-scale version of this maker's attention-getting kitchen ventilation hoods, seamlessly welded Underlines models fit under or between wall-hung cabinets. Vented by centrifugal exhaustors or remote fans of from 600 to 1400 cfm, hoods come 36-, 42-, and 48-in. wide and up to 27-in. deep for restaurant-style cooktops or ranges. Utensil hanger optional. Abbaka, San Francisco.

306. Translucent barrel vault
Architect Ron Yeo used curved structural fiberglass-sandwich panels insulated with light-diffusing, translucent fiberglass batts as both roof and daylighting source for a third-floor studio in a California house. Panels offer light-transmission ranges of from 3 to 74 percent; a 17-percent level was specified for this application. 800/258-9777. Kalwall Corp., Manchester, N.H.

307. Modern material
Designer Patrick Naggar showcased Surell solid-surface material in his custom Aurora bath, using it for wall tiles, flooring, tub surround, cabinets, counter, and sinks: even the light fixture has a Surell diffuser. The composite comes in 26 colors, and can be sculpted, molded, cut, routed, inlaid, and shaped to fit any custom application. 800/FORMICA. Formica Corp., Cincinnati.

308. Single-control faucet
A new kitchen line from a source of luxury plumbing fittings, the Kouzina faucet is made of solid brass with a ceramic disc valve. Features include a pull-out spray on a retractable hose; an integral water diverter offers a choice of aerated stream or a pressure spray. Available in four faucet/handle versions, including a high-arc spout. Kallista, Inc., San Leandro, Calif.

309. Distressed cabinetry
A new finish option, Stonewood is said to mimic the wear, nicks, and scratches that would occur naturally in furnishings used over several generations. Produced by wire-brushing, sanding, and staining cabinets by hand, the antique finish is offered on eight country-style designs and seven colors (Moss is shown; kitchen design by George Rallis). Rutt Custom Cabinetry, Goodville, Pa.

310. Contrasting solid surface
Corian offers an expanded range of colors available in various styles of integrally formed vanities—countertop, sink, and coved backsplash furnished as one unit. Bowls now can be ordered in dark Sierra colors (Midnight is shown) set into counters of a contrasting shade. The D shape is described as suitable for both home and commercial use. 800/4-CORIAN. DuPont Co., Wilmington, Del.

311. Architectural stained glass
Richard Giles fabricates authentic stained glass into custom windows and signage for homes, gardens, and commercial spaces. Pictured is one of a limited edition of wooden sash salvaged from dismantled Pennsylvania Dutch barns, refurbished and glazed in quilt-like patterns for use as decoration or as a window. 800/281-6982. South Mountain Stained Glass, Sinking Spring, Pa.
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Architectural Record April 1995 43
ARCHITECTS' CHOICES AFFECT ENVIRONMENTAL QUALITY

As the world's population grows our consumption of raw materials continues to increase and the need for shelter increases as well. Less clear is how the building materials choices we make affect attempts to attain sustainability. In assessing environmental impacts of their choices, design professionals may ask themselves:

Can I be assured the materials I specify will be available for future generations in perpetuity?

Of the major building materials, only wood comes from a readily renewable source...trees. There is no denying trees can be — and are being — renewed at a phenomenal rate. More than 1.7 billion were planted in the U.S. in 1993 and millions of acres were reforested through planned natural regeneration. This fact of renewability makes wood the only common building material that can be assured of being available to future generations forever.

Renewable or recyclable — what's the difference?
Recycling is a positive step toward sustainability, but it is not a panacea. Few building materials can be manufactured using 100% recycled materials and none can be recycled indefinitely. Each time a material is recycled, it is degraded and a greater percentage of virgin material is needed to maintain its structural integrity. Recycling has merits — it buys us time to find alternatives, and it helps reduce the need for landfill space. But it does not solve all our environmental problems. Renewability, on the other hand, is a lasting solution for the supply of materials that can be renewed. Wood is the only primary building material currently being renewed as virgin fiber for future generations.

Is the material energy efficient?
The importance of energy conservation is twofold. First, much of our energy is derived from nonrenewable fossil fuels. We can’t afford to waste it. Second, the implications of energy use, in terms of air and water emissions, ozone depletion, and the potential for global warming, are manifold. Architects can play a role in energy conservation by specifying materials which are energy efficient in both their manufacturing and end use. It takes far less energy to produce solid sawn lumber products than any of the alternatives. And in most cases wood requires less insulation to be used to achieve comparable energy efficiencies in use.

Does the product have unique advantages?
In addition to its renewability, a unique advantage of wood is its role in carbon sequestering. When trees grow, they absorb carbon dioxide and release oxygen, helping to purify the air we breathe and reducing the buildup of atmospheric carbon-based gases thought to contribute to global warming and the greenhouse effect. The carbon remains in the wood even after it is made into a usable product, which means buildings constructed of wood serve as carbon sinks. Meanwhile, the carbon sequestering cycle is continued with the trees planted to replace those harvested.

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Gordon Kostin, like many architectural, engineering and construction professionals, regularly uses both SweetSource and Sweet’s Catalog Files to find and specify materials.

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At 40 years old, RECORD HOUSES enters mid-life, an appropriate time to take stock. We’ve featured hundreds of houses over the years, and made, it seems, some indelible impressions in the minds of our readers. In fact, last month, of “the 10 contemporary houses that matter most to architects” listed in The New York Times Magazine, six had been first published in ARCHITECTURAL RECORD (five were covers). Hardly, we think, a coincidence. It’s too early to predict the influence of this year’s lineup of nine projects, which includes the work of acknowledged masters of residential design—Gwathmey Siegel & Associates (page 74), Franklin D. Israel Design Associates (page 82), and Turner Brooks (page 92)—as well as emerging voices—Frederick Phillips & Associates (page 68), Koning Eizenberg Architecture, (page 88), and Hariri & Hariri (page 96)—and newcomers—Dean/Wolf (page 62) and Judith Sheine (page 70). Of all the designers featured, it is perhaps Ettore Sottsass (page 80), the 77-year-old Milanese architect, industrial designer, and de facto poet, who best sums up the diverse impulses that not only drive architects to constantly reinvent the house (a type that most consumers still prefer in a conventional mode), but also the mission of RECORD HOUSES: “There are moments when you want to go to the piazza and shout, and other times when you need to be more quiet.”

Karen D. Stein
Hitting Bedrock
Dean/Wolf Architects solidly anchors this hilltop house to a granite formation, affording both woodland views and privacy.
To many potential buyers, this site seemed impossible. A house and its septic-drain fields could occupy only some 10 percent of the three-plus acres because the rest was designated as protected wetlands. That restriction confined the possible site for a building to just one location—on top of a solid-granite dome tight against the rear property line (site plan below). Worse still, the driveway would have to cross a stream—which meant special-permit requirements—and climb up a jumble of craggy ledges—which meant blasting. But a young professional couple with several active pre-adolescents and a love for nature, Andrew and Lisa Greenberg, were intrigued by the site's beauty, including, in addition to the stream and ledges, dense woods containing trees over a 100 years old. Before they made an offer, however, they did what too few clients do. They called in the architect.

As the undaunted team of Kathryn Dean and Charles Wolf walked the difficult terrain with the Greenbergs, they quickly saw that the assets outweighed the deficits. One asset was the granite dome, which forms the highest elevation and offers the best views. Another factor, the proximity to the northern boundary, was not all bad: Across the property line is a manicured golf course offering protection against incursion by future houses going up too close by. On the south side, however, where the stream comes closest to the building site, the owners can enjoy the view against a background of dense trees shielding the public road beyond.

On the spot, clients and architects decided to focus the primary view towards woods and stream, and to turn a relatively blind entry side (opposite and previous pages) toward the golf course. Soon after, the Greenbergs approved Dean and Wolf's basic parti: an organizing spine for the spaces within and without, using angled walls on the entry side to form an upward-reaching spiral. The incline of the driveway, where it ends at a U-turn, carries through in the angle of flanking concrete screen walls (top right), which gradually rise from the ground to meet the house. There, the ascent continues along the top of a cedar-clad screen wall above the first floor (previous pages), then under the second-floor windows (left), where it terminates in a tall stone-faced fin wall. The building plan widens in tandem with the spiral's height (overleaf) so that the spaces inside flow horizontally, giving a forced-perspective view from the entrance door. They also flow vertically toward the sky through light wells enclosed with polished plaster walls that pass through the second floor, emphasizing the focus above.

Although the design went quickly, the following stages did not. Approvals by various authorities to cross wetlands and alter site contours took a year. Sitework called for highway-construction blast-borer equipment to place some 1,000 pounds of dynamite as the machines climbed ledges on heavy tracked rollers to build the driveway and ultimately to create a level area on the granite dome for a building site. (Some of the stone was salvaged for exterior facing, but plans to surface all the exterior as well as the living-room floor and fireplace with stone had to be abandoned because the cost of setting it was too high.) One bonus was that concrete first-floor walls could be poured directly on the newly created granite surface. The owner took responsibility for subcontracting site preparation and foundations, a process that Wolf says worked well. But he adds: "There has to be a clear understanding of responsibilities." (While he declines to discuss the cost of this 6,100-square-foot house, he cites the case of another client who handled all subcontracting, saving 20 percent of estimated costs.) After the concrete, came a steel-frame structure for the second floor and, finally, finishes, including windows framed in marine-grade teak outside and ash within. Charles K. Hoyt
There isn't a right angle in the place," says Charles Wolf in only a slight exaggeration. Considering the angled walls and roofs that slope in two directions—lateral for drainage and longitudinally to express the design parti—the joint connections in the house’s concrete-and-steel construction had to be flexible.

A forced perspective created by converging walls can be seen in the upstairs hall (opposite left). Here, the walls around skylit wells to the floor below (opposite) also slope. Small glazed windows in these walls provide acoustic privacy to the living area when the owners' children make noise.

All interior trim is ash and the wood floors are white oak stained with a water-based finish that prevents yellowing in the abundant sunlight.

The end of the living room (opposite) is cantilevered 14 feet out from a cliff to bring stream views closer. Concrete transverse fin walls along the north wall (plan) provide lateral structural support and are hidden from view outside by cedar screen walls that carry the slope of the upward-spiral parti.

Credits

Spiral House
North Castle, New York

Owners: Dr. Andrew and Lisa Goldberg

Architect: Dean/Wolf
Architects—Kathryn Dean, Charles Wolf, partners-in-charge

Engineer: Anchor Consulting
(structural)—Evan Akselrad, partner-in-charge

Consultant: Reginald Hough
(concrete)

General Contractor: Einar Moi
The comparatively spacious 40-foot-wide double lot architect Frederick Phillips had as a starting point for a doctor's residence presented a challenge: how to preserve the scale and rhythm of a neighborhood of narrow houses built on 20-foot-wide lots. "The temptation would be to cover the whole lot with one structure that would present a cube-shaped barrier to the street," says Phillips. Instead, he designed a narrow ground- and split-face concrete block shotgun-like house for the west half of the lot. With the exception of a garage at the rear of the site, and the structural-steel framed porch and bedroom tower, he left the east half of the lot open for use as a garden.

The steel porch and bedroom structure was carefully detailed. "I had made several trips to South Carolina, and had become familiar with some masonry houses, with post-and-beam porches on the sides to catch the prevailing breezes. Visually, we wanted the porch to feel light; to be something that says the light structure is there to be a filter for breezes."

Another challenge for Phillips in this transitional neighborhood, where gangs are active, was meeting his client's need for security and secure access for patients. Three parking spaces were provided inside the rear garage, so that patients can park inside the building, and few windows were provided on the first floor. Security gates were installed at some vulnerable entry points on the second floor.

**Credits**
*Private Residence*
*Chicago, Illinois*

**Architect:** Frederick Phillips & Associates—Frederick Phillips, design principal; Ronald Piekarz, project architect; Brian Buczkowski, production architect

**Engineer:** Stearn Joglekar

**General Contractor:** Frederick Phillips & Associates
Private Residence
Frederick Phillips & Associates, Architect
Chicago, Illinois

1. Storage 7. Dining room
2. Office 8. Kitchen
4. Garage 10. Master bedroom
5. Deck 11. Bedroom
Desert Outcropping

Seser Residence
Inyokern Hills, California
Tribal Studio Architects
Only an hour and a half northeast of Los Angeles, in the foothills of the San Gabriel Mountains and on the way to the Mojave Desert, lies Juniper Hills, a world apart. Here, at an elevation of 4,200 feet, John Sarli, a mathematician and avid outdoorsman, purchased five acres of rolling terrain to satisfy both vocation and avocation—contemplation and intense athletic activity. He asked Judith Sheine, a friend from college, an architect and currently a professor at UCLA and Cal Poly Pomona, to build him, in his words, “a crystal-like structure, a gem in the desert.”

Sheine, a self-proclaimed disciple of Rudolph Schindler (and co-editor of a recent book on Schindler’s work and writings, published by Academy Editions) has absorbed many lessons from the master—most notably, faith in a flexible four-foot module that could be sub-divided or multiplied and, because of Schindler’s training as an engineer, his vision of himself as an “artist-builder,” according to Sheine. These traits are in evidence in her first completed house.

The architect placed the structure on an existing narrow promontory near the middle of the site, flanked by steep drop-offs ideal for drainage. Set at 45 degrees from due north, the profile of the curved metal roof split into two uneven pieces gently echoes rolling hills that loom in the distance, while giving the effect of an alien vessel. Says Sheine of the striking form and choice of materials: “It’s like a Barbarella spaceship. Hard on the outside and soft on the inside.” Indeed, the steel roof decking set atop 16-inch-thick load-bearing perimeter walls (4 inches of rigid insulation sandwiched between an 8-inch-wide concrete block and 4-inch-wide exterior face block) contrasts with the soft yellow sheen of the birch-veneer plywood lining that rises from 8 feet 8 inches above the block to the 16 foot 8-inch centerline of the curved main vault (following pages).

Like Schindler, Sheine, a former student of mathematics, based the proportions of the main spaces on a four-foot module: the 16-foot-wide interior space is divided into three sections: a 12-foot-long bedroom; a 20-foot-long kitchen and bathroom block organized around a three-sided courtyard; and a 28-foot-long living/dining room. Lofts suspended from the roof decking by 1/4-inch steel cables provide additional sleeping/reading space at both ends of the house. Steel beams are highlighted by a red primer coat that acts as a paint color (similar to San Francisco’s Golden Gate Bridge), reinforcing the reddish hue of custom-designed Douglas fir window frames.

Located in an active earthquake zone, the structure withstood the strong vertical shear of the 1994 Northridge earthquake. The materials, however, are not immune to the elements. Harsh sunlight rapidly discolors window frames and the metal roofing expands and contracts depending on daylight, emitting muffled expansion creaks as the sun emerges in the morning. Says Sarli of his new home: “It’s an alarm clock.”

Karen D. Stein

The house sits on a plateau atop the hilly five-acre site; its length runs northeast to southwest. Future plans include a terraced path between house and garage.

1. House
2. Pump house
3. Water tank
4. Garage
5. Well house
Steel decking on the ceiling is 18-gauge and 4 1/2-inches deep, allowing room to recess sprinklers. On the bottom of the loft it's 16-gauge and 3-inches deep. The dining room wall is clad in corrugated steel with a subtle leaf-like pattern from the finishing process. Above the 8-foot 8-inch-high concrete block walls, birch veneer plywood panels are screwed to metal studs.

**Credits**

**Sarli Residence**

**Juniper Hills, California**

**Owner:** John Sarli

**Architect:** Judith Sheine, Architect

**Engineers:** Gerald Sheine and Nancy Hamilton

**General Contractor:** Joseph T. Setter

1. 18-gauge structural steel decking
2. 1/2-inch plywood
3. 20-gauge corrugated steel roofing
4. Torch-applied roofing
5. Rigid insulation
6. Gutter formed from steel
7. Concrete block
8. Rigid insulation
Living With Art

On a hill overlooking Lake Zurich, this large house mimics a small village.
On a gently sloping hill overlooking Lake Zurich stands a house designed for a large family and an equally large modern art collection that the family regards as an integral part of its domestic surroundings. The commission required the architect to fit an ambitious program onto a site governed by the restrictive Swiss building code, which not only limits height and mass, but also requires the construction of a stick mock-up so that townspeople can judge the design for themselves. In return, the commission provided an opportunity to make spaces at once intimate and museum-like.

In this case, the house was conceived of as a succession of interlocking interior and exterior spaces. A series of terraces and gardens extends the building into the landscape and integrates it with the site. Says partner-in-charge Charles Gwathmey: "Previously we approached the house as a single object. But when the program expands, do you simply build a bigger object, or do you work from a fundamentally different idea?" To reduce the impact of 10,225 square feet, Gwathmey's scheme became the "house as village," where the arrangement of components is determined both by the program and the changing topography of the site. Set back into the hill, the true extent of the "village" is only revealed at close quarters, in a gradually expanding sequence of sculptural white fragments with lead-covered vaulted roofs.

From the street, the south-facing front facade, standing two and a half stories high, echoes the retaining walls characteristic of Zurich. Rooms are grouped into two main wings, connected by the dining room. A raised cylinder adjacent to the library accommodates a reading room and, one floor up, the master bedroom. This space, the only round element in the design, acts as a hinge between the relatively public and more private areas of the house. Behind the living room is the split-level children's wing and the family stair, parallel to the full-height stair that extends through the front of the house.

The living room, where domesticity and art meet, is the most striking space in the house. Twenty-four-feet high with a glazed south face, the room is dominated by a powerful, target-shaped work of specially commissioned art painted on the west wall by Richard Long (following pages). The restricted choice of materials helps link the fragmented volumes, in sharp contrast to the more traditional shingle-roofed and wood-walled neighboring houses. "Poured concrete construction gives a physical and psychological sense of density and permanence," says Gwathmey. Introverted and somewhat aloof, the house is a miniature hill town that opens upon itself, with the main terrace and pool in the role of town square. Ultimately, the liveliness between spaces is subordinate to the overall effect of this residence-cum-gallery—the sense of tranquility and intensity, of calm and concentration. Tracy Metz
Cabinets in a reddish Swiss wood resembling beech add warmth to the interior. The robust yet elegant design of the fireplace echoes the combination of planes and vaults that characterize the complex as a whole (opposite top left and right). Daylight into the lower-level art gallery is filtered through a glass brick ceiling (opposite bottom left). Pre-cast concrete columns (part of the structural system, which also includes cast-in-place concrete walls and floors and load-bearing clay block partition walls), line the dining room (opposite bottom right).

Credits
Zumikon Residence
Zumikon, Switzerland
Architect: Gwathmey Siegel & Associates Architects—Charles Gwathmey, principal-in-charge; Bruce Donnally, associate; Nancy Clayton, project architect; Tom Lewis, Sylvia Becker; Carole Iselin, project team
Associate Architect: Pfister + Schiess Architekten—Thomas Pfister, Rita Schiess, principals-in-charge; Daniela Staub, project architect; Heinz Aebi, construction supervisor
Engineers: Winiger-Kränzlin + Partner (structural); Ernst Burkhalter Ing. (mechanical)
Consultant: Carl Hillmann Associates (lighting)
General Contractor: Heinrich Schlumpf
Having contributed some of the more colorful and energetic designs of the roaring 80s—from his Memphis furniture to his showrooms for Esprit—Ettore Sottsass is in a different mood these days. “There are moments when you want to go to the piazza and shout,” explains the Milan-based designer, “and other times when you need to be more quiet.” While designing the Casa Cei, a 4,800-square-foot house for a family of four in Tuscany, Sottsass felt the pull of ancient traditions and let them help shape the building.

As a result, Casa Cei is an exercise in simple geometry: a cubic form clad in white Istrian stone, topped with a red metal roof, and surrounded by an unpretentious garden. “Tuscan architecture is very compact, dignified, symmetrical,” says Sottsass. “Houses here have a sense of mystery and silence, like a de Chirico painting.” Any trace of menace at Casa Cei, though, is dispelled by the light touch of Sottsass and his associates Marco Zanini and Mike Ryan in the colorful frames surrounding windows and a balcony. “The windows are toys glued onto the Classical white box,” explains Sottsass.

Designed for a middle-class family with traditional Italian ways.
(everyone gathers for lunch at home every day, for example), the house has a simple concrete frame with brick infill and a metal-truss roof that seems to float above stone-clad walls. Whereas the exterior emphasizes the house's solidity, the interiors are surprisingly light, thanks to a central atrium that brings sunlight in from above. The same third-story windows that let in all that light also draw hot air out of the house when they are opened during warm months. On the ground floor, a large Tuscan-style kitchen allows the entire family to gather and a two-story-high living room provides an elegant space for socializing. The second floor is mostly bedrooms, while the third floor has a guest room and a wrap-around terrace offering views of the ancient Tuscan hills. Clifford A. Pearson

Credits
Casa Ceì
Tuscany, Italy
Architect: Sottsass Associati—Ettore Sottsass, Marco Zanini, Mike Ryan, design team
Associate Architect: Studio Maestrelli
General Contractor: COE
Act Two

In a landscape twice destroyed, once by fire and then by human building practices, the Drager house stands out as a monument to the American home. What architect Frank Israel has built in the Oakland Hills, across the bay from San Francisco, is a comfortable string of rooms that sums up traditions of domestic architecture. A central staircase gathers together a series of loft-like spaces that terrace the hillside, all sheltered by a prominent roof.

When the 1991 fire destroyed the Dragers' rambling Cape Cod-style house, they lost not only a comfortable and unpretentious home, but all of their possessions as well. Susan Drager wanted something better to come out of the destruction: "As a child I used to visit a Frank Lloyd Wright house in New Canaan, Connecticut. I couldn't believe that people lived like that. It stayed with me." The combination of a clean slate and a desire for great design made the Dragers "ideal clients," according to Israel.

The site, however, had many restrictions. After the fire, new construction had to be approved by all of the abutting and confronting neighbors. Also, the Dragers had to provide off-street parking for four cars. The houses had to be constructed out of non-combustible materials. On the other hand, the owners were permitted to "max out" the footprints of their original homes, though additional new construction could not have more than 500 square feet of habitable space. The resulting boxes come as close to their neighbors as many of the older houses that had been built before set-back requirements took effect—generally simple volumes to build and accept (since neighbors act as critics).

Now the Dragers' neighborhood is filled with megaliths, mainly because the desire to build as much usable space as possible led architects to divorce most of the structures from their setting. In contrast, the Drager house steps up and back from the street. The strong roof is like a tent spread out over stucco shapes colored to echo the golden hues of the terrain. The fragmentation of the facades lightens the overall effect of 4,500 square feet. The progression up exterior steps to a middle-level entrance and then inside along a staircase that squeezes between rooms overlooking Oakland, the San Francisco Bay, and the hillside gives a dynamic sense of the landscape. The family and its activities are tied together in a knot of interior terraces, window slots, and vertical openings.

Israel found inspiration in the Shingle Style, yet incorporated his own signature—a bold use of color and materials [RECORD, April, 1993, pages 100-107]. "I wanted to transform the Dragers' experience of their house, and allow them to be aware of their site, as if they were living inside of the hill," says Israel, who collaborated with project architect Annie Chu on the design. "It was necessary to create a direct and intimate relationship to the place." At the same time, Israel sees it as "a singular form under the spreading roof, a ship riding off into the views." The Dragers describe the structure as a phoenix, an apt comparison considering the history of its design. Rising from the ashes, the house's wing-like roof spreads out to provide shelter.

Aaron Betsky
Blending suburban building types, the Drager house is a split-level that rises up a steep hill, soon to be filled with larger houses. The gridded street-front facade melds several traditions, including Rudolf Schindler, a favorite source for Israel, and the bungalows with articulated wood structures and strong roof profiles common to the neighborhood.

At the center of the structure is the point of entry, the "great hall," around which the main public rooms are arranged. The living room fills the width of the house and borrows light from both sides.
1. Garage
2. Storage
3. Family room
4. Guest room
5. Living room
6. Kitchen
7. Dining room
8. Office
9. Master bedroom
10. Bedroom
The detailing of the interior appears deceptively simple. The central stair climbs the hillside and curves around a leaning wall, creating an abstract composition of overlapping spaces (middle left). Windows are framed in Douglas fir painted a dark green that appears almost metallic. Floors in the public areas are concrete. The limited material palette also includes pigmented plaster (top left) and plywood. Wood furniture is by Roy McMakin (opposite) and glass sculptures in the study are by Nikolas Weinstein (bottom left).

Credits
Drager Residence
Oakland, California
Owner: Sharon Drager
Architect: Franklin D. Israel
Design Associates—Frank Israel, principal-in-charge; Annie Chu, project architect; Barbara Callas, project manager; Jay Deguchi, Rick Gooding, Bill Molthen, Tom Zook, Ivan Oviedo, Jim Tsai, Danny Kaplan, Felix Ang, Michael Matteucci, Sigrid Geerlings, Sarai Grenell, project team
Engineers: Joseph Perazzelli (structural); Brian Kangas Foulk (civil);
Consultants: MB&A (mechanical); FI.R.E. L.T.D. (lighting)
General Contractor:
Archetype—Zach Nemzer, Richard Clark, Wil Bailey
Unlike neighbors in more affluent sections of town, the clients for this project (a couple with two children) wanted changes to their 1930s Santa Monica cottage to be virtually invisible from the street (top right). For architects Hank Koning and Julie Eizenberg, known for both commercial and residential work [RECORD, Mid-April 1988, pages 90-95], the compact 40-foot by 150-foot site presented little obvious room to maneuver; nonetheless, they managed to assert their presence. Says Eizenberg of their small, yet forceful addition: “We were well behaved.”

Local zoning ordinances prohibited adding more than 50 percent of the existing square footage of 1,300 unless, among other things, garage space was doubled. Koning, Eizenberg, and project architect Tim Andreas were able to reorganize an inefficient floor plan and pack in 650 square feet more, mostly in the second floor of a chunky 21-foot-high tower that does not exceed the area’s height limit of 28 feet (bottom right and opposite). The tower also provides sheltered outdoor dining in the courtyard. For design clues, the architects looked to Irving Gill, whose stucco-covered cubic forms and signature strips of rectangular windows reappear here.

While a thickened chimney in the front acts as a privacy screen along the street, new windows pushed to the perimeter and around the front corners generously admit light and give the impression of a floating roof. The architects removed an interior dropped ceiling, lining the underside of the newly exposed gable with wood and reinforcing the structure with tie rods, which, when painted the same butter color as the walls, almost disappear. They smoothed out the odd volumetric ins and outs of the south wall by moving the kitchen and a cramped, formal dining room out into the open and reconfiguring leftover space into a powder room and maid’s room. Unlike Gill’s houses, which are characterized by compact, densely interwoven rooms, this interior now has the feel of a sprawling loft, borrowing light and space from adjacent areas. In the sitting room, oversized Douglas fir-framed sliding doors overlook a paved courtyard that is shielded from the house next door by a concrete block wall, extending the room into the garden. It’s Koning and Eizenberg’s blurring of the lines between inside and outside that gives new vigor to the original interior, without turning the house into a public spectacle.

Karen D. Stein

To retain a modest street-front facade, the architects did minimum renovation to the house front (top right), saving their architectural expression for a backyard master-bedroom tower, which peeks out over the main volume (bottom right). Stucco arches flare out 18-inches—a massive base for a glass-rimmed suite (opposite).
The architects opened up a warren of enclosed rooms to create a loft-like series of linked areas that borrow space and light from one another. The former kitchen and dining area were gutted and are now a powder room and maid's quarters with a separate entrance from the side courtyard (plan below). The new kitchen is a wide corridor, connecting living/dining with a sitting room. A tower covers an outdoor eating area (photos left) and houses the master bedroom. Bands of green rectangular windows are studied reminders of Irving Gill (opposite).

Credits
31st Street House
Santa Monica, California
Owners: Joanne and Philippe Valli-Marill
Architect: Koning Eizenberg
Architecture—Hank Koning, Julie Eizenberg, principals-in-charge; Tim Andreas, project architect; Brian Lane, team
Engineer: Ross Downey & Associates
General Contractor: Charles Kuipers Design
During two decades of practicing in northern Vermont, Turner Brooks has designed a series of small buildings of special formal and spatial originality, using wood-frame construction and vernacular elements. The owners of this latest house, artists Sharon Lombard and Amos Miller, had moved from Cincinnati to rural Wisconsin, seeking a tranquil place in which to live, work, and raise their daughter. Neither wanted what Lombard calls "an ostentatious money-statement"—they wanted, instead, a house that would comfortably fit both the regional landscape of fields and hills and the local society of dairy farms and small towns.

The couple learned of Brooks's houses in magazine articles, and liked their verve and inventiveness. Of particular interest was a loft in New York City in which they noticed one of Brooks's toy-like "Hovering Creatures." Though a distant cousin of that work, the Lombard/Miller house still has distinct features that relate to it, including a gutsy, exposed wood truss that helps define dining and living spaces; a splayed stair that narrows as it ascends; a double-hung window installed diagonally; and interior windows of various sizes. Also echoing the architect's earlier work is the house's arrangement of space. "I like buildings that remain mysterious and ambiguous and that one must journey through, sometimes repeatedly, before beginning to comprehend them," Brooks wrote in a recently published monograph of his work. Although only 2,400 square feet, the house contains four levels of spaces whose interrelationships reveal themselves gradually, beckoning the visitor to explore from floor to floor.

It is possible, of course, to make too much of stylistic continuity, for every good design resolves specific conditions. Here, regional tradition influenced the exterior; the board and batten cladding, its dashing red and white, refers directly to local barns built by Norwegian settlers. More subtly, the yellow of the clapboards alludes to the butter produced by the region's dairy farms. Nestled into a hillside, and shaded by oaks, this new house has, as its owners wished, the feel of a farmhouse. No one, however, mistakes it for a traditional dwelling, and it has provoked much interest in the community, and even some flights of fancy. One visitor compared it to a whooping crane; another to a dog barking at the moon; Brooks himself likens it to a praying mantis. And, more down to earth neighbors affectionately call it "the snazzy house." Nancy Levinson
Lombard/Miller House
Westby, Wisconsin
Brooks & Carey, Architect

© Cervin Robinson photos
Lombard is a performance artist, and her parents, who live nearby, are puppeteers. Thus the house incorporates elements that encourage small-scale theatrical performances: a platform in the living room, which Brooks calls a “makeshift stage,” and the exterior stairs that cascade down from the kitchen porch create impromptu bleachers. Other elements with stage presence include a balcony and several interior windows. Recently, a bedroom window played a major role in a children’s party, serving as the launch point for “flying ants,” made of candy bars lowered to excited guests below. The living/dining/kitchen space is finished in a lively combination of materials: walls are fir plywood, painted wood wainscoting, and drywall; the floors are maple. The dining table and chairs were designed by Brooks.

Credits
Lombard/Miller House
Westby, Wisconsin
Consultants: Arthur Choo (structural); John Bates (lighting)
General Contractor: Daniel Arnold
1. Entry
2. Kitchen
3. Dining room
4. Living room
5. Bedroom
6. Master bedroom
7. Studio
Canadian Au Pair
Squeezed between an existing A-frame cottage that the clients wanted to keep for sentimental reasons and a grove of tall birch trees, the 2,500-square-foot addition designed by Gisue and Mojgan Hariri is a Modernist long-house shaped by the boats, trees, and vistas found in this rustic part of Ontario near Barry’s Bay. A summer home for a Virginia couple and their four grown children, it is a place where the horizontal thrust of the nearby lake and the vertical pull of the slender birches are perfectly balanced. It is also a place where the tightly spaced structures create an almost palpable sense of compression, while their shared deck spreads out toward expansive views.

As in their Gorman Residence in Connecticut [RECORD, April 1993, pages 76-83], the Hariri sisters faced the challenge of adding on to an undistinguished, pitched-roof house. Steeped in the Corbusian Modernism taught at Cornell in the 1970s, the Hariris might have been expected to emphasize the contrasts between old and new, vernacular and Modern. But in neither project did the architects take such a contrasting approach. In the Gorman Residence, they penetrated the old house with a new glass-and-steel bridge that, literally and figuratively, ties the entire composition together. In Ontario, they pushed the new structure to within three feet of the old, creating a long narrow alley that links two buildings and two design vocabularies together. “In Connecticut, we overlapped and penetrated spaces, while here we dealt with the separation of spaces and volumes,” says Gisue Hariri.

Although distinct structures, the two components of the Barry’s Bay project work as a single house with one kitchen, dining room, living area, and deck. Responding to questions from the local zoning board, the architects showed that a house isn’t defined by one roof. By creating two components, the Hariris allowed the clients’ children to entertain in the old house without disturbing their parents in the addition. At the same time, shared deck areas accommodate outdoor dining and relaxing. And the placement of two buildings so close together creates a tension that is released in dramatic fashion as the rear deck spreads out in a graceful curve to embrace both structures.

Although the addition echoes the pitched roof and wood siding of the old cottage, its clearly expressed structure and clean lines proclaim its Modernist lineage. Built on wood beams resting on concrete piers, the new structure’s frame construction allowed the east facade to be punctured with long slot windows that the architects say recall the horizontal lines on birch bark. Metal pipe railings, along with wood decking and long cedar wall planks, hint at the nautical theme inspired by the lake and the boat-storage room that occupies a large part of the house’s lower level.

Maintaining a simple palette of materials, the interiors are flowing spaces that overlook the lake without sacrificing a sense of enclosure. Indeed, it is this balancing of opposites that is becoming a hallmark of the Hariris’ work to date. Clifford A. Pearson.
Treating the existing prefabricated A-frame cottage as a given, the Hariris repaired its old foundations and stripped it of its fake shutters and pink paint. The new 100-foot-long addition is a frame structure built on wood beams resting on concrete piers (drawings right). A small pavilion topped with a wave-like roof projects beyond the house and encloses an outdoor shower (opposite, top). Slot windows intended to evoke the horizontal markings on birch bark cut into the east facade (opposite, middle) and act as light sources at night when the house is lit up and people are outside on the deck.
Like the house's exterior, the interiors employ a rustic palette of red-cedar walls and ceilings with white-maple floors. Corrugated metal around the stairs (bottom left) contrasts with the wood and recalls the combination of industrial and natural materials found in local farm buildings. To provide a more enclosed and private area within the long flowing living room, the architects limited glazing on the east wall to the house's idiosyncratic slot windows (top left). A freestanding fireplace acts as a sculptural element in the living room, while its stainless-steel chimney provides a vertical accent to the mostly horizontal space.

While views are carefully framed on the main level, glazing is more generous upstairs. With the roof sitting above a large band of windows, sunlight streams into the house from above. An airy reading room overlooks the living room and is connected to the master bedroom by a narrow bridge (opposite).

Credits
Barry’s Bay Cottage
Ontario, Canada
Owners: Jane and Charles Baird
Architect: Hariri & Hariri—
Gisue Hariri, Mojgan Hariri,
principals-in-charge; Paul Baird, Graydon Yearick, Brigid Hogan, Aaron McDonald,
design team
Associate Architect: M.W.
Swinarski
Engineers: Robert Silman
Associates (structural); Paul Walkington (geotechnical)
Consultant: P.J. Stringer
(surveyor)
General Contractor: Zuracon
Inc.
The editors of ARCHITECTURAL RECORD announce the 26th annual RECORD INTERIORS awards program. This program is open to any registered architect; work previously published in other national design magazines is disqualified. Of particular interest are projects that incorporate innovative programs, building technologies, and use of materials. There is an entry fee of $15 per submission; please make checks payable to ARCHITECTURAL RECORD. Submissions must also include plan(s), photographs (transparencies, slides, or prints), and a brief project description bound firmly in an 8-1/2- by 11-in. folder—and be postmarked no later than April 30, 1995. Winning entries will be featured in the 1995 RECORD INTERIORS. Other submissions will either be returned or scheduled for a future issue. If you would like your entry returned, please include a self-addressed envelope with appropriate postage.

Submissions should be mailed to:
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New Products/Tile

312. Handcrafted. Epro specializes in rustic ceramics that offer a range of tones within each specific color. Tiles come in 15 different sizes and three trims. Shown here with Heritage field tiles, new Intricates are miniature rectangular and triangle shapes for use in border mosaics or as accents. 614/882-6990. Epro, Inc., Westerville, Ohio.

313. Cut to order. This maker's custom-design team used water-jet cutting tools to translate Earl Swensson Associates' bandanna motif into 4,000 sq ft of porcelain-tile floor. Layout and installation are described as less costly than standard mosaic work. 800/221-9093. Crossville Ceramics, Crossville, Tenn.

314. Look of ages. Antiquity, a new tile line, is said to replicate the look of old, distressed stone in easy-care matte glazed ceramic tile. Edges have a "chiseled" appearance. Range comes in four neutral-toned colorways, with coordinating accent, corner, and border pre-mounted cut-tile designs. 215/393-2237. American Olean, Lansdale, Pa.


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New Products continued from page 103

316. Commercial-kitchen stainless
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317. Stainless-steel hardware
A Chicago-based distributor imports FSB (Franz Schneider Brakel) door and window hardware from Germany for architects and hardware specifiers. The range includes eight new stainless-steel levers designed by Hans Hollein, Miguel Mila, and Hartmut Weise, available in standard satin- or mirror-polished stainless. On special order, a vacuum-deposition technique makes possible three titanium-over-steel finishes: black satin, matte-gray steel, and brass/gold stainless steel. FSB also makes hardware in anodized aluminum and polished brass. 800/621-1937. The Ironmonger, Chicago.

Corrections
• RECORD's coverage of the Central Administration and Junior School Building, Museum of Fine Arts in Houston [January 1995, pages 70-77], Carlos Jimenez Architecture Studio, should have designated John H. Bowley as project architect. Also, The Powell Group should have been listed as contract furniture and installation subcontractor.
• The animation of Mies van der Rohe's Farnsworth House that illustrated our story on on-line services (March 1994, page 40) was made by Columbia University architecture students Chris Fox and Peter Oberdorfer.
• Commenting on the article on single-ply roofing by Dana Holbrook, [Fundamentals, Feb. 1994, pp 38-39], Joe Luthy, marketing manager of Versico, Inc., points out that the basic polymeric structure of TPO membranes, unlike other thermoplastics cited, is inherently flexible, and does not require plasticizers or other additives to provide flexibility. In addition, TPO membranes have no chlorinated ingredients, and as such are recyclable; very solvent-resistant, TPO seams can be sealed by heat-welding only.
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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 62-67**
Spiral House
Dean/Wolf Architects

**Pages 68-69**
Private Residence, Chicago
Frederick Phillips & Associates, Architect

**Pages 70-73**
Earli Residence
Judith Shyne, Architect

**Pages 82-87**
Drager Residence
Franklin D. Israel Design Associates, Architect

**Pages 88-91**
31st Street House
Koning Eizenberg Architecture, Architects

**Pages 92-95**
Lombard/Miller House
Brooks & Carey, Architect

**Pages 96-101**
Barry's Bay Cottage
Hariri and Hariri, Architects
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400. Prefinished clapboard
Made of a wood composite, Colorlok siding now comes in a new six-inch profile designed to replicate the look of beveled-cedar lap siding. Offered in 16-ft lengths and six factory colors—two whites, two grays, a beige, and blue—siding is said to have long-term resistance to weathering. 800/255-0785. Masonite Building Products, Chicago.

401. Wind-resistant vinyl
A colorful design guide explains how the CertiLock panel edge holds Monogram vinyl siding in place against substantial negative and positive wind-load pressures. Offered in 17 low-gloss colors in both rough-cedar and smooth-brushed surfaces, siding comes in several clapboard-profile options. 800/283-9590. CertainTeed Corp., Valley Forge, Pa.

402. Exterior-color selection
Prepared for architects and other professionals, a binder-format specification guide gives performance, test, color-option, and weathering data on all of this maker's vinyl siding products, including clapboard- and shingle-looks. Sampling program and technical support available. 800/328-7864. Heartland Building Products, Memphis, Tenn.

403. Two-tone cedar look
Made in Canada by a Masco subsidiary, Fieldbrook vinyl siding has a random, two-tone pattern, described as the maker's best effort in capturing the traditional look of natural wood. A color brochure illustrates color options and profiles, and explains the siding's non-prorated lifetime performance guarantee. 519/853-1230. BPCO, Acton, Ont.

404. Extra-rigid, long span

405. Pre-finished shingles
A new sidewall option, 18-in. Western red cedar shingles can be specified already factory-coated on all sides and edges with an oil-based finish. Folder illustrates color choices: gray, tan, bleach, and natural; shingles are all edge-grain heartwood. Samples offered at no charge. 800/426-8970. Shakertown, Winlock, Wash. Continued on page 111.

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The Energy Act of 1992 went into effect last April. In October 1995, the next wave of the Act's new lighting regulations will become mandate.

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406. Fabrics for out-of-doors
A 12-page guide illustrates residential and commercial applications said to demonstrate the design impact of awnings, canopies, and outdoor-furniture cushions made of Sunbrella solution-dyed acrylic fibers. A 1995 update includes photos of over 100 solid-color and striped fabrics; swatch program offered. 910/227-6211. Glen Raven Mills, Glen Raven, N.C.

407. Stile-and-rail doors
A color brochure covers several styles of interior and exterior doors made of Douglas fir, outlining how to store, handle, finish, install, and maintain wood doors for optimum results. Lists all sidelight and other glazing options for entrance-, sash-, and French-door configurations. Bend Door Co., Division of Jeld-Wen, Inc., Bend, Ore.

408. Tubs and showers
Jacuzzi's new catalog includes full dimensions and floor-loading requirements for all models of residential whirlpools. Also covers such new units as a shower that incorporates a full-size whirlpool; an extra-deep Luxura tub; and customizable shower systems with base, wall, and plumbing modules. 800/678-6889. Jacuzzi, Inc., Walnut Creek, Calif.

409. Ceramic-tile murals
Decorative wall designs and slip-resistant floor motifs of ceramic tile are supplied either from stock or following a designer's sketch. Using proprietary tile-layout software for both geometrically regular and irregular patterns, mosaics are cut and mounted on mesh for easy installation. Fit into standard tile modules. Mosaica, Inc., Worcester, Mass.

410. Radiant-heating systems
Application-specific brochures show how different indoor radiant systems provide constant, even heat with no baseboards or ductwork to restrict furniture placement. Products included are suitable for whole-home use, exterior snow-melt, single-room additions, and large commercial installations. 800/256-7887. Gyp-Crete Corp., Hamel, Minn.

411. Architectural millwork
A 32-page catalog shows Details millwork, including moldings, window and door trim, brackets, and dentil blocks. Made of polyurethane in over 1,000 styles for interior and exterior use, millwork comes prefinished with a white topcoat; accepts oil or latex paint. Can be glued, sawed, or nailed like wood. 800/BUILD-GE. Georgia-Pacific Corp., Atlanta.

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**Disabilities continued from page 33**

"disproportionate" to the overall cost of the project or alteration. For projects built after the effective dates of the law, both owner and architect are responsible for violations. The architect alone is usually liable when the owner demands that the architect design a remedy for a violation, and the architect fails to do so. But the owner is liable if the architect recommends an action to correct what is later deemed a violation and the owner doesn't accept it. Savage recommends that architects document in writing all decisions regarding ADA compliance to ensure that they are not blamed if a complaint is filed. Richard Hardaway, like other architects, chafes: "I resent that I am a sitting duck for a lawsuit over a code that's not a code, but is enforced like a code."

**The need for certainty**

Michael Jawer, assistant vice president of the Building Owners and Managers Association, International (BOMA), faults ADA for not providing certainty in resolving accessibility conflicts. Slip resistance is an example of a requirement that is, well, slippery, as architect and building consultant Jim Sealy relates in a lengthy explanation that can be accessed in the Building Codes & Standards forum on AIAOnline. No product or material is "ever going to satisfy the act's original requirements that a surface be slip-resistant," he writes.

"The ADA is a complaint-based process," Beasley says. "The legal process doesn't allow for constructive dialog. If the application of [all] these design standards was played out in court it would be a mess!" Adds Mintzer, "Even people with disabilities don't always agree whether the best height for a toilet is 17 or 19 in."

To demonstrate a good-faith effort, BOMA recommends that its members consult with tenants and patrons to see if their needs are being met. Other owners bring in advocates, such as Easter Seals, to make suggestions. ADA expects employers to make workplaces accessible to those who may have rare or unique disabilities, but architects don't have to become experts on every possible handicap. Physical therapists from Magee Rehabilitation Center in Philadelphia, like many facilities around the country, will offer recommendations.

Yvonne Gee, a physical therapist at Magee, asks designers to look beyond the written law to what accessibility really means. "I've seen instances where a door that was clearly wide enough for wheelchair accessibility was hung on hinges that were so stiff that someone in a wheelchair couldn't open it."

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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>• VEHICULAR</td>
</tr>
<tr>
<td>• PEDESTRIAN</td>
</tr>
<tr>
<td>• UTILITY SUPPORT</td>
</tr>
<tr>
<td>• OVERPASS</td>
</tr>
<tr>
<td>CALL TOLL FREE 800-328-2047</td>
</tr>
</tbody>
</table>

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Circle 80 on Inquiry Card
Advertising Index

Bold Face - page number
Italics - Reader Service number

A
A/E/C Systems '95, 114 ; 42
(800) 451-1196
Andersen Commercial Group, 22-23 ;
14, 15 [G-H]
Armstrong World Industries, Inc.,
Cov.II-1 ; 1 [G-E]
B
Baudisson Concept Window Corp.,
44 ; 18
(617) 569-2927
Bonneville Power Administration,
16Wa/16Wd ; 7, 10
C
CalComp, 103 ; 30
(800) 832-1212
California Redwood Association,
24 ; 16
(415) 382-0062
Case Window and Door, Inc., 100 ; 36
(800) 227-3957
Ceco Building Systems, 5 ; 3 [G]
(800) 474-CECO
Cedar Valley Shingle Systems,
108 ; 34
(800) 321-9523
CertainTeed, Celadon Ceramic Slate,
Cov.III ; 81 [G-E-H]
(800) 699-9988
CPI International, 45 ; 21
(800) 759-6985
D
Directory of Specialty Consultants,
106
(801) 974-2847
E
ECFC/RotoSwing Division,
53 ; 26 [G]
(800) 221-4169
Ellison Bronze, Div. of Dowcraft
Corp., 54 ; 27 [G]
(716) 665-6522
F
Follansbee Steel, 16 ; 6 [G]
(800) 624-6906

For detailed data, prefiled catalogs of the
manufacturers listed below are available in
your 1995 Sweet's Catalog File as follows:

- General Building & Renovation
- Engineering & Retrofit
- Industrial Construction & Renovation
- Homebuilding & Remodeling
- Contract Interiors
- Light Source

G
GE Lighting, 110 ; 37 [G-E]
(800) GE-LAMPS
Georgia-Pacific Corp., 57 to 59 ; 28
[G-I-H]
(800) BUILD GP
Gordon, Inc., 105 ; 32 [G]
(800) 747-8954

H
Heartland Building Prods., 112 ; 39
[G-H]
(800) HEART-01
Hewlett-Packard Co./Designjet,
20 ; 13
(800) 851-1170
Hewlett-Packard Co./Laserjet, 6
(800) LASTERJET

I
IBM, 52 ; 25
(800) IBM-4FAX
Inclinator Co. of America, 113 ; 40 [G]
(717) 234-8065
International Conference of Building
Officials (ICBO), 16Wc ; 9
(310) 692-4226

K
Kalwall, 107 ; 33 [G]
(800) 258-9777

L
Laticrete International, Inc.,
60 ; 29 [G]
(800) 243-4788
Leviton Mfg. Co., 10 ; 5
(800) 824-3005
Litecontrol, 55 ; 20
(800) 662-3455
Louisiana-Pacific, 50-51 [G-I-H]
(800) 299-0028

M
Mannington Commercial, 18 ; 12 [G]
(800) 241-2926
Manufcaturers' Spotlight, 115 to 119
(609) 426-5523

N
NCARB, A.R.E. Handbooks, 120

P
Parex, Inc., 104 ; 31 [G-I-H]
(800) LePAREX
Planter Technology, 109 ; 35 [G]
(800) 542-2282

R
Range Rover, 56

S
Simpson Strong Tie Co., Inc., 111 ; 38
[G-H]
(800) 999-5099
Southern Pine Council, 121 ; 80
(504) 443-4464
Summitville Tiles, Inc., 8 ; 4 [G]
Sweet's Group, McGraw-Hill, Inc.,
46-47 ; 22
(800) 992-0535

T
Technical Glass Products, 113 ; 41
(800) 426-0279
Tischler und Sohn, 17E ; 11
(800) 282-9911
Tomen Building Components, Inc.,
16Wb ; 8 [G]
(909) 428-1600

U
USG Interiors, Inc., Cov.IV ; 82
[G-H-C]
(800) 950-3859

V
Visa Lighting Corp., 43 ; 17
(800) 788-VISA

W
Western Wood Products Assn., 44
Willamette Industries, Inc., 2-3 ; 2
(503) 744-4655
Wom-Door Corp., 48 ; 23 [G]
(800) 453-8494

Z
Zumtobel Lighting, 49 ; 24
(201) 340-8900

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