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For Good Modest Projects
I don’t believe most architects do ignore what you call modest commissions [RECORD, February 1996, page 9]. In fact, most enthusiastically undertake them. Most would try to do a “good design” and some would even succeed, possibly getting their project published in RECORD.

There is both personal and professional impetus for us to design good modest projects. While the users appreciate the positive qualities, they don’t seem able to translate that into understanding design. Perhaps, too few have been exposed to good buildings.

Most of our clients for modest commissions do not read architectural magazines. Those interested may read “Arts and Leisure” in The New York Times and be exposed to a limited, if sophisticated, discussion with stingy graphics. Such articles rarely deal with the basic issues addressed in your editorial.

“The chance to enhance the image of the profession” implies the opportunity exists. If the popular media gave the same kind of exposure to architecture as it does to film, theater, dance, and the visual arts, that opportunity would increase. If the client—the public—learned what good architecture can do for their neighborhoods, there would be more of it.

Our profession doesn’t lack for talent, but rather for demand. If the demand were there, budgets would be better, administrators would be more design conscious, the small-scaled built environment would be better, and I probably would not have had the time to write this letter.

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May 3-5

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May 16-September 13

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June 5-9
International Design Conference in Aspen. The 46th conference’s theme is “GESTALT: Visions of German Design.” Conference chairman is Herbert Schultes, head of design, Siemens AG, Munich. Contact IDCA: 970/925-2257 or fax 970/925-8495.

June 6-September 3
A special exhibition at the Museum of Modern Art in New York will celebrate the occasion of the 90th birthday of Philip Johnson, and his role as a curator and donor to the museum. Contact the Museum of Modern Art, 212/708-9400.

June 24-25
“Green Building Materials ’96,” a conference for architects, specifiers, builders, and manufacturers, Radisson Hotel, Gainesville, Fla. The program will explore important issues these professionals have concerning the specification and manufacture of so-called “green” building materials. For program information contact Dr. Charles Kibert at 904/322-7502; fax 904/322-9606.

June 28-30
The Construction Specifications Institute’s 40th annual convention and exhibit, Denver. A “Roofing warranties, maintenance and lifecycles” symposium will be held in conjunction with the convention. Contact Lisa Derby at 800/689-2900, ext. 772.

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Circle No. 4
ARCHITECTURAL RECORD Editorial

RECORD Offers Readers Chance to Earn Continuing-Education Credits

The states of Alabama, Iowa, and Florida now require architects, if they are to keep their licenses, to demonstrate that they have kept up with a fast-growing array of new skills, new technologies, and new information. Tennessee starts in 1997. About a dozen other states have enabling legislation on the books that they can begin to enforce at any time. The American Institute of Architects (AIA), as a condition of continuing membership, demands of its members that they earn a minimum number of continuing-education credits—36 learning units (LUs) over a three-year period ending in 1997, and 36 LUs in each calendar year thereafter.

To support architects in this area of increasing momentum, ARCHITECTURAL RECORD is pleased to announce that beginning with this issue, it’s offering readers the opportunity to earn those valuable continuing-education credits through its pages. Henceforth, part of the value of your subscription will be the chance to conduct, through RECORD, a program of self-directed studies for lifelong learning, and to earn credits for your effort.

Here’s how it works. The AIA has accorded RECORD the status of Registered Provider of continuing-education credits. This means that the program offered by RECORD meets quality standards established by AIA. Each month single articles, series, or the whole magazine may be suggested as continuing-education material, earning learning units (or their equivalent) depending on the amount of contact time, degree of interaction, and method of testing involved. This month, the entire issue of RECORD, with its focus on the single-family house, is being offered. To earn an AIA credit, read this issue, then simply fill out and mail the self-report form. It contains instructions and is bound into this issue (see table of contents for the location). For state credit, use a form prescribed by your own state. Readers with questions about the AIA’s Continuing Education System may call Thomas Lowther at 202/626-7478. Readers with questions about continuing education in their own states should contact their state licensing board.

Only in a few large U.S. cities do architects have easy access to continuing-education resources, such as workshops, seminars, and trade shows. Many architects practicing elsewhere are reluctant to spend a lot of money to travel to those cities. They will now be able update their professional skills and earn credits without leaving their office.

RECORD doesn’t intend to stop with the printed page. In time, the magazine plans to provide offerings that meet a higher level of credit, both through its pages, and via on-line or CD-ROM. Material may be linked to added databases such as bibliographies, case studies, and design reference files. Advertisers will be encouraged to share their expertise through special advertising sections that will earn additional credits.

Knowing that RECORD is now offering continuing-education credits allows you to plan a coherent program for yourself to satisfy state and AIA goals. April is your chance to get started. Next month, look for an important credits-earning article on glazing. And expect added exciting features on design, practice, and building systems in the months ahead. Stephen A. Kliment
Your incandescent dinners or fluorescent conferences - are they big or small?

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Boston

Suit Hits Bridge

A proposed 10-lane cable-stay bridge over the Charles River between Charlestown and North Boston, conceived by Swiss engineer Christian Menn, is the subject of two lawsuits that focus on planning, not design, issues. Bechtel/Parsons Brinckerhoff and Wallace, Floyd, Associates are doing the preliminary design, with final design by HNTB.

Montreal

New Life For Buckminster Fuller Dome

Buckminster Fuller's U.S. Pavilion for Expo '67 in Montreal, one of the city's most striking landmarks, recently opened its doors to the public for the first time in almost 30 years. The geodesic dome, known as the Biosphere, is now home to an environmental interpretation center designed by local architects Blouin Faucher Aubertin Brodeur Gauthier with Desnoyers Mercure & Associates. The 40,000-sq.-ft. project includes exhibition space, administrative offices, and a restaurant. The result of a protracted design competition, which involved the controversial disqualification of one well-respected contender, the scheme encloses the existing concrete platforms behind glass. No attempt was made to cover the dome — its original acrylic sheathing was destroyed by fire in 1977. Although the project, a joint effort of the City of Montreal and Environment.

New York Metropolitan Region

A Clear-Eyed Look At Region's Blues

Peering into year 2120, the Regional Plan Association (RPA), a Manhattan-based private research group, foresees "a slow and potentially irreversible" decline for the New York region if it continues to rely on short-term solutions to social, political, and economic problems. But the future need not be so grim, argues the RPA, believing that the region's 31 counties in New York, Connecticut, and New Jersey, can reverse the slide. In the just-released "A Region at Risk," its third plan since 1929, the RPA calls for a public-works program, including natural-resource protection, investment in existing urban areas, a regional rail system, and educational reform. Some local business leaders and politicians see the RPA's views as too pessimistic, but the group's blueprint, requiring some $75-billion over 24 years, could add substance to political happy-talk. A.B.

New York City

Lilly Reich: Out of Mies's Shadow

"Lilly Reich: Designer and Architect," at New York City's Museum of Modern Art through May 7, takes another step in the slow process of recognizing the women who made significant contributions to the Modern Movement. The show dwells on Reich's original work as an exhibit designer, where she focused on raw materials and industrial processes. While moving Reich from the long shadow of Mies van der Rohe, with whom she collaborated in Germany before he emigrated to the U.S., the show fails to thoroughly examine the main body of her work — ripe for further study. A.B.
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Circle 6 on inquiry card
Revisiting Anne Frank’s House

The Anne Frank House in Amsterdam, named after the young girl who chronicled her family’s experience during the Holocaust in her diary and was later killed, and arguably one of the world’s most famous houses, is being restored and expanded. The managing foundation aims to restore as much as possible of the original atmosphere to the long, narrow 17th-century canal-side house, which received 600,000 visitors last year. To be added are public amenities such as a lecture room, a bookshop, a library, a mediathèque, and exhibitions about the rise of neo-fascism as well as on Anne Frank and World War II. “Even though space is tight, the museum will remain open during the restoration,” says museum director Marie-Jose Rijnberk. “We expect to be finished by early 1998.”

Anne’s parents had come to Holland in the hope of escaping the rise of fascism and discrimination against Jews in Germany. After the Germans overran Holland, they saw themselves forced to go into hiding in July, 1942 in the annex behind Otto Frank’s business at number 263 on the Prince’s Canal. Anne lived there with her sister, parents, and four others, the entrance to their hideaway hidden from view by a hinged bookease. They were betrayed and arrested on August 4, 1944. All were deported; Otto Frank was the only one to survive. He published an abridged version of Anne’s diary in 1947.

Making a hideaway into a museum
Since the late 1950s, the Anne Frank House has actually consisted of two houses, the original number 263 and the neighboring 265 on the Prinsengracht. A first restoration took place in 1958, a second in 1970. Plans for the current makeover, supervised by C.L. Temminck Groll, an expert on restoration of the period, and an expansion, designed by Mels Crouwel of the Modernist Amsterdam-based studio Benthem Crouwel Architects, were nine years in the making. (Benthem Crouwel won an initial competition to design the project. When the program changed, they were commissioned by the museum to do a new scheme.) The version that was finally approved requires demolishing a block of housing for young people on the corner of the Prinsengracht and the neighboring Westermarkt square. It is to be replaced by a new building consisting of the bookshop, coffee shop, and exhibition, lecture, and reception spaces behind glass facades; the top four floors will once again be youth housing, with each apartment having its own operable wooden shutters.

While access to the cramped quarters of the annex will remain limited because of fire codes, those waiting to enter the museum will no longer have to stand on the street since the project adds 6,400 sq. ft. of space. Until now, the museum had 1,200 sq. ft. at its disposal.

Inter-weaving old and new
“Visitors will enter the museum through the new building on the Prinsengracht and leave around the corner on Westermarkt,” says director Rijnberk, “having followed a longer and more leisurely route than they do now. They will also see more; for example, the helpers’ stairway that leads to the bookease and the annex, and Otto Frank’s office with period furniture.” Collaborating with Temminck Groll, the museum has decided to recreate the atmosphere of the house as it was during the war without actually making a replica of it.

The first historical space visitors enter will be the storeroom on the ground floor, where spices were made. In the annex itself the close, cuooped-up atmosphere will be evoked by darkening the windows just as they were during the war. The window in the attic where Anne used to sit and write will stand slightly ajar, affording a view of the chestnut tree she describes in her diary. To ease circulation, Crouwel has added a passageway at rooftop level connecting the attic of the annex with the top floor of the main house. All such contemporary additions are of glass, marking the contrast between new and old; the spiral staircases leading down to the exit have glass steps and wood-paneled walls.

The estimated cost of the entire project is $10 million, divided almost equally between the new and existing buildings. The Anne Frank Foundation itself is providing nearly $2 million—visitors have been paying a supplement on their entrance tickets for several years—and the national government another $2 million. The remaining sum of $6 million has to be raised through donation. Director Steven Spielberg was one of the first to contribute, with a gift of $250,000. Tracy Metz
Thoughts On

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New Face for Independence Mall
The Pew Charitable Trusts has commissioned Venturi, Scott Brown & Associates (VSBA) to prepare a conceptual plan for Philadelphia's Independence Mall and a preliminary design for a new Gateway Visitor Center. VSBA will use "as a starting point" a plan developed for the site last year by the National Park Service (NPS) that has been criticized for lacking a comprehensive vision. The Trusts will consider contributing funds to the project based on the ideas to be presented by VSBA this summer. The Trusts expect to work closely with the park service and the city throughout the planning process, which remains preliminary pending completion of NPS's plan for the site.

$1.5-billion Theme Park
Plans to build a $1.5-billion theme park in Osaka, Japan, were announced by MCA, Inc., which recently commissioned Rem Koolhaas to design a master plan for its Universal City complex in Los Angeles [RECORD, March 1996, page 11]. The corporation's first venture outside the U.S., Universal Studios Japan will be linked by high-speed water taxi to the Kansai International Airport, Renzo Piano's own version of a fun ride. MCA has not yet named an architect for the project.

Obituaries
• Architect Alejandro de la Sota, an influential Modernist in Post-War Spain, died February 14 at 82. His best-known works are the Maravillas Gymnasium in Madrid (1961) and the Civil Government Building in Taragona (1957). Many of Spain's well-known Modernists consider themselves direct disciples of his Minimal Rationalism, Juan Navarro Baldeweg among them.
• Esther Kahn, widow of architect Louis I. Kahn, died February 24 in Philadelphia. She was 90. A neuropathologist by training, Kahn is credited with galvanizing the group of architects and historians who helped to place her husband's archives at the University of Pennsylvania. She fought to preserve the architectural integrity of his work and remained accessible to researchers, historians, and students.
• David Gebhard, architectural historian and teacher, died March 3 in Santa Barbara, California. He was 68. Among his books are: *Rudolph Schindler: Architect and A Guide to Los Angeles and Southern California*, written with Robert Winter.

Chicago

Chicago’s Historic Architecture Threatend

Thirty Chicago buildings or districts recommended for landmark status were without legal protection through the winter and could, theoretically, have been demolished or altered. Among them are Mies van der Rohe and Louis Sullivan buildings. And there is no guarantee they will survive the next year. In an end-of-session housecleaning, the Chicago City Council secretly discarded those recommended (some from 1980) for designation, which requires Council approval. A court ruling brought the Council's action to light. Mayor Richard Daley intervened and the Council passed a resolution on March 6 restoring the 30 to their former status—with a catch. The city's preservation ordinance now includes a sunset clause, requiring potential landmarks to be reviewed by the Council's Committee on Preservation within one year. There is, however, no corresponding requirement for the City Council, making it possible for designation to fail by a kind of pocket veto. Compounding the problem, no building or district may be nominated more than once. Alderman Burton Natarus—a preservation opponent whose ward contains 20 of the 30 properties—has vowed to call hearings on each of the 30 that must be considered or discarded, straining preservation organizations. Cheryl Kent

Cornwall, England

A Millenial Garden of Earthly Delights

Months after Britain’s Millennium Commission chose not to fund Zaha Hadid’s competition-winning Cardiff Opera House design, it now has an opportunity to redeem itself. One of the latest proposals presented to the Commission is the Eden Project, an international resource center for eco-education and research in Cornwall by Nicholas Grimshaw & Partners, Anthony Hunt Associates, and Davis Langdon & Everest, among others. A half-mile-long greenhouse, Eden will house four climate-controlled zones called “biomes” and a visitors’ center. Curving down and around the south side of a defunct clay pit in this economically depressed area, the double-bowstring roof is to be a dynamic feature in the landscape, but a nearly invisible backdrop to the main event inside—a transparent, pneumatic pillow system powered by photovoltaic cells. Given its environmental agenda, ingenuity, and local employment prospects, the project, its matching funds secured, may fare better than the ill-fated Opera House. A.B.
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A Tale of Two Cities: Lessons from Two Coasts


Reviewed by Peter Katz

At first glance, Parallel Utopias looks as if it might be yet another style book, like the many glossy volumes that try to encapsulate the look of places from Ireland to India. But after reading it, one realizes this book is a much more ambitious effort. It compares two communities—Sea Ranch, California, and Seaside, Florida—that have become touchstones for new-town planning in two different eras. In so doing, author and photographer Richard Sexton wants us to understand each place as more than just a collection of houses.

The lavish photographs make a compelling visual argument for both places as ideal communities. But after reading Sexton’s three essays and those of sociologist Ray Oldenburg and architect William Turnbull, I’m left wondering whether both, or just one of the places in Parallel Utopias has succeeded in its “quest for community,” the challenge grandly posed in the book’s subtitle.

As a resident of San Francisco, I’ve grown accustomed to hearing criticism that Sea Ranch “isn’t what it used to be.” Invariably the gripe is about overbuilding. During a recent visit, I was relieved to see that Sea Ranch, which was masterplanned by landscape architect Lawrence Halprin in the 1960s, looked better than these comments would have suggested. But I was struck by a criticism noted in Parallel Utopias—that Sea Ranch is dependent on the automobile. Says Sexton of Sea Ranch, “distances are great and all practical errands require a car.” As a result, the development did not convey much of an outward sense of community.

Another problem with Sea Ranch relates to the expectations of those who have purchased homes in the development. Sea Ranch was marketed as a place where one can live surrounded by nature. Yet with the passage of time, residents are increasingly surrounded by other nearby homes. The sense of privacy that was promised to the first buyers is diminished with each new home that is built. This seems an inevitable consequence of a design ideology that can only work at unit densities far lower than those of Sea Ranch.

Seaside, started some 20 years later, follows a different design ethos. Patterned after traditional small towns, Seaside’s buildings assert themselves by shaping the public space of the streets and squares they face. Seaside is a place that seems to improve as it reaches full build-out. The few unbuilt lots that remain between homes read like missing teeth—gaps in the urban fabric. That is one reason why the town requires construction of a home to start within two years of the sale of a lot. Beyond its “look,” Seaside seems to function like a real small town (albeit an upscale one), with everything reachable on foot.

Much has been written over the years about both Sea Ranch and Seaside: the philosophies that shaped them, the affluence of their residents, and the difficulty of applying the lessons of such second-home communities to year-round ones. Parallel Utopias captures much of that discussion. As such, the book is a welcome addition to the larger debate about community design now taking place.

But it’s hard to reach a conclusion regarding the value of these projects as models for emulation based solely on what Sexton provides us. The Sea Ranch, for all of its beauty, fails in my estimation as a true community because of the ideas about planning and architecture that prevailed when it was started. Seaside, on the other hand, is the product of an era that is just now coming to appreciate the connection between physical design and the making of true community.

Peter Katz is the author of The New Urbanism: Toward an Architecture of Community.
Out-of-Body Experience


Reviewed by Andrew Anker

In Flesh and Stone, Richard Sennett traces the development of the Western city from Periclean Athens to contemporary New York, making stops along the way in Hadrian’s Rome, early-Christian Rome, medieval Paris, Renaissance Venice, Revolutionary Paris, and E.M. Forster’s London. The journey is long, but Sennett does not attempt a sweeping history of the city; rather, he follows a single, continuous thread of urban life—the human body and its relationship to urban space. He finds that the thread changes over time, but never breaks.

Sennett’s decision to use the body as the focus of his discussion is a way of making us see those groups that the dominant culture tends to render invisible. For Sennett, the body is an obvious locus of investigation because it is there that differences of gender, age, and race are most clearly recognizable. Western society’s repeated attempts to repress or ignore the body, often in favor of a one-size-fits-all rationality, can be seen in this light as a desire to repress difference.

In a chapter entitled “Fear of Touching,” Sennett explains that the Jewish ghetto in Renaissance Venice was not simply an attempt to suppress alien religious beliefs. More importantly, Venetian authorities created the Ghetto Nuovo to isolate the non-Christian body. Fear of the outsider’s or the “Other’s” body found physical form in the Ghetto which, located on its own island and surrounded by a perimeter of buildings, could readily be cut off from the rest of the city.

As with other buildings and spaces Sennett discusses in Flesh and Stone, one can certainly interpret the Venetian Ghetto from perspectives other than that of the body. But the book offers an insightful, alternative reading of the city, one that achieves its force through Sennett’s uncovering of bodily traces throughout culture. In Venice, for instance, he relates the creation of the Ghetto to a generalized repression of the body stemming from the city’s devastating military defeat at Agnadello in 1509. Blaming the loss on their citizens’ sexual decadence, the Venetian Senate voted to limit displays of sensuality by regulating jewelry and clothing. But if the rest of Europe viewed Venice as a Babylon by the lagoon, Venetians saw the source of the decadence in a Jewish community about which tales of promiscuity circulated freely. Sennett explains, “The Venetian attack against the Jews intertwined with this revulsion against bodily sensuality.” The Ghetto was the constructed means of preventing that sensuality from “infecting” the Christian population.

While Sennett’s reading of the Venetian Ghetto tells a story of one people’s repression of another, Flesh and Stone’s greatest strength is in reminding us of our culture’s tendency to ignore the body hurts us all. In medieval Paris, Sennett locates the beginnings of “the duality which marks the modern city” in the conflict between a desire for individual freedom in the economic realm and a craving for religious community. Here again the body figures prominently, for it is through compassion for the bodies of others, for their pain and struggles, that people create community. Cut off from bodily sensations, focused only on our own comfort, on our own freedom of movement, we are reduced to passive spectators of the urban scene. For Sennett, it is a position in which we remain isolated individuals, cut off from our fellows.

But Sennett does not see our isolation as inescapable, and Flesh and Stone is, in the end, guardedly optimistic about regaining a sense of urban community. For while the body is often the focus of repression, it’s also the site of resistance—Athenian women retreated to ritual spaces to celebrate their bodies’ power, and Venetian Jews retreated to the Ghetto where they were free to study and pray. In the final chapter, Sennett looks at multi-cultural New York and finds that difference does not preclude indifference. For in order to feel compassion, to experience community, it is not enough to be in the presence of others. We must first recognize our own incompleteness, an incompleteness that Sennett finds located in the body.

Andrew Anker is the Fay Jones professor of architecture at the University of Arkansas.

John M. Johansen: A Life in the Continuum of Modern Architecture, by John M. Johansen. Rockport, Mass.: Rockport, 1996, 172 pages, $40 (paper). Like his Mummers Theater in Oklahoma City—with its boldly colored, angled bridges—this book on Johansen’s life and work is most impressive when it is making connections. Inspired by sources as diverse as Marshall McLuhan, Classicism, and soap bubbles, Johansen has spent 50 years designing surprising buildings and wondering how things like ecology, density, and magnetic levitation might affect architecture. The book is part monograph on his work and part rambling discourse on the subjects that interest him. A gracious introduction by Richard Rogers and an analytic essay by Lebbeus Woods round out the book’s offerings. C.A.P.

Views of Rome, by Steven Brooks. New York: Rizzoli, 1995, 224 pages, $60. In the tradition of 17th- and 18th-Century view painters, or vedutisti, American photographer Brooke has recorded his impressions of the Eternal City. His cool but romantic black-and-white photographs are accompanied by the same (or at least similar) views as captured by Piranesi 200 years earlier. The book also includes photographs of modern Rome and three scholarly essays.

Designing with Nature: The Ecological Basis for Architectural Design, by Ken Yeang. New York: McGraw-Hill, 1995, 256 pages, $35. Ken Yeang, the Malaysian architect who has earned an international reputation designing high-rise buildings that respond to the tropical environment, began this book while earning a doctorate at Cambridge University in the 1970s. The book lays the theoretical foundation for a green architecture, which Yeang has been practising as well as preaching for more than two decades. Mostly text, the book could have benefited from more photographs and illustrations.

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Indicators

**Home building holds steady**

With new housing starts remaining close to a 1.5-million-unit annual rate in the last few months, home builders are finding consistently high demand, if little new growth. The Federal Reserve may continue to push interest rates downward, but there might not be enough unmet demand to spur much higher starts. New multi-family units remain near a historically low percentage, but the imminent end of the apartment glut will begin to boost activity, helped by an aging population and the trend to smaller household size.

**Resales dip on economic anxiety**

The National Association of Realtors expects a healthy rate of housing resales in 1996, and blames recent dips on economic anxiety brought on by federal budget gridlock and unusually bad winter weather in much of the country. Even with recent weakness, sales rates were higher than January 1995 in all regions except the Northeast, which was flat. The West registered the most impressive gain—9.3 percent—after years of weakness. January interest rates remained favorable: 7.03 percent versus 9.15 in 1995.

**What a difference a year makes**

An impressive 14 areas reported a booming job market in Boston Society of Architects' annual survey of AIA chapters. That's twice as many as last year. "Send resumes!" urges South Carolina AIA. Two years ago, 16 areas reported conditions as "down" or "busted." Only four find themselves in these categories this year; with only Santa Barbara, Calif., calling itself "busted." Oklahoma has boomed for three years running; other hot areas on last year's and this year's list include Arizona, Utah, and Mississippi.

**AIA Chapter Survey**

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<th>Market Conditions</th>
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Source: Boston Society of Architects

**Hottest Markets:**
- South Carolina
- Arizona
- Southwestern Pa.
- Washington, D.C.
- Middle Tennessee
- Colorado
- Mississippi
- Georgia
- Utah
- Iowa
- Oklahoma City
- Montana
- Nebraska

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**Short Takes**

- **50,000 new Hilton rooms:** With rising room occupancy, hotel chains are building again. The Hilton Hotels Corporation expects its room inventory to increase 54 percent globally by 2000. "The mid-scale category is the fastest growing," says Hilton.

- **Empowering inner cities:** The Empowerment Zone and Enterprise Community initiatives, administered on the federal level by HUD, are spurring inner-city investment through tax credits and other means. Information is now available on the World Wide Web: http://www.ezec.gov.

- **Record office-furniture shipments:** Surprising commercial-office experts, office-furniture shipments were up 7.4 percent and reached record levels in 1995. According to a survey by Kennedy Research, dealers, designers, and facilities managers expect flat or slightly dipping shipments this year.

- **PM Salaries:** Median earnings for project managers in construction ranged between $73,000 and $80,000, according to the Project Management Institute (610/734-3330).
A Warm Welcome for the Electronic Hearth

By Michael J. Crobie

They’re in virtually every up-scale residence, they’re not going to go away, and, if anything, they are getting bigger and more complicated by the minute. While not the seismic force that indoor plumbing and electricity were, the continuing elaboration of television, VCRs, and stereo systems is affecting the design of American houses.

What’s more intimidating is the breakneck speed with which audio/visual technology is changing. Even if you devote a good share of your professional life to following home-electronics trends, it’s impossible to keep up with new components and improved performance, not to mention the newest integrated total-home systems that permit clients to control lighting, interior climate, and security at the touch of a keypad. “The technology of

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A former editor at Progressive Architecture, Michael J. Crobie is an architect with Steven Winter Associates, a building systems research and consulting firm in Norwalk, Ct.

Reconciling dual “hearth”s:

Mounted on wheels (below left), a media unit designed by architect Mark Stamer swivels into viewing position when needed (right and below right).

the equipment you’re designing for is usually obsolete as soon as the design concept gels,” says Mark Sexton of Krueck & Sexton Architects in Chicago. The best approach is to hold open the design of the media center—where equipment is fabric-shrouded or set within cabinetry—or “home theater” (typically a separate “media” room) for as long as possible, designing-in enough flexibility to accommodate components the dimensions of which are subject to change.

Getting help

With these unknowns, how is the architect to wrestle the technology into a form that doesn’t overpower or compromise the architecture? Luckily, an entirely new class of consultants has emerged from the jet-stream of audio-visual advancement. Electronics consultants have for years helped clients pick

just the right sub-woofer. But recently their role has expanded. Now they integrate entertainment components with other electronics; find appropriate locations for equipment; determine the controls, electrical-load demands, and any special HVAC requirements; and coordinate installation with other trades.

“We provide end-to-end service for architects and their clients,” says Mitchell Klein, president of Media Systems, a Boston-based electronics consulting firm, “in terms of education, and also design and engineering services that complement the work of the architect.” Klein, a member of the Custom Electronic Design & Installation Association (CEDIA), a trade group, is quick to point out that the design of spaces, cabinets, and other enclosures for home-media systems remain the purview of the architect. “Once the client articulates what he wants in terms of home electronics, the architect calls us—instead of passing out,” says Klein, “and we satisfy the electronic needs within the parameters of the architecture.”

Though firms such as Media Systems are often dealer-installers, a good one should offer architects and their clients far more than an electronics retailer, who may have limited equipment selection, and perhaps
Electronics consultants can help manage the burgeoning area of home electronics, but architects must help clients avoid the "How do I work this clicker?" question $90,000 later.

little expertise in coordinating installation or integrating the systems with HVAC and lighting. Such consultants are usually paid a fee, based on the scope of work, and are hired by the client. They can also work as part of the design team, paid through the architect.

"Make sure they can read drawings," warns Mark Stumer of Mojo Stumer Architects in Roslyn, N.Y., who has designed a number of media centers. "I've worked with dealers who don't know how."

Stumer and other architects point out that it is the architect's job to help match the system selected to the level of technical complexity the client is comfortable with. Dealers usually push the latest models festooned with every bell and whistle. "I had a client who had a $80,000 A/V system, and he couldn't use half the stuff," remarks Stumer. "If you don't use the equipment every day," notes Stumer, who has a media center in his own home, "you'll forget how to operate it."

Architect Sexton refers to this as "the VCR problem," citing the amusing statistic that 50 percent of households with VCRs have a blinking "12:00."

**Call early**

Making the best use of an electronics consultant depends, as it does with most consultants, on when they are brought into the design process. Both architects and A/V experts agree that in the case of home electronics the earlier the better. Architects who have designed a number of media centers now consider questions about the client's electronic lifestyle just as important as the number of bedrooms and the size of the kitchen. Once the client's interests are understood, it's not too early to visit an electronics consultant's showroom. "We can show the kind of equipment that might be involved," says Media System's Klein, "and help define the scope of the project."

As the project moves through design development and into construction documents, the electronics consultant should be kept apprised of such details as media-center cabinet design, the building's structural layout (which might conflict with recessing equipment into a wall, or exhausting heat generated by components), lighting systems, and electrical loads.

During construction and punch-listing, the consultant can help the architect work with the general contractor to coordinate electrical, HVAC, and finish-carpentry trades. Typically the consultant installs the electronic components and special equipment such as motorized screens and projection-television units. The consultant needs to be involved throughout construction to field architect and contractor questions.

**Command Center:**

A keypad "super station" in a project designed by Holt Hinshaw Architects controls lighting, mechanical systems, even the swimming pool as well as a sophisticated home theater system. The red-stained Okume wood veneered panels conceal mechanically ventilated space for 17 amplifiers.

**Designing for the electronic hearth**

Unless a client requests a separate room dedicated only to home electronics, chances are that the media center will share space in a family room, living room, or master bedroom. Traditionally, such social spaces have as their focus a fireplace, a view from a prominent window, or a conversation area defined by furniture placement. The media center introduces another focal point, one that doesn't dovetail easily with the others.

"Architecturally, a fireplace usually takes the central position in a room," observes Klein, "but the video screen needs to be the focal point. We battle this problem constantly." Klein adds that the "video hearth" will be used daily, unlike most fireplaces. Shoving a video screen into a corner doesn't permit good viewing angles, and an array of electronic components may not discreetly fit into the masonry mass of the fireplace.

It may be possible to split the room's focal points, for example. In his design of a house in Venice, Calif., Steven Ehrlich placed a fire-
From body shop to bedroom:

For a Chicago apartment, Krueck & Sexton took a sculptural approach, matching other cabinetry (below) in enclosing home-video equipment. The carving shell surrounding four monitors (opposite) was originally conceived in plywood with high-gloss paint. A cabinetmaker with auto-body background built the units with a fiberglass shell over foam to match the finish; high-gloss car paint was applied to particleboard cabinets. The tops are 3/8-in. glass back-painted to match.

Another conflict arises in window placement. Rooms with unshaded window walls, skylights, or greenhouse additions create media-center havoc. Not only will glare obscure video screens (especially rear-projection ones), the hard, acoustically reflective surfaces can reduce a luminous sound system to harshness. Programmable controls, of course, can automatically draw draperies and lower electric lights to TV-viewing levels. Mark
Stumer believes that it is possible to strike a balance between conflicting requirements. The media cabinet Stumer designed for one house is hinged; the unit swivels outward to face seating (previous pages). Thus viewing isn’t compromised and a fireplace can back up to another one on a lower level. “The fireplace,” says Stumer, “also acts as a break between the seating area and a window view,” helping veil the screen from back light.

Screens should not be placed adjacent to windows, where sunlight will wash out the image. Stumer and other architects experienced with these systems try for a mix of acoustically hard and soft surfaces, with overstuffed furniture, rugs, and window treatments to reduce reverberation. The controls on high-end stereo components can often compensate for unusual room shapes, but if highest quality sound is what’s desired, then a room shaped for good listening (such as a shoebox for surround sound) is best.

**Making space in cabinets and closets**

An age-old rule of house design is that you can never have enough storage, and media centers need lots of it. “Architects are typically shocked at how much space audiovisual equipment requires,” says Klein. A rule of thumb for audio components is that they are generally 17 to 19 in. wide, and need 24 in. of usable depth. Access is also critical to install, wire, and service components. Heat generated during operation can shut down a system if it is not properly ventilated. Some cabinets may even need exhaust fans. Klein says that equipment can be located in an adjacent space or recessed into a closet, provided that there is adequate access to service it.

Within rooms, cabinets are the most popular way to enclose electronic equipment, yet they’re inherently in conflict with their contents, which work best when not shrouded. The A/V consultant’s impulse is to put the equipment in racks and let the technology hang out—“the Pompidou approach,” as architect Sexton describes it, “which sounds great, but looks disturbing.” Sexton has designed enclosures that make televisions sculptural objects within the living space (below and opposite). Other approaches: build shelves permitting televisions to be pulled out and swiveled, or place speakers on wheels behind movable panels so that they can be swiftly rolled into place for best listening. Racks inside cabinets ease component service and replacement. To reduce the apparent size of cabinets, architect Franklin Salasky, of B-Five Studio in New York City, suggests bowing their fronts to diminish the depth at the ends. He also includes customized storage space for video-cassette tapes and compact disks.

With surround-sound systems, an array of speakers is called for. Some speaker models can be discreetly recessed into ceilings, walls, baseboards, vanes, and coves. Paul Holt of Holt Hinshaw Architects, in San Francisco, has strategically placed speakers inside freestanding sculpture. Wireless remote controls reduce the need for fixed-in-wall controls.

**Turning on the whirlpool from Jakarta**

Today, only the most well-heeled and electronically savvy clients are asking for totally electronic homes, with fully integrated systems that include monitoring security and life safety. Such systems can adjust the lighting, draw the shades, program the sound system, lock the front door, and turn on the air conditioning from a single keypad. But as computer and control technology advances and becomes cheaper, such sophisticated innards may one day be found in all homes. To make a house appear occupied during a week-long vacation, for example, scenarios for lights, shades, and sound can be preprogrammed—with a different pattern every day. Sexton observes that this kind of deterrence is preferable to relying only on alarms and other physical security measures.

*Continued on page 125*
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Industrial Influences

Light and Lively

For his family's half of the attached triplexes he designed for a steep site in Studio City, Calif., architect Jeffrey Tohl wanted a tropical color scheme with a "1950s thing to it." In the kitchen (right and lower left) he chose a rose-and-green granite countertop for the warm, lively character of the stone, and picked up green and ocher and lavender shades as a color wash on the natural-birch cabinets. Cut-outs, overlapped edges, and strategically placed slots on the cabinet doors serve as pulls, creating a smooth, unencumbered mural of natural wood—a composition of planes and colors. Not even the refrigerator has handles.

The two bathrooms use light very differently. On an upper level, the master bath (middle right) is flooded with sunlight from an end wall of windows. The two basins are wall-hung sculptures, bracketed with natural-birch storage units and topped with mirrors set on wooden easels. The floor is Strata green slate. Though the child/guest bath (lower right) is 11 feet below grade, sunlight from a high clerestory window washes the tiled walls of the shower and bounces through a glass-block partition. The subtle hues from the kitchen reappear in their bright and deep-color versions in a collage of 4-in. accent tiles from different kilns.

Architect: The Architecture Studio—Jeffrey Michael Tohl, designer; John Gormley, Mark Roberson, Carl Welty, project team.
Cementitious

The client, an artist on a very realistic budget, wanted a warm, natural feel for this California kitchen. Santa Monica architect David Hertz had developed just the cost-effective, bucolic material: Syndecrete, a lightweight, fiber-reinforced precast that displays subtle variations in color and texture. The J-shaped countertop (lower right) illustrates some of its design potential. Hand-cast in the plant as a single piece, the two-in.-thick slab permits a substantial cantilever without reinforcement. Sealed and given a coating of liquid wax, the precast exceeds the requirements of the Ceramic Tile Institute’s T-72 kitchen-counter stain test, resisting damage from red wine, grease, and other cooking ingredients. The 1/8-in. caulked joints needed where sections meet have been included in the design of the counter. Very slight, non-structural shrinkage cracks and air bubbles contribute to the organic nature of the material. The checkerboard shows current color and pattern options offered by Hertz’s company, Syndesis, Inc.

Architect: David Hertz; Michael Rendler; project architect
Downtown

The clients, a young couple with an infant, wanted a chic, New York look for their Tribeca loft—but on a budget. Architect Alexander Gorlin selected materials that seem more expensive than they are, such as the stainless-steel countertops, installed at half the cost of stone. Cabinets appear to be faced in ebonized wood—but it's laminate instead.

The kitchen island (top photo, and inset, left) replicates, in miniature, the footprint of the building, an old loft structure on Hudson Street. The steel on appliances, backsplash, and counters emphasizes sunlight from the large, west-facing windows. Counters, integral sink, and backsplash were fabricated and "seamlessly" welded off-site, and each linear section was installed in one piece.

The master bath (inset photo and bottom) is tucked behind a compound curve that forms part of the living-room wall. The imported tile and custom stainless-steel towel bar follow this curve.

Architect: Alexander Gorlin, Architect; Jeffrey Feingold, project architect; Mark Rosenthal, job captain.
Down Home in Brooklyn

When architect Duo Dickinson helped the owners of this 1870s Brooklyn brownstone move the kitchen from the cellar to the high-ceilinged parlor floor, he also took away the bearing wall separating front and rear halves of the space, opening the room to direct view from the street door. In what he describes as a “passive/aggressive” approach, he placed the cabinetry with the cooking equipment along the long wall and painted it to match the existing Victorian trim elements, so the piece looks built in, “incised into the wall.” But the curved counter and illuminated setback say “look at me,” drawing the eye to the kitchen from the entry by catching reflections from the back window. The floor tile replicates the dimensions of the original parquet.

The English brown oak island is an art piece, with a curved, platform end that terminates the counter at the point closest to the living room. The granite surrounding the cooktop (inset) is a passive, neutral gray. Low-voltage lighting accents the upper curve of the cabinetry, which in turn echos the fireplace arch (not shown) and the serving island.

When the bath was renovated, the clients asked to keep the original green tile, so Dickinson salvaged that for the walls and selected new tile for the floor in the same Deco feeling. The curved vanity top widens to accommodate the sink, then curves back.

Transitional Kitchen

For a new kitchen in an existing space that acts as the connecting link between the original Spanish Colonial house and a newer bedroom/dining wing by architects Lubowicki/Lanier [RECORD, April 1994, pg. 72-75], the client asked designer Chris Tosdevin for a neutral palette. And as the president of Bulthaup (LA), Inc., he knew just what to consider: the almost flawless 18-gauge stainless steel fabricated by this German kitchen-system manufacturer. Both designer and client felt that stainless steel, when used for its functional qualities—stain-resistant, unaffected by heat, impervious to grease—becomes a warm, not cold material.

The steel-framed window, built to the same 25-mm module as the cabinetry and placed to line up with the upper cabinets, captures a selective vista of tile roof, cypress, and bougainvillea. A full backsplash fits underneath. Counters are set at a 37-in. height that better suits a taller American cook; the cutting board can be slid across the sinks to increase counter space. The limestone floor is the same jade-green used extensively in the Lubowicki/Lanier addition, helping to tie the new kitchen into the somewhat older wing.

**Designer:** Christopher Tosdevin.  
**Sources:** Dishwasher: Miele. Cooktop and ovens: Gaggenau. Refrigerator: SubZero. Cabinetry and plumbing fittings: Bulthaup Corp.
Cabin on a Grand Scale

For his country place in Emigrant, Montana, 15 miles north of Yellowstone National Park, architect Tom Blurock wanted to give the impression of the massive scale of the lobbies of such famous National Park Lodges as Yosemite’s Ahwahnee. But since he had only about 850 sq ft over all to work with, he had to make some adjustments.

Major architectural elements—doors, windows, the logs themselves—have been selected and sized on a skewed scale that imparts a solid, large feeling. Doors and windows are both shorter and wider than usual. For example, the 12-ft-wide north-facing window-wall is 6-ft 6-in. high, not the more-common 6-ft 8-in.

Extra-wide trim around openings adds to this sense of scale, and also conceals the gap needed to accommodate the movement of the logs under temperature changes. The chinking (log jam) is a silicone material that remains springy and resilient, unlike the mortar previously used. All the rustic materials—Douglas fir logs, window frames of unfinished teak, lodgepole pine, even the zinc roof (not shown)—are intended to gray out together.

The components Blurock chose for the 475-sq-ft kitchen/living/dining space (below) are also hefty. The black Danish stove heats the whole house, even during Montana winters. The 8-ft 6-in.-long stainless-steel workbench holds two sinks (one next to the burners to make filling pasta-water-pots easier), cooktop, counter space, and all the pots and pans. In the tiny bath (right), tucked off of the ship-cabin-scale bedroom, a massive section of peeled fir log holds a top of local travertine. Notice the width of the mirror surround.

Architect: Thomas Blurock
Showcase

A serene bath created for the Kohler exhibit at January's National Association of Home Builders by Tod Williams and Billie Tsien uses cool, subtle materials such as sandblasted glass (sealed against fingerprinting), special limestone-like concrete, and space-separating screens of translucent fiberglass. Fixtures are a soft gray. The total effect is one of water-washed stone—the only touch of color is the moss garden on the cantilevered tub surround.


Built to Last

For his bayside Fire Island, N.Y., home, Peter Samton selected materials with a proven record of long-term performance in a salt-filled marine environment—and ones that could be delivered by boat. The kitchen (right) has cabinet faces and walls of solid-sqir wainscotting, characteristic of Long Island's grand 1890's shingle cottages, with strong vertical lines that disguise the uneven weathering of the wood from sun and glare. The island site made prefabrication vital; countertop, sinks, and backsplash (all stainless steel to withstand the always-damp air) arrived as one piece and didn't need to be seamed. Flooring is Vermont Green slate.

Architect: Peter Samton, Gruzen Samton; Bill Bialosky, job captain.
Heart of the Home

Architect Todd Remington used some structural sleight-of-hand to create a light-filled great-room-kitchen within a single-level Minnesota home. In order to span the existing stairs (saving the expense of moving them) and open the new space to a view of woods at the rear, I-beams were slipped under base cabinets (at left in both photos), and a custom “mini-truss” carries upper cabinets. Glass fronts on both sides of the extra-long upper cabinet turn them into a light well for the stairway, and let even more light into the kitchen. This joist is held by a steel-post system developed for this project, with set screws that hold collars supporting the extended cabinet shelves. Metal has a brushed-steel finish that reflects other colors in the room.

Finishes—natural birch wood and solid-black laminate countertops—were selected for their comfortable appearance, modest price, and a Bauhaus esthetic that appealed to the German-born client. A 12-in.-deep cantilevered snack counter wraps around the cooking/eating island to double as a safety standoff, distancing small children from the cooktop.


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By Steven S. Ross

If you have any spare funds for computer-related purchases, you might do well to take
a look at more random-access memory. RAM prices have finally begun to fall in dollar
terms, after stabilizing at about $10 per megabyte for the past three years. (Off-shelf,
memory prices have been falling a little over the past few years, but the effect had been
masked by a weak dollar.)

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gabyte and falling further, despite strong
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Windows95. Extra memory brings extra
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extra programs run alongside your CAD
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You might also put some money into "spe-
nalized" tools such as the WoodWorks suite
discussed this month.

Having trouble finding those extra funds? You
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keeping help. Next month, we'll be looking at
software to help you do just that.

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714/956-3170, CompuServe GO CADVANCE,

Equipment required: Windows or Windows
95 computer. Comfortable in 8 MB for small
files; 16 MB of RAM recommended. Program
files take about 10 MB of disk space for full
installation.

Cost: $1,995; upgrade from 6.0 is $50, from 5.0
and earlier, $695. Competitive upgrade from
CAD packages costing at least $1,000 is $695.
Upgrade from less expensive packages is
$1,995 minus price of competing software.
Free unlimited support (you pay for the call).

Cadvance was the first fully-functional
high-end Windows CAD package. But Cadvance's
original parent, IsiCAD, fell on hard times; FIT
has released a modest update with an
aggressive pricing strategy in hopes of
restoring some luster; Cadvance does some
things extraordinarily well:

• Its 2D drafting tools remain first-rate, even
by today’s standards.

• Unlike AutoCAD, more than one project or
drawing can be loaded at the same time,
allowing transfer of data and drawing sec-
tions among them, without loading more than
one copy of the entire program.

• Most standard Windows-compatibility tools
are enabled—OLE and DDE for two-way
data exchange with database or spreadsheet
software, the Windows clipboard, and other
items.

• There is basic rendering, and the ability to
create walk-throughs.

• You can import almost any bitmap file in any
format.

• There's a versatile macro-language with
good macro-recording ability.

• There are many suppliers of add-on produc-
tions that enhance its capabilities.

But 3D editing is limited. You can extrude a
plan into 3D, and you can combine 3D primiti-
tives. But you can't simply dive into a 3D
drawing and add new material on-the-fly; the
drawing file structure keeps 2D and 3D enti-
ties separate. And, despite Cadvance's small
memory footprint, it actually takes longer to
redraw a screen than does AutoCAD R13c3
or 4.

If you intend to translate back and forth
between Cadvance and AutoCAD, test care-
fully first. Cadvance was one of the first to
offer direct binary compatibility, reading and
writing AutoCAD DWG files. In fact, it
licensed the technology from Sirlin. But since
the last license upgrade, in 1998, Autodesk
has purchased Sirlin and evolved its file
structure.

In general, we were unable to import
AutoCAD Release 13 files cleanly in DWG
(we converted them to R12 files first, from
AutoCAD R13). AutoCAD R13 had some dif-
ficulty reading Cadvance drawings saved as
Version 10, 11, or 12 DWG files. There are
other modestly-priced CAD packages (Visual
CADD comes immediately to mind) that do a
better job with AutoCAD files.

Who, then, should be interested in Cadvance?
Facilities managers will find its database
books especially useful. So will those who are
using older versions of AutoCAD, and who
need a compatible, mainly 2D package that
runs fast on small machines, and that allows
easy transfer of data among drawings that
may all be on-screen at once.

Manuals: Two thick paperbacks cover refer-
cence, tutorial, and user's guide and a small
addendum for 6.5 features.

Ease of use: The 2D tools are fine, as is the
walk-through feature. But other 3D features
are somewhat dated.

Error-trapping: Excellent. Changed or
deleted items are not permanently removed
from the file until it is "packed" or until it is
saved in a non-Cadvance format.

AutoCAD Release 13c4

Vendor: Autodesk, 111 McInnis Parkway, San
Rafael, CA 94903, 415/507-5000, 800/964-6432,
fax 415/507-5100, CompuServe GO ADESK,

Equipment required: Computer already
running AutoCAD Release 13 in DOS, or
computer capable of running Windows 3.1,
3.11, 95, or NT, 16 MB of RAM (more
recommended) and 100 MB of hard drive
space. CD-ROM drive strongly recom-
ended; the upgrade from CD-ROM took less
than 20 minutes on our review machine.

Cost: This is the currently shipping version
of AutoCAD Release 13, $3,750 on CD-ROM,
$3,995 on floppy disks. The upgrade from
previous versions of AutoCAD R13 is free, but
dealers may add a service charge. Continued
This "e4" upgrade to AutoCAD Release 13 is the fourth (and probably the last) major upgrade before Release 14 shows up in 1997. If you've already installed the e3 upgrade from last fall (it came with new, fast screen drivers), you may not want to bother with this one. There's new functionality and a 10 to 20 percent speed increase for Windows users, but there are also new incompatibilities.

There is something for everyone, even for DOS and Unix users (more below). For the Windows user, the release is fully compatible with Windows95. You can run more than one copy of AutoCAD at the same time in Windows95 as well as WindowsNT—important if you need to share drawing elements or data among two or more projects.

There's also full Windows OLE-2 compatibility. That is, you can paste or link objects from other applications into AutoCAD, and from AutoCAD to other applications. If you have enough memory to keep all the applications open at the same time, you can even "drag-and-drop" selected objects into drawings. For all users, there's a new "SAVEIMAGE" system variable that controls the writing of graphics files for application-defined objects.

The downside is that add-on products that use the Autodesk ARX development environment have to be updated. How do you know if you are using ARX? ARX is part of the ADS interface—the interface most add-on vendors use to "hook into" AutoCAD. But only some ADS-dependent products use ARX. Most of them have an "ARX" filename extension such as SSDING1.ARX. The ARX revisions will help vendors provide more intelligence to standard "objects" that might be represented in your drawings.

Among the add-ons that should be upgraded are Autodesk's own AutoVision R2 (the R2e4 upgrade is included with the AutoCAD e4 upgrade); AutoCAD Designer 1.2 (you'll need to go to 2.0), and Autodesk IGES Translator R13 (you'll need AIT R13.1). Only the AutoVision upgrade was ready to test when we reviewed. Autodesk WorkCenter 1.1 works, except for "file open" redirection; an upgrade is due there as well.

All e4 versions, including the DOS version, benefit from new and enhanced commands—some of which were once available only in add-on products. There's a new "direct distance" entity entry, for instance—you move the cursor to indicate direction, and then enter the distance to the first point. You can now move dimension arrows and text independently of the dimension lines; stacked fractions are easier, too. There is better control of hatch patterns, attachments of material specs to objects, viewports, and creation of 2D profile images out of 3D solids. There's also an enhanced DXF translator that allows you to convert R13 DWG files to pre-R13 DXF. Unix users will appreciate the DLSTATUS command, which gives information on display lists, viewports, and swap space. There's also a new Unix "aerial view" viewport.

Manual: An unindexed 113-page paperback with information on installation and new functionality.
Ease of use: No pain, no gain.
Error-trapping: There's now an incremental save, and an undo file that's easier to live with (you can keep it on your disk or in RAM) for Windows users. Both features encourage more frequent saving of work in progress. There is support for long file names in Windows95, but as you move files to other systems, their names may change in ways you don't expect. This is a hy-product of Windows95, not AutoCAD.

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Ease of use: Almost trivial.
Error-trapping: Any action that could destroy data is warned against.

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155. Modified gooseneck
Grohe's subtly curved Classic spout, introduced from Germany 20 years ago, can now be specified with a more traditionally styled cross handle. Interchangeable discs can be ordered reading "hot" and "cold" in English, French, and Italian. All solid-brass fittings meet ANSI/NSF Standard 61, Sec. 9 for water-contact materials. 708/582-7711. Grohe America, Inc., Bloomingdale, Ill.

156. Wash-basin range
Variable lavatories, an unusual conical shape in either deep or shallow versions, are made in wood, as shown here, as well as enameled in four colors, clear and frosted glass, three colors of soda glass, and aluminum. Matching circular countertops may be stainless steel, clear or frosted glass, or a stone look. 714/282-8686. Toto Kiki USA, Inc., Orange, Calif.

157. Wall-hung fixtures
Vitreous-china, European-style water closet and bidet incorporate the Geberit concealed water tank and bowl carrier system, which fits inside a 2- by 6-in. stud-wall space. The tank, insulated to eliminate condensation, and the supply line, valve, and flush pipe are hidden but accessible behind a cover plate. 800/359-3261. Absolute, a division of American Standard, Inc., Chandler, Az.

158. French flair
From this source's Etoile collection of hand-finished brass and nickel plumbing fittings and bath accessories, the Arche lavatory set makes a grand, Victorian-influenced statement. A colorful small-format catalog shows basins, towel bars and hooks, tiles, hand-held and wall-mount showers, and faucets. 800/899-6757. Waterworks, Danbury, Conn.

159. Above-the-counter basins
New Vessels handcrafted ceramic lavatories come in three unusual shapes designed to fit within countertop cut-outs. Left, a slatted-wood vanity holds a clay-texture cone-shaped basin with a Japanese-bath effect; the wall-mount faucet is also a new design. Material options include six textures and three high-gloss glazes. 414/457-4441. Kohler Co., Kohler, Wis.

160. Pressure-balancing valve
A pressure-balancing, scald-preventing shower control is built with a ceramic disk cartridge said to maintain precise temperature levels without drips even in the hardest, most corrosive supply-water conditions. The device meets anticipated federal safety standards; the loop-style handle meets ADA requirements as well. 847/675-6570. Gerber Plumbing Fixtures Corp., Chicago.

161. Bath faucet
A new single-lever mixer from Dornbracht, German-made Novus faucets are said to work with both traditional and contemporary settings. The German source of these high-style plumbing fittings promises four-day delivery at the same cost as UPS ground from Atlanta. 770/416-6224. Santile International, Norcross, Ga.

162. Kitchen gooseneck
Renaissance faucets come in the classic gooseneck shown here, as well as a high-arched spout and a traditional style with integral soapdish. New finish options include brass-trimmed chrome, charcoal, and white with brass or chrome trim. Faucets come in models that fit different inlet configurations. 708/803-5000. The Chicago Faucet Co., Des Plaines, Ill.

163. Organized shower
An all-in-one way to mount bath accessories and storage onto the shower bar, the InTouch Organization offers a soap dish, hooks, shampoo shelf, and net-bag storage: even a hang bar for hand washables. Available in white, brass, chrome, and clear finishes. Other fittings meet specific needs such as seniors and healthcare. 818/993-1841. Interbath, Inc., City of Industry, Calif.

164. Traditional-style faucets
Known for very contemporary plumbing designs, this New York manufacturer now offers a mid-priced, more traditional range. Called Classics, the line includes the Hampton lavatory set shown here. Finish options include all types of brass, polished and satin nickel, pewter, copper, and oil-rubbed bronze. 718/402-2988. Paul Decorative Products, Bronx, N.Y.ii
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RECORD HOUSES 1996 marks the beginning of a new era. After 40 years of publishing the annual issue—the highlights of which are compiled in a book to be released this fall by Harry N. Abrams, Inc.—now comes an alter ego: a CD-ROM featuring this month’s houses and produced with Graphisoft, U.S., Inc. It’s the ultimate house tour. (The CD-ROM will be available next month for $19.95. To order call 212/512-4685.) While RECORD HOUSES, the magazine, was originally conceived to show that Modern houses are, in fact, livable, its main purpose remains true to what its first editor, Herbert L. Smith, Jr., wrote in the debut issue: “...recording and stimulating design progress.” “A business card coming out of the mountains,” is how 34-year-old Wendell Burnette (cover and pages 94-101) describes his own house outside of Phoenix, his first solo project. After nearly 11 years of working with Will Bruder, Burnette is opening his own office, and his house had, in addition to providing shelter for his family, a heavy burden to bear: “I needed to show potential clients what I was about,” says Burnette. For architects who have produced many houses during their careers, each new one provides a unique opportunity to explore site, program, materials, and more. The weekend getaway that Peter Gluck built for his family proves that architects can be their own most challenging clients (pages 84-89). Mark Mack, who was born in Austria and now lives in Los Angeles, did what he calls his “most Californian house” in, of all places, Reno, Nevada (pages 72-79). Given the restrictions of low-income housing that he’s grown accustomed to, Rob Quigley made an easy transition in scale and financial realm in his Capistrano Glass Beach Houses (pages 106-113). The simple forms and immaculate detailing of Richard Gluckman (pages 102-105) and Carlos Jimenez (pages 90-93) imbue their work with a timeless quality. In their projects, Miller/Hull (pages 80-83) and Patkau Architects (pages 114-117) show that forested, rocky sites, like so many domestic dreams, are highly buildable. Karen D. Stein

Manufacturers’ Sources listed on page 118
Showing off Art in the High Sierras
Mark Mack interprets the courtyard house, creating indoor and outdoor spaces that work for both people and art.
t started with the site—nine acres of rugged, arid hills offering spectacular views of Reno and the Sierra Nevadas. “It was so unprotected, so open,” remembers architect Mark Mack, of his first visit to the site with his clients Peter and Turkey Strengel. “I was reminded of a simple shed standing alone in the desert,” says Mack.

Mack’s initial idea was to build a large prefabricated structure—a giant shed—and then insert various blocks underneath it, articulating each function according to its needs. During the design process, the shed evolved into a great hovering element that was part roof, part trellis, part breezeway. Like this unconventional sheltering device, the house as a whole uses fresh—but economical—means to link the outdoors with the inside, to interpret the traditional courtyard house, and to create interiors that work both as grand spaces for Modern art and as casual rooms for family living.

Respecting the rugged character of the site, the architect cleared just a small portion of it for a rectangular plinth on which to build the house. Within the confines of the concrete plinth, the right angle reigns supreme—even landscape features such as a reflecting pool and small grassy areas follow strictly orthogonal lines. Beyond the house’s platform, the irregular realm of nature takes over. A clear distinction is also made between the front of the house, which faces east to the city, and the back, which turns toward a private courtyard. The main entrance, though, is placed on the north side, which establishes a strong processional axis through the house, but takes an important function away from the front of the building.

Although attuned to its northern Nevada setting, the Strengel House shares some characteristics with the Austrian-born Mack’s work in his adopted state of California. “I like to joke that this is my most Californian house,” says Mack. A strong relationship between indoors and out and an open floor plan are hallmarks of Modern Californian design that also play important roles in the Strengel House. Indeed, every room of the house has direct access to the outside and the large living spaces flow one into another without interruption. Emphasizing the link between inside and out, Mack designed courtyards and patios as outdoor rooms, going so far as to include a fireplace and hanging pendant lights in the covered yard just outside the dining room. At the same time, he used many “exterior” materials, such as concrete block and corrugated metal, inside the house.

The clients, who own an art gallery in Reno, wanted a house that would also be a showcase for their collection, which includes many large Modern pieces. As a result, the main living areas are big rooms with 18- to 24-foot-high ceilings, generous wall space, and a combination of track and spot lights that wash walls and key on individual pieces. While rich colors are used on the exterior of the house to break it down into smaller blocks, a more muted palette is employed indoors to provide a backdrop for the Strengel’s art collection. A wood-frame structure with some steel and a few concrete-block walls, the house is built on a concrete slab and has radiant heating.

At 7,000 square feet, the house is big. But because it’s a set of a few large spaces, rather than a warren of small ones, the house isn’t overwhelming. After a year in the house, the Strengels and their daughter are still discovering new things about it. “It keeps changing depending on the time of day and month of the year,” says Peter Strengel. “In most houses, you tend to gravitate to one or two rooms after a while. But we use every bit of this house.” Clifford A. Pearson
While most of the 7,000-square-foot house stretches along one floor, a study sits on a mezzanine overlooking the living room (left bottom). The only other second-story space is a guest room above a small den near the entrance (not shown).

To weave together indoors and out, Mack brought exterior materials inside. For example, concrete blocks with colored cinders form a wall in the entrance foyer (left), while colored and sealed squares of concrete serve as the floor in all of the public rooms. Walls in the living and dining rooms are drywall treated with several coats of subtly colored plaster. In the dining room, the corrugated-metal roof is exposed and hung with spot lights that recall the stars outside (opposite). Floor-to-ceiling glass in the living and dining rooms bring in views of the valley and the mountains to the east (left bottom).

The spacious living areas were designed to display the large Modern artwork that the Streemels collect and sell. A cast-bronze horse by Deborah Butterfield stands along the entry axis, while a striped ceramic “dango” by Jun Kaneko anchors a corner of the dining room (left top). The large painting in the dining room is by Richard Larson (opposite).
A study loft provides a quiet retreat, while maintaining visual connections to the living areas and the outdoors (left).

In plan, the house is organized into zones with varying degrees of privacy. In general, the public spaces, such as the living room (opposite) look onto the city and the mountains beyond, while the more private areas, such as the bedrooms, kitchen, laundry, and family rooms, feed onto a grassy courtyard with its own lap pool.

Credits
Stremmel House
Reno, Nevada
Owners: Peter and Turkey
Stremmel
Architect: Mack Architects—Mark Mack, principal; Robert Flock, project architect; Gloria Lee, Tim Sakamoto, Robert Does, project team
Architect of Record: Leo Parker
Engineers: Parker/Reznik (structural); Fricke Engineering (septic & soil)
Consultants: Peter Walker (conceptual landscape design); Terri Hanziker (interior design)
General Contractor: Michael Doherty Construction

1. Entry
2. Garage
3. Laundry
4. Guest
5. Family
6. Kitchen
7. Living
8. Dining
9. Master bedroom
10. Den/exercise
11. Bedroom
12. Lap pool

20 FT.
6 M.  → N

MAIN FLOOR
Island Retreat Fits Rocky Site

Clinging to a rocky point on one of the San Juan Islands, this house by the Miller/Hull Partnership serves as the weekend getaway quarters for a family of four, with a backup-studio for the graphic-artist patriarch. His studio is quiet, private, and separated from the house, but is fully wired to his main office in Seattle, so that two-day weekends may easily be stretched into three. The house is not untraditional for the region, except for its response to an unusual site condition, its use of indigenous woods, and its special detailing, intended to resist wood’s tendency to decay rapidly in this climate.

To preserve the natural beauty of the island, the views and trees, landowners may only build within a 100-foot-diameter circle on their lots. This geometry problem established the unusual layout of the house: the main portion of the house is angled away from the studio to keep it within the limit. A walkway from the access road terminates at the glass-covered porch separating the main house from the studio and guest room—its central location a reflection of its importance as a place for family gatherings and socializing. A large, glazed barn door that covers the entry-side of the porch can be pushed open to catch a cross-breeze, or closed during inclement weather.

Building materials were delivered by barge. The house is constructed mainly of woods indigenous to the Northwest: cedar board-and-batten siding and shingles, hemlock ceilings, fir trim, casework, and structural members. All are stained in colors that reflect the gray and orange stands of madrone trees on the site (right). The open kitchen, dining, and living room, which flows out onto the upper deck, reflects the weekend home’s informality. Upstairs every possible inch of space has been used to its best advantage.

The detailing is simple and elegant. For example, the double sliding-glass doors that lead to the upper deck, and the windows on each side, have no exposed headers, and no exposed upper track—these are located in the wall above the ceiling, and the doors suspended from track hidden in a slot. The upper deck itself is detailed with similar thoughtfulness—the braces and columns that support the roof above are secured by pinned joints rather than shelf angles, so the wood can drain rather than rotting away in the rainy climate. The same brackets also carry tension rods that support a steel pipe that carries the far end of the deck. “It’s always harder to make these details work than one thinks,” says architect Robert Hull, “but they have a useful purpose.” Charles Linn

Two views of the house from the water (opposite and right above) show the angled relationship between the main part of the house and the studio/guest room. The dashed circle on the plan indicates the lot’s construction limit. The limit is intended to preserve views for other houses in the area, and to keep too many trees from being removed.

1. Master bedroom
2. Children’s room
3. Glass porch roof
4. Guest room
5. Kitchen/dining
6. Living room
7. Upper deck
8. Covered porch
9. Studio
10. Lower deck
11. Access road
The glass-roofed porch (right in top photo) is sited at an angle from the house in order to make the entire structure fit into the lot’s 100-foot-diameter building limit. The glazed barn door can be rolled open or closed according to weather conditions.

In the master bedroom (bottom left) every inch has been used to its best possible advantage—much space has been devoted to storage in closets and nooks. The headboard (foreground, below left) contains a built-in storage space, and supports a pair of reading lamps. The bed is oriented to give it a view of the water.

The color palette of the materials chosen for the house—the orange fir, hemlock ceiling, and gray-stained cedar siding—is derived from the orange and gray bark of madrone trees found outside the house. In order to keep the living and dining room (opposite, and wall section) as open to the view as possible, the door headers and sliding door track were concealed above the ceiling line. The T-shaped brackets allow water hitting the structural members to drain, so that rotting of their ends does not occur. The diamond-shaped light fixtures in the ceiling were custom-designed by Miller/Hull.

Credits
Island House: Tikamaga
Decatur Island, Washington

Owners: Tim Girvin and Kathleen Roberts

Architect: Miller/Hull Partnership—Robert Hull, partner-in-charge; Victoria Carter, project architect

Engineer: C.T. Engineering (structural)

Contractor: Avery Builders
Annex Supports Varied Pursuits

For architect Peter Gluck’s family of four, its new 3,000-square-foot annex to a much smaller nearby house (site plan below) embodies more than simply expanding a weekend retreat. It shows how to accommodate a unified group of people’s differing needs in a single location. “We spent a lot of time rethinking how we live,” says Gluck, talking about the maturing family’s increasingly diversified pursuits and habits, not to mention its widening circle of friends and acquaintances. Their traditional little farmhouse in New York’s rural Catskill Mountains, which had served well for 20 years, had begun to burst at the seams with too many activities and people.

Nor did the formal character and gardens lend themselves to the extensive, innovative addition the family had in mind. Instead, Peter Gluck and son Thomas chose a site far up an allée through the woods toward the back of the 18-acre property where they could freely experiment with new ideas about planning, massing, and construction. They had several criteria:

- The family’s guests and two younger members could live and work independently, for as long as they liked, and come together only when they pleased in a large welcoming common area. The result (projected plans, following pages) was a large multi-use space housing varied functions on several levels and a wing containing four tightly planned dormitory-style rooms plus one larger bedroom. Each room in the wing has a desk, ample storage, and computer hookups where, as Peter Gluck puts it, “the studious can explore the libraries of the world, while others go skiing, hiking, or rafting.”
- The new building would respect the original house’s character, but take full advantage of a natural wooded site—a transitional spot.

The Glucks had lived in a small farmhouse (1) surrounded by rose gardens (2) and a croquet lawn (3) for many years when they decided on their new “annex” (4).

Bridge House Retreat
Olive Bridge, New York
Peter Gluck and Partners, Architect
between the old lawn and the trails in the untamed woods high atop a rock ledge beyond. To accomplish this dual role, the white symmetrical facade of the multi-use block was built to resemble a folly when viewed from the distant house, while the rest of the structure becomes more and more informal as it disappears into the woods.

- The structure would be a composite of many innovative materials, forms, and construction techniques. This was affordable only because Thomas Gluck took two years to build it himself with the help of a carpenter and an assistant.

The rectilinear multi-use space (this page) has heavy post-and-beam framing, exposed on the interior by Gluck’s attaching insulated wood-stud curtain walls to the outer face. The exterior finish is 5/16-inch concrete panels with a 1 1/2-inch airspace behind to further block solar-heat gain. Roof framing is an inverted king-post-truss system of log-support compression members suspended from the outer framing by 3/4-inch tensile cables. Foundations were built on compacted soil with a surrounding dam to drain away ground water runoff from the ledge. The elevated bedroom wing bridges a stream and gives occupants tree-top views. Clad in corrugated aluminum-and-zinc-plated steel, it is likened by Thomas Gluck to a railroad car complete with pull-down bunks. This wing stands in the air on columns laterally stabilized by bracing cables sunk into deep concrete pads that taper from 12-feet square at their base. Bridges extend the house out into the woods, including one 85-feet long stretching from the roof terrace over the multipurpose space. Charles K. Hoyt

Credits
Bridge House Retreat
Olive Bridge, New York

Owners: Peter and Carol Gluck
Architect: Peter Gluck and Partners—Thomas Gluck, designer
Engineer: Ruderman Associates (structural)—Michael Theiss
Builder: Thomas Gluck

The multi-use space (right in plan) includes overlooking balconies designed to house a study and pool table on the second level and a studio for the senior Glucks on the third. The angled walls in the basically rectilinear box are created by superimposing a conventionally built gabled building with cedar siding (dotted lines, lower plan). The mahogany windows were built by Thomas Gluck on site. Seven-foot-square sections rise easily, counterweighted by bricks sliding on steel rods.

1. Entry
2. Kitchen
3. Multi-use space
4. Bedroom
5. Dormitory rooms with shared bathrooms
6. Library

FIRST LEVEL

SECOND LEVEL
Texas Two-Step

Lott House and Guest House
Houston, Texas
Carlos Jimenez Architecture Studio, Architect
Carlos Jimenez’s architecture abides by Willa Cather’s maxim that art should simplify. It’s been nearly 20 years since Jimenez moved to Houston from his native San José, Costa Rica. During that time (first as a student and since 1983 as head of his own small firm) he has consistently refined his approach to program, site, and form—so much so that the end result—the building—has about it an air of ultimate purity. A city known as an architectural free-for-all due to a lack of zoning restrictions and a tepid landmark-preservation policy ironically has proven an ideal setting for an architect in search of the lost values of simplicity and permanence.

His reputation in his adopted home was, until recently, based largely on the many houses he has done there: 16 (with five more sprinkled around the state and country). When he completed the Central Administration and Junior School Building at Houston’s Museum of Fine Arts [RECORD, January 1995, pages 70-77], a 60,000-square-foot administrative and teaching facility, over a year ago, it was clear he had mastered a larger scale. And, as part of an arts campus with a masterplan by Venturi, Scott Brown & Associates, an original museum by Mies van der Rohe, and new gallery space by Rafael Moneo planned for a 1999 opening, he is clearly no longer a house architect in the public eye. Though if Jimenez has his way he will always be doing houses, and more, because it is the mix of building types that has taught him to reconcile seemingly conflicting impulses.

“To respect intimacy without sacrificing public presence,” says Jimenez of his self-imposed challenge. “As an architect you need both great proximity and a perspective.”

The constant shift between small-scale detail and public stature shows in this house, located on one of Houston’s tree-lined boulevards. In organizing the 60-foot by 135-foot lot, Jimenez was guided by client Marley Lott’s desire for a two-bedroom house—“first, he asked me to tell him the least that I wanted,” recalls Lott of the programming process. A separate guest house was quickly incorporated into the scheme because, Lott reports, the architect also “asked me what was my one luxury.”

To provide a sense of place in neighborhood in flux (a house next door was recently replaced by four units), Jimenez made the only governing architectural rules—the setback requirements—into the outline of the house (30 feet from the main street, 10 feet from the west side and 5 feet from the east), and of the guest house and carport (same side setbacks and 10 feet from the back alley). While giving order to the compound, the scheme frees the center of the site, allowing it to become a miniature grassy mall. “The program is so intertwined with the site,” observes the architect, “it’s more about discovering a place than making one.” “I wanted a place of repose,” says Lott. “And he gave it to me.” Karen D. Stein

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The main house faces Houston’s famed South Boulevard (top left), lined with majestic oaks, and is entered from a path that leads to the west side of the house. The south side has a screened porch integrated into the main volume (top right). The deep roof overhang of the guest house (opposite) echoes the profile of the main house.

LONGITUDINAL SECTION

15 FT
4.5 M.
For Jimenez's direct esthetic to come off as poetic and not simple-minded, the detailing of joints has to be virtually invisible. Toward that end, he ranked finishes, balancing use, visual effect, and cost—in his words "calibrating the choice of materials." While Jimenez used maple on the floors upstairs, concrete floors were left raw downstairs to afford operable steel windows throughout. These provide a crisp edge to the exterior brickwork and generous cross-ventilation inside.

Credits
Lott House and Guest House
Houston, Texas
Owner: Marley Lott
Architect: Carlos Jimenez
Architecture Studio—Carlos Jimenez, principal-in-charge; Robert Fosler, Mason Wickham, Eric Batte, project team
Engineer: Structural Consulting Company—Jon Monteith, Ciarinn Higgins, project team
Consultants: Carlton Cook Company (custom furniture/cabinetry); Rosa Finsley (landscape)
General Contractor: Anderson Builders
House Hovers Over Desert Site

Colored fields caught in cruciforms of steel tint the desert “Mondrian” Wendell Burnette has built for himself and his family in the Sonoran desert near Phoenix, in Sunnyslope, Arizona. He started with basic materials often found in commercial construction of the lowest order: masonry, steel, concrete, and glass, and transformed them into a finely detailed home that seems to hover over the desert landscape.

Burnette started with a small, quarter-acre site in an unfashionable part of town. Because it was north of the irrigated areas that used to fill the Valley of the Sun and is thus free of pollen, Sunnyslope originally was developed as a haven for patients with tuberculosis and other respiratory problems. In the 1950s, it turned into a slightly seedy, but adventurous “anything goes kind of Modernist neighborhood,” as Burnette puts it; “a place where everything looks to the views and ignores the street. I like to think of it as the Hollywood Hills of Phoenix.” This particular site had a “scar”—an abandoned road that marred the delicate ecosystem of the desert.

The scheme used by Burnette to create the 1,160-square-foot home he shares with his wife Debra, a landscape designer, and Robert, their 15-year-old son, was what he calls a “hand-aid” over that left-over mark. Occupying the roadbed and not much else, the 16-foot slot of the house touches down lightly on the desert floor: two footing lines support the north and south concrete block walls, and poured-in-place concrete-floor slabs are suspended between them. There was little other excavation: one cut into the earth to accommodate the master bedroom, set into the desert floor to the rear of the property, and another beneath the central courtyard to create a shallow pool for evaporative cooling, complete the $1,500 worth of grading work Burnette did with a back-hoe.

“I like to think of the walls as monoliths, a little like Stonehenge,” Burnette explains. The south wall comes in eight-foot sections, while the north wall has a four-foot rhythm. This creates patterns of light, while blocking out the direct sun and views of hodgepodge neighboring structures. As with Le Corbusier’s Villa Savoye, one drives along the old road between these walls and right into the house. Entry is under a floor slab via a small courtyard, where steel stepping platforms lead to a living area over the carport, or up a step-ladder-like construction onto a second slab with two bedrooms.

“I am a detail-oriented kind of guy,” Burnette admits, “but it is the details that make a good space.” Trained at Taliesin and otherwise “self-taught” during a decade as a designer in the office of local architect Will Bruder, Burnette claims to be carrying on the traditions of Frank Lloyd Wright, “who didn’t just make pretty drawings, but started a tradition of innovation here that is his real legacy.” The result is an absolutely minimal marvel of simple forms that make a fit frame for the desert Southwest. Aaron Betsky

Rather than creating an isolating capsule, architect Wendell Burnette designed a “desert canyon hike” that moves you between shading walls and water to a high place where you can capture a view over the desert. The house appears to cantilever both horizontally and vertically, so that it lifts up off the rocky jumble on the desert floor.
The "monoliths" that frame this desert house are actually a hybrid. Conventionally-reinforced concrete block was laid up to the first floor; and topped by a locally-produced H-shaped super-lightweight block that was vertically post-tensioned. The wall has an R-28 heat-resistance rating. "It's a single-stroke solution: thermal, structure, inside and outside finish," says Burnette.

The perpendicular walls (right) are either tinted or clear glass. Burnette achieved the colors by using on-site auto-glass-tinting technology "so that I could control the color and degree of privacy." A deck (opposite) shades an entrance courtyard that serves as the bridge between public and private spaces.

1. Master bedroom
2. Bedroom
3. Studio
4. Entry court
5. Kitchen
6. Living room
7. Evaporative pool
8. Car port
9. Corridor
The slats (left top and opposite) provide slivers of the view to the sides, while acting as a "sundial" that makes one aware of the time of day "even when you're brushing your teeth or taking a shower."

The interior wall panels were originally the formwork for the roof slabs. To maximize space, all walls that run parallel to the concrete block screens are only three inches thick; they are made of plywood panels and supported by a cable-stay system. The medium-density overlay plywood has a kraft-paper-like finish that leaves a smooth-faced finish on the concrete. When cleaned and sealed, it takes on a gloss like "the varnish of hundred-year-old leather." None of the steel was sandblasted, and all connections are clearly visible.

"All the materials came to site and then we erected them," says the architect, "we didn't do anything to them." All electrical outlets and conduit became part of the carefully-studied interior elevations.

Credits
Burnette Studio/House
Sunnyslope, Arizona

Owners: Wendell and Debra Burnette

Architect: Wendell Burnette

Consultants: Furley Scott Consulting—Paul Scott (structural); Roy Otterbein (mechanical); C.A. Energy Designs—Charles Avery (electrical); Debra Burnette (landscape)

General Contractor:
Wendell Burnette
Rural Icon Dares to be Simple

When a building is as straightforward as this house in Nova Scotia, there is no margin for error. Every false move—whether it be a badly executed joint or an awkwardly proportioned window—sticks out like a “Kick Me” sign on a pinstripe suit. There’s no place to hide that ugly drain pipe or those poorly conceived sill details. Simplicity, it turns out, is remarkably difficult to pull off. This second home for an artist and a writer does it, but in the process, dances dangerously close to the line separating the simple from the obvious. Indeed, the design looks so right that it almost takes on the aura of an icon: the prototypical farmhouse that children draw in crayon or the house on a maple-syrup label (bottom right).

Through his work on a host of art galleries in New York City, Richard Gluckman had known the clients for many years. Before discussing the program or anything else about the commission, the clients spent a week with the architect traveling around Nova Scotia, photographing and measuring local barns, farmhouses, and other vernacular structures. “It was the simplicity of means in the models that generated the design of the house,” rather than any one particular model, explains Gluckman. On subsequent trips around the peninsula, the clients (who are husband and wife) bought a few ruined barns and salvaged their sandstone foundations for use in their house. Eventually, these large rugged stones became important building blocks in the steps, chimney, fireplaces, and retaining walls of the new house. “It’s found architecture,” says the husband.

The site is on the side of a hill about 50 feet from a cliff that drops 150 feet down to the water. Two hundred and fifty acres of wooded land surround the two-acre clearing for the house. While the hillside location offers great views of the water, it has the disadvantage of catching the often brutal winter winds. Even though the house is not the clients’ primary residence, they spend about five months a year there, including some time during the winter.

“The brutal simplicity of the terrain and the place” constantly reminded Gluckman and his project architect Robert White that they shouldn’t get too fancy with the design of the house. “We conceived of it as a simple three-room house with each room occupying one floor,” says Gluckman. While this was not literally done—there is a small study off the bedroom and there are mechanical and storage rooms in the lower-level studio—each floor has the open feeling of being one room. Simple materials are crafted together as if the house were one big piece of cabinetry, says White: African wenge wood for most floors, tongue-and-groove pine boards for walls and ceilings, and Newfoundland slate for the studio floor and entry porch. Where walls touch, where stone meets wood, where ceiling meets wall, everything lines up perfectly. No half boards or odd stones here.

As with the spaces for art he has designed, including the Andy Warhol Museum in Pittsburgh [RECORD, September 1994, pages 74-79], the architecture here is muted so it works with, rather than upstages, what’s on display. But instead of paintings or lithographs, the featured attractions here are the view over the cliff and the sunlight that streams into each room. Clifford A. Pearson

Designed and built in less than a year, the house is an oasis of domesticity in an unforgiving land (photos). Because the owners live in the house only part of the year and because the weather can be so rough, oak shutters can close up all of the windows.
The architects designed the house “almost as if we were renovating a found structure,” says Gluckman. This meant creating interiors where the simplicity of the spaces, materials, and detailing became the key element in the entire design.

Using the clients' collection of Gustav Stickley furniture, the architects designed a living room in which the proportions of the windows, the materials, and the light complement the furniture (left). “We worked from the inside out,” says Gluckman. The clients say they find spartan spaces such as the kitchen (opposite) “very pleasurable, though not luxurious.”

**Credits**

Rural House for an Artist and a Writer  
Nova Scotia, Canada  
**Architect:** Richard Gluckman  
Architects—Richard Gluckman, partner-in-charge; Robert White, project architect; Steven Learner, designer; Patrick O'Brien, drafter  
**Engineer:** Janega Engineering  
**General Contractor:** B.A. Watson Construction

![Diagram of the house](image)

1. Studio  
2. Sauna  
3. Mud porch  
4. Kitchen  
5. Dining  
6. Living  
7. Bedroom  
8. Study
Beach Comber
A glass beach house defies convention and the confines of a narrow site.
On a strip that was once a hodgepodge of ocean-front wood cottages—mostly weekend getaways for inhabitants of San Diego or Los Angeles—Rob Wellington Quigley has built a full-fledged house of poured-in-place concrete caissons and cantilevered concrete floor slabs that is both kinetic sculpture and retreat. While a weathered bluff nearby offers more prominent building sites at the risk of storm-related landslides, this narrow swath is right along the shoreline, and over the years real-estate prices have increasingly come to reflect its status on the beach. A gatehouse at the beginning of the road monitors all traffic within the mile-or-so-long community, so the air of informal Pacific Ocean beach community is offset by an aura of secluded privilege.

It’s that combination of accessibility and aloofness that Quigley has managed to capture in this 3,700-square-foot structure, one of several newcomers to the Orange County enclave. The architect organized the building’s mass in a rough U-shape around an internal garden to create privacy from the street. The split personality was developed even further by exploiting the difference in the site from front (along the street) to back (on the beach). Explains Quigley: “East-west oriented planes reinforce the rigid, parallel property lines. North-south elements respond more freely to the primal forces at work on the seashore, assuming soft curves and eroded shapes.”

The client, a Los Angeles-based couple, had enjoyed a waterfront, greenhouse-like restaurant in San Francisco, and asked Quigley to duplicate the effect of glass-enclosed spaces while still providing ample wall space for their collection of modern art. “Because it’s not wholly logical, the house has a quality it otherwise wouldn’t have,” says Quigley of reconciling such opposite requirements in the design. What’s more, large expanses of glass on a west-facing beach present the added problem of enormous heat gain, which was solved by making the tent-like glass canopy out of double layers of glass with heat resistant properties. (One layer is tinted, with a low-E coating, and the other is tinted and fritted.) “[This is possible] because of new glass technology;” says the architect, “this house would have been impossible to build 10 years ago.” While wood shutters and deep roof overhangs provide additional shading, giant pivoting glass doors, retractable skylights, and operable windows tucked into at times improbable locations provide generous cross-ventilation.

Movement through the house follows a carefully choreographed sequence of overlapping outdoor and indoor spaces that “introduces you to the beach slowly and methodically,” according to Quigley. The dramatic path is intensified by the confines of the narrow, 68-foot by 150-foot lot. A sense of the unexpected is further developed by the use of materials in surprising ways. Black asphalt shingles, for example, are an exterior cladding along the street (previous pages)—their grainy texture seems at home in the sandy environment. The shingles reappear in the master-bedroom as a decorative wall treatment around the bed.

While Quigley has built a reputation in his adopted home of San Diego as a designer of low-income housing [RECORD, July, 1992, pages 78-83], this project allowed him to explore themes of vernacular construction, technology, and craft on a grander scale. Quigley is outspoken on the critical role of his client—be it community group or private individual—in the design process, going so far as to suggest a program of interactive public workshops when working on a civic building. Quigley defies conventional wisdom that collaboration creates a watered-down design. He says: “Participatory design leads to stronger buildings.” Karen D. Stein
From the street, visitors enter an overlapping series of enclosed spaces (plans below left)—a small vegetable garden, a sandy terrace criss-crossed by concrete walkways, and a tree-lined wedge of grass, a leftover from the yard of the previous house (far left)—that lead toward a two-bedroom guest house over the garage and the main structure (near left).

Mahogany-framed pivoting glass doors open the living area to the interior courtyard, helping to cool the space. In between the exposed reinforced-concrete structure, gray-stained redwood channel shiplap siding was used to recall more casual beach-front cottages, says Quigley. A powdered pigment mixed into the concrete gives it a blueish hue.

1. Entry
2. Vegetable garden
3. Garage
4. Living room
5. Sitting room
6. Dining room
7. Kitchen
8. Bathroom
9. Master bedroom
10. Master bathroom
11. Guest house bedroom
12. Deck
On the second floor, windows at both the west and east ends of the house extend a sweeping view from the ocean through the master bathroom (top left) to the street-front garden (top right). Downstairs, concrete walls and translucent fiberglass insulating panels fashioned into a curved shoji screen are backdrop to the client’s collection of Modern art (bottom left and right). The sculptural staircase is framed by panels of perforated metal that increase the effect of dappled light in the main space. Two layers of glass, including fritted panes, reduce internal heat gain and meet California’s stringent codes restricting the amount of glass surface area allowed in a structure. In addition, the concrete frame, says Quigley, serves as a “thermal sink” by absorbing heat.

Credits
Capistrano Beach Glass House
Orange County, California

Architect: Rob Wellington Quigley—Rob Quigley, principal-in-charge; Catherine Herbst, project architect; Teddy Cruz

Engineer: Integrated Structural Design (structural)
Consultants: Patrick Quigley & Associates (lighting); Linn Company (interiors/furnishings)

General Contractor: Mark Falcone Contractor—Darren Harper, construction superintendent
Focused by the Landscape

The Barnes house could be mistaken for an outcropping on its lightly forested, rocky site. Only a razorlike 3/8-in.-thick steel-plate canopy, projecting from the stucco-on-wood frame exterior, hints at a different nature within. The house’s apparent introversion seems at first confirmed. Inside the lower-level entrance, below the canopy (opposite), a low window frames a close-up view of the mossy rock cleft within which the house is set. At the top of the stair, the house seems to unfold. A pivoting window wall reveals an outdoor terrace perched hundreds of feet above the 20-mile-wide Strait of Georgia, and expansive views open north to the mainland of British Columbia.

Dappled by sun from the side and overhead, the kitchen, terrace, and dining and living areas flow together, suiting the owners’ nature-oriented, informal lifestyle. (Such a lifestyle is well suited to Nanaimo, a timber town turned retirement mecca on Vancouver Island.) The clean lines of the polished-concrete floor, the crisp metal brackets and rails, and the smooth drywall interiors evoke a city loft more than a country house. But these elements are tempered by the unsanded-wood framing and by cabinetry and doors (such as the sliding one, middle right) that surprise in their puzzle-like intricacy.

Satisfied neither with traditional details nor abstract form-making for its own sake, John and Patricia Patkau take a sculptural approach, but consciously permit the pure idea to be “adjusted” by the realities of beam spans, site conditions, and clients’ ideas about living. There are no all-encompassing esthetic principles here. That the house feels as if it has evolved naturally from and expresses the uniqueness of the place and its occupants is central to the architect’s approach. As John Patkau explained in last year’s John Dinkeloo Memorial Lecture at the University of Michigan, they learn by building, sometimes making painstakingly crafted models of completed work, “to find a way from one project to the next, to understand what we are doing, and to somehow build on that to find some form of mature expression.”

James S. Russell

Rather than set the house on the highest point of its five-acre site, the architects placed it within a rock cleft (top). Stucco-covered parapets, evoking the terrain, obscure the undulating internal wood-frame structure (section).
John and Patricia Patkau see the house as “a landscape focusing device.” It is wedged in a narrow cleft between two moss-covered rock outcroppings at trees’ edge. At its east end, the house is framed orthogonally (bottom of plans) and a concrete column carries exposed rafters high over the dining area.

Moving west, John Patkau says, “We made a variety of adjustments to shape the view, to fit into the rock. By making those adjustments, the geometry sort of came about. It’s not something we began with.” A diagonal cuts across the living area and the vertebrae-like framing dips down (opposite), carrying the eye toward a wedge-shaped prow (extended by the metal canopy) to a view along the slopes of Vancouver Island and island-dotted bays.

Credits
Barnes House
Nanaimo, British Columbia
Architect: Patkau Architects—Tim Newton, John Patkau, Patricia Patkau, David Shone, Tom Robertson, team
Engineer: Fass & Epp Partners (structural)
Contractor: R.W. Wall Ltd.
Manufacturers' 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 72-79
Streemmel House, Reno, Nevada
Mack Architects, Venice, Calif.; 310/822-0019

Pages 80-83
Island House: Tikamaga, Deactur Island, Wash.
Miller/Hull Partnership, Architects, Seattle, Wash. 206/682-6837

Pages 84-89
Bridge House Retreat, Olive Bridge, N.Y.
Peter Gluck and Partners, Architect, New York City: 212/255-1876

Pages 70-73
Lott House and Guest House, Houston
Carlos Jimenez Architecture Studio, Architect.
Houston; 713/550-7248

Pages 94-101
Burnette Studio/House, Sunnyside, Arizona
Wendell Burnette Architect, Phoenix; 602/385-1091

Pages 102-105
Rural House, Nova Scotia
Richard Gluckman Architects, New York City; 212/925-8897

Pages 70-73
Capistrano Beach Glass House, California
Rob Wellington Quigley, Architect, San Diego; 619/292-8888

Pages 114-117
Barnes House, Nanaimo, British Columbia
Patkan Architects, Inc. Vancouver, B.C.; 604/683-7633
Wood doors and windows: Mike Chan Cabinets. Locksets: Surgeant. Lighting: Lightolier, Inc.
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**165. Lever-handle lockset**
A new design, the #17 Gull Wing can be ordered in brass, bronze, or stainless steel (shown), in a choice of nine finishes. For use with this maker's mortise locks and interchangeable-core cylinders, which permit instant rekeying as needed for key-control security. 317/849-2250, Best Lock Corp., Indianapolis, Ind.

**166. Cabinet hardware**
One of five decorative styles introduced early in 1996, Primitive Brass hardware has a rustic, hand-forged appearance. Made in pull and knob functions, the line can be ordered in the verdigris, patinated, and satin-brass finishes shown. 800/566-1986. Baldwin Hardware Corp., Reading, Pa.

**167. Taller and taller doors**
CraftMaster interior doors, with molded facings of composite wood, are now offered in 7- and 8-ft heights. Six-panel designs can be ordered in both natural and harvest stain colors; doors are said to have the feel of solid wood without the weight. A kit supplies door-face and core samples. 800/552-0785. Masonite, Chicago.

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168. Site-specific faucet
The Avatar faucet has an integral pull-out spray said to be designed around natural hand movements. The spray/stream function button holds at the last-used mode; the handle, set at a 45-deg angle, can be ordered for center-, right- or left-hand placement. The high arch of the swivel spout makes pot-filling easier. Kohler Co., Kohler, Wis.

169. Autoclaved aerated precast
An extremely energy-efficient, non-combustible building system developed in Germany and widely used in Japan, Hebel AAC block, panels, lintels, and other components can be cut, milled, and trimmed with normal woodworking tools. It can be used for load- and non-load-bearing walls without compromising exterior or interior finish options. It is described as “a process that improves on every aspect of building-shell construction in the U.S.” An architectural data kit includes samples as well as loading- and code-compliance information. 800/354-3235. Hebel USA, Inc., Atlanta. continued on page 124

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171. Vinyl-tile flooring
A new pattern in this maker's Evolution top-grade vinyl tile, Castile has an earth-toned Southwestern look of rustic fired tile overlaid with a Spanish-influenced mosaic. Floor comes in five color combinations. Tiles are said to fit tightly for a seamless appearance; the urethane wear surface has a lifetime guarantee. 609/584-3000. Congoleum Corp., Mereville, N.J.

172. Restaurant ranges outdoors
A new model in Wolf's Gourmet Series of commercial-style equipment configured for residential use, a stainless-steel, natural- or propane-gas barbecue can cook an entire meal. Features include a 16,000 BTU charbroiler, rotisserie, and an infra-red rear burner. 800/366-9653. Wolf Range Co., Compton, Calif.

173. Solid-surface kitchen sink
A homogeneous composite with a "warm" surface, GE Plastic's Heavy Valox resin makes new PearlStone sinks chemical-, heat-, and impact-resistant. The sink can be cleaned with most cleansers; sanding removes deeper mars. Pinnacle Products, Birmingham, Mich.

174. Complex cladding options
Marvin now offers its commercial-grade extruded-aluminum exterior cladding as a low-maintenance option on even the most complex round-top and circle windows and doors, such as the "Vitorian" design pictured. Custom muntin styles and brick-mold casings can be clad in configurations as tight as a 7-in-radius curve. 800/346-5128. Marvin Windows & Doors, Warroad, Minn.

Continued on page 126
Large houses, on the order of tens of thousands of square feet, are manageable only through these total systems, observes Holt, who designed a 40,000-sq-ft residence in California with eight “super” command stations at various locations (page 39).

From these stations the client can answer the phone, monitor home security, and open a gate for a visitor at the end of a half-mile-long driveway. The touch of a button will also set in motion dozens of preprogrammed functions. Hit the “go to bed” button and the lighting, security, and hvac adjust for the night. Another button, “entertain/night,” resets the systems for arriving guests by turning on walkway lights, illuminating stained-glass windows, and wafting preselected music throughout the house.

Such a “tour de force,” as Holt calls it, is not easy. The project developed over 10 years, with ever-changing technology integrated by Brian Fogerty, a consultant now with Axion Design, of Pleasanton, Calif. Still, with advanced systems, you can call your house from the car, or from an airport thousands of miles away for that matter, to turn on the Jacuzzi, adjust the water temperature, and set the lighting for “passion pit.” Welcome to the age of electronic hedonism. But Holt and other architects warn that these systems can be too complex, so that the owner, if not comfortable with programming or resetting controls, is at the mercy of the technology. For such complex systems, a manual override is essential. Re-programming the systems might demand a call to an electronics engineer. Holt’s project also required an emergency generator so that security systems could continue running in the event of an earthquake or other disaster. The brains of the house are centrally located in the basement, in an 8- by 25-ft room with its own air-conditioning system to handle the heat generated from all the gear.

If we’ve learned anything from the advancement of home technology, it is that rather than relieving the architect from having to make choices, it increases the professional’s responsibility to help clients make intelligent, informed decisions about the design.

Further information
The Custom Electronic Design & Installation Association (CEDIA), has grown along with the interest in home media centers. Its current roster is 825 member firms. While audio/visual design and installation is the staple of CEDIA firms, many also offer guidance on total-electronics home systems, including lighting and security. A membership directory is available for $35. You can contact CEDIA at 9202 N. Meridian St., Suite 200, Indianapolis, IN 46260-1810, 800/CEDIA30, fax: 317/571-5603, Internet Web site: http://www.cedia.org/cedia.
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