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Value added

I read with interest your editorial [Repositioning the Architect, RECORD, March 1992, page 9]. I agree that as architects we can bring tremendous value to the public with our ability to serve a range of roles in the built environment. Each of the roles you delineated reflects a business decision on the part of architects to diversity. I think, however, our most important role remains as designers-and it is the essential nature and value of design in the built environment that must be communicated to our clients, as well as the public at large, in order to elevate the perceived worth of the architectural profession. The design process, at its best, challenges a business or organization to understand what they do, gives them a new view of themselves and their potential, and encourages them to change and evolve.

In recessionary times it's imperative that we remind prospective clients of the added value design excellence brings to any project. Design should not only raise esthetic values and satisfy functional requirements but, at its core, it should be relevant to the community in which it exists. What drove much of the design of recent commercial environments was a function of the financial markets and tax structures of the '80s. The '90s do bring an opportunity-based on the lessons learned and a resurgent economy-to proceed with projects where the need for profit is more in balance with social and environmental needs and values . . .

Thank you for inspiring us to brainstorm on these issues. Michael Franklin Ross, Managing Director Stone Marraccini Patterson Santa Monica, California

Accidental Cities

Jonathan Barnett's essay, "Accidental Cities: The Deadly Grip of Outmoded Zoning," [RECORD, February 1992, pages 94-101] is very eloquent and very visionary. It is, unfortunately, somewhat naive and superficial in some respects.

I would suggest that the shortcomings of sprawl development and "Edge Cities" are real enough, but rather than the result of shortsighted and outmoded zoning, by and large they are an example of "Be careful what you wish for, you might get it." I find the roots of the situation not in zoning of the 1950s and 1960s, but rather in the 18th-century philosophical debate between the urban Alexander Hamilton and the country-gentleman Thomas Jefferson. That the Hamiltonian view was ascendant through the first quarter of the 20th century was mainly a function of immigration, industrialization, and the limits of technology. The emergence of the affordable automobile permitted many the opportunity to pursue their Jeffersonian preferences for a bucolic "country" life. Suburbia was as far as most could get, but we still see those who are able move yet further out to larger lots and small estates ... There is a long way to go between recognizing the deficiencies of economically successful "accidental cities" and making the corrections that might overcome many of those deficiencies. To understand how and why they evolved the way they did is crucial, because the corrections are likely to require dramatic and profound changes in the ways people act (as distinguished from what they say). Moreover, those corrections, which may soon begin to emerge Continued on page 11

Calendar

Through August 18

"Louis I. Kahn: In the Realm of Architecture," Museum of Modern Art, 11 West 53rd Street, New York City. 212/708-9480.

Through August 30

Designs for a Museum. Schemes by winner Gunnar Birkerts and three other finalists. Charlotte Crosby Kemper Gallery, Kansas City Art Institute. 816/561-4852.

September 16

Healthy Housing: Directions in Research, Design & Construction of Sustainable Housing. Contact: AAHE Committee, Faculty of Architecture, Architecture 2 Building, University of Manitoba, Winnipeg, Manitoba, Canada R3T 2N2. Fax: (204) 261-7386.

September 16-19

Housing Perspective in North America. Contact: AAHE Committee, Faculty of Architecture, Architecture 2 Building, University of Manitoba, Winnipeg, Manitoba, R3T 2N2, Canada. Fax: (204) 261-7386.

July 27-September 17

"Dream House: Designed and Crafted Objects," Peninsula Fine Arts Center, 101 Museum Drive, Newport News, Virginia. 804/596-8175.

September 11-November 8

"The Wright State: Frank Lloyd Wright in Wisconsin," Journal/ Lubar Galleries, Milwaukee Art Museum, 750 N. Lincoln Memorial Drive, Milwaukee. 414/224-3200.

October 19-21

AEC Expo, Moscone Convention Center, San Francisco. For information: Expoconsul International, Inc., 609/987-9400.

October 24-25

"Disaster Prevention, Response & Recovery" conference sponsored by Technology & Conservation Magazine and MIT Museum. For registration: Technology & Conservation, One Emerson Place, 16M, Boston, Mass. 02114. 617/227-8581.

ARCHITECTURAL RECORD Editorial

Social Housing: Learning From Past Mistakes

It's no coincidence that our sister publication *Business Week* ran its recent story about housing not under design or construction or even finance, but in a department it calls "Social Issues." It is one sign that we are at long last placing housing where it belongs. As a typology, housing has suffered for generations from ultranarrowness—generations that comprise the technowhiz kids of the 1960s and their Operation Breakthrough; the Robert Moses housing-by-the-million champions of the 1930s who sought to store the poor in project towers; and the Bauhausers who, while more on track since they did recognize the social content of housing, nonetheless blew it through their ultimately fallacious assumption that people like to live in tall towers surrounded by light, air, and a view of other towers, an assumption aggravated by Le Corbusier's unhappy dictum that the house is "une machine à habiter." Frankly, the worker housing of the early industrial age was a lot more on the mark, despite its meager amenities, by providing community plus closeness to the workplace.

Today we know better. Pruitt-Igoe at least taught us-or should have-that families with children, especially those with single parents, don't function well from the 26th floor, as Bob Campbell points out in his eloquent essay on pages 70-71. South Central Los Angeles taught us something else, that even with humanely scaled housing (and remember that lower, people-scaled buildings are buildable by local. often minority contractors) and a decent street frontage, you're still missing out on that crucial social dimension that makes for a sane, balanced, healthy community, no matter what its income level. In the inner city, this social dimension means people with low incomes, absent parents, easy drugs, and untraditional living arrangements that contradict the accepted paradigm of the nuclear (why nuclear?) family of two live-in parents and 1.8 children. Inner-city dwellers must be afforded the support programs that make life bearable. That means Head Start-type early education, skills training, health clinics for the elderly and the victims of drugs and AIDS, daycare, and visible gathering places. All of these, as this page noted last month, should go toward creating an atmosphere and a motivation to do gainful work, the ultimate stabilizer of a community.

Where does all this leave the architect? The main lesson is that it isn't enough to design and produce a better box. Operation Breakthrough spent millions to produce factory-fabricated, site-assembled housing units, but quite ignored the crucial soft stuff—the cost of land and the cost of money, craft union practices and, last but not least, as we said above, the social factor. Yet this in no way belittles the architect's role. The 12 projects shown on pages 72 to 117 prove that fine architecture is possible and still make good social housing. Not every case provides a full gamut of social services. Not all house the poor. But each one takes into account the need of people for Mumford's "chance meetings" of neighbors, for a diversity of classes and, in most cases, for residents to have taken part in the design—a situation which, as Campbell points out, slows down the delivery process but ends up with viable housing and not a crime-ridden, graffiti-defaced ghetto.

It wasn't easy to assemble this group of distinguished architectural and socially virtuous examples. I hope that, as examples, they serve to provoke the profession into working to combine these twin goals. RECORD looks forward to publishing an encore. Stephen A. Kliment

If we'd only invented it sooner.

We're not saying we could have prevented the fall of Rome.

But just think how long their buildings *could* have lasted with Neopariés as the wall cladding. Neopariés combines the timeless beauty of natural stone with the durability of glass ceramic. Virtually impervious to weather and environmental contaminants, it gives you superior technical performance and is easily maintained.

So if you're looking for durability of historic proportions, specify Neopariés. Unless, of course, you're creating another ruin. **Circle 5 on inquiry card**





Continued from page 4

in part as a result of the 1990 Clean Air Act amendments, may involve wrenching dislocations in property values and life styles, especially among the more affluent and influential members of the society.

It is also essential to accept that whatever corrections might be made will take time to make. People cannot give up their cars overnight, even if they want to. Any change will be gradual and implemented step-by-step. Each such step must work in and of itself, or the effort might be abandoned. The transition is the challenge.

Thirty or more years ago, Walt Kelly's Pogo said, "We have met the enemy, and he is us." The "accidental cities," or inadvertent urbs, we have created, are the direct result of decisions we have made over time, acting in pursuit of a Jeffersonian notion that the "country" is better than the "city"-somehow, uninformedly perhaps, unrealistically perhaps, hoping to have the best of both. These places are most assuredly not the result of either outmoded zoning or of poor planning. Rather, they are the result of planning and zoning attempting to carry out the desires of the people they represent and serve. This is, after all, representative democracy in which the will of the people will be done, even if it

proves unwise. Edward C. Steinberg, AICP Commissioner of Planning City of White Plains, New York

Mr. Barnett replies:

Mr. Steinberg agrees with me that commercial development patterns in the suburbs are seriously deficient; nor does he dispute the fact that virtually all development that takes place follows zoning and other

regulations. I think it is a little unfair of Mr. Steinberg to place responsibility for bad suburban development on Thomas Jefferson when there are so many more plausible culprits at hand, but arguing about who is to blame only diverts attention from the real issue: what do we do now? My basic point is that commercial development in the suburbs is not just the product of the market's invisible hand, but is deformed by the deadly grip of outmoded zoning, invented fifty to seventy years ago in a very different economic and technological context. If zoning and other regulations are misshaping commercial development, it makes sense to change the regulations.

I then tried to show some models for change that suggest prototype that can be embodied in new kinds of zoning regulations.

To create economic incentives for such compact development, it will be necessary to restrict the amount of high-density commercial zoning in suburbs. and to use the kinds of land assemblage and zoning review that have long been the practice in cities like White Plains. No one would suggest that it is easy to make major changes in established patterns of suburban commercial zoning; the task would be hopeless except that there are benefits in the changes for both developers and public policy. Compact development can produce superior economic results for developers, in lower land costs. shared infrastructure, and parking. Compact development supports rapid transit and reduces the need for automotive trips, providing relief from suburban gridlock.

The shift of commercial development away from older centers is an economic and political reality; but the suburban strip and the isolated shopping mall are not the only possible design. We can do a lot better.

Obfuscation revisited

I wanted to write you a brief note to say how very much I appreciated your editorial ["Eschewing Obfuscation: Ideas for Cleaning Up Our Language Act," RECORD, April 1992, page 9]. It was right on the mark, and I shall take you up on your offer to send you any "Fog Index Gems" that I come across. Well done. John H. Winkler, Partner Skidmore, Owings & Merrill Architects New York City

If I can't understand what's being presented, I won't waste any more time and will assume it can't be valid or important or useful until explained otherwise in clear and simple terms. The English language, perhaps more than any other, has thousands of words that perform superbly. Even with rapid changes in technology there are very few new words that need to be invented to explain these changes.

If by some chance your editorial succeeds in changing the way people write, not just architects, literary critics or computer programmers but also politicians, Pentagon staffers, and petty bureaucrats, then you will have provided a far greater service to the modern world than the most remarkable of architectural structures! John Hurst, President The Ironmonger, Inc. Chicago

Hooray for your April editorial encouraging architects to speak and write in simpler language, to really communicate with clients and the public. As a frequent writer of marketing materials for architecture firms. I find it difficult to convince some that rich ideas need no embellishment. Like buildings, less is also more in communication. The simplest, most elegant and clear forms are the most difficult to achieve. A public with a better understanding of buildings and the role of architects could be a real boon to the industry and the profession.

I like to quote Bill Caudill, a CRSS founder, and a clear communicator of architectural ideas, who said, "If nobody understands you, you didn't say anything." Margery Peterson Saint Paul, Minnesota

I was very happy to read your editorial on architects' misuse of language. I have evolved the following tongue-in-cheek formula for my students who tried to talk their designs into existence (see below). Words of Wisdom =666 divided by the (Time to think about the project + the Time to draw the project + the Time to make the model + 0.0000059) +69. In other words, if you don't spend the time thinking, drawing and forming the project, you will have to talk forever to describe your work. Thomas L. Turman, Architect Berkeley, California

$$WW = \frac{666}{T_1 + T_2 + T_3 + 0.0000059} + 69$$

Obfuscation by architects is not limited to verbal assaults, as shown in the very issue in which you write on this subject. One has only to look in RECORD HOUSES at Constantine Boym's furniture on page 31, or Steven Harris's Root Guest House beginning on page 102, or the architectural gems so frequently shown in previous issues, to find three-dimensional examples that fit the dictionary definition of obfuscation: to stupify, to confuse, to muddle.

Arcane language has taken on a life of its own for architects, who long ago discovered ways to rise above the public through this means—in both what we write or say and in what we design. I am happy to see your editorial, that says, in effect, the Emperor has no clothes. John B. Hackler, Architect Architectural Research & Design Peoria, Illinois

Bravo to your editorial on "Eschewing Obfuscation." Your editorial was most appropriate and to the point. Too many times we are caught talking to ourselves and not really understanding ourselves. If architecture and architects are to become more the servants to our society, then we must send a language that is nurtured by those whom we expect to receive it. If we prefer to convey thoughts without receivers, then we are going to become a group of isolationists without purpose whom the public will disdain . . . Let's start a campaign to say what we mean and mean what we say ... Down with "obfuscated communications" in architecture! I shall be on guard for my first unintelligible communication for your archives.

John A. Busby, Jr., Partner Jova Daniels Busby Atlanta

I have been waiting for years to read an editorial such as yours. Having been in the architectural profession for 43 years I have heard and read a lot of verbal obfuscated palaver emanating from pompous architectural pundits.

Architects, in the main, have become mesmerized with their own sense of importance and pontifical utterance . . .

Forgive my hyperbolic remonstrances to extirpate egregious flatulence.

Alex Pierce, Architect Portland, Oregon

On January 11, 1992, I wrote on the Editorial Forum/Essay page of the *Cleveland Plain Dealer* a piece entitled "Architect in a Box," from which the following lines are excerpted:

"In November, I had the occasion to spend a morning with the architecure writer from a prominent national newspaper on the East Coast. I am prepared to share with you the secret of being an architect so you can quickly join the line of supplicants in Columbus for your fair share of the State's diminishing budget. "The secret is—learn to talk in their foreign language. If you can talk like an architect, you can sign contracts like an architect. While you and I thought they went to school to design buildings and learn the secrets of engineering, they really took a short language course and spent the rest of their education touring the great cathedrals of Europe. But no more-here are the secrets revealed:

• Never say, 'The windows will be set back from the wall and they will be a different color from the wall.' Instead say, 'The articulated fenestration is compelling and the color of the glass becomes a quiet interpreter.' It will be weeks before anyone comprehends what you are talking about.

• If you are a contractor who wants to demolish all but the front of an old building and build a new building behind the front face, you can add a lucrative architect's fee to the contracting job by saying: 'The two facades, a unique melding of the old and the new, create a wonderful rhythm on the street that modulates as the eye rises becoming background and foreground at the same time.'

• If you are a company seeking a new facility and have a very small budget don't worry if you can only afford concrete that matches the road out front. Don't call the building dull and uninteresting. Instead praise it as a 'civil building melding modern construction materials with an appropriate sensitivity to the frugality of the times. "... It isn't enough to learn these few expressions. You really need to make up your own words, otherwise known in the profession as 'the architect's unique vocabulary.' Never use single syllable words like wall, brick, dirt. Practice at home by looking up multisyllable substitutes, such as external facade, high density naturally baked construction aggregate, and natural outdoor media to support special horticultural displays." Richard A. Shatten Cleveland

Referring to your April 1992 editorial, the best example I heard was at the Monterey Design Conference in 1991. A presenter described a slide as: "The component link element of pedestrian entry sequence." The slide showed: the simple front door!

Also heard: "... within the con-

text of community metaphor, which typifies the intentionally confrontational maturation of the contextual synthesis, creating a disciplined, surreal transition with a synergy of disparate uses which integrate rather than segregate . . . " Huh?

It's too bad that these guys can't actually design as well as they talk; in fact, there seems to be an inverse relationship between true design ability and witty word-smithing. *Les L. Melburg Nichols Melburg Rossetto AIA Redding, California*

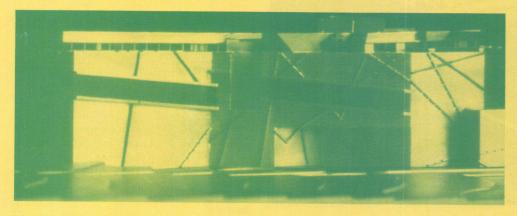
Since my early days at Rice University the arrival of RECORD HOUSES was always a treat; they were keepers This year one of the high points was your editorial, "Eschewing Obfuscation: Ideas for Cleaning Up our Language Act." This is a very valuable alert about a trait that has caused many to shake their heads about our profession.

Earlier this spring one of my Houston colleagues was reviewing with me a questionnaire which he had just returned to his architectural school. He has been the president and number one business getter at his 70person firm for many years and at age 62 has a good perspective of his architectural career. The questionnaire asked what college course had been the most valuable to him with respect to his present role and responsibilities. His answer: English. As the AIA moves forward with its Life-Long Learning program, let's hope that communication skills will have a prominent place among the course offerings. Robert A. Brooks, Partner Brooks/Collier Houston

ARCHITECTURAL RECORD Design News

Germany

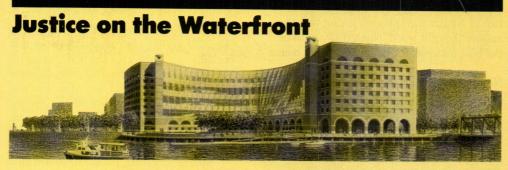
Libeskind Plans for the Unexpected at Wiesbaden Office Complex



Daniel Libeskind is invoking a Tenth Muse the Unexpected—to reformulate the modern concept of the work day. In his winning entry for a complex of office buildings in Wiesbaden, the dark bands (above) are meant to be Muse Lines traversing both elevations and ground. The lines form connections between the built and the organic, and between the five elements Libeskind posits: earth, air, fire, water, and money. Twelve interconnected buildings, seven to nine stories high, will occupy a landscape planted only once and left to dissolve

into a wilderness complete with birds, insects, animals, weeds, odors, and whatever other surprises "nature" brings to the work site. The rooftops will present an urban landscape of cafés and seating areas where 2,000 workers can view the Rhine as well as the ever-changing ecology of the site. Libeskind's organic approach extends to the interiors, where he uses the concept of crystal growth to accommodate unknowable future office configurations. Construction is scheduled to begin later this year, with completion projected for 1994. Judith Davidsen

Massachusetts



The conceptual design for a new federal courthouse, located on a prominent site overlooking Boston Harbor, was unveiled June 16. The architect is Henry N. Cobb of Pei Cobb Freed & Partners, in association with Jung Brannen. Cobb's proposal calls for 30 courtrooms arranged in a symmetri-

cal, 10 story L-shaped building. The facility will be faced with brick to echo the architecture of nearby 19th-century warehouses. The angle of the L will be filled with a curving cascade of glass that forms the facade of an atrium looking outward to the sky and sea. *Robert Campbell*

Canada

\$125-Million Safdie Project in Vancouver

Moshe Safdie's winning design for Library Square, a city block in downtown Vancouver containing a 350,000-sq-ft central library and a 21-floor federal office building, uses the colonnade to evoke the classical language of traditional library architecture. Bookstacks and library services occupy a seven-story rectangular block surrounded by an elliptical freestanding colonnade of reading rooms and study areas. Bridges span skylit intervals between rectangle and oval. An outer elliptical colonnade roots the office building and forms an atrium from which the public can observe the library at work. The colonnade is limestone-hued precast concrete infilled with varicolored stone from British Columbia quarries. A public garden with trees, trellised walks, and an amphitheater sits on the library roof. The project is scheduled for completion in 1995.



Building Delancey

I

The hardcore hopeless come here for a last chance to clean up their lives-and build their own treatment center.

195

Delancey Street Embarcadero Triangle San Francisco, California Backen, Arrigoni & Ross Architect

Island of Domesticity

A single-room-occupancy residence for the working class in San Diego shows that living in one room does not have to be grim.

202 Island Inn San Diego, California Rob Wellington Quigley Architect

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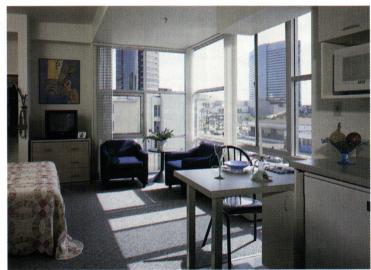
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- 1. Garage entry
- 2. Café
- 3. Recreation
- 4. Front desk
- 5. Deck
- 6. Lobby
- 7. Reading room
- 8. Courtyard
- 9. Typical unit
- 10. Live/work space
- 11. Existing building
- 12. Future park

A typical room at the 202 Island Inn is 300 feet square (plan left.) All rooms boast televisions and microwave ovens. Some, especially corner units, have views of San Diego (bottom left), while others look out onto a landscaped courtyard. Communal spaces include a first-floor reading room (top left). San Diego's temperate climate eliminated the need for a central hvac system. Instead, the temperature of each unit is controlled by through-the-wall heat-pump air conditioners, which Quigley masked on the exterior with perforated metal screens (opposite).

Credits

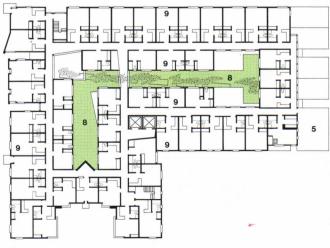
202 Island Inn San Diego, California Owners: 197 Partners Architect: Rob Wellington Quigley—Guillermo Tomaszewski and Bob Dickens, project team

Engineers: A. M. .S. Engineering (structural); W & S Electric (electrical); Weather Engineering (mechanical)

Consultants: Spurlock Poirier (landscape); McCulley Interiors/McCulley Design Group (graphics and signage) General Contractor:

Douglas E. Barnhart, Inc. Manufacturer Sources: See Contents page





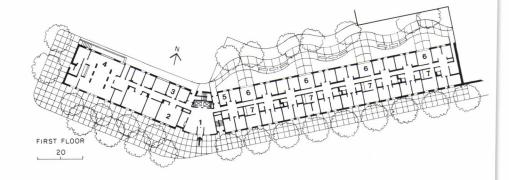
SECOND FLOOR



Singles Housing Brownsville, Brooklyn

Like all of the singles projects, this facility was built by the city but is managed by a nonprofit organization—in this case a group called The Miracle Makers. Residents come from three different populations the mentally ill, people infected with the AIDS virus, and the formerly homeless—and include men and women. The three groups, however, are not segregated into different houses, except by sex. The local community initially fought the project, but the facility has proved to be a good neighbor, says George Jones, its director. Not only is the building itself a handsome presence on the street, but its residents have become active members of local groups. In fact, the local community board has asked three residents to become members. For security reasons first-floor



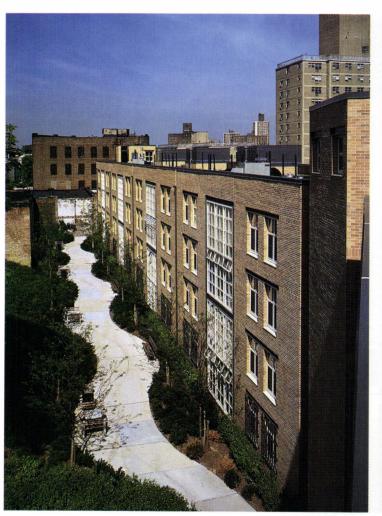


Whitney Cox photos

lounges face the secured rear yard (left below) instead of the street. Only on upper floors do the curtain-walled lounges face the street (opposite). Like all the singles projects, this building has masonry bearing walls and 8-inch precast-concrete planking. Nearly half of all the dwelling units in the building are handicapped-accessible, meaning the project comfortably exceeds the requirements of local laws. A two-story entry lobby (right below) includes a bowed second-story landing that echoes the entry structure's curved facade. The project's 176 dwelling units are organized into "houses," each of which has eight private rooms and common spaces such as a two-story lounge and a kitchen (bottom).

Credits

Owner: The City of New York Architect: SOM/New York— Michael McCarthy, design partner; Carolina Woo, administrative partner; Robert Halvorson, structural partner; Jane Moos, project manager; David Walker, senior designer; Frank Ruggiero, technical coordinator; Richard Lee, structural engineer; Scott McIntyre, civil engineer; Carol Cohen, interior designer; Ed Benovengo, specifications Engineer: Cosentini Associates (mechanical) Consultant: Fisher & Marantz (lighting) Landscape Architect: The SWA Group General Contractor: Lehrer McGovern Bovis Manufacturer Sources: See Contents page



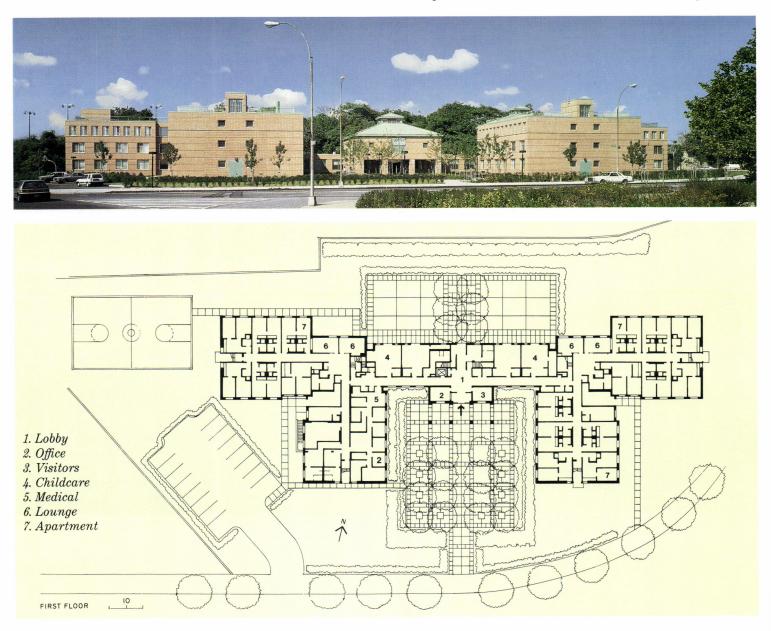
- 1. Lobby
- 2. Meeting room
- 3. Office
- 4. Dining
- 5. Dwelling
- 6. Lounge
- 7. Kitchen





Family Housing Flatlands, Brooklyn

While the singles projects serve particular populations and are managed by nonprofit organizations, the family facilities house a wider array of people in distress and are run by the city's Human Resources Administration. Because residents live here only for a few months—until permanent housing is found for them and include children, these buildings must be able to handle a higher level of wear and tear. Durability was a major concern with all of the buildings in the transitional housing program, says SOM's Michael McCarthy. As a result, tough materials—such as brick and concrete block—were specified rather than stucco. One of the first two family projects completed—in November 1989—the Flatlands facility reaches out to its neighbors

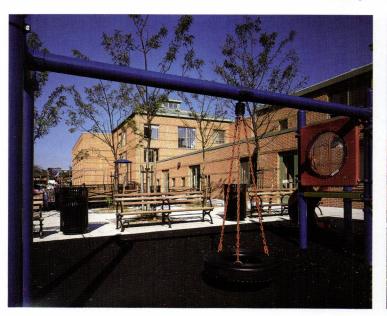


with a gracious forecourt (below right) and a scale that is more residential than institutional. A more active rear court (below left) serves as a playground. Apartments in the three-story residential wings cluster around social cores with glazed lightwells (right). The cores were designed so each would have two shared lounges, a caseworker's office, and a laundry, but sadly the lounges and offices have been converted into apartments due to overcrowding. Apartments range from studios to two-bedroom units and all include kitchens and dining areas (bottom right). Larger apartments occupy the ends of each wing, while studios are placed backto-back in the center. A connecting door between studios allows them to be used as a larger apartment if necessary.



Credits

Architect: SOM/New York— Michael McCarthy, design partner; Carolina Woo, administrative partner; Jane Moos, project manager; Tom Killian, senior designer; Stephen Weinryb, technical coordinator; Richard Lee, structural engineer; Scott McIntyre, civil engineer General Contractor: Kreisler, Borg, Florman









Mixed Incomes

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Langham Court Boston, Massachusetts Goody, Clancy & Associates, Architect

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ETT

Combining income groups is key to a successful Boston development project.

he term 'subsidized housing' has come to describe not only an economic arrangement but an architectural compromise. The words are almost shorthand for 'grim boxy building surrounded by asphalt wasteland.' Though this owes to the skeletal budgets of such projects, it is also probably due, as Oscar Newman wrote in *Defensible Space*, to a ''gentleman's agreement [that] public housing must never approach the luxurious in appearance.'' It is, then, a point of pride to the developers of Langham Court (LC), a mixed-income housing cooperative in Boston designed by Goody, Clancy & Associates, that their handsome building is not only indistinguishable from, but *better* than, much of the city's market-rate housing.

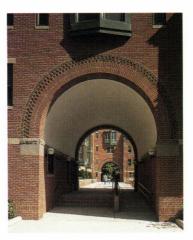
LC is the result of municipal involvement, community activism, architectural commitment, and labyrinthine financing. The project began in 1986, when the Boston Redevelopment Authority (BRA) issued an RFP for development of a long-vacant block—a hangout for drug dealers and prostitutes—in the city's South End. Thomas O'Malley, BRA's Assistant Director of Neighborhood Housing and Development, recalls being impressed by the winning scheme's "architectural excellence and neighborhood-based perspective." Indeed, Goody, Clancy's experience with low-income housing dates from the late '60s; their client, the nonprofit Four Corners Development Corporation (4CDC), was a group of South End housing activists incorporated specifically to develop Langham Court.

Architect and developer responded with skill to the esthetic and social agendas set by the BRA. Local guidelines called for new construction to complement the site's distinctive surroundings, a landmarked neighborhood of tall townhouses, many with bow fronts and elaborate ironwork. Goody, Clancy made the steel-framed building a contemporary counterpoint to its historic context.

The BRA also wanted the project to accommodate various income groups. Financed with city money, state loans, and private investment spurred by federal tax incentives, LC is an 84-unit limitedequity cooperative, with one-third of its units heavily subsidized, one-third partly subsidized, and one-third market-rate. "We've found that mixed-income projects work much better if residents represent a *continuum* of incomes, rather than two disparate classes," says Nancy Phillips of The Community Builders, Inc., who served as 4CDC's technical consultant. In this approach, not only do marketrate units provide an overall project subsidy, they often stabilize fragile neighborhoods. This last, says the BRA's O'Malley, is "crucial to the viability" of such ethnically diverse places as the South End, where strongholds of affluence border zones of poverty.

LC's design makes no distinctions among its residents. Market-rate and subsidized apartments are equally detailed and located randomly throughout the complex. If sales of market-rate co-ops have been slow (only 5 of the 48 units have been sold so far), Phillips attributes this to the region's weak real-estate market.

Should buildings of LC's quality become the new standard for affordable housing? The question of better units versus more units is widely debated among low-income housing developers seeking to reconcile lean budgets with the acute need for shelter. For some, however, Langham Court itself makes the case for architecture. "At first I didn't care much about design—whether the building had arches, for instance. But now I see they make a better building, one that will still look good 50 years from now," says Pat Cusick, one of 4CDC's trustees. "In any case, the real point is, poor people like to live in nice places just as much as rich people." Nancy Levinson



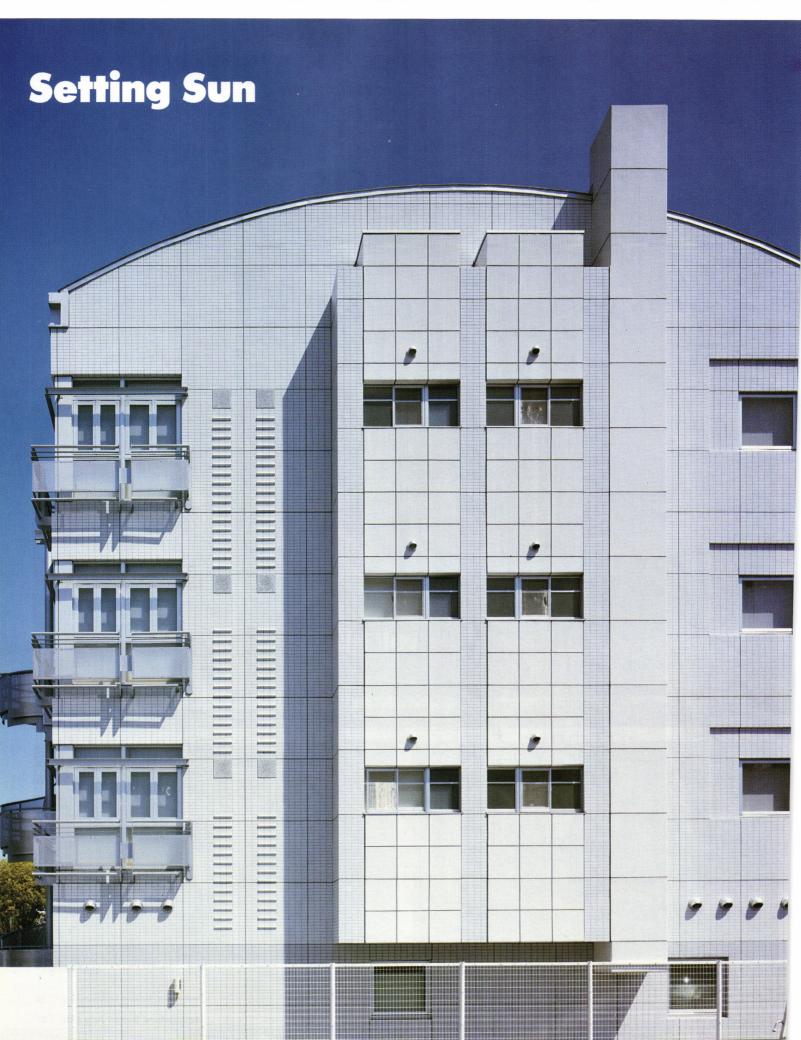
Like most affordable housing built in this era of federal detachment, Langham Court was funded by several local and state sources, including \$10 million from the Massachusetts Housing Finance Agency. In plan. massing, and detail. Langham Court responds to its environs. The 88,000-sq-ft complex consists of a five-story block (containing elevatoraccessed flats) that fits the scale of Shawmut Avenue, one of the South End's main thoroughfares (top opposite). Along the smaller-scaled side streets (bottom opposite) are fourstory rowhouses containing duplexes. Dormers, bays, and oriels: arched and vaulted entryways; mansard roofs; stringcourses and textured brickwork; and a palette of multicolored brick, Dakota granite, precast concrete, enamel-coated aluminum, and mahogany give the complex an unusual richness.

Langham Court's 84 units range in size from 300-sq-ft studios to 1,300-sq-ft threebedroom flats and duplexes. Several apartments accommodate the handicapped.

The southern orientation of the 13,000-sq-ft courtyard has social as well as environmental benefits, as it effectively invites the residents of Washington Manor, an adjacent subsidized project for the elderly, into the Langham Court community.







SS Nagoya; Photo House Tanaka photos



Morning Park Chikaramachi Retirement Community Nagoya, Japan Kaplan/McLaughlin/Diaz, Architect

Morning Park Chikaramachi Retirement Community occupies a square site (top) in the historic Shirakabe-Cho section of Nagoya, famous for its whitewalled samurai houses. A courtyard garden, enclosed by two parallel, low-rise buildings, is the focus of the complex. A one-meter grid of ceramic tiles on the west elevation (opposite) is the backdrop for a lively array of balconies, recessed windows, and a protruding metal-clad bay. The tiny balconies shield bedrooms from view but allow light to permeate each apartment.

ith its birth rate declining and its population aging, Japan today faces a dilemma that has plagued the U. S. for decades: how to house the elderly. Traditionally, multigenerational families have lived under one roof, but as children leave home for jobs in other cities and the Japanese grow more affluent, this practice is starting to fade. Anticipating the growing needs of the "silver" population, Human Life Services Co., developers of housing for older adults, hired American architects Kaplan/McLaughlin/Diaz, a firm with extensive stateside experience in retirement-community design, to collaborate with Kajima Corporation on Morning Park Chikaramachi Retirement Community, a 60,000-square-foot facility in Nagoya.

For starters KMD had to put aside its preconceptions and determine how senior citizens in Japan really spend their time. They learned that retirees in Japan are an energetic lot, eager to continue active, community-oriented lives. "That need for 'community' dictated the creation of a gathering place to promote social interaction among Morning Park residents," says principal-in-charge Mitch Green. The architectural solution was a courtyard garden embraced by two fivestory buildings. To ensure a residential character, common facilities are concentrated on the lower two floors with individual living units above. Both face inward toward the court and away from telephone poles and parking lots.

But Morning Park is by no means a secluded enclave hidden from view. KMD took its cues from the historic walled samurai houses of the neighborhood, designing a sweeping white wall that guides residents into the facility and invites passersby to glimpse into the treefilled courtyard.

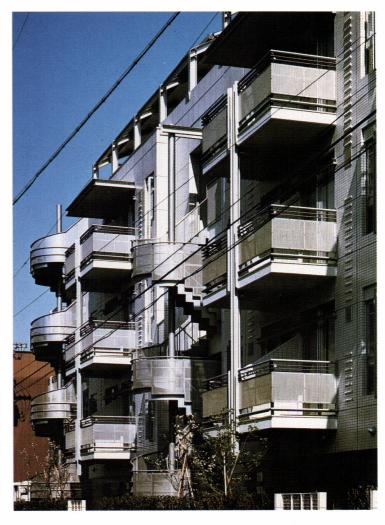
Recreational facilities arranged around the courtyard draw residents out of their apartments and into Morning Park's social life. Instead of playing tennis or golf like their American counterparts, these seniors practice the tea ceremony in a traditional tea house and enjoy the curative powers of Japanese-style spa baths. A medical clinic and beauty parlor were included not only for convenience, but to foster a sense of independence among residents. And two guest apartments assure residents of family contact without living under the same roof.

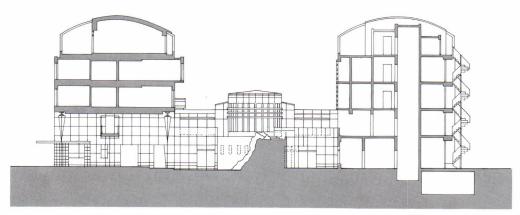
To forge a direct link between the apartments and the courtyard activity hub, the architects created six circulation cores, each housing an elevator and fire stair. Most apartments are through-units with both courtyard and street views, and every apartment basks in direct sunlight from its southern exposure. By servicing only two apartments per floor, the cores not only eliminate depressing institutional corridors, but also ensure that even top-floor residents can enjoy ground-floor activities.

In the apartments, many of the familiar comforts of home were recast in a handicapped-accessible format. To make the units more maneuverable for the wheelchair-bound, KMD avoided the cramped hallways and narrow doorways typical of Japanese apartments and largely eliminated changes in floor level. Colors and materials were carefully studied to aid the visually impaired.

While a purely American solution was not the answer for Nagoya, the needs of senior citizens are surprisingly universal. "Everything you do in elderly housing is an attempt to keep people from being shut-ins," says KMD's Ryan Stevens, the project designer. At Morning Park Chikaramachi KMD created a facility that works as a true community. *Naomi R. Pollock*

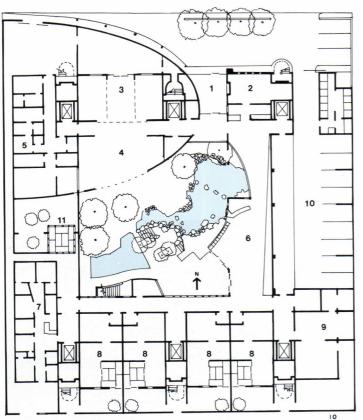
Designed as through-units, the apartments enjoy both garden (left) and city (right) exposures. To preserve residents' privacy while maintaining a bond with the garden, the architects designed operable bay windows that function like balconies, complete with handrails. Metal screen enclosures ensure privacy between adjoining apartments. Exit balconies interspersed between apartments contain ladders for emergency egress. Concealed behind decorative steel grilles, the balconies double as discrete places to dry laundry. A circular exterior stair, partially enclosed by a punched aluminum screen, enlivens the north and south elevations.







A curving wall, ranging in height from 4 to 20 ft along its length, draws people in from the street, through a canopied entrance, and into a courtyard garden (above). Radiating bands of granite pavers and a simple waterfall cascading over rocks unite Japanese and Western garden traditions. The courtyard serves as a focal point for various functions located in and around its open space, including a semicircular multipurpose room, piano bar, and communal dining room.

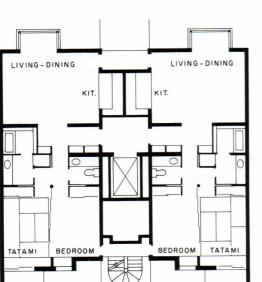


FIRST FLOOR

- 1. Lobby
- 2. Office
- 3. Private dining
- 4. Main dining
- 5. Kitchen
- 8. Apartment 9. Mechanical 10. Parking

7. Clinic

- 11. Tea house
- 6. Lounge



5

TYPICAL APT. PLAN





Averaging 825 square feet, the apartments are small by American standards, but not in crowded Japan, where most people are accustomed to living in less space. Surrounded by a private garden, a tea house with tatami floors, shoji screens, and woven ceiling provides a private setting for friends to sip green tea (opposite). A softly lit piano bar is a comfortable place for larger groups to gather (above). In the double-height entrance vestibule (top), cool masonry exterior surfaces abut warm cherrywood door trim.

Credits

Morning Park Chikaramachi **Retirement** Community Nagoya, Japan **Owner:** Seichiro Suzuki and Human Life Services Architect: Kaplan/McLaughlin/Diaz-Mitch Green, principal-in-charge; Ryan Stevens, project designer; Tom Beggs, landscape architect; Herb McLaughlin, Michel Weenick, Taro Funakoshi, Mika Yamamoto, project team Associate Architect: Kajima Corp., Nagoya Office

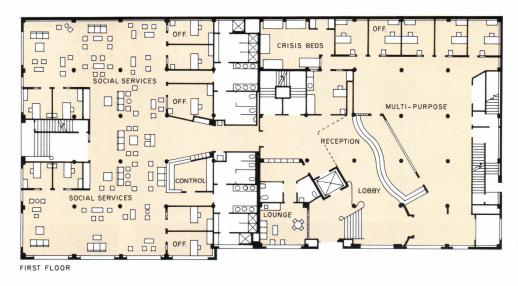
Engineers: Kajima Corp. **Consultants:** O'Brien Associates (interiors)

General Contractor: Kajima Corp. **Manufacturer Sources:** See Contents page



Custom modular sleeping units designed by Asian Neighborhood Design (below, right and left) allow a semiprivate space for sleeping that can still be monitored. The units break down for cleaning, transport, and storage. Lockable drawers on casters below each mattress give clients personal storage. Soft, indirect lighting in sleeping rooms is provided by fluorescent billboard fixtures.

Showers (below left, opposite) are provided for those the center is able to accommodate for overnight stays, as well as visitors who use the drop-in center during the day. A commercial kitchen in the basement (below right, opposite) serves 400 meals per day.



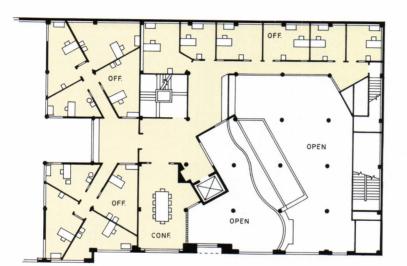








SECOND FLOOR



MEZZANINE

Credits:

Multi-Service Homeless Center San Francisco, California

Owner:

City and County of San Francisco, San Francisco Department of Social Services

Architect:

Asian Neighborhood Design— L. Wayne Barcelon, Harry Ja Wong, principal architects; Steven Suzuki, senior architect; Curtis Chong, Douglas Fong, project architects; Jan Snow Sing, Randi Gerson, project coordinators; Norman Chin, Suzan Swabacker, construction managers

Associated architect:

San Francisco Bureau of Architecture—Norman Karasick, city architect; Woodrow Jones, senior architect; Tara Lamont, architect; Bill Taylor, construction manager

Engineers:

Kwan & Associates (structural); JYA Consulting Engineers (mechanical); Pete O. Lapid (electrical)

Consultant:

Cunningham/Yamato & Associates (food service)

General contractor: Nibbi-Lowe Construction

Manufacturer Sources See Contents page





ive years after it built its first homeless shelter in a burned-out section of East New York, H.E.L.P. (Housing Enterprises for the Less Privileged) has come back to the old neighborhood. The nonprofit organization headed by Andrew Cuomo, the 34-year-old son of New York's governor, opened its latest project—H.E.L.P. Homes this spring, directly across the street from where it was born in 1987. Although both projects were designed by Cooper, Robertson & Partners and are based on similar sets of principles, H.E.L.P. Homes represents a new direction for the group. Instead of offering temporary shelter from the urban storm, H.E.L.P. Homes provides permanent housing for low-income and formerly homeless families, some of whom will merely move across the street.

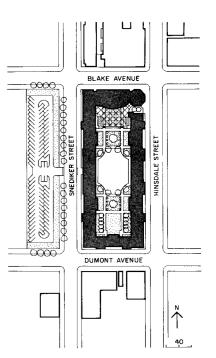
Like all of the organization's projects, H.E.L.P. Homes grew from a set of principles that emphasizes the need for security, a full array of support services, and social interaction among residents, explains Alexander Cooper, who not only headed the design team but also sits on H.E.L.P.'s board of directors. For security reasons the building has a single point of entry, through an octagon-shaped pavilion at one corner of the site. "Although corner entries are tricky," says project manager Don Lasker, "we wanted people to enter the building from the part of the neighborhood that's most intact." The architects reinforced this connection to what's left of an urban fabric by linking the project's most public element, a community center, to the octagon and the area's best street-Blake Avenue. The 16,000square-foot community center provides space for daycare, medical care, administrative offices, and counseling programs-all of the support services that Cuomo believes are essential to the success of low-income housing.

Occupying an entire city block, the 192,000-square-foot complex surrounds a 1.1-acre courtyard that serves as a focal point for friendly meetings. Broken down into different zones on two levels, the courtyard provides an active playground area and a variety of quiet outdoor rooms. With all 150 apartments looking onto the courtyard, there are plenty of watchful eyes to keep it safe.

The four-story apartment building wrapping around the courtyard offers advantages that most New Yorkers would envy. Because the architects wanted to eliminate possibly dangerous double-loaded interior corridors, the building is just 32 feet wide, and all apartments are reached from outdoor balconies and stairways open to the courtyard. As a result, all apartments have cross ventilation and views both to the street and to the courtyard. To encourage people to spend time on the balconies, the architects made these elements seven feet wide—wide enough for chairs or even a small table. The apartments themselves range from 575-square-foot, one-bedroom units to 1,225-square-foot, four-bedroom units.

To break down the 600-foot-long facades and reduce the lengths of balconies, Cooper, Robertson inserted brick-clad "knuckles" between stuccoed sections. The so-called knuckles protrude on the courtyard side of the building and include the covered stairways as well as the larger apartments. Gable roofs and vertical wall openings further differentiate the knuckles from the flat-roofed portions of building.

Sensitive design distinguishes H.E.L.P. Homes from a typical low-income project; what's more, an innovative arrangement in which residents own shares of the management company and benefit from any savings in maintenance costs is designed to encourage upkeep by residents and a sense of community pride. *Clifford A. Pearson*



Occupying a full city block (site plan above), the project cost \$19.5 million. The residential portion of the complex is a load-bearing masonry structure with concrete planking, while the attached community center is a steel-frame structure with metal decking. To keep costs down stucco was used on balconied sections (middle and bottom opposite), and inexpensive details such as cast-stone lintels and small colored tiles were used to animate facades (previous pages).







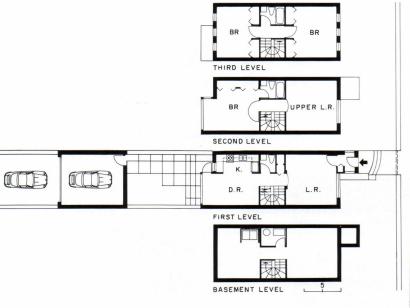
Focus on Housing

If the need for decent affordable housing seems impossibly vast, the five projects on these pages do at least offer hope. In every case, the key word to success was "cooperation." In Oakland, that meant a public/private package for rehabing the California Hotel; across the bay, a series of community-based meetings has led to the first phases of a rehabilitation master plan for Sunnydale Gardens, one of San Francisco's most troubled public housing projects. Near Seattle, a group of homeowners banded together to create the country's first cohousing project, while on the

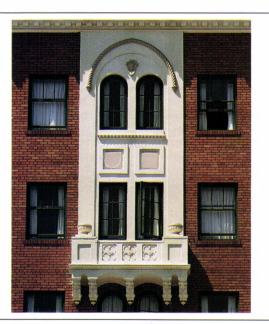


Eastlake Court

Chicago, Illinois Johnson & Lee, Architect



opposite coast, in Brooklyn, a variety of neighborhood groups, government agencies, and a nonprofit community design center created Brooklyn Gardens. Finally, a Chicago developer sought to provide urban starter housing by building market-rate, but relatively affordable townhouses in a marginal area of Chicago. His compromise? A willingness to give up higher profits for urban responsibility.



Bay area rehab

The rehabilitation of the California Hotel at the edge of downtown Oakland is a model example of how public and private collaboration can result in decent low-income housing. Built in 1929 and once the only hotel in the Bay Area to accommodate nonwhite tenants, the California was abandoned in 1973. In 1991, the hotel reopened following an extensive interior rehabilitation by The Ratcliff Architects. The residential hotel now has 75 single-room-occupancy units without kitchenettes, 58 SRO units with kitchenettes, and 16 studio apartments, all renting at levels around \$150 per month lower than rents in the private market. Tenants without cooking facilities use communal kitchens on each floor (plan opposite). The project was developed by Oakland Community Housing, Inc., with state, federal, and local funds, along with additional moneys acquired by selling the building to a private partnership. Because the red-brick and white-stucco structure is listed on the National Register, the partners were able to take advantage of both historic-preservation and low-income housing tax credits. P. M. S.



Townhouses on a budget

Eastlake Court is a privately financed nine-building row of townhouses situated in a slowly reviving area of Chicago called The Gap. a block east of Mies van der Rohe's Illinois Institute of Technology campus. Designed by Johnson & Lee, the three-story gable-roofed houses were developed for sale at market rates to young and middleaged professional homebuyers attracted by the area's historic Prairie School architecture and by its proximity to the Loop. Each house boasts a two-story living room, second-story master bedroom, a third story with either one or two bedrooms, and a detached rear garage (plans opposite). Although the architect's original scheme called for brick facades with limestone trim, cost overruns in the tight \$800,000 budget forced them to substitute stucco for stone. P. M. S.

Brooklyn Gardens

Brooklyn, New York The Pratt Institute Center, Architect



Sunnydale Housing Rehab

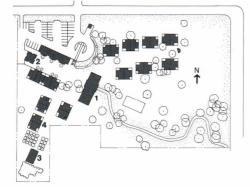
San Francisco, California Marquis Associates, Architect





Winslow Cohousing

Bainbridge Island, Washington Edward Weinstein Associates, Architect



1. Common house

2. Guest house

3. Barn

4. House



Edward Weinstein Associates photos



SANTOS STREET

Parking
 Shared back yard
 Private front yard
 Private back yard
 Play court
 Sand lot
 Bus stops

8. Community center



Back to Brooklyn

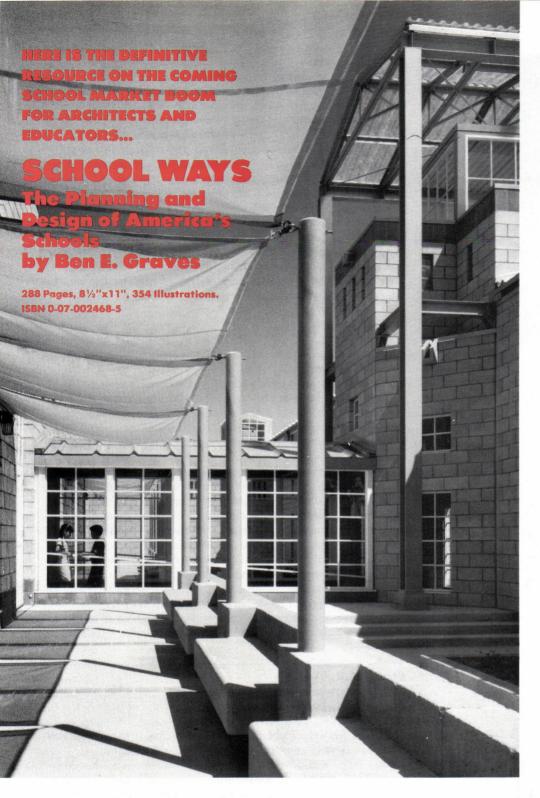
Despite its name, Brooklyn Gardens was anything but idyllic when the local nonprofit group Pastoral and Education Services took over a vacant five-story apartment complex in the borough's troubled Fort Greene section as its first development project. Although the gut rehabilitation of any empty apartment house is good news, Brooklyn Gardens is especially noteworthy for the three types of shelter it provides: housing for the mentally ill, permanent housing for single adults, and transitional housing for mothers and children. The Pratt Institute Center for Community and Environment Development (Cindy Harden, project architect) organized the U-shaped 51,000-square-foot building vertically, giving each group of residents a separate wing. A single main entrance offers 24-hour security; beyond this central point each of the three residential groups has a private entrance off a newly landscaped central courtyard. Communal kitchens, a daycare center, medical care, counseling, and job-assistance are among the services offered. P. M. S.

Turning the corner

Sunnydale is San Francisco's largest public housing project— 93 garden-style buildings housing 787 families on a sloping 49-acre site in the southern part of the city. Like many projects built just before World War II, Sunnydale has deteriorated into an urban nightmare, its once-inviting open spaces today a haven for criminal activity. To reverse the decline, the San Francisco Housing Authority enlisted architects Marquis Associates to prepare a HUD-funded, \$50-million master plan for the project's revitalization. After intense talks with community groups and surveys of residents, Marquis identified a set of problems, including the buildings themselves (structurally sound but rundown and barracklike), the site design (amorphous, poorly landscaped parking lots), and recreation facilities (children make up 50 percent of Sunnydale's population). In addition to repairing the concrete buildings, the architects have proposed a relandscaping plan that will define and control access to the project's open space. Private backyards will replace current open vards, and on-site parking will be provided through small courts in front of the buildings (plan left and rendering opposite). P. M. S.

Group effort

Although more and more common in northern Europe, cohousing remains a novelty in the U.S. Cohousing is a hybrid of three residential types: a traditional single-family house, a co-op apartment, and, for lack of a better word, a commune. In the case of the Winslow cohousing project, located on Bainbridge Island, near Seattle, architect Ed Weinstein arranged 30 clustered houses along three axes leading to a 6,000-square-foot common house. The houses, with their gabled roofs and wood siding, evoke the area's rural vernacular architecture. While the dwelling units are small-518 square feet for one bedroom to 1,300 square feet for four bedrooms-residents enjoy shared space in the common house, which has a dining and meeting room, library, community kitchen, day-care center, laundry, recreation room, and teen room. There is also a guest house. Residents eat mainly in their own houses, but group meals in the common house are frequent. Problems and proposals are aired at weekly meetings, where final decisions must be approved by consensus (a majority is not enough). Clearly, compromise is the key to the success of any cohousing project. P. M. S.



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ERAMIC COMPOSITION

С G W Η Η R 0 M Ζ E D Т E A A



In addition to the conventional method of tile installation used in the project shown here. Buchtal offers a new prefabricated system Keraion-Quadro, which invisibly fastens large format tile to metal grids on



At Buchtal Ceramics, we choose our words carefully. Much like an architect chooses a building material. That's why when we say Chroma® offers the designer the most extensive palette of modular sizes and colors in glazed ceramics, you can believe it's true. ♦ With 71 colors and sizes from 2×10 strips to two-foot square panels, dramatic design statements are inevitable with Chroma. Architects like you have been using Chroma all over the world for dozens of applications. In

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Buchtal Ceramics directly at 1325 Northmeadow Parkway Suite 114 Roswell, GA 30076 (404) 442-5500 Fax: (404) 442-5502. ♦ In the meantime, every picture tells a story.

Architect: Solberg & Lowe, Santa Monica, CA

Samuel Goldwyn Foundation Children's Center Los Angeles, CA Product: Chroma 12×12 142 Intense Red (not shown 12×12 146 BlueGreen, 12×12 140 Intense Yellow and 12×12 144 Intense Blue)

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Circle 24 on inquiry card



Bob Shewach

Product Literature



400. Perforated metals

A 50-page catalog features floor plates, expanded metal, wire cloth, and gratings, available in a range of coating options over black metal, galvanized steel, and aluminum structures. Technical data, perforation patterns, and load tables are included. McNichols Company, Tampa.



401. Rubber flooring

Specification cards hold samples of tile and Vynite rubber wall base available in any of seven matching colors, as well as new rubber stair treads made the same thickness as the flooring to eliminate the need for separate stair nosings. Mercer Products Co., Inc., Eustis, Fla.



402. Fire-labeled cabinets

A catalog describes Larsen's new Flame-Shield configuration, offered on over 70 styles of fire-equipment cabinets. The listed construction maintains the integrity of one- and two-hour fire walls with recessed and semirecessed cabinets. Larsen's Mfg. Co., Minneapolis.





403. Paver design

The Interlocking Concrete and Grid Pavements Reference CADalog is DOS-based, DXF-format software with detail drawings on 50 landscape applications, including pedestrian walks, roads, runways, and erosion control. ASTM and CSA editions available. Concrete Paver Institute, Herndon, Va.*



404. Drywall Anishing

A color brochure explains how Sheetrock First Coat primer minimizes decorating problems such as joint banding and "photographing" by equalizing porosity and texture variations between gypsum-panel face paper and joint compound. United States Gypsum Co., Chicago.*



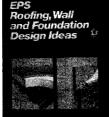
405. Floor-protection grates Carpeted metal products as well as

aluminum and stainless-steel grating systems are featured in a four-page catalog. Cross-section drawings illustrate profile, frame, and lockdown details; custom designs can be specified. Kadee Metalfab Incorporated, Bedford, Ohio.



406. Anodized aluminum Anodized Aluminum Color Stan-

dards for Architectural Applications shows samples of the most-used shades: champagne-, light-, medium-, dark-, and deepbronzes, and black. The standard assures that the color specified will be the color provided. Architectural Anodizers Council, Wauconda, Ill.



407. EPS insulation

Technical guide to expanded polystyrene insulation products has welldone installation illustrations for roof, wall, and foundation applications. Physical-property and test data included for the CFC/HCFCfree material. MEPS Insulation Council, Washington, D. C.



408. Window coverings

A 32-page architectural catalog covers a range of light-, heat-, and sound-control treatments, including horizontal and vertical blinds. pleated and Duette shades in fireretardant fabrics, and draperies that work with hospitality/health care finishes. Hunter Douglas Window Fashions, Upper Saddle River, N. J.



409. Resilient flooring

Architectural binders offer actual samples of all VPI flooring products-solid-vinyl tile, static-control tile, sheet vinyl, and wall base—one binder to a line. Installation and performance data are included. Vinyl Plastics, Inc., Sheboygan, Wis.



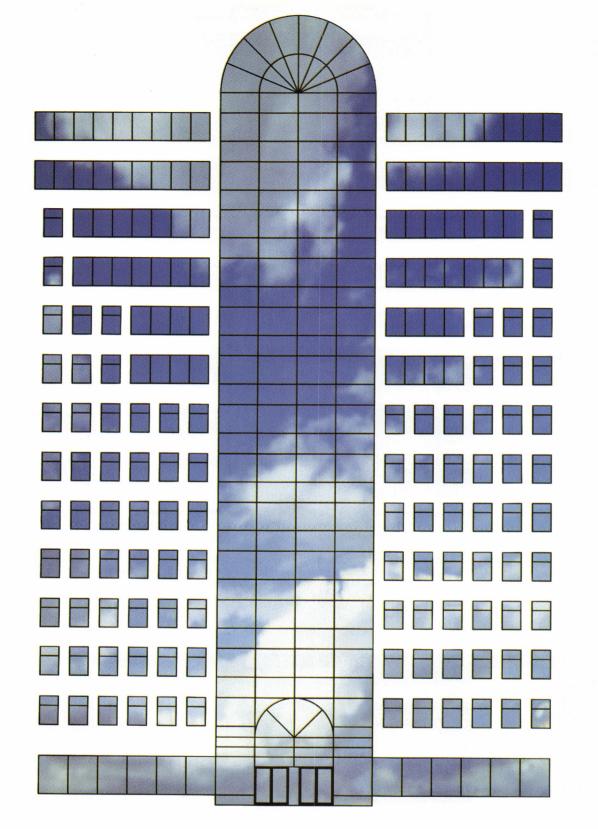
410. Bookshelves

A new welded-frame cantilever shelving system meets stringent steel-bookstack structural standards set by the American Library Association. For both static and highdensity-mobile applications, the shelves can be easily adapted to meet all local seismic codes. The Spacesaver Group, Fort Atkinson, Wis.



411. Foam-core panels Brochure describes Durashield tongue-and-groove structural panels, made with a pultruded fire-resistant fiberglass skin and a rigid polyurethane core in 1- and 3-in. thicknesses. Building panels meet RFI/EMI codes, and are suggested for applications such as computer-testing facilities. MMFG, Bristol, Va.

* Product data on CAD disk



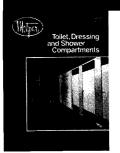
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Product Literature / Washroom Accessories

For more information circle item numbers on Reader Service Cards.



412. Toilet compartments

A 16-page color catalog illustrates toilet, shower, and dressing compartments for a range of applications, including heavy-duty solid phenolic, solid-core stainless steel, and laminate surfaces. All mounting options and hardware are detailed. Metpar Corp., Westbury, N. Y.



413. Washroom accessories

Stainless-steel dispenser/disposal units, no-touch dryers, grab bars, and other bath and shower-room accessories are shown grouped by application, including products for school, hospitality, detention, and health-care facilities. Modular ammenity walls and phone kiosks are also featured. 48 pages. Bradley, Menomonee Falls, Wis.



414. Sanitary partitions

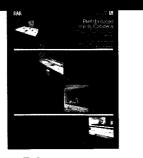
Brochure on German-made Kemmlit cubicles illustrates design and durability features such as all-rounded edges, concealed fasteners, and contemporary-style nylon hardware, and pictures color options offered in melamine-coated solid-core panels. W&W Sales Ltd., Spring Valley, N. Y.



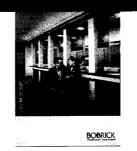
415. Laminate surfaces Made with a hot-glue process said to ensure permanent lamination, DesignRite partitions come in over 100 Wilsonart solid colors as well as woodgrain and other patterns to permit coordination of partitions with countertops and tiles. Standard layouts diagrammed for all mounting configurations. DesignRite Partitions, San Diego.



416. Solid-composite panels Color catalog describes the Trespa panel, based on thermoset resins reinforced with cellulose fibers. The colorful composite material comes in three standard sheet sizes, up to 12 by 6 ft, and is particularly useful in toilet and shower partitions, laboratory counters, and food-handling installations. Hoechst Celanese Corp., Somerville, N. J.



417. Lavatory counters Prefabricated vanity cabinets are shown in several wheelchairaccessible styles suitable for public, institutional, and residential bathrooms. Angular-front designs put towel dispensers/disposal bins within the cabinet to unclutter the wash area. R-A-R Enterprises, Round Mountain, Texas.



418. Washroom equipment

Colorful 50-page catalog covers the full range of Bobrick products: toilet compartments, washroom accessories, detention specialties, and healthcare and hospitality designs, offered in laminate over phenolic as well as architectural stainless steel. Bobrick Washroom Equipment, Inc., North Hollywood, Calif.



419. Stainless-steel accessories A four-page brochure highlights design, finish, and mechanical options for this maker's lines of recessed towel holders, grab bars, and other washroom units. Also illustrates multiservice consoles that combine sink, towel and cup dispensers, mirrors, shelf, and other functions in a sleek, compact unit. McKinney Parker, Scranton, Pa.

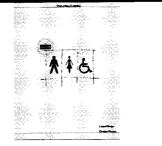


420. Towel/grab bars Color catalog has 12 pages on bath accessories—towel bars and rings, soap holders, shelves, and shower rods—in brass, chrome, and stainless steel for residential, hotel, and office applications. Seachrome Corp., South El Monte, Calif.



421. Commercial fittings

ASI's 44-page catalog features the Design Line of recessed accessories, which have an 18-gauge stainlesssteel body and solid-phenolic-core doors in any of over 80 laminate colors. Three less-costly accessory collections, as well as institutional and detention products, are also available. American Specialties, Inc., Yonkers, N. Y.



422. British-style compartments Thrislington Series cubicles have 6-ft-high panels for greater privacy, with an easy-up extruded-aluminum frame set on adjustable, pivoting feet. Offered in materials for both wet and dry areas, with finish options that include Formica laminates, vinyl wallcoverings, and Corian. Bobrick Washroom Equipment, Inc.,

North Hollywood, Calif.



423. Barrier-free vanities

Washroom and hospital vanity units illustrated in several styles that meet wheelchair accessibility codes, including space-saving and severeduty configurations. Finish choices range from institutional to marble; a custom-design and layout service is offered. BPS Architectural Products, Inc., Houston. ■

Manufacturer Sources

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

Pages 72-77

Delancey Street Embarcadero Triangle Backen, Arrigoni & Ross, Architect Built-up roofing: Manville Corp. Tile roofing: Craycroft Clay Tile. Casement windows: Weathershield Mfg. Quarry tile: Summitville. Locksets: Schlage Lock Co. Lighting fixtures: Dual Lite; Columbia. Outdoor lighting: Prescolite. Copper sconces: Shaper Lighting. Elevators: Otis.

Pages 78-83

202 Island Inn Rob Wellington Quigley, Architect Built-up roofing: GAF. Metal doors: Steelcraft. Slate flooring: Eurocal Slate. Floodlights and landscape fixtures: Hubbel; Loran; Metalux. Lobby seating: Vecta. Elevators: Amtech.

Pages 86-89

Transitional Housing for Singles Skidmore, Owings & Merrill, Architect Face brick: Yankee Hill. Built-up roofing: Manville. Windows: Howard Industries. Locksets: Russwin. Paints: Sherwin/Williams. Plastic laminate: Formica Corp. Flooring: Armstrong. Outdoor pole-mounted lighting fixtures: KIM. Hydraulic elevators: Schindler.

Pages 90-91

Transitional Housing for Families Skidmore, Owings & Merrill, Architect Brick: Clay Craft. Built-up roofing: Tamko. Aluminum windows: Acorn Building Components.

Pages 92-97

Langham Court

Goody, Clancy & Associates, Inc., Architect Field brick: Victor Cushwa & Sons. Accent brick: Taylor Clay Products. Custom-color window and bay paints: Kynar 500. EPDM roofing: Firestone Corp. Shingles: Eternit Corp. Aluminum doublehung windows: Traco Corp. Glass: Solar Seal Corp. Locksets, closers, exit devices: Sargent Corp. Elevator: Atlas Elevator. Fire-rated suspended ceiling: United States Gypsum Corp. Paints: Devoe Corp. Glazed wall- and mosaic floor tile: United States Ceramic Tile Co. Quarry tile: Metropolitan Ceramics. Lighting fixtures: Progress; Prescolite. Exterior lighting: Bega.

Pages 98-103

Morning Park Chikaramachi

Kaplan/McLaughlin/Diaz Architects, in association with Kajima Corporation, Nagoya Office Granite cladding and flooring: INAX Corp. Tile wall cladding: INAX Corp. Aluminum-coated metal roof: Nisshin Steel Co., Ltd. Windows: Sankyo Aluminum Industry. Glass: Nippon Sheet Glass Co., Ltd. Carpet: Milliken & Co. Sconces: Matsushita Electric Works, Ltd. Elevator: Mitsubishi.

Pages 104-107

Multi-Service Homeless Center Asian Neighborhood Design, Architect Built-up roofing: Owens-Corning. Sheet metal: Fry-Reglet. Windows: Torrance Steel Window Co.; Bonelli Enterprises. Entrances: VistaWall. Toilet accessories: Bobrick. Paints and stains: Fuller-O'Brien. Plastic laminate: Wilsonart. Flooring: Krommenie Marmoleum. Countertops: Corian. Bed units: custom by architects. Special lighting: Louis Poulsen & Co.

Pages 108-109

H.E.L.P. Homes

Cooper, Robertson & Partners, Architect Windows: Mannix Industries. Brick: ACME Brick. Benches: Londino Stone Co. Storefront glazing and entrances: EFCO Corp. Exterior wall lighting: Bega. Pole-top lighting: Sentry. Closers, locksets, and exits: Yale. Interior glass doors: Acme Steel Door Co. Ceilings: Armstrong. Terrazzo flooring: D. Magneau & Co. Elevator (Community Center): Dover.

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Health-Club Flooring: Selection Guidelines

By Katherine Freeman

Health clubs, gymnasiums, fitness centers, and university fieldhouses encounter increasing competition for increasingly demanding customers. They meet this competition with upgraded facilities, the latest equipment, expanded service hours. Clients of health clubs see more of the floor than the patrons of other types of buildings. Flooring is a key design element and it must be not only attractive, but capable of withstanding heavy abuse and wear.

BEFORE CHOOSING FLOORING, THINK ABOUT: Budget

The critical performance requirements of flooring in sports facilities demand special flooring materials. They are often far more expensive than traditional commercial flooring installation. High costs may be justified by lower long-term costs of reduced maintenance, lower injury and liability risks, and longer flooring life.

Substrate requirements

Some systems, such as wood systems, build their own support system and underlayment and can be forgiving of inferior substrates. Other systems, such as rubber flooring or applied floor coatings, require a smooth and properly prepared substrate to be successful. Materials directly bonded to the substrate also require proper substrate preparation. Lack of this may create dead spots within the floor. Moisture penetrating the substrate will interfere with proper performance of most systems.

Surface requirements

The texture and finish of the athletic surface can be adjusted to the needs of the activity. Textured materials provide traction for running tracks. Smooth surfaces are more suitable for roller skating or activities that require quick or sliding movement, such as dance. Hard, stable surfaces produce height and bounce, appropriate for hard-playing-ball sports. Resilient surfaces work well for gymnastics and exercise equipment. Seams should be avoided when they might interfere with rolling speed or ball-bounding ability.

Safety and legal liability

Flooring materials should meet industry standards for safety and injury resistance. The requirements for each activity or area should be considered in selecting flooring. Exercise and aerobic areas need resiliency to reduce joint injury and muscle fatigue. Handball and racquet courts require firmness for high bounce and fast play, yet must have shock-absorbing quality to reduce injury from falls or jumps. All floors ought to provide a degree of slip-resistance and traction for safety.

Wet areas

Wet areas must be resistant to slipping and to bacteria and fungus.

Katherine Freeman, an interior designer, is an associate of Thompson, Ventulett, Stainback & Associates. Betty H. Spiker, of Williamson & Associates, provided technical assistance for this article.

Most of the commonly used wet area finishes, such as vinyl matting and ceramic tile, are sanitary and resist growth of bacteria and fungus. Recent slip-resistance recommendations for wet-area flooring establish a minimum of 0.8 static coefficient of friction. Comfort under bare feet is also a consideration.

Maintenance

Flooring materials must be properly maintained to retain their performance qualities and look good. In the past, many of the flooring products that could do the job and meet selection standards were unattractive. Recent advances in flooring technology have developed materials that are handsome as well as functional. The designer of a sports facility now has a wide variety of systems and products to meet the esthetic as well as the performance requirements.

Carpeting

Relatively inexpensive compared with hard-surface flooring, carpeting gives the most opportunity for creativity in color and design. Carpet is generally easy, quick, and fairly inexpensive to install, making it a good choice for renovation work. The same low cost and ease of installation permit change every few years to update a club image.

Recent developments in carpet manufacture have improved appearance retention and durability. These developments include solution-dyed fibers, enhanced fibers, and antimicrobial treatments. Solution dyeing makes the carpet more colorfast, better able to stand up to heavy cleaning and wear. Enhanced fibers improve the ability of a carpet to withstand the heavy wear, abrasion, and soiling of a sports facility. Antimicrobial treatments, available for both carpet fiber and backing materials, prevent the growth of bacteria that the moist atmosphere of sports clubs fosters.

Special sports carpeting is available with court layouts and game lines woven in. This product is primarily for school gymnasiums, but may be useful in other applications.

Rubber carpet underlays are designed for various sports activities to reduce muscle fatigue and injury. Firm, more supportive underlayments may be used under carpeted gymnasium floors for basketball and similar activities, providing good ball bounce and speed. Highly resilient shock-absorbing underlayments are designed for aerobics and other high-impact activities.

Resilient Acoring and composite rubber Acoring

For many years, design choices in resilient flooring were limited. Today's products offer a variety of colorful solids, confetti patterns, and the appearance of terrazzo, stone, and wood. Resilient flooring is easy to install, wears well in medium- and high-traffic areas, and is easy to maintain. Some types do not require waxing or buffing.

Rubber flooring materials are made to meet a wide variety of needs. Rubber flooring with high resiliency and moderate foot support is often used in aerobic areas to soften the impact of the activity on the body. Materials with balanced firmness, resiliency, and good traction are designed for indoor running tracks. Basketball, racquetball, and 1. Natural linoleum, a resilient, slip-resistant flooring is used for gyms, tennis and racquetball courts, exercise rooms, and indoor running tracks. Lines for various sports activities may be painted on. **Credits**

Manufacturer: Cork Carpet by Forbo Industries, Inc.





2. A cushioned and sprung wood aerobics floor at Barnett Bank Health Facility has automatic dampering to provide adequate foot support and resiliency. Credits

Architect: Cooper Carry & Associates Inc. Architects

© Timothy Hursley

other court activities use rubber materials with less resiliency and more stability to reduce energy loss and improve ball bounce. For free-weight areas, thick rubber flooring with high resiliency and strength is used to absorb noise and impact loads common to this activity and to prevent damage to equipment, flooring material, and the subfloor. Similar thick rubber flooring is used in ice-skating rinks, golf clubhouses, and other areas where spike resistance is needed.

Vinyl and vinyl-composition flooring may be appropriate for some nonexercise areas where inexpensive and durable materials are needed. Most of these products are less resilient than rubber and some are even brittle. Most of these products are not recommended for areas where resiliency is required. Most are not slip-resistant and should not be used around wet areas. Special vinyl and PVC mesh mats and ribbed or gridded raised-surface mats and tiles are more suitable for proper drainage and slip resistance where standing water occurs.

Wood flooring

Wood is a traditional material for the sports-facility industry. It gives warmth and a sense of quality. Wood systems installed over plywood subfloors give minimal resiliency, but good foot support and good rebound qualities for basketball and similar activities. Multipurpose wood floors balance force reduction and stability for a wide range of applications. More resilient systems mounted over sleepers, springs, or other resilient material provide shock absorption for aerobics and dance. New, super-strong finishing agents are tougher and more durable than earlier finishes, making wood flooring practical as well as beautiful.

Applied floor coatings

These coating are usually urethane or epoxy resin-based and can be applied directly on the substrate. They range in thickness from a thin, paintlike coating to a built-up, thick floor surfacing. Most thinly applied products do not provide resiliency, but give a tough surface for many court activities. They have a fairly short life-span and must be reapplied frequently. Many thicker floor coatings provide a floor finish with excellent rebounding qualities and some degree of resiliency. Some of these products require stripping before reapplication, which can be messy and costly.

Ceramic tile

Recent improvements in ceramic tile technology have resulted in stronger, more durable products with a wide range of color, texture, size, and finish options. Unglazed ceramic mosaic tiles and many porcelain and quarry tiles have color throughout the body of the tile. This integral color helps hide chips and cracks that might develop in high-abuse areas.

One of the most logical applications of ceramic tile in sports facilities is in wet areas, such as pools, showers, and locker rooms. Many ceramic tile materials are durable, sanitary, and slip-resistant. These slip-resistant products require special maintenance procedures and may be difficult to clean, but they give good performance in wet-area applications. 3. Exercise-room carpet at the Barnett Bank Health Facility has a factory-applied rubberpad backing to reduce injury. The fiber has been treated to be antimicrobial.

Credits

Architect: Cooper Carry & Associates, Inc. Architects

4. Small-scale mosaic tiles at the Kimberly-Clark Health Facility form a pool deck surface that is slip-resistant and comfortable underfoot.

Credits

Architect: Cooper Carry & Associates, Inc. Architects

5. Italian glass mosaic tiles created the mural, the pool bottom and sides, and the floor area for this therapeutic exercise room.

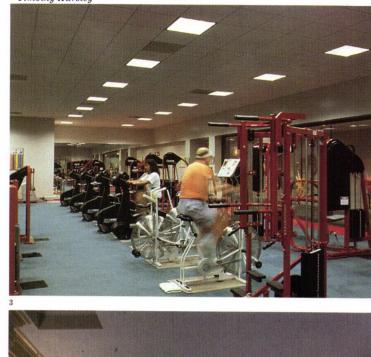
6. Rubber flooring at the Indiana World Skating Academy, Indianapolis, is designed to resist extreme puncture and tear stress. It can be walked on by ice skates and golf spikes. Credits

Manufacturer: Norament 992S by Freudenberg Building Systems, Inc.



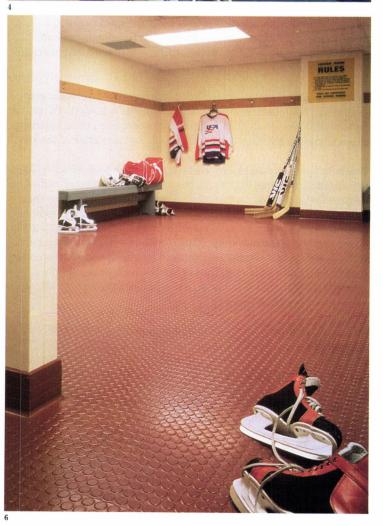
5

Gabriel Benzur









Wheel Me Out to the Ball Game

By Gareth Fenley

When former White House press secretary James Brady went to Oriole Park in April, he didn't go just to watch baseball. Before the game, Brady went down to home plate for a ceremony that held great significance for millions of people. As one of the better known Americans who gets around in a wheel chair, Brady was there to honor the Baltimore Orioles and the Maryland Stadium Authority for making Oriole Park fully accessible to persons with disabilities.

"What this place stands for is America at its best, an opportunity country, a country that recognizes that sports fans, including those with disabilities, are just that—sports fans who want to get out and enjoy a game," said Brady, who was disabled in 1981 during an attempted assassination of President Ronald Reagan.

Oriole Park at Camden Yards, the country's newest major-league ball park, was designed by Hellmuth, Obata & Kassabaum (HOK) Sports Facilities Group (Kansas City, Mo.). Accessibility features include special seats throughout the ballpark that swing out of the way to make room for wheelchairs; gradual-incline ramps; wide corridors and elevators; accessible ticket windows, rest rooms, telephones, and food-concession stands; public announcements shown on a giant television screen for fans with impaired hearing, and wheelchair access to the playing field.

Brady was joined in the Oriole Park ceremony by Alan Reich, president of the National Organization on Disability, who said: "While the Americans With Disabilities Act requires accessible public facilities, this action demonstrates the spirit and not just the letter of the law."

The initial phase of ADA implementation, which took effect on January 26, 1992, requires that barriers to access in existing facilities be removed where readily achievable. Alterations and additions to existing facilities beginning after January 26, 1992 must be readily accessible and usable by persons with disabilities. New construction scheduled for occupancy after January 26, 1993 must also comply. ADA compliance is required of outdoor and indoor stadiums, coliseums, basketball and hockey arenas, and other sports exhibition areas. In facilities such as these, one significant aspect of ADA compliance is wheelchair access.

Although conditions such as "readily achievable" and "readily accessible" are vague, specific regulations for ADA compliance are spelled out in the U. S. Architectural and Transportation Barriers Compliance Board (ATBCB) Accessibility Guidelines for Buildings and Facilities. These ADA guidelines address such wheelchair access issues as seat location, movement throughout a facility, and areas where accessibility must be provided.

A seating plan

ADA guidelines regarding seating in sports facilities are directed at

Gareth Fenley is a frequent contributor to ARCHITECTURAL RECORD.

eliminating that spot at the front of the arena or over to one side where people in wheelchairs usually have to sit. "I've seen them down on the track at high school football games and right at the edge of the court at basketball games," says Donna Hall-McDowell, principal, Accessibility Consultant (Atlanta, Ga.).

In facilities accommodating more than 300 spectators, ADA guidelines state that disabled persons must have access to all seating choices, from budget bleachers to skyboxes. Those in wheelchairs must have a line of sight comparable to those for other spectators. In addition, at least one companion fixed seat must be situated next to each wheelchair seating area.

The ADA guidelines further specify a required number of wheelchair locations according to the total seating capacity or assembly area. A facility with 51 to 300 seats, for instance, needs four wheelchair locations. Seating for more than 500 persons requires six wheelchair locations plus one additional space for each total seating capacity of 100 persons.

Wheelchair locations must be scattered throughout the facility and wheelchair users must be able to be accompanied by those who use fixed seats. "That doesn't mean that you have to have disabled persons sitting in the first row, the last row and every row in between," says Mike Holleman, director of sports-facility architecture at Heery International, Inc. (Atlanta, Ga.) "But you have to make an effort to have more than one area in the stadium where they are grouped together."

In existing facilities, these guidelines present a challenge, according to Hall-McDowell. Ronald Mace, president of Barrier Free Environments, Inc. (Raleigh, N. C.), says the ADA will make changes in the traditional way of doing things, but "almost everything I've seen so far can be accommodated." He cites removable bleachers used in Tampa stadium. "They cost millions to build," says Mace. "Within those millions, somewhere a little money could have been spent to make them accessible, even if it meant installing a small lift to get to the upper floor. That technology is available and not uncommon."

Seat manufacturers offer a strategy for scattering wheelchair locations through a stadium or arena. At Oriole Park, specially designed seats called equal-access chairs were placed throughout the stadium. The equal-access chair is actually two seats off a center stanchion. The seats can be used like typical fold-down armchair seats, but when someone in a wheelchair wants to use that space, the seats fold up and out of the way to make room for the chair. Says Ben Barnet, senior vice president of HOK Sport: "What's nice about the way the equal-access seating works is that the individual in the wheelchair can have a companion, who may not be handicapped, sit in the next seat."

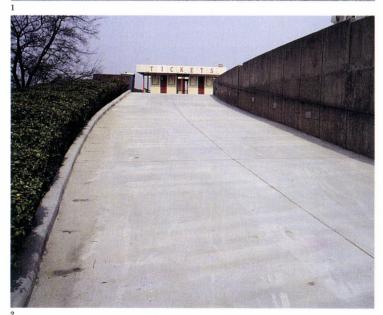
Getting around

In new construction, the space for ramps and elevators can be built in at the start. Renovations don't have that luxury, so the trade-offs

What's Wrong With These Pictures?

Heery International, Inc. photos



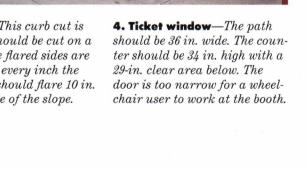


1. Parking spaces—*The* signage is too low to be seen above a vehicle parked in the space. One van space with a 96in. accessible aisle for a wheelchair lift should be provided.

2. Incline to ticket booth-This incline would be a tiring trip for a disabled person. It should have no more than a 5 percent grade with a 5-ft level run in between each maximum run of 40 ft.

3. Curb cut—This curb cut is too steep. It should be cut on a 1:12 ratio. The flared sides are too steep. For every inch the slope rises it should flare 10 in. out on the side of the slope.

ICKETS



between ramps and elevators demand careful consideration. Factors involved include cost, safety, and degrees of independence offered to disabled persons.

Elevators are the more economical solution, especially in a large facility, such as a stadium, according to Holleman at Heery International. "Ramps take so much space in a large stadium that they become very expensive," he says.

Ramps used by disabled persons are not the same as those used by the general public, says Bob Edney, coordinator of codes and standards at Heery. "There are strict architectural and engineering limitations on ramps for the disabled," he says. "You can't have wheelchairs getting out of control on the way down due to high speeds. Also, there must be level platforms included along the way to comply with the ADA. These level areas are designed to give wheelchair-bound persons a place to rest and they greatly increase the cost of the ramp. Most probably, you would be looking at a double set of ramps, one a completely accessible route in compliance with ADA and the other to move thousands of people in and out of the facility rapidly."

A double set of ramps raises the issue of signage. Ramps must be clearly identified so wheelchair users don't find themselves flying down the wrong one. "In a stadium, this is a difficult issue we don't yet have an answer for," says Holleman. "In the past, signage has always been placed high above reach, since it tends to get a lot of abuse. It's part of the ADA to provide signs at 60 in. off the floor. But at that height they are difficult to see when many people are around. This is a major issue we have to deal with."

Elevators may be a more economical solution, but they offer less safety and independence to disabled persons, according to Hall-McDowell. "An elevator is a piece of equipment and it will fail," she says. "And in case of fire, it shuts down. What happens when you've got 30 persons in wheelchairs at a sports event and fire breaks out? You can have a platform at the landing of the stairwell where a few of them could wait for a fireman. And there is a device that rolls on stairs, but people have to be taken out of their wheelchairs and placed on this device. In a panic situation, a ramp is a much better alternative."

All-around accessibility

Accessibility at sports facilities is not limited to letting people in to watch the game. In addition to spectator seating, wheelchair access must be provided in other locations, such as performing areas and team facilities, offices, concession stands, press areas, and other places people work.

Most accessibility consultants say that complying with the guidelines will demand an extra measure of creativity from designers. "The designer has to be creative, to rethink, because we have been trained in a certain way—grand stair entries, huge doorways," says Hall-McDowell. "We've just got to trash that and rethink what we are doing."

Where To Find Help

Large architectural firms assign one or more persons to become ADA specialists. Smaller operations often hire consultants. One of the ADA authorities is North Carolina architect Ronald Mace, FAIA, founder and president of Barrier Free Environments. This firm specializes in design for the disabled and elderly. Its services include accessibility design and consulting at all stages of construction planning, accessibility surveys of existing buildings, and seminars and publications on accessible design.

Another firm is Accessibility Consultant, headed by the husband-and-wife team of F. G. (Rick) McDowell and Donna Hall-Mc-Dowell. They have lived the accessibility issue since 1986, when McDowell's career as a construction engineer was interrupted by a disabling injury. His construction background combined with Hall-McDowell's design experience enable them to find solutions to unusual design problems.

To work effectively with accessibility consultants, bring them in early, says Hall-McDowell. "Don't have a design and then bring in a consultant and ask 'OK, how do we make it accessible?' You may not be able to. If you involve someone early, you can avoid the quick-fix approach. There are so many little things that you have to take into account that you should have the consultant with you when you first look at the site or first look at a building you're going to renovate."

Another source of help is the disabled community. Designers at Ellerbe Becket, Inc. (Kansas City, Mo.) seek out the help of local disabled persons for their sports projects. "We go to the group that is active in every city and work with them from day one," says Ronald Turner, senior vice president at Ellerbe Becket. HOK Sport met with representatives of Baltimore's disabled community when they were designing Oriole Park.

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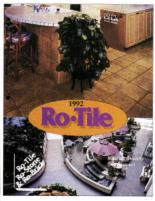
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Contains helpful illustrations and specifications on fire safety and other rubber floor and stair tread systems featuring many different marbleized or plain raised and surface designs in all decorator colors. Included are rubber landing and riser materials, vinyl treads and risers, fluff cord and traffic tiles along with recommended adhesives. Musson Rubber Co., P.O. Box 7038, Akron, OH 44306.

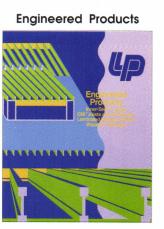
Musson Rubber Circle 45 on the inquiry card.

Ro-Tile Is Naturally Beautiful



New 1992 Ro-Tile catalog contains complete information on high quality Ro-Tile, Ro-Stone and Ro-Brick concrete tiles. New colors include exciting Southwest look. Ro-Tile has semi-gloss, handquarried finish, while Ro-Stone has look of unpolished natural stone. All offer excellent skid-resistance and natural beauty.

Ro-Tile Circle 49 on the inquiry card.



Louisiana-Pacific's engineered wood products are designed to eliminate the common problems of solid sawn lumber. Gang-Lam LVL, Inner Seal I-Joists and GNI Joists are stronger, more stable and easier to handle. Catalog includes span and uniform load charts, and information on the Wood-E engineering software package.

Louisiana - Pacific Circle 46 on the inquiry card.

Sound Performance & Quality Tectum Inc.



From the roof deck overhead to the wall and ceilings within, Tectum Inc. continues to be the leader in the manufacture of acoustical abuse resistant interior and deck products for the commercial, industrial & institutional market. Products of quality with over 40 years experience and testing gives the building industry a family of products for quality specifications. Tectum, Inc, 105 S. 6th St., Newark, OH 43055. Fax (614) 349 9305.

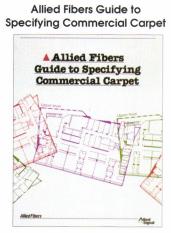
Tectum Inc.

Circle 47 on the inquiry card.

Wood & Synthetic Flooring Systems Selection Guide Connor-AGA

Discover your many options for wood & synthetic systems from the industry leader, Connor.AGA. Selection Guide provides a review of all flooring products & applications to help you select the system that is right for your facility. Systems are performanced engineered, environmentally safe & manufactured from the highest quality materials. Listed in SWEET'S Catalog 09550/CON & 09770/ CON. Call (800) 833-7144 or fax (906) 822-7800 today.

Connor.AGA, Inc. Circle 48 on the inquiry card.



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

Allied Fibers

Circle 52 on the inquiry card.

TOUCHBAR EXIT DEVICES



Catalog of UL listed (for life safety only or for fire-rated for up to 3 hrs.) exit devices. All have matching 1-piece touchbar. Available in bright or satin brass; bright, satin or oil-rubbed bronze; bright or satin stainless & aluminum anodized clear, dark bronze or black. Catalog includes a wide choice of entry trim: pullevers, levers, knobs, thumbturns or key-only functions. Electric operation, monitoring, mullions, & other accessories are also shown. (310) 699-0511.

Adams Rite Mfg. Circle 50 on the inquiry card.

New 88-Page TimberForm Site Furnishings Catalog



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

Columbia Cascade Co. Circle 51 on the inquiry card.

Sports & Recreational Facilities: Product Showcase

Barrier-Free Entrances With Swing Door Operator



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

Horton Automatics Circle 53 on the inquiry card.

1992 Pawling Interlok-Plus Selection Guide



Guide features photos, diagrams & specs. for many styles of specialty flooring ideally suited for professional sports, fitness areas, locker rooms & wet areas, schools & playgrounds, work & high traffic areas. Applications include: entrances, lobbies & halls, weight rooms, exercise areas, aerobic floors, equipment areas, showers, saunas, & pool areas. Wide selection of colors, textures & easy care materials guarantees the best match-up to any decor or protection needed. Call 800-431-3456.

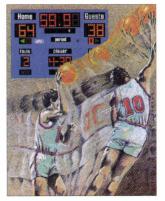
Pawling Corporation

Circle 57 on the inquiry card.

Aluminum/Acrylic Walkway Cover Systems

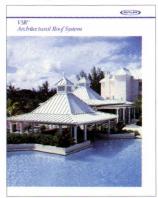


Acrylic skylight canopies and aluminum free-standing and wall-mounted walkways are featured in this catalog. Several canopy profiles are available such as pyramidal, bubble-top, and barrelvaulted. These enclosures come in standard finishes and colors; custom finishes are available. Scoreboards for Sports Facilities



Nevco Scoreboard Company has been manufacturing fine quality and carefullyengineered scoreboards for indoor and outdoor sports for over 58 years. Our 5 year guarantee and UL Listing lets you know we care about our products. Send for our latest catalog. Phone 800-851-4040, Fax (618) 664-0398.

The VSR[™] Architectural Standing Seam Roof System



The VSR roof system has the classic boxrib lines of a rectangular profile system. VSR can be used on conventional or pre-engineered structures with any substructurals. Exceeds requirements of U.L. 90, Army Corps of Engineers ETL-1110, and ASTM E-330- Modifiled. Available in Kynar 500[™]/ Hylar 5000[™] coatings in custom or standard colors with 20 year warranties.

Butler Manufacturing Co. Circle 56 on the inquiry card.

Time-Proven Floors By Tuflex

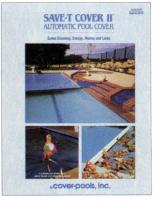


Attractive floor in 18 colors. Design is always bright & fresh. Superior durability in schools, locker rooms & weight rooms. Flooring is 3/8-inchthick. Guaranteed by the 35 yr. resilient flooring leader. Benefits- moisture & dirt cannot penetrate underneath, cut-resistant, superior traction & safety features. American-made, environmentally-friendly. For more info: Tuflex Rubber Products 4521 W. Crest Ave., Tampa FL 33614, (813) 870-0390.

Tuflex Rubber Products Circle 60 on the inquiry card.

Mapes Circle 54 on the inquiry card.

Key Operated Motorized Swimming Pool Cover



Design every pool with the added advantages of safety, convenience, & conservation of water & heat, with the automatic SAVE-T COVER II by Cover-Pools, Inc. The entire operating system can be completely concealed from view. Full color brochure provides detailed specifications. Cover-Pools, (since 1962) 66 East 3335 South, Salt Lake City, Utah 84115. 800-447-2838.

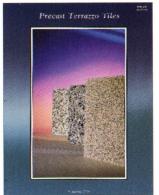
Cover-Pools, Inc.

Circle 58 on the inquiry card.

Precast Terrazzo Tiles Available in Four Styles

Nevco Scoreboards

Circle 55 on the inquiry card.

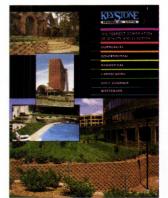


Wausau Terrazzo Tiles, the only domestically made terrazzo tiles, are produced on completely automated, computerized equipment, without waste. Materials are carefully metered to assure uniformity, while computer calibration guarantees exact sizing. Steam curing and 600 tons of pressure provide superior strength & durability. Gleaming finish. Low maintenance. Call 800-388-8728 for additional information. 38 years experience.

Wausau Tile Circle 59 on the inquiry card.

To Advertise Call 1-800-544-7929 Fax: 212-512-4256

Concrete Retaining Walls



Patented, mortarless system of high strength concrete rock face modules interlocked with reinforced fiberglass pins produce structurally sound walls of timeless beauty. Permanent. Environmentally safe. Easy to install. Cost effective. Keystone Retaining Wall Systems, (612) 897-1040 or (800) 747-8971.

Keystone Retaining Wall Circle 64 on the inquiry card.

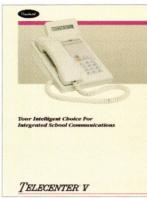
Airflex® Pads Enhance Floor System



AIRFLEX® pneumatic genuine rubber pads bring additional resiliency & load deflection to ActionCush I by trapping air in pneumatic cells during compression & releasing air when pressure is removed. The ActionCush I system has 2 layers of plywood subflooring panels which provide a stable base, eliminates dead spots & provides consistent, lively ball bounce. Action Floors offers a variety of hardwood flooring systems. P.O. Box 469, Mercer, WI 54547, 715-476-3512, fax 715-476-3585.

Action Floor Systems, Inc. Circle 68 on the inquiry card.

Telecenter® V-**School Communications**



The Telecenter V Communication System is designed to help administrators work smarter instead of harder. It satisfies school telephone system requirements, it performs an extensive range of internal communications functions plus, it offers control of media resources by teachers. Rauland-Borg Corp., 3450 West Oakton Street, Skokie, Illinois 60076: (800) 752-7725.

Rauland-Borg Corp. Circle 61 on the inquiry card.

NO-TOUCH PUBLIC WASHROOM EQUIPMENT



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

INTERSAN MFG. CO. Circle 62 on the inquiry card.

General Shale Sports Trak Cover



Ideal for warning tracks, jogaina paths, hiking trails and other activity areas, General Shale Sports Trak cover provides a cost-efficient, low maintenance, attractive alternative to commonly used paving materials. A granular brick product that maintains its consistency and neat appearance even in rain, Sports Trak is now available in 50 lb. bags or bulk loads.

General Shale Circle 63 on the inquiry card.

Slate-Simulated



Four-color brochure describes features of non-asbestos fiber cement simulated slate roof slates in creating elegant & appealing rooflines. Four slate products available. Slate characteristics, general uses & applications (including freezethaw) & various Roofscapingsm designs are among features detailed. Color chart on 16 new optional colors also included. 50-year limited transferrable warranty. Call 1-800-346-6147 or FAX 704-588-2096.

FibreCem Corporation Circle 66 on the inquiry card.

Fast-Curing, Durable **Flooring Systems**



Cures in one hour and in extreme cold, limiting expensive downtime. Penetrates and strenathens the substrate, delivering a superior bond. Ease of maintenance, resistance to acids and bacteria, and durability make it an excellent choice for stadium restrooms, food concession areas, or total stadium renovation. (800) 477-4545.

Silikal North America. Inc. Circle 67 on the inquiry card.

Moisture & Corrosion **Proof Walls & Ceilings**



Kemlite[®] all-fiberglass wall and ceiling system catalog explains that the specially treated surface of Class Arated Fire-X Glasbord® PLUS is significantly tougher and more cleanable than ordinary fiberglass. Also includes Sanigrid[®] corrosion-proof ceiling grid, Glasbord[®] lay-in fiperglass ceiling panels and accessories.

(emlite Company Circle 65 on the inquiry card.

Classified Advertising

To Advertise Call 801-972-4400 FAX 801-972-9409

POSITIONS VACANT



Design Architect needed to perform general architectural duties in a small rural architectural firm including interior design, landscape and illustration graphics. Requires a Bachelor Degree in Architecture, two years training and six years experience in architecture. The position pays a salary of \$28,000.00 dollars per year. Special requirements for the position are as follows: 1) Prior experience as principal in architectural firm; 2) Ability to identify a strong, appropriate and coherent design concept and develop it through detailing in all systems. Skilled in sensitive design. creating buildings with rich character and consistent yet functional detailing demonstrated through professional publications or illustrations of completed projects; 3) Experience in design of a variety of complex institutional and corporate building types; 4) Demonstrable ability in graphic graphics; 5) Demonstrable knowledge of building codes, structural, mechanical, and electrical systems; 6) Demonstrable ability to perform interior design including: preparation of specifications and bidding of furnishing and finish materials, and color coordination; 7) A degree or substantial course work towards a degree in landscape architecture and demonstrable ability to perform landscape architectural duties including but not limited to specifying site plant materials and designing site irrigation systems; and 8) ability to design in either English or Metric systems. Job Order No. 1069049. Contact Utah Job Service, P.O. Box 307, Logan, Utah 84321, Attn: Maxiene McDonough. Requires permanent employment authorization.

Northeast/West Coast Regional Sales/ Marketing Manager. Growing mfg of door and hardware system seeks an individual with a full understanding of the construction industry. Good personality and fire codes knowledge essential. Min. 5 yrs experience in arch./construction. Travel is a requirement. Job entails developing distribution, and presenting system to architects and owners. Compensation \$30,000 + bonus. Send resume to Openings, 40 W Howard, Pontiac, MI 48342, ATTN: Mike Stadelmayer.

Aggressive Sales Agents: North America's leading manufacturer of standard design and custom precast plaster and glass reinforced gypsum architectural products for residential and commercial purposes requires Representatives for major cities. Persons should be presently calling on General Contractors, Home Builders, Drywall/Plastering Contractors, Architects and Designers. Respond in writing to The Balmer Studios Inc., 99 Jane Street, New York, N.Y. 10024.

Architect — BS, under two years experience in facility design/planning, with good graphics, CADD and English. (ad #1). Saudi Consolidated Engineering Co. (See ad #3).

Architect — BS, 3 to 5 years experience in facility design/planning, such as warehouses, workshops and medical facilities; and English writing/report specifications experience. (ad #2). Saudi Consolidated Engineering Co. (See ad #3).

Architect — BS, 5 plus years experience in facility design/planning, including medical facilities. English writing important. Work location Khobar, Saudi Arabia, with large multi-disciplinary engineering/architectural firm. One year initial assignment. "Benefits include annual one month leave, with transportation; holidays; sick leave; health; housing and transportation. 48 hour week. Submit resume, work history and 5 to 10, 8 1/2x11 copies of relevant work samples to the following, by mail or fax to: Personnel, Saudi Consolidated Engineering Company (Khatib & Alami), Box 1713, Khobar, Saudi Arabia: Fax Direct Dial: 011 966 3 894-2341. (Ad #3).

Architect for Arlington Hts., IL area employer to provide professional services in the design, construction, repair or alteration of such buildings as: office & public bldgs., shopping centers, residential, industrial & institutional bldgs. Candidate will be expected to provide expert services in such areas as: planning & preparing conceptual designs; site & land planning; scheduling; production of contract docs.; cost analysis & specifications; interior furnishing & graphic design; on-site construction coordination & project management; complete restoration, renovation & preservation; and financial feasibility studies. Prepare and present conceptual designs and presentation renderings. Supervision of 1-3 others varies according to project. Salary \$28,000/year, 40 hrs./wk., 8am-5pm, Mon-Fri. Require 4 yrs. college w/bachelor of science degree in architecture (or foreign degree equivalent). Require 5 yrs. direct experience in job being offered and as described. Must have proof of legal authority to work permanently in the U.S. Applicants may be asked to submit portfolio. Applicants send resume to Illinois Dept. of Employment Security, 401 S. State St., 3-South, Chicago, IL 60605, Attn: M.J. Stoll, Ref. #V-IL-4810-Y. No Calls. An Employer Paid Ad.

Architectural Project Manager, experienced in design and Project Management of Hospital/Healthcare and Educational projects, with emphasis in production. Position in Miami, FL, requires minimum of prof. registr. in Arch., Bach., Arch. and two years applicable experience. Training and/or exper. in Constr. Mgm't. would be enhancement. Hrs. 8:30 am to 5:30 pm. Mon-Fri, \$36,400. per annum. Resumes must be received by July 30, 1992, marked RE: JOB ORDER #FL 0617737 to Job Service of Florida, 701 S.W. 27th Ave., Room 15, Miami, FL33135. An equal employment opportunity employer.

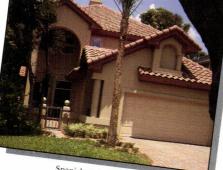


Architectural Record Computer Software Section

1221 Ave. of the Americas Room 4297 New York, NY 10020

1992 ARCHITECTURAL RECORD COMPUTER SOFTWARE SECTION						
Sizes		Material				
1 Inch 7	'/8 x 2 3/8	Artwork o	Artwork or			
2 Inch 17	'/8 x 2 3/8	film preferred.				
3 Inch 27	ng					
4 Inch 3 7/8 x 2 3/8 free of charge.						
4 Inch 17	′/8 x 5 1/8		_			
1992 RATES						
Unit	1X	6X	12X			
1 Inch	\$180	\$170	\$165			
2 Inch	360	340	330			
3 Inch	540	510	495			
4 Inch	720	680	660			

Cherie Jolley Phone (801) 972-4400 Fax (801) 972-9409



Spanish-style stucco-look DUROCK exterior, residence, Jacksonville, FL



Thin grey marble tile and black granite tile, corporate headquarters, Irvine, CA



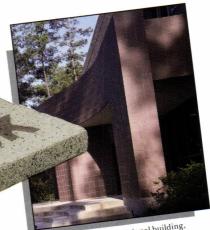
Stucco-look DUROCK exterior, residence, Mobile, AL

Columns, walls and chimneys of DUROCK Exterior Cement Board with stucco finish, residence,

Goose Pimple Junction, VA



Long-lasting movie set of DUROCK Exterior Cement Board, Universal Studios Florida, Orlando, FL



Ceramic tile, professional building, Conroe, TX

WE'RE SOLIDLY BEHIND A LOT OF CREATIVE IDEAS.

With DUROCK® Exterior Cement Board Systems, architects and builders have found a substrate that's durable enough to back virtually any exterior design, including panelized construction.

Ceramic tile, marble or granite tile, thin brick...DUROCK Exterior Cement Board can handle it all. In addition, DUROCK provides the only acrylic stucco system with a hard, impact and fire-resistant substrate. It allows layering of cement board to form esthetically pleasing quoins, dentils, lintels and banding.

Easy to cut and install. Clean. Water-resistant and resilient enough to handle heavy abuse and multiple finishes. DUROCK Exterior Cement Board is fast becoming the number one backer of innovative designs. Building Code compliance covered under Report No. NER-396. For more information on the complete DUROCK Exterior Cement Board System, call 1-800-USG-4-YOU or write to

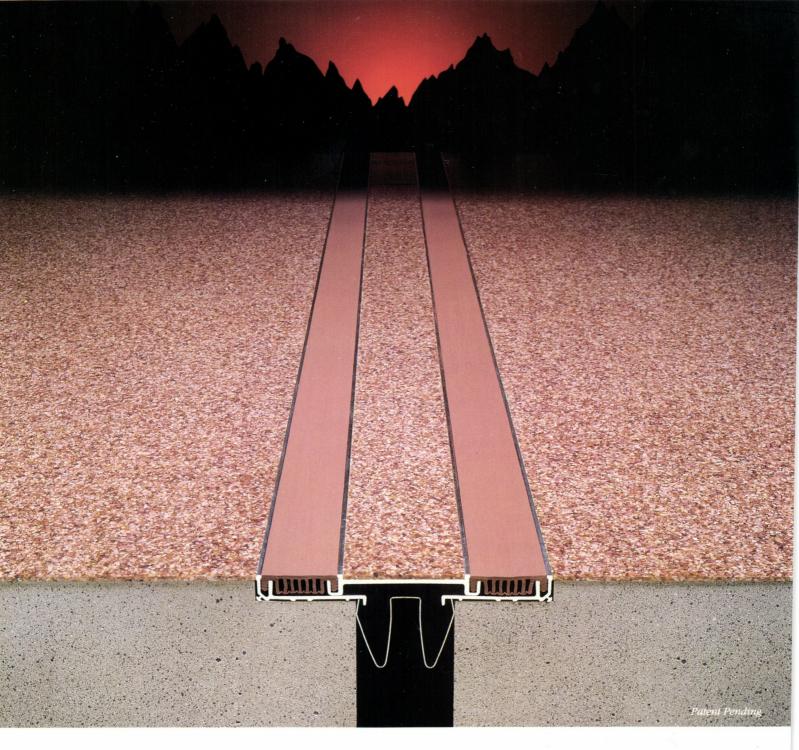
U.S. Gypsum Company, P.O. Box 806278, Chicago, IL 60680-4124.

1 1 1 1. 7 . 7 . 1 . 1



United States Gypsum Company

USG



C/S ANNOUNCES THE DAWN OF A NEW AGE IN EXPANSION JOINT TECHNOLOGY

Unsightly floor joints with missing gaskets and dirt collecting voids have been a serious maintenance problem, tripping hazard and visual disgrace for years.

But now there's a solution! C/S has developed a flush expansion joint cover system with clean, simple lines. It provides for multi-directional movement — up to 50% — *without loss of seal* and is available for 1" through 16" openings.

The design features rugged aluminum components and gaskets of a co-extruded thermoplastic material to smoothly accommodate both pedestrians and wheeled equipment. Gaskets may be custom colored for larger projects and the center plate recessed to accept tile or carpet for the ultimate unobtrusive look. Best of all, C/S Flush Seals cost no more than conventional joint systems.

A new age in expansion joint technology is now here — even for seismic applications! Call 800-233-8493, our technical staff is ready to assist you.



Circle 81 on inquiry card