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September 1973

House & Home



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key problems
in housing's only
boom market



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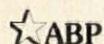
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House & Home

McGraw-Hill's marketing and management publication of housing and light construction

Volume 44 Number 3/September 1973

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Cover/Photography: Mitchell Funk

Nixon plan to revamp mortgage industry given strong chance of success

President Nixon has now presented his plan for a complete redesign of the country's private financial structure.

(A summary of the President's proposals appears on page 9.)

The thrust of the proposal—that mortgage-lending thrift institutions should move toward commercial-bank status for their own protection in tight-money periods—stands a surprisingly fair chance of becoming law providing Congress acts before the President's term runs out.

"I am gradually shedding my initial skepticism on this," says a Capitol Hill source. "My guess is it will go somewhere—but slowly."

While the changes the White House proposes for thrifts command such a wide Washington consensus that even such a staunch Democrat as Representative Wright Patman of Texas appears in basic agreement, the important point for the housing industry is that they would ease the lot of lenders without doing anything at all to reduce the extreme and financially induced boom-bust swings in the actual production of housing. For a transition period, in fact, housing's typical feast-famine syndrome might even be increased somewhat.

Housing. The president of the National Association of Home Builders, George Martin, criticized President Nixon's proposals in the severest terms. The changes, Martin said, "would virtually destroy" the existing system for financing housing and would drive up interest rates.

To this kind of talk, the White House document outlining the President's intentions counters that "it is hard to imagine how" its suggestions "could increase the cyclical variability of housing." Yet it also concedes the basic point that "housing production will not be made constant over the cycle, nor should it be, since the demand of housing is highly sensitive to interest costs."

The whole intent of the President's proposals is to let mortgage rates share more readily in the general upward movement of rates when money gets scarce, even though White House officials expect that the price-ra-

tioning effect of high rates will shut out a lot of residential construction for the duration of such periods.

Tax changes. The aim of his program, the President said, was to put commercial banks and thrifts "on roughly equal footing" with respect to deposit powers, lending powers and tax burdens. Thrift institutions would surrender their special tax advantage over banks, along with the ¼% yield advantage they currently have in attracting consumer deposits. In return, the thrifts would get wider powers more nearly similar to those of banks.

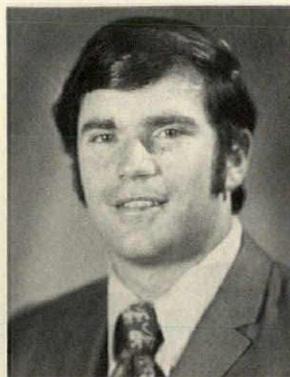
"We're going to make damned sure they don't get the powers until we get the tax side of this done," says Howard Beasley, the Treasury economist who led the team putting together the proposals. They are based on recommendations offered earlier by the President's Commission on Financial Structure and Regulation under Chairman Reed Hunt.

While much broadened, the thrifts' non-mortgage lending powers would still be somewhat curtailed. The thrifts could make none of the commercial or industrial loans that banks make, and any non-mortgage loans would be limited to a percentage of total assets.

The rationale for keeping thrifts well short of full commercial bank lending powers, Beasley said, was to ensure that people won't say savings and loans are completely out of the mortgage market and to provide for an orderly transition.

New S&L role. The chief goal of the President's package is to discourage the concept of specialized mortgage lenders. However, Beasley would not be surprised if, at a later stage, the thrifts come back to Congress for full powers to make business loans. This would obviously carry them to full commercial-bank status.

Patman concludes, with the President, that there is no future for specialization in an era when small depositors' funds are increasingly sensitive to high open-market yields. So the congressman is already recommending that "S&Ls and mutual savings banks be permitted to convert to commercial banks...



TREASURY'S BEASLEY
Drafted President's proposals

and make business and industrial... loans."

While some large S&Ls are prepared to accept the Nixon Administration's bargain, the potent lobbying force of the U.S. Savings and Loan League probably will fight to keep Regulation Q, even if it costs the industry the checking-account powers it covers to get into the new world of electronic funds transfers.

Timetable. The mutual savings banks were pleased to see that the package included a chance for them to expand from the Northeast to the rest of the country via a Nixon proposal for federal chartering. The S&Ls on the other hand, will have several chances to make their influence felt in opposition. Congress's two tax committees will have to move in tandem with the banking committees if the Nixon package is to progress. Representative Al Ullman (D., Ore.), acting for the ailing House Ways & Means Committee chairman, Wilbur Mills (D., Ark.), says the panel "will not put a stamp upon this unless other committees act. Certainly it will take into next year."

But despite the S&L opposition, gathering momentum may very well bring enactment of the Nixon concepts. As doubts rise about retaining specialized institutions, a severe credit crunch might force the issue.

Futile stand. Says a congressional source who agrees with the Nixon proposals: "With or without the protection of the Regulation Q ceilings, there's no way S&Ls can win in a drag-out battle with banks. So if a 1973-74 crunch is coming, S&Ls will be the losers." That would be one of the real tripping mechanisms to get the Nixon package moving in Congress.

This source sees the Q barrier as badly breached already, both by the four-year no-ceiling instrument and by the controversial NOW accounts in use in Massachusetts and New Hampshire. These, in effect, are interest-bearing checking accounts innovated by savings banks. The Nixon proposals would enable all institutions to offer them nationwide.

Mortgage tax credit. To restore money to the housing market and to entice non-thrift lenders to make mortgage loans, the Administration will send to Congress a tax-credit plan. The credit would be available to all taxpayers and would equal a percentage of the interest income earned on residential mortgages. To lock in mortgages as a big share of portfolios, the credit would increase according to the percentage of mortgages to total loans. It would be given only on residential loans.

The question for a Treasury Department eager to balance the budget is: How big should the credit be?

Should S&Ls get a full offset for their loss of their special bad-debt reserve?

Says the Presidential document on financial changes: "If the tax credit is set at a level which does not alter the taxes paid by thrift institutions, the overall tax subsidy to housing will be larger, since other investors will utilize the tax credit. If the overall subsidy is maintained at the current level, thrift institutions would receive less of the tax subsidy, with other holders of residential mortgages receiving the remainder."

Penalty plan. Patman's approach would involve compulsion rather than a tax subsidy. He would require lenders, including insurance companies and pension funds, to earmark a share of investments for housing. Those who didn't comply would have to deposit funds in a non-interest-bearing account with the Federal Reserve Bank of their district, with the latter investing in housing.

Congress may not choose either route. But of the two, says a government lobbyist, "I'd bet on the tax gimmick over compulsion."

—STAN WILSON
McGraw-Hill World News
Washington

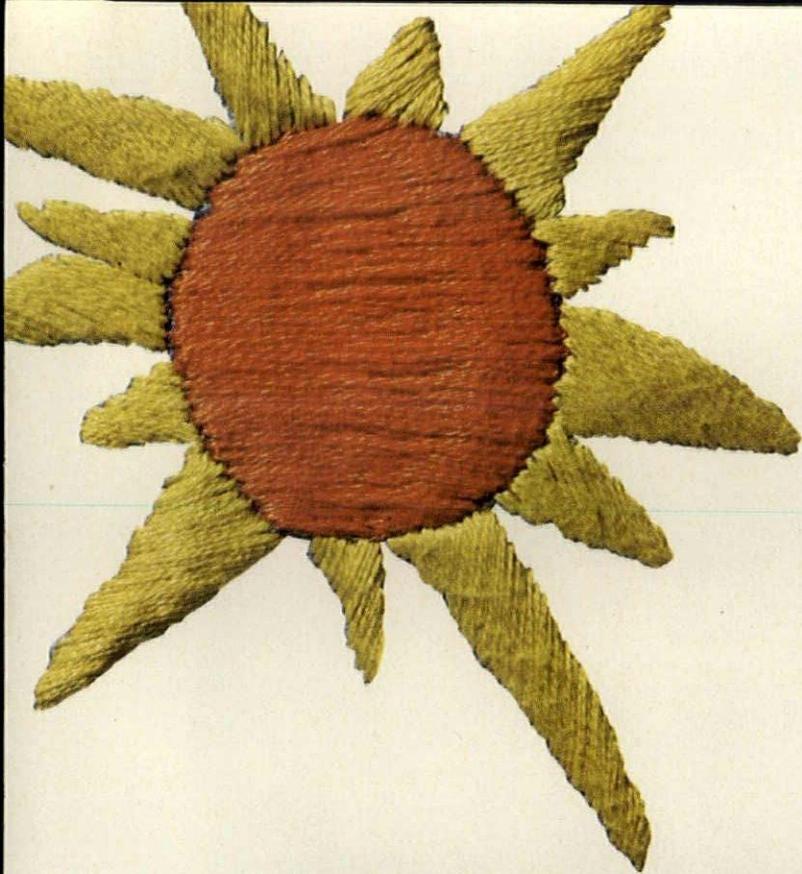


House & Home CONFERENCE ON
RESORT DEVELOPMENT OPPORTUNITIES

IN

MEXICO

ACAPULCO, NOVEMBER 12-14, PIERRE MARQUES HOTEL Y CLUB DE GOLF



House & Home CONFERENCE ON
RESORT DEVELOPMENT OPPORTUNITIES

IN
MEXICO

Why you should attend

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- Mexican contractors and developers experienced in resort development
- Mexican financial and investment leaders
- Private owners of Mexican resort land
- Mexican architects, planners and attorneys
- U.S. investors and developers interested in the Mexican market

You'll hear from these and other experts

Maxwell C. Huntoon Jr. is Managing Editor of House & Home, McGraw-Hill's marketing and management publication of housing and light construction. In addition he is the Director of the highly successful House & Home/AMR seminars on Land Use, on Condominium Marketing and soon will direct a new seminar series on Recreational Development. Mr. Huntoon is also the author of a recent book on land planning



Russ Ballard, President of Salt-Ballard Properties of Salt Lake City, began evaluating property in Mexico in 1969, received the first Mexican federal permit from the Foreign Relations Department to establish a 30-year bank trust on Mexican property in 1973, and now has 356 acres with 3½ miles of beach front in full scale development at Mazatlan, Sinaloa, Mexico.



Barry L. Bunshoff, an attorney with the firm of Cushing, Cullinan, Hancock & Rothert of San Francisco, is counsel for developers in establishing 30-year trusts for foreign beneficial holding of real property in Mexico and all aspects of the development and sale of lots and condominiums in Mexico to foreign nationals. Mr. Bunshoff served as Deputy Attorney General of the State of California in 1961-1965 specializing in land fraud prosecutions.



Lic. Alfredo Adolfo Rios Camarena is General Director of Fideicomiso Bahía de Banderas, a trust fund of the Mexican federal government responsible for assembling and preparing for resort development thousands of acres of former communal land in the Bahía de Banderas area surrounding Puerto Vallarta.

M. Sherman Eubanks is Vice President and General Manager of Crocker Land Company and Director and President of Crocker-Aetna Company. In these positions he is responsible for all forms of real estate, land acquisition and land development by the Crocker Companies including 2840 acres in Palm Springs, 2200 acres in Baja California and a condominium project in Puerto Vallarta, Mexico.



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The Mexican economy

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- How it is keyed to the U.S. dollar, keeping Mexico a bargain for U.S. and other foreign tourists
- Why it needs foreign capital
- Why it fosters high returns on investment

Robert C. Frojen is President of Economex Corporation, a general consulting and management services organization representing U.S.A. interests in Mexico and Mexican interests in the U.S.A. He is also President of Frojen Advertising Inc. which, from 1966 to 1972, served as advertising agency for the Mexican National Tourist Council, creating all tourism advertising for Mexico in the U.S.A. and Canada.



Jose Riojas is Director General of Playasol, S.A., the largest and most successful resort condominium developer in Mexico. Active in Acapulco and Puerto Vallarta and developing plans for more condominiums in Cancun, Ixtapa and Manzanillo, Playasol is selling their units to buyers from Mexico, Canada, the United States and parts of Europe. See the August issue of House & Home for more details on Playasol activities.



Lic. Jose Campillo Sainz, as Undersecretary of Industry in the federal government Department of Industry & Commerce, is the chief adviser to the President of Mexico on the role of private enterprise in that country. It is also his responsibility to regulate all foreign investment in Mexico through the administration of the new laws governing control of real estate by foreign investors.



Lic. Antonio Enriquez Savignac is Director and Special Trustee of Infratur, a trust fund of the Mexican federal government charged with the investment of 100 million dollars to develop two new tourist sites at Cancun in the Mexican Caribbean and Ixtapa on the Pacific Coast. The money will be spent creating an infrastructure including ultramodern jetports as well as power, lighting, water, drainage, sewage and telephone systems as a base for resort development.



Edward Durrell Stone, Jr. is President of Edward Durrell Stone Jr. Associates, a land planning firm based in Miami but active in many areas of the United States and Mexico. Mr. Stone was the planner for Club Mazatlan Sur Mexico, a major resort planned unit development by Salt-Ballard Properties. He has also worked on other Mexican projects not yet under construction.



The Mexican political climate

- Why Mexico has been politically stable for nearly half a century
- Why the government welcomes foreign investment and know-how
- How the government is making concessions to facilitate foreign participation in real estate development

What the Mexican government is doing right now to further resort development

- It has put \$100 million into two huge new resort areas that will be open to developers
- It is assembling hundreds of thousands more acres of coastal land to sell to developers
- It is completing new access highways to Baja California and other resort areas
- It is building jetports to open up new resort areas

The nature of today's Mexican resort market

- How big the market is now, and how much bigger it can get tomorrow
- Where the tourist—and the potential buyer—comes from, and what he wants
- How much the average tourist and condominium buyer is spending in Mexico
- How more effective merchandising techniques can expand the resort market
- How more liberal financing can expand the resort market

What the U.S. developer needs to know to operate in Mexico

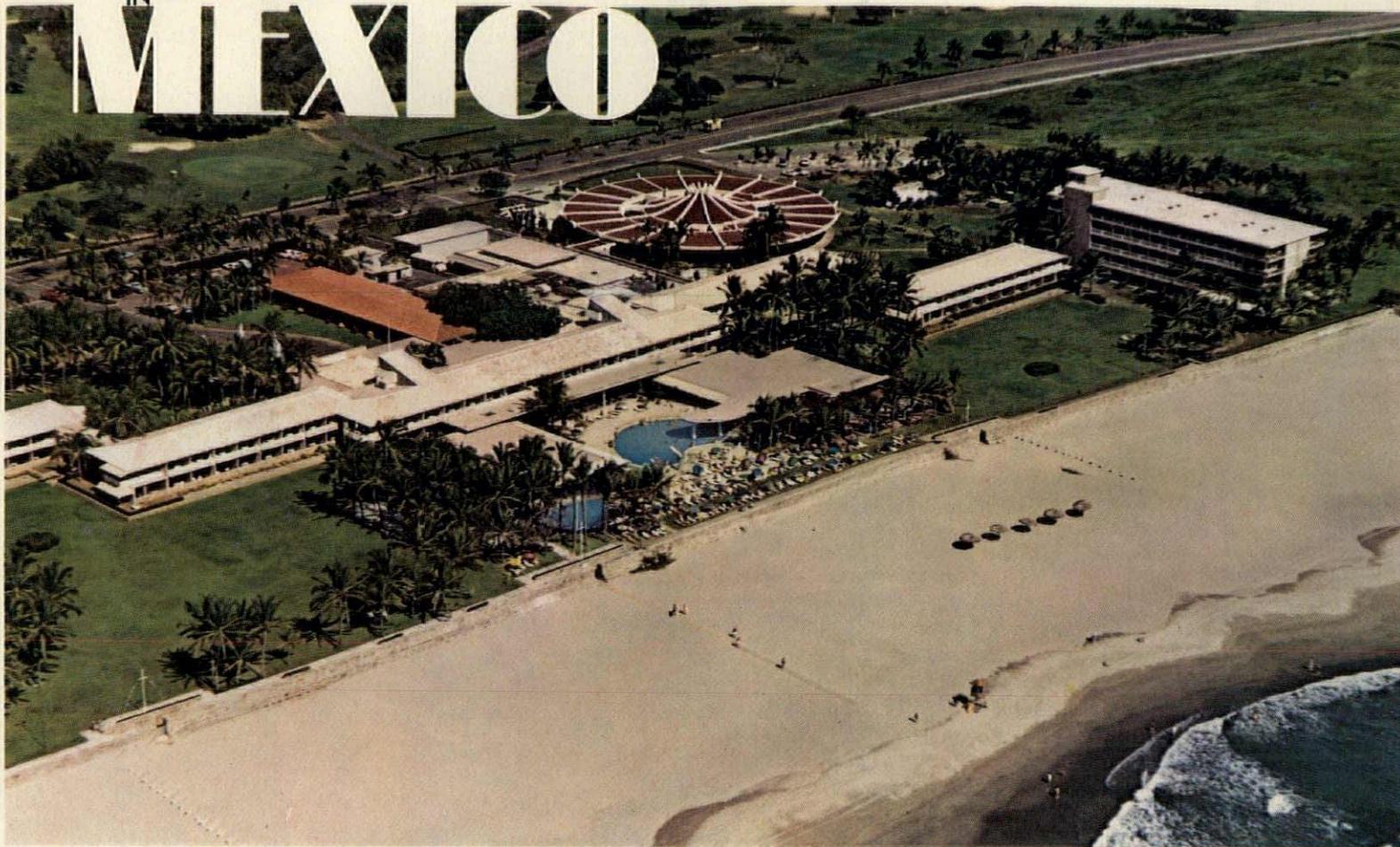
- The ground rules of joint venturing
- How to find appropriate Mexican partners
- How to deal with local legalities and red tape
- How to avoid the possible pitfalls of acquiring Mexican land
- The special roles of the architect and planner in Mexican development
- Where to find legal, architectural, planning and technical people who know the Mexican resort market
- Where to find sources of capital for Mexican resort investment

And finally

You'll have the opportunity to visit resort projects in Acapulco and in other parts of the country. Both the Mexican government and private developers will help arrange post-conference tours.

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RESORT DEVELOPMENT OPPORTUNITIES**

**IN
MEXICO**



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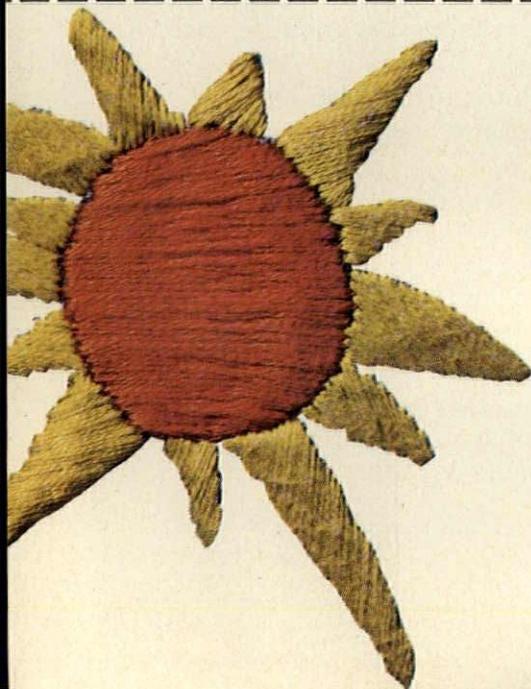
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Are subsidies to be or not to be? That is the question left by court's ruling

A federal district court has ordered Housing Secretary James T. Lynn to end his moratorium on the housing subsidy programs, upsetting all calculations as to when new subsidy money might be available.

Judge Charles R. Richey ordered Lynn to begin accepting applications for section 235 and 236 subsidies and for rent supplements—and to approve and complete processing of those projects found by the defendant (Lynn) to be qualified under the defendant's own regulations.

One week later the judge ordered the Farmers Home Administration to resume its low-interest loan program for poor families. It had been suspended, along with the housing subsidy programs, last January.

Until Judge Richey ruled that the suspension of subsidies was illegal and unconstitutional, Washington's experts were almost unanimous in guessing that a replacement program—or new versions of the existing 235 and 236 programs—wouldn't be in place before next summer.

Best guesses. Given the political realities, the controversy swirling around the subsidized housing programs and the complexities of drafting new legislation, congressional leaders and industry lobbyists expected the 18-month moratorium that began last January to run its course.

(For a projection of the impact of the moratorium on subsidized starts, see story page 12.)

Now, if the government should eventually lose its appeals in the court case, Lynn might find himself compelled to re-start the existing programs before new legislation is enacted.

Plea of a stay. Immediately after the Richey decision, the Department of Justice moved for a stay of the judge's order, which gave the government until late September to appeal. One observer speculated it might be possible for some sort of resolution of the case by January 1.

Secretary Lynn, who asked the Justice Department to appeal, said of the Richey decision:

"Reinstating programs that we know involve substantial inequities and waste is not in the best interest of either the people we want to help obtain housing or the taxpayers."



STANJENNINGS

SECRETARY LYNN

He may have to re-start...



DELANNERS

EX-SECRETARY ROMNEY

... what he ordered stopped

The Secretary also said that, in any event, he would not reinstate the subsidy programs be-

fore presenting the Administration's own housing proposals September 7.

Nixon financial reforms in capsule

These are the seven major changes in the nation's financial structure as proposed by President Nixon in his message August 3. (*An analysis of the President's program appears on page 4.*)

- "Interest ceilings on time and savings deposits should be removed over a 5½ year period."
- "Investment and lending alternatives for federally chartered thrift institutions and banks should be expanded."
- "Federal charters for stock savings and loan institutions and mutual savings banks should be permitted."
- "Credit unions should be provided with greater access to funds."
- "FHA and VA interest ceilings should be removed." (It was also urged that states end their usury ceilings.)
- "The tax structure of banks and thrift institutions should be modified," and provision should be made for an income tax credit tied to an institution's investment in mortgages.
- "Expanded deposit services for consumers by federally chartered thrift institutions and banks should be allowed."

People in housing

Deanes break with Westinghouse

JIM DEANE and son BILL and Westinghouse Electric Corp., formerly building together in California as Deane & Deane Inc., split up to form separate corporations.

The Deanes and ROBERT HARDESTY set up Deane Projects Inc. as a homebuilder in their old headquarters town of Half Moon Bay. Bill is president and Jim, former partner of brother BEN DEANE in older Deane Brothers Inc. operation, is chairman. Company buys \$40 million Deane & Deane projects. Westinghouse takes over Deane & Deane's 8,000-acre holdings in Half Moon Bay under new Half Moon Bay Properties Inc., with CLARENCE R. GRAHAM JR. as operating officer. He had been Deane & Deane's senior veep.

New venture. Three execs leave National Homes to form

Jonathan Group, a developer and builder proposing to start six Midwestern residential projects within a year. Principals: J. TIMOTHY MCGINLEY, formerly corporate executive vice president at National's headquarters in Lafayette, Ind.; PHIL MONTANUS, who was president of National Homes Construction Corp.; THOMAS D. RUSH, the construction unit's former executive VP.

DIED: WILLIAM RALPH MASON, president of the Irvine Co. during its transition from a farming operation to urban empire, of a heart attack at 54 at his Corona del Mar home in California. The city of Irvine was incorporated in 1971 as Mason's dream come true. It remains his monument.

—E.W.R.

Farm agency. The Farmers Home Administration did not say immediately whether it would appeal the decision on its rural loan program.

The HUD budget has \$431 million in blocked subsidy funds that are available for commitment.

The housing decision is the latest of a dozen defeats for the Nixon Administration on the impoundment issue. Other cases involved funds for highways, water and sewer construction, education, health services, youth employment and anti-poverty programs.

Plaintiffs. The housing suit was filed in May by a group including the states of Maine and Pennsylvania; Fairfax County, Va.; several local nonprofit housing sponsors; and the National Committee Against Discrimination in Housing.

The subsidy programs accounted for about a million starts during Secretary George Romney's four-year tour at HUD. The rush to meet the ten-year housing goals enacted in 1968—including 6 million subsidized units—helped to push total housing starts last year to an all-time record of 2.4 million.

NAHB's plan. Immediate revival of the subsidy programs was the key recommendation of 14 proposals made to the President last month by the executive committee of the National Association of Homebuilders. Among the NAHB's other suggestions:

- A temporary income tax surcharge.
- Federal cutbacks in military and space spending to accommodate domestic funding.
- Revocation of the government regulatory groups' actions that permitted banks and thrift institutions to pay higher interest rates to depositors.
- Suspension of the business investment tax credit in times of credit stringency.
- Imposition of credit controls to arrest the "alarming" growth in short-term consumer installment credit.
- An income tax exemption for the first \$750 of interest earned by consumers on savings.
- "Leadership action" by the Secretary of Housing to provide "adequate" mortgage money at reasonable interest rates.—D.L.

HOW TO TAKE A AND PUT IT WHE



BEAUTIFUL VIEW RE YOU WANT IT



A choice of views is getting to be a luxury. We at Libbey-Owens-Ford have a few ideas about conserving the ones we have. Bring them indoors. Just pick the appropriate wall and do it with mirrors.

This dramatic mirrored fireplace wall was made from beveled mirrors cut to create an elegant design... and one that provides two lovely views of the outdoor scene for the price of one. The mirrored fireplace facing also adds to the feeling of spaciousness.

With rising construction costs becoming an increasing limitation to the size and detail that go into today's homes, solutions like this are a more and more important way to build in size and beauty.

For more information on mirror products, write Bill Maxwell, Libbey-Owens-Ford Company, 811 Madison Ave., Toledo, Ohio 43695.

LOF

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Congress hears that freeze is costing builders half-million subsidy starts

The moratorium on subsidized housing will have caused the loss of 500,000 starts by mid-1975.

That's the conclusion of a report to the House Appropriations Committee by Henry B. Schechter of the Congressional Research Service of the Library of Congress. It was used by committee members during sharp questioning of Housing Secretary James T. Lynn when he appeared before them to defend the budget request for his Department of Housing and Urban Development.

The report was the first official analysis and projection of the impact of the moratorium from a government source. It was requested by Rhode Island Democrat Robert O. Tiernan, who has been in Congress since 1967 but just this year moved onto the Appropriations Committee.

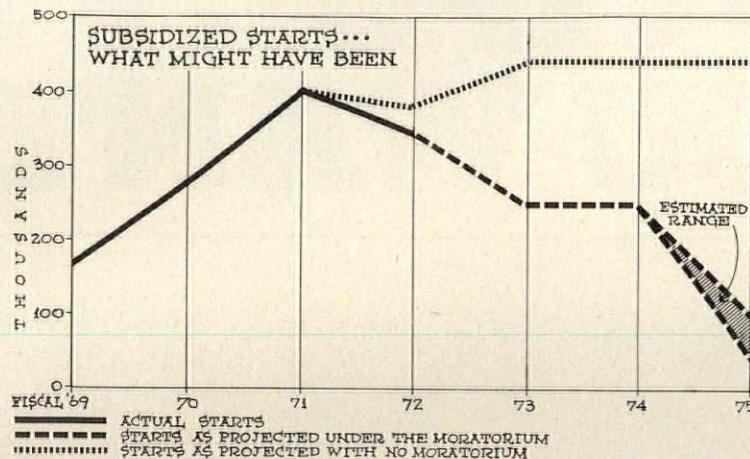
Schechter's forecast was used in a slightly different version during the House debate over HUD's \$3 billion budget. The forecast was inserted in the *Congressional Record* by Chairman William A. Barrett (D, Pa.) of the housing subcommittee.

Legislation. Schechter bases his estimate on what the housing legislators in both House and Senate believe to be the outlook for new subsidy legislation.

Assuming that Lynn and President Nixon submit their housing recommendations to Congress by the September 7 deadline they set for themselves, it is unrealistic to assume that both houses of Congress could pass such legislation before the spring of 1974. Even with the most expeditious handling of differ bills by the conferees, Schechter assumes that "it might be within a month or two of the end of fiscal 1974" (May 1 or June 1) before Congress could pass some modified version of the Administration's recommendations or a modified version of the subsidy programs that were frozen last January.

18-month freeze. Even if legislation were passed earlier in 1974, Schechter notes that it would take some time for HUD to crank up new regulations and for field offices to process applications—assuming Congress promptly voted appropriations to fund the new programs.

All this makes clear, Schechter says, that the moratorium



Projection of starts as they might have been is based on President Nixon's housing goals report of June 1972 and extrapolation by Congressional Research Service. Estimates of what starts will be under freeze were made by H&H and by the research service.

announced in January 1972 is virtually certain to run its 18-month course, assuring "the virtual depletion of the preconstruction pipeline in almost all the subsidized housing programs." The result, Schechter says, would bring subsidized

housing starts in fiscal 1975—which begins July 1, 1974—"down to between 50,000 and 100,000 units." For the two fiscal years 1974 and 1975 subsidized starts "will total about 300,000 to 400,000 units," the report states.



LAWYER TOOTE
She'll police civil rights



ARCHITECT MEEKER
He'll do community planning

Two appointments fill the HUD team

President Nixon has filled the last of the vacancies created in the upper echelons at HUD when the President swept out George Romney and his aides after last fall's election.

David O. Meeker, 49-year-old deputy mayor of Indianapolis, (whose old boss, Raymond Lugar, is President Nixon's favorite mayor) was appointed as assistant secretary for community planning and development. An architect, he joined the Indianapolis government in 1968.

Rights post. The new assistant secretary for equal opportunity is Gloria Toote, a graduate of Columbia University's school of law. She has worked for *Time* magazine and was a practicing lawyer with Morris Ernst's New York civil-liberties law firm (Greenbaum, Wolff & Ernst). She

was an aide to Governor Nelson Rockefeller of New York and, before her shift to HUD, was assistant director of ACTION, the agency that promotes the Administration's campaigns to enlist volunteers for social programs.

New town lender. Alberto F. Trevino Jr., 41, was named to be the first full-time general manager of HUD's New Communities Corp., which administers the new-communities loan guaranties. He was president of a Laguna Beach, Calif. urban development and planning organization, and had been a planner for the Irvine Co. and the General Electric Co. During the Romney regime, Assistant Secretary Sam Jackson also served as general manager of the New Communities Corp. —D.L.

The losses. To project the shortfall of 500,000 units over a two-year period, Schechter suggests that the Administration, if it had kept on doing its best to meet the goals of the 1968 Housing Act, might have kept subsidized housing starts at 437,000 a year. That was the level estimated for fiscal 1973 in the President's fourth annual report on housing goals, issued in June 1972. A projection of this rate for the fiscal 1974-75 period "would imply the production of 875,000 units, or about 500,000 more than are likely to be produced" Schechter's report states. (See chart.)

Secretary Lynn disputed the conclusions, saying he couldn't tell how many subsidized housing starts there will be in the fiscal years 1974 and 1975 "without knowing what our approaches are going to be for those years..." He also contended that the high level of subsidized starts would not have been continued even if there had been no moratorium, since the department began enforcing "quality processing" and other procedures to tighten up on approvals of applications for subsidized housing.

Delay. At a mid-July hearing before the Senate Housing subcommittee, Lynn again asserted under questioning from several senators that he would "resist strongly" any pressures to reinstate the suspended programs before the Administration's September proposals.

Carl Kamp leaves Home Loan Board

Carl O. Kamp Jr. resigned from the Federal Home Loan Bank Board at the end of July to return to private business.

Kamp had been acting chairman of the S&L regulatory agency since December 1972, when Chairman Preston Martin resigned. Kamp's own four-year term would have expired in June 1975. He was a St. Louis savings and loan executive when first appointed to the FHLBB in 1969. He is a Republican.

The new chairman of the board is Thomas R. Bomar, a California Republican who took office on June 7. Bomar had been the executive vice president of the Federal Home Mortgage Corporation [News, May].



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prefer.**

**Here's what
they told us.**

An independent research firm found that an overwhelming majority of your customers prefer wood panel doors over flush doors for the entrances to their homes. And that growing numbers prefer wood panel for interior doors, too.

In three surveys conducted for Ponderosa Pine Woodwork Association in 1968, 1970 and 1972, consumers in 39 states reported what they want most from doors, what kind of door they prefer—wood panel or flush—and why. These consumers

were selected on a random basis from a mail panel based on the latest census data. With over 80% response, the results of these surveys are applicable to all 53 million households in the 39 states.

63% prefer wood panel doors for front entrances.

And 62% prefer panel for rear and other entrance doors. Even back in 1968, consumers preferred wood panel doors by a 23-point margin over flush, and now the spread has grown to 35 points for front doors and from a 21-point to a 38-point lead for other entrance doors.

% who prefer wood panel or flush doors

	1968	1970	1972
Front, main entrance			
Panel	59%	64%	63%
Flush	36	26	28
No preference	5	10	9
Rear, other entrance			
Panel	54%	54%	62%
Flush	33	26	24
No preference	13	20	14

Appearance and durability are what consumers want most from doors.

In all three surveys, consumers ranked the factors most important to them in selecting doors. Each time they said appearance was most important and durability second in importance.

They rate wood panel doors best for both appearance and durability.

Consumers rate panel doors best by wide margins for giving them the qualities they said are



most important. And this trend is continuing upward for panel doors at the expense of flush doors.

% rating panel, flush doors very attractive

	1968	1970	1972
Panel doors	69%	75%	77%
Flush doors	59	53	55

% rating panel, flush doors very durable

	1968	1970	1972
Panel doors	69%	69%	73%
Flush doors	55	57	53

(Note: The same respondent could rate both panel and flush doors so the totals may add up to more than 100%).

Preferences are shifting toward wood panel for interior doors, too.

% who prefer panel or flush for interiors

	1968	1970	1972
Panel doors	31%	32%	34%
Flush doors	60	47	49
No preference	9	21	17

In the five years since 1968, preference for flush doors has fallen while panel door preference is rising. One explanation may be that as consumers look to beautify the interior of their homes, their preference increases for the kind of doors they rank highest in appearance—wood panel doors.

Are you giving your customers what they want?

Before you install doors in your houses or apartments, consider the results of these three surveys. Consumers say appearance and durability are the qualities they want most from their doors. And they rate wood panel doors better than flush for both appearance and durability. A large majority

already prefers wood panel doors for entrances. And their preferences are shifting to panel doors for inside their homes, too.

Are you giving your customers what they want?

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We want you to have a report on the major findings of five years and \$40,000 worth of research: "The consumer of the 70's: a report on his housing plans and preferences." It tells you your customers' plans for moving and remodeling, as well as their preferences for doors and windows. It's an important study that can help you make your houses and apartments even more appealing to today's home buyer.

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Anti-growth leaders finding subtle new ways to tell builders: No housing

The controlled-growth movement is spreading across the country like crabgrass across the suburban lawn. It has made zoning a more explosive issue than at any time since the state's authority to control land use was upheld by the Supreme Court 47 years ago.

As land-use lawyer Richard F. Babcock pointed out at a recent seminar sponsored by the National Association of Home Builders, controlled growth is an issue that makes political bedfellows of the Ford Motor Co. and the National Association for the Advancement of Colored People—and the Connecticut Home Builders and the American Civil Liberties Union.

The movement is called no-growth by its opponents. But whatever the label, the movement is the result of a popular rebellion led mostly by suburban homeowners and environmentalists. They find allies where they can to fight what they consider too rapid, erratic and costly development made possible—they say—by uncontrolled and corrupt local zoning practices. The culprits, they contend, are local politicians supported by real estate interests and builders who have long profited from the idea that economic growth *per se*, and the population growth that accompanies it, are good.

The leaders. The controlled-growth campaign bares its cutting edge in such cities as Boulder, Colo.; Boca Raton, Fla.; and Petaluma, Calif. Typically, the controlled-growth slogan rallies several varieties of middle- or upper-class militants: those fighting higher taxes, or highway building, or air and water pollution or the intrusion of housing for the poor.

These allies usually unite on the issue of controlling population density. They benefit from the broad issues of consumerism, protection of the environment and the quality of life. Legally, they benefit from crucial decisions of state courts that have been left standing by the Supreme Court's refusal to hear an appeal.

Building slowdown. The result is to slow housing construction through arrangements that tie development either to the rate at which capital im-

provements and public facilities become available or to flat limits on the number of housing units that can be built.

This explicit control on the rate of development is a "new type of isolationism," according to the NAHB's President George Martin, whose organization has created a fund of \$200,000 to help local builders fight such ordinances in the courts.

The controlled-growth campaign gained its latest advantage last November. The Supreme Court refused to consider a case that, in effect, challenged the development ordinance legislated by the town of Ramapo, N.Y., only 30 miles northwest of New York City.

The Ramapo plan. The heart of the Ramapo scheme is its plan scheduling capital improvements (sewerage, drainage, parks, roads and firehouses) over 18 years. New housing can be built only with a special permit, regardless of the residential zoning of the land. The permit is dependent on whether the housing can be served by a specified level of these community facilities.

The Ramapo decision, says Herbert M. Franklin, a Washington attorney who has specialized in exclusionary zoning, is turning community long-range plans, which have rarely had legal effect, into effective regulatory mechanisms to regulate housing starts and growth.

"This decision now confers substantial legal authority on such plans as the basis for development timing control," he says in a Potomac Institute pamphlet, "Controlling Urban Growth—But for Whom?" The question, he says, "is whether a locality—and by extension every locality—may use such a power primarily to benefit the affluent. This is what Ramapo has done."

(For a brief review of Controlling Urban Growth, see Literature section, page 176.)

Petaluma's controls. Other localities are already well along the Ramapo route.

Petaluma limits housing starts to 500 a year. The key to control is a citizens' review board that rates the applications by builders who apply for a share of the 500 units. The board screens the applications for conformity to the town plan. Then

it checks the proposed units against the existing infrastructure—schools, sewers, roads, parks and any such facilities that the builder proposes to supply at his expense.

The builder gets a brief hearing—after which the citizens' board makes its recommendations to the town's official planning board. In real life, according to critics, what the citizens' board recommends, the planning board adopts. Petaluma's ordinance is being challenged in court by builders.

Boca Raton's limits. In Boca Raton, Fla., north of Miami, the NAHB is taking steps to support a court case against the city's out-and-out cap, or ceiling, on growth and population.

The Boca Raton ordinance fixes 40,000 as the maximum number of housing units for the city, ever. There are now about 19,000 and—prior to the adoption of the cap—the city was zoned for about 62,000 units. The net effect of the cap is to stop population growth at about 100,000.

Builder victories. In other states, however, court decisions have gone against local attempts at exclusionary zoning. In Pennsylvania, for instance, the state supreme court has ruled against four-acre zoning, holding that zoning can't be used "to avoid the increased responsibilities and economic burdens which time and natural growth invariably bring." In another case, the court reiterated that sewerage problems couldn't be used to excuse exclusionary zoning.

Similarly, New Jersey court decisions have overridden such zoning, although observers are awaiting the decision of the state supreme court in a case involving Madison Township. This case, they suggest, may mark a turnabout.

New states' rights. Alongside the trend toward controlled-growth ordinances by localities is a movement among state governments to take back land use or zoning decisions that they had left to the localities for half a century. Vermont, Florida and California are among the states which have enacted such laws. In California a voters' initiative put the development of 1,200 miles of coastal land under state regulation.

In such cases, as Richard Babcock points out, the people feared that development was spoiling a principal asset and they felt that only state intervention could provide control. In some instances, however, the motivation for state action—as in Massachusetts—was that only the state could act against local pressure and thus insure that housing for poor families would be built.

Proponents of controlled growth in Fairfax County, Virginia are wary of a law they expect to clear the legislature and create a governor-appointed board with authority to override local zoning. Audrey Moore, a county supervisor who wants to cut county growth "in half, hopefully, over the next five years," says that the developers who are losing zoning battles at the county level will get what they want from such a board. "Those decisions are much easier at the state level," she says.

Land-use bill. The trend toward more state control is fostered by the new federal land-use legislation that has passed the Senate with the Nixon Administration backing. The bill (S 268), sponsored by Senator Henry Jackson (D., Wash.), provides cash grants for states that create statewide land-use controls to meet federal standards and penalties for states that don't measure up.

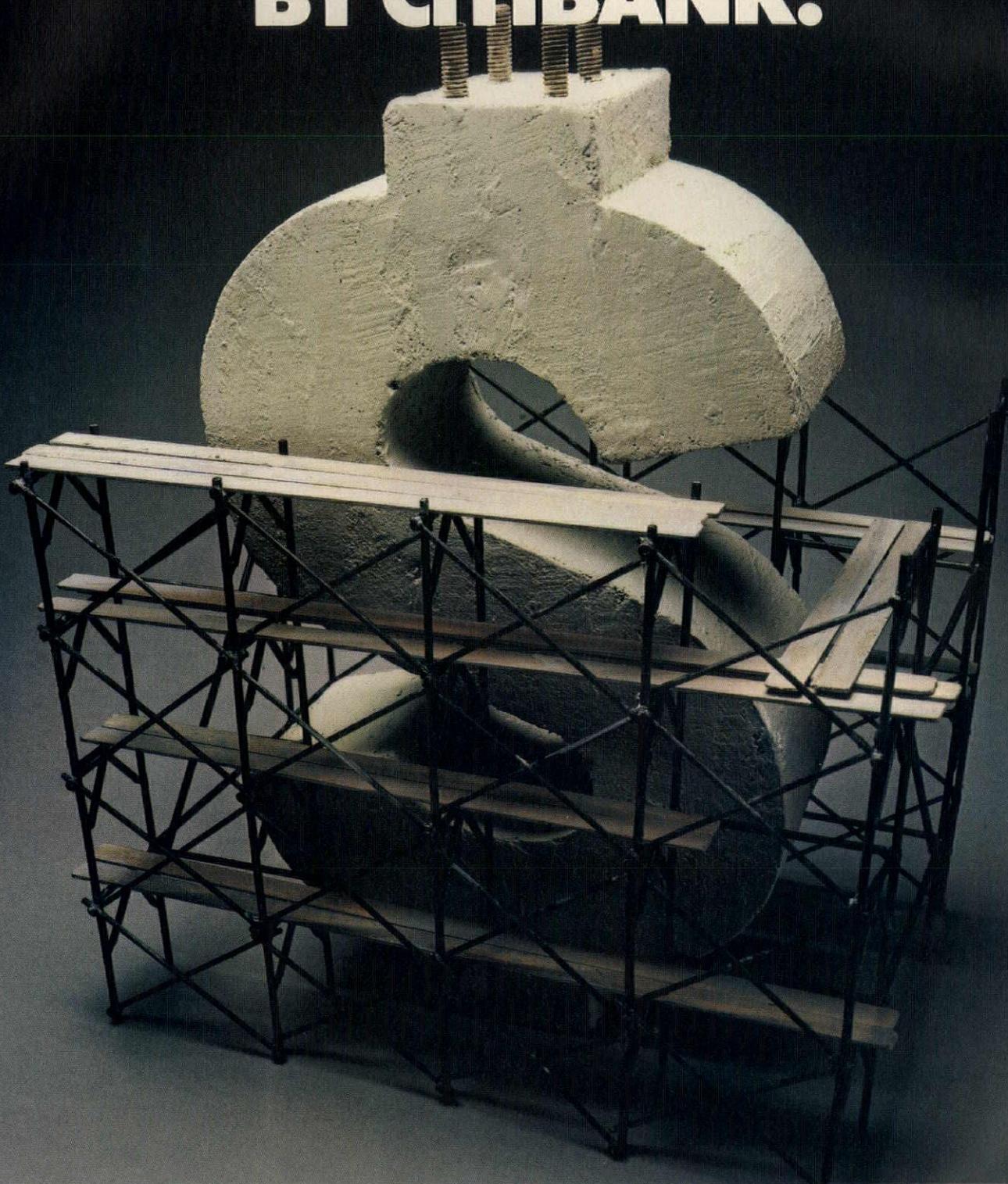
The Jackson bill requires that each state land-use plan set guidelines for approval of developments of 50 housing units or more lying ten miles or more outside metropolitan areas. The state plans must assure that no project exceeds the capacity of sewers and water systems, and such plans must also include provision for certification of the financial capability of developers.

An underlying trend of the court decisions and the land use legislation—which seems likely to be passed by this 93rd Congress—is to arm the planning agencies of both state and local governments with power to force compliance with plans.

As the spokesman for one planning group puts it: "Ramapo is very much the wave of the future."

—DON LOOMIS
McGraw-Hill World News,
Washington

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Merchant-built houses—single-family detached houses for sale or rent including vacation and year-round, promotional and zero-lot-line houses and remodelings.*†

Multifamily housing—multifamily housing includes single apartment buildings, multi-building projects, PUDs, attached housing such as townhouses, duplexes, triplexes, fourplexes and rehabilitations.*†

†all categories include modular housing

*remodelings must take in the whole structure. Custom additions to a detached house must be tied into original design of house. No single room or single apartment remodelings are admissible. Redecorations are not admissible. Face-liftings must be structural. Photos of both before and after construction will be required for judging.

Registration date and fee:

Entry fee: \$20 per entry. Deadline: postmarked by midnight, November 16, 1973.

Submission of material:

On receipt of registration form and fee, entrant will be sent a spiral binder—color-coded to the project's category—

which is to be filled with sufficient black and white photographs and plans to illustrate the design, any unusual problems or solutions. (Detailed instructions for preparation of entries will be included in the binders mailed to entrants.)

Judging:

Will be held on March 12 and 13, 1974 at the American Institute of Architects headquarters in Washington, D.C. The panel will consist of outstanding architects, housing industry leaders and editors of *American Home* and *House & Home*. The number of awards to be presented shall be solely determined by the judges.

Winners:

Will be notified by telegram immediately after judging. Award certificates will be presented and photos of winning projects will be displayed during the 106th annual convention of the American Institute of Architects, May 19-23, 1974 in Washington, D.C. Winners will be expected to prepare and ship to the AIA convention—at their own expense—a project display board representing the winning entry. Instructions for these boards will be forwarded to winners. Winning binders and display boards will not be returned to entrants.

Conditions:

Entries must be approved by all parties concerned. All material accompanying entries must be free from copyright restrictions and any other restrictions that would prohibit publication of such material by *House & Home* or *American Home* magazines. *House & Home* and *American Home* shall have the right to publish all material submitted and shall have the right to photograph for publication any entry project.

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Check appropriate company category(ies) Builder Architect Developer Owner

Mail entries to: Dept. HFBL, House & Home, McGraw-Hill, 41st Floor, 1221 Avenue of the Americas, New York, N.Y. 10020 by midnight, November 16, 1973.

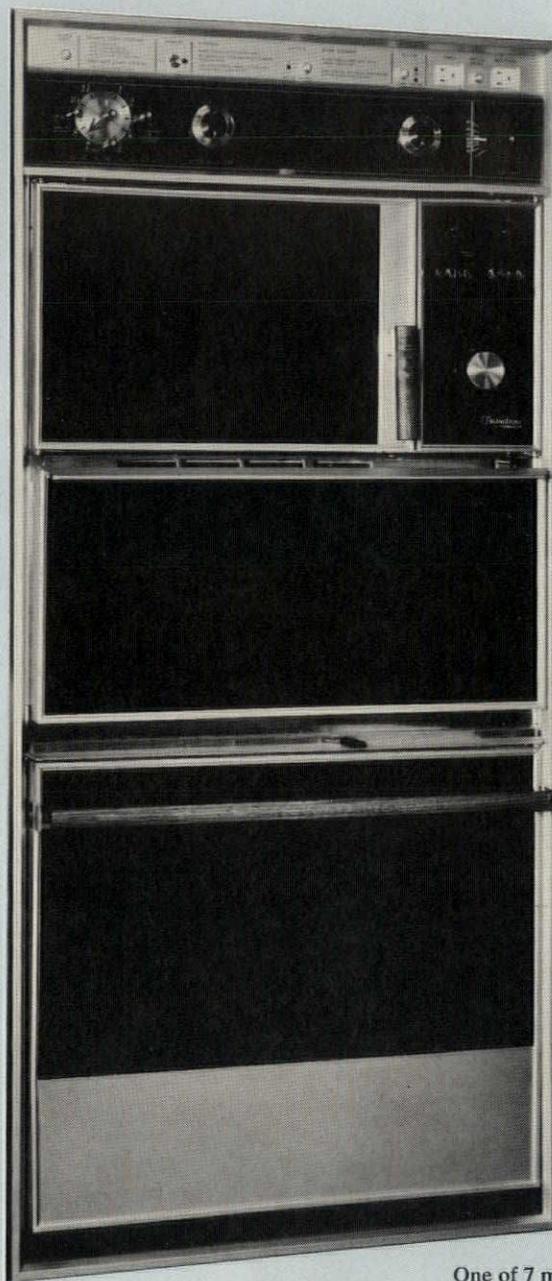
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Have complaints brought better builder performance? Buyers say yes and no

They might be called the angry home buyers from everywhere.

Their number is legion, and they have lately been assailing most of the nation's biggest builders on counts ranging from poor workmanship to fraudulent sales practices.

Encouraged by their newspapers' exposés of shoddy housing, buyers in Chicago, the nation's most competitive homebuilding market, have been particularly vociferous. The Larwin Group of Los Angeles settled out of court on an \$11.7 million lawsuit by outraged owners in Larwin's Greenbrook Country subdivision, west of Chicago.

Targets. Other big names in building—Centex, Kaufman & Broad and Tekton—have also come under considerable fire.

The complaints prompted builders to consider new warranty programs and to staff up with customer-service people. Many builders now claim they are on top of both construction and sales problems.

Buyers' poll. What do the buyers think of all this?

Has the builder's performance truly improved, or are the improvements mere sham?

A penetrating survey was conducted in several of Chicago's new subdivisions, and the buyers' appraisals follow.

Most buyers give the builders some credit for better buyer treatment, and some even say they have been swayed to states of reasonable contentment. There are some, however, that have moved out of their houses and that have scant faith left in homebuilders in general.

William Doppke, 31, a two-year resident in K&B's Sugarbrook subdivision, claims things are better today in his \$23,000 home—but not perfect.

"I would say I'm still not generally satisfied," he says.

While Doppke claims he's not prejudiced against K&B and plans to stay in his home for five to six years, he contends that "Quite a few people have developed a strong dislike for K&B."

A change at K&B. Problems Doppke has had to deal with since his move-in have included a cold family room. "There were several other homes the same way—somebody forgot to put in the insulation."

But Doppke concedes that



Abandoned house in Chicago's new Forest Heights tract looked like this last year. Columnist Al Jedlicka spotlighted such cases in "Shoddy Homes" series in *Chicago Daily News* in March '72. Some buyers say builders' performance has improved.

K&B has changed. "At one time you fought with everybody and got no response. Now we've got names and numbers of people in the field, and response is improving."

'Best in Illinois.' Gordon Line, a townhouse owner in Kaufman & Broad's \$29,000-to-\$42,000 Barrington Square development northwest of Chicago, says:

"We as owners have become more realistic. We fired the professional manager in charge of maintenance, and now three of us are putting in 70 hours a week doing it ourselves.

"It was a real rip-off in the past. K&B improved by bringing new people into the company. The old-style builder said, 'To hell with the buyer.' Now we've got service representatives on site. I think that K&B is backing its commitments now. I've looked at all the models, and I still think they're the best in Illinois."

Centex buyers. Richard and Ann Lietz of Bolingbrook, Ill., have a highly positive attitude toward their new \$35,000 Centex townhouse. They say that some builder tasks were not completed before their move-in, but Mrs. Lietz adds: "You bet your sweet life they're going to get those things done. I'm a very optimistic person." She notes that workmen are now laying the carpeting that hadn't been laid, painting garage doors and installing screens and door stops.

Workmanship. Tom and Diane Sapyta are "pretty well pleased" with their \$28,000-\$29,000 Centex townhouse but are somewhat cynical about most products home builders turn out. Says Sapyta: "There is no workmanship. You could buy a \$100,000 house and not get good workmanship."

The major problem he had—which he says was more severe for his neighbors—was lack of soundproofing between townhouses. He says that the sales models had what he calls a double wall between units, and he took it for granted that the actual units would be similarly divided. They weren't.

"Some people can hear their neighbors' light switches," he insists.

Janis and William Woodburn also found some problems when they moved into their \$29,000 Centex single-family home in August of 1972. The problems included carpeting that needed restretching, warped vanity doors and a broken utility room window.

Mrs. Woodburn says she's quite happy, however, and states that Centex has been responsive to her problems. She says they were encouraged by Centex to write at regular intervals during the warranty period noting any problems. So far, all have been corrected in a reasonable time.

Larwin critic. Raymond Fligg of Schaumburg, Ill., has had experience with two builders—Larwin and the Lancer Corp., a smaller builder. Fligg was one of the prime organizers of the anti-Larwin coalition that instigated and won the Greenbrook Country suit.

"We noticed things wrong the first day we moved in," said Fligg, who bought his Larwin home while it was under construction. He says he saw only sales models and, to inspect for-sale houses, he had to sneak onto construction sites. He was barred from entering openly.

Fligg's complaints included a peeling driveway, faulty weather stripping on the front door,

poorly installed insulation and a ½-inch concrete crack that moved across the whole garage and into the house. He says Larwin refused to repair the crack and told him cracks in concrete were normal.

'90% frauds.' "They gave us two numbers to call, one for emergencies and the other for regular service," Fligg says. "We'd call them and nothing would happen.

"The closet was out of plumb. We complained, and one of their really sincere people said to put in some new paneling and send the bill to Larwin. Like a fool, I bought the most expensive paneling. I sent the company the bill, but they never paid. The man who advised us quit."

Fligg says that he has very few complaints about his Lancer home but he warns: "I haven't seen all builders but I can say no matter what the builder tells you, remember he's looking for the stupidest guy in town, because 90% of them turn out to be frauds. When I decided to leave Larwin I looked at more damned projects of more builders and they're just like Larwin."

Larwin defender. Mrs. Pat Lynch, who still lives in the Larwin's Hannover Park development, praises the company. She says Larwin had underpinned sinking homes, replaced everything destroyed and turned the area "into a very nice place" since the suit.

"I've heard that Larwin upped the grade of concrete for newer homes in the area—and no one's complaining about that," she said.

Keeping cool. Suzanne and Robert Bermant of Deerfield, Ill., say that the builder of their \$55,000 home, Chesterfield Builders of Deerfield, went so far as to give buyers a list of sub-contractors and their telephone numbers.

Mrs. Berman says she's had complaints but, over all, is happy. She has heard that owners get better results from a builder by keeping calm. "We heard that if you get obnoxious with them, they're not so quick to help."

Other home owners approve of obnoxiousness, however, as the only reason why today's new home owner is getting a better deal than he did six months ago.

—MIKE KOLBENSCHLAG
McGraw-Hill News, Chicago

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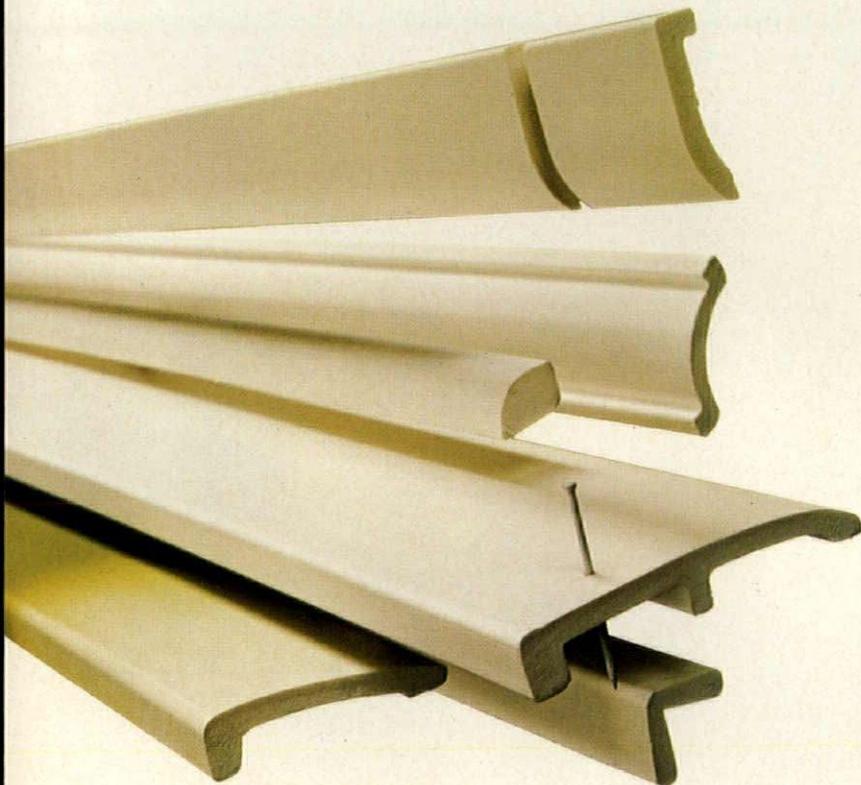
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A gypsum fire and sound control system that saves you up to \$36 per thousand square feet of wall area!

Georgia-Pacific's gypsum system for fire and sound control gives you a one-hour fire rating (U.L. Design ULU312), and an STC of 45. And it costs \$36 per thousand square feet of wall area less than using a comparable wood fiber sound control system. It saves you installation costs too, because it's so easy to install.



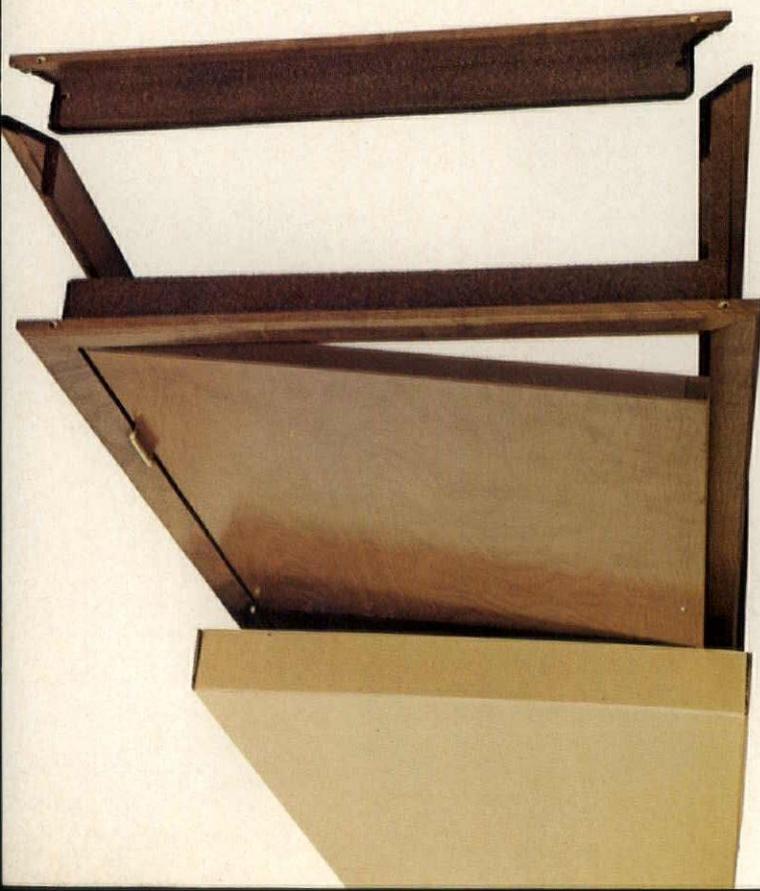
gline!

Doors that are prefinished and pre-hung!

Georgia-Pacific's Vinyl Shield® pre-hung doors are already finished. No painting or staining, so you save installation costs. And there are tough vinyl surfaces on both the door and the jamb/casing so dirt and stains wipe clean quickly. Easily. Units are available in woodgrain patterns, plus new solid white.

Real hardwood paneling* at an imitation price!

New Renaissance™ paneling. It's the new antique look. At old-fashioned prices. Renaissance comes in six warm shades of real hardwood face veneers. Georgia-Pacific makes other kinds of paneling, too. In fact, paneling in every style. Every price range. For any type of home.



* Simulated antique finish plywood 1/4".

Imagine the time and money you'll save. Then call us!

Georgia-Pacific

The Growth Company
Portland, Oregon 97204



CIRCLE 23 ON READER SERVICE CARD

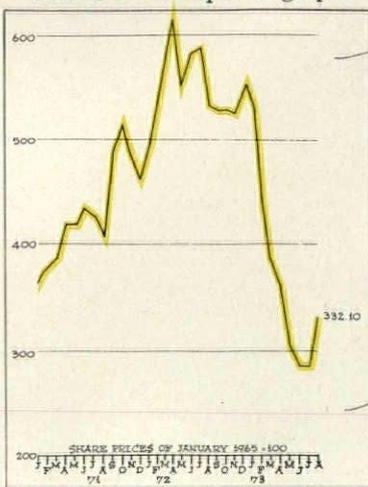
Mobile homes haul housing stocks upward for first strong gain of the year

The housing industry's stocks joined the midsummer rally on the Big Board and the HOUSE & HOME index of 25 issues surged to 332.10, from 285.43, in the month ended August 8.

It was the first real advance for the housing list this year.

The mobile-home stocks led the way with a gain of 44% on the month.

Here's the composite graph.



Here's how the five companies in each group performed.

	Aug. '72	July '73	Aug. '73
Builders	470	245	283
Land develop.	445	149	153
Mortgage cos.	1,216	1,031	1,183
Mobile homes	1,752	460	662
S&Ls	181	111	119

Company	Aug. 8 Bid/Close	Chng. Prev. Month
BUILDING		
Alodex.....OT	1 1/4	+ 1/4
AVCO Community Devl. PC	1 1/4	- 3/8
American Cent. Homes OT	6 1/8	+ 1
American Housing Systems OT	2 1/2	.....
American Urban Corp. OT	3 3/8	+ 3/8
Bramalea Cons. (Can.)-d	OT	5 + 5/8
Building Systems Inc. OT	1	- 3/8
Campanelli Ind. OT	5	+ 3/4
(New America Ind.)	OT	37
Capital Divers. (Can.)-d	OT	37
*Centex Corp. NY	15 1/2	+ 4 1/4
Cenvill Communities AM	11 3/4	+ 1
Cheezem Dev. Corp. OT	3 1/2	.....
Christiana Cos. AM	2 1/4	- 1/8
Cons. Bldg. (Can.) TR	2.80	+ .05
Dev. Corp. Amer. AM	20 1/2	+ 5 3/4
Dev. Int. Corp.-d OT	1 1/8	+ 3/4
Edwards Indus. OT	5 1/2	- 1 1/4
First Builders Bancorp. OT	2 1/2	.....
First Hartford Corp.-d AM	3 3/8	+ 1/8
FPA Corp.-d AM	8 1/2	+ 1/8
Frouge Corp. OT	5 1/2	+ 1/4
General Builders AM	1 3/8	- 1/8
Gil Development-d OT	1 1/4	.....
Hallcraft Homes OT	4 1/8	+ 7/8
Hoffman Rosner Corp. OT	3	- 1/4
Homewood Corp. OT	10	+ 1 1/4
Hunt Building Corp. OT	3 3/8	+ 3/8
*Kaufman & Broad NY	24 1/2	+ 1
Key Co.-d AM	3	- 5/8
Leadership Housing-d OT	4 1/2	.....
(includes Behring Corp.)	.....	.....
Leisure Technology AM	7 1/4	.....
Lennar Corp. AM	10 1/4	+ 1 3/4
McCarthy Co.-d PC	3	- 3/8
McKeen Const. AM	3 1/2	- 1/8
H. Miller & Sons AM	10	+ 2
Mitchell Energy & Dev. AM	20	+ 2 1/2
National Environment OT	2 1/8	+ 1
(Sprul Homes)	.....	.....
L. B. Nelson Corp. AM	5 1/4	+ 1/4
Oriole Homes Corp. AM	13 1/4	+ 4 1/8
Prel. Corp. AM	5 1/4	+ 1/8
Presidential Realty-d AM	10 1/2	+ 1/8
Presley Development AM	5	+ 7/8

Company	Aug. 8 Bid/Close	Chng. Prev. Month
Pulte Home Corp. AM	3 3/8	+ 1/4
F. D. Rich Housing Corp. OT	1 1/4	+ 1/4
Robino-Ladd Co. AM	7 1/8	+ 1 1/4
Rossmoor Corp. AM	5 1/4	+ 1
*Ryan Homes AM	21 1/2	+ 5 1/2
Ryland Group OT	9	- 2
*Shapell Industries NY	11 1/2	- 3/4
Shelter Corp. of America OT	2 1/8	- 1/2
Standard Pacific AM	2 3/8	+ 3/8
Universal Home & Devel. PC	2	- 1/4
*U.S. Home Corp. NY	9	+ 3/4
Valley Forge Corp. OT	4	- 1/4
Washington Homes OT	2 3/8	- 1/8
Del. E. Webb NY	4 7/8	+ 1/4
Western Orbis AM	7 1/8	.....
Westchester Corp. OT	3 1/2	- 1

SAVINGS & LOAN ASSNS.

American Fin. Corp. OT	12 3/4	+ 1 1/8
Calif. Fin. NY	4	+ 1/4
Empire Fin. AM	7 1/2	+ 3/8
*Far West Fin. NY	7 3/4	+ 1
Fin. Corp. of Santa Barb. AM	12	- 1 1/4
*Fin. Fed. NY	12 1/2	+ 7/8
*First Charter Fin. NY	15 1/2	+ 1/2
First Lincoln Fin. OT	3 1/8	.....
First S&L Shares AM	13 3/4	+ 1 3/4
First Surety OT	3 3/8	- 1/4
First West Fin. OT	2	+ 1/4
Gibraltar Fin. NY	15	+ 3/4
Golden West Fin.-d NY	13 1/2	+ 1/2
*Great West Fin. NY	18 1/2	+ 2 1/4
Hawthorne Fin. NY	7 1/8	- 1/2
*Imperial Corp. NY	8 7/8	.....
Trans World Fin. NY	7 1/2	+ 3/8
Union Fin.-d AM	9	.....
United Fin. Cal. NY	7 1/2	+ 1/4
Wesco Fin. NY	12 3/8	+ 1 1/8

MORTGAGING

Charter Co. NY	25 1/4	+ 6 1/2
CMI Investment Corp. NY	40 7/8	+ 10 1/4
*Colwell AM	17	- 1 1/8
Cont. Illinois Realty NY	16 1/4	- 1/8
Excel Investment AM	16 1/4	+ 3 3/8
Fed. Nat. Mtg. Assn. NY	18 1/2	+ 3
Financial Resources Gp. OT	2	- 1/4
(Globe Mortgage)	.....	.....
First Mtg. Ins. Co. OT	18 1/2	+ 2 1/4
*Lomas & Net. Fin. NY	12	+ 2
*MGIC Inv. Corp. NY	76 1/4	+ 11 1/2
Midwestern Fin. AM	9 3/4	- 1
Mtg. Associates OT	14 1/2	+ 3 1/4
Palomar Fin. AM	4	- 1/4
So. Cal. Mort. & Loan Corp.-d OT	2 3/8	- 1/8
UPI Corp. AM	1 3/4	- 1/8
(United Imp. & Inv.)	.....	.....

MORTGAGE INV. TRUSTS

Alison Mtg. NY	27 1/8	- 1/8
American Century AM	17 1/2	+ 5/8
Arlan Property Invest. OT	14	+ 1/4
Atico Mtg. NY	17 3/8	- 1/4
Baird & Warner OT	17 1/4	- 3/8
Bank America Rity. OT	26 1/4	- 1
Barnett Mtg. Tr. NY	24 1/4	- 2 1/4
Beneficial Standard Mtg. AM	23 3/8	+ 1 1/8
BT Mort. Investors NY	26	- 2 1/4
Builders Investment Gp. NY	28 1/4	+ 1 1/4
Cameron Brown NY	27 1/2	+ 2
Capitol Mortgage SBI OT	24 1/2	- 1/8
Chase Manhattan NY	52 3/4	- 1/8
CI Mortgage Group NY	15 1/4	- 2 1/8
Citizens Mtg. AM	15 7/8	.....
Citizens & So. Rity. NY	34 1/4	+ 7/8
Cleve Trust Rity. Investors OT	19	- 3/8
Colwell Mtg. Trust AM	28 1/4	- 1
Conn. General NY	19 3/4	- 7/8
*Cont. Mtg. Investors NY	9 1/2	.....
Cousins Mtg. & Eq. Inv. NY	25 1/8	- 1/4
Diversified Mtg. Inv. NY	22 3/8	- 1 1/8
Equitable Life NY	26	+ 1 1/8
Fidelco Growth Inv. AM	28	- 4 3/4
Fidelity Mtg. AM	30 1/4	+ 1/8
First Memphis Realty OT	20 1/2	- 3/8
*First Mtg. Investors NY	16 3/4	+ 1 1/4
First of Denver AM	21 1/4	+ 5/8
First Pennsylvania NY	17 1/4	- 2 1/8
Franklin Realty AM	6 1/2	- 1
Fraser Mtg. OT	17 1/4	- 1/4
Galbreath Mtg. OT	22 1/2	- 3/8
Gould Investors AM	9	- 3/8
Great Amer. Mtg. Inv. NY	33 1/2	+ 3/4
Guardian Mtg. AM	36 1/2	- 7/8
Gulf Mtg. & Rity. AM	17 3/8	- 1/4
Hamilton Inv. OT	17 1/4	+ 1/4
Heitman Mtg. Investors AM	12 1/4	+ 5/8
Hubbard R. E. Investments NY	18 3/4	- 1/2
ICM Realty AM	19 3/4	+ 7/8
Larwin Mtg. AM	22 1/2	+ 1/8
Lincoln Mtg. OT	7	.....
Mass Mutual Mtg. & Realty NY	21	- 3/8
Median Mtg. Investors OT	10 3/4	+ 1/2
Mony Mtg. Inv. NY	10 3/4	- 7/8
Mortgage Trust of Amer. NY	17 1/4	+ 1/2
National Mortgage Fund OT	13 3/4	+ 3/4
North Amer. Mtg. Inv. NY	26 1/2	- 1/4

Company	Aug. 8 Bid/Close	Chng. Prev. Month
Northwest Mut. Life Mtg. & Rity. NY	22 1/2	- 7/8
PNB Mtg. & Rity. Investors AM	18 3/4	- 2 3/4
Palomar Mtg. Inv. AM	14 1/2	- 3/8
Penn. R. E. Inv. Tr. AM	11 1/8	- 1/8
Property Capital AM	15 3/4	+ 3/4
Realty Income Tr.-d AM	14 1/4	+ 3/8
Republic Mtg. Inv. NY	15	- 3/8
B. F. Saul, R.E.I.T. NY	16 1/4	- 3/4
Security Mtg. Investors AM	9	- 1/8
Stadium Realty Tr. OT	6 3/4	+ 1
State Mutual SBI NY	21 1/4	- 1 1/8
Sutro Mtg. AM	14 1/4	- 1 1/8
Unionamerica Mtg. & Eq. AM	20 1/4	- 1
U.S. Realty Inv. AM	13 3/4	- 1/2
Wachovia Realty Inc. NY	23 1/2	+ 1
Wells Fargo Mtg. NY	19 1/4	- 2

LAND DEVELOPERS

All-State Properties OT	3 1/4	+ 1/8
American Land-d OT	1 1/8	+ .05
*AMREP Corp. NY	5 3/4	+ 5/8
Arvida Corp. OT	9 1/2	+ 1
Atlantic Imp.-d OT	3 3/4	.....
Canaverl Int. AM	2 1/4	- 1/2
Cavanagh Communities NY	3 3/8	+ 5/8
Crawford Corp. OT	5 1/4	.....
*Deltona Corp. AM	12 3/4	+ 1 1/2
Disc Inc. of Amer. OT	1 1/8	+ 1/4
Fairfield Communities OT	1 1/2	+ 1/4
*Gen. Development NY	8 1/2	- 1/8
Getty Financial Corp.-d OT	4 1/2	.....
(Don the Beachcomber)	.....	.....
*Holly Corp. AM	2	+ 5/8
Horizon Corp. NY	7 1/2	+ 1 3/8
Landmark Land Co. AM	2 1/4	+ 1/2
(Gulf State Land)	.....	.....
Land Resources OT	3	+ 3/4
Major Realty OT	6 3/4	+ 1 1/2
*McCulloch Oil AM	5 1/2	- 3/8
Southern Rity. & Util. AM	5	.....

MOBILE HOMES & MODULES

*Champion Home Bldrs. AM	6 1/4	+ 2
*Commodore Corp. AM	4	- 1/2
Conchemco AM	11	+ 7/8
De Rose Industries AM	3 1/4	+ 1/2
*Fleetwood NY	13 3/4	+ 4 3/4
Golden West Mobile Homes OT	5 1/2	+ 1 3/8
Moamco Corp. AM	2 3/4	- 1/8
(formerly Mobil Americana)	.....	.....
Mobile Home Ind. AM	12 3/4	+ 4 3/8
Monarch Inc. OT	2 1/8	+ 1 3/8
*Redman Ind. NY	11	+ 3 1/2
Rex-Noreco NY	3 1/4	+ 7/8
*Skyline NY	22 1/2	+ 6 3/4
Town & Country Mobile AM	4 1/4	+ 1/2
Triangle Mobile OT	2 1/4	+ 5/8
Zimmer Homes AM	5 1/4	+ 1 1/8

Albee Homes OT	3 1/4	+ 1/8
ASM Ind.-d OT	1 1/4	.....
(Formerly AABCO)	.....	.....
Brigadier Ind. OT	3 3/8	+ 1/8
Environmental Communities OT	1 1/4	- 1/2
Hodgson House OT	3 1/4	+ 3/8
Liberty Homes OT	2 3/4	+ 7/8
Lindal Cedar Homes OT	4 3/4	+ 3/4
Modular Dynamics OT	1 1/4	.....
Nationwide Homes AM	7 3/4	+ 1/2
Shelter Resources AM	7 3/4	+ 2 1/4
Swift Industries OT	7 3/8	.....

DIVERSIFIED COMPANIES

Amer. Cyanamid NY	22 1/2	- 1/2
Amer. Standard NY	13 1/4	+ 2 1/8
Arien Realty & Develp. NY	5	+ 1/8
AVCO Corp. NY	9 7/8	+ 1 3/8
Bethlehem Steel NY	26 1/4	+ 1/2
Boise Cascade NY	14	+ 4 3/4
Building & Land Tech. OT	6 1/2	.....
CNA Financial (Larwin) NY	11 1/8	- 2
Castle & Cooke NY	14 1/2	+ 1 1/8
(Oceanic Prop.)	.....	.....
CBS (Klingbeil) NY	32 1/4	- 3/4
Champion Int. Corp. NY	18	+ 2 3/4
(U.S. Plywood-Champion)	.....	.....
Christiana Securities OT	160	.....
Citizens Financial-d AM	4 1/8	- 1/2
City Investing NY	12 3/4	+ 1 1/2
(Sterling Forest)	.....	.....
Corning Glass NY	104	+ 12
Cousins Properties OT	20 3/4	+ 5
Davos Inc. OT	1	.....
Dreyfus Corp. NY	8 3/4	- 3/8
(Bert Smokler)	.....	.....
Environmental Systems OT	2 1/2	- 3/4
Evans Products NY	15 1/4	+ 2
Ferro Corp. NY	39	+ 5 3/4
First Gen. Resources OT	3 1/2	.....
Fischback & Moore NY	54 1/2	+ 10 1/8
Forest City Ent. AM	8 1/2	- 1/4
Flag Industries AM	4 1/2	+ 2
Frank Paxton Corp. OT	9 1/4	- 1/4
(Builder Assistance Corp.)	.....	.....
Fruehauf Corp. NY	25 1/4	+ 1

Company	Aug. 8 Bid/Close	Chng. Prev. Month
Fuqua Corp. NY	11 1/4	+ 1 1/4
Georgia Pacific NY	35 1/4	+ 3 1/8
Glasscock Products AM	5 1/4	+ 1/4
Great Southwest Corp. OT	1 1/4	- 1/4
Gulf Oil (Gulf Reston) NY	22 1/2	+ 1/4
INA Corp. (M. J. Brock) NY	38	+ 1 1/4
Inland Steel (Scholz) NY	28 1/4	- 5/8
International Basic Econ. OT	4	+ 1 1/2
International Paper NY	38 1/2	+ 5 1/4
Internat. Tel. & Tel. NY	31 1/2	+ 1 1/4
(Levitt)	.....	.....
Investors Funding AM	3 3/4	- 1
Killearn Properties AM	4 1/4	- 3/4
Lery Corp. OT	3 1/4	- 3/8
Ludlow Corp. NY	12 1/4	- 3/8
Monogram Industries NY	6 3/4	+ 1 1/8
Monumental Corp. OT	28 1/4	+ 2 3/4
(Jos. Meyerhoff Org.)	.....	.....
Mountain States Fin. Corp. OT	6 1/4	+ 5/8
National Homes NY	4 1/4	+ 1/2
Occidental Petroleum NY	9 3/4	+ 3/4
(Occ. Pet. Land & Dev.)	.....	.....
Pacific Coast Prop. AM	1 1/4	+ 1/4
Perini Corp. AM	5 1/2	+ 7/8
Philip Morris NY	125 1/4	+ 5 3/4
Prosher Corp.-d OT	1 1/4	.....



homasote



Finished ceiling, insulation,
roofing base...

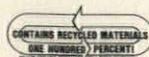
ALL IN A ONE-STEP APPLICATION!

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No matter how you figure . . . *Homasote gives you more profit per roof!*

For information and product literature, contact your local Building Supplies Dealer or write:

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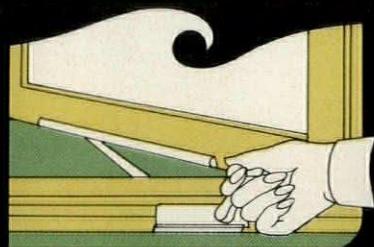
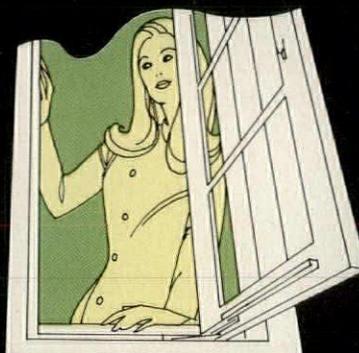
more than 63 years of technology for building and ecology



Caradco makes the luxury of wood casement windows affordable.

**...with features that save
resources-everybody's.**

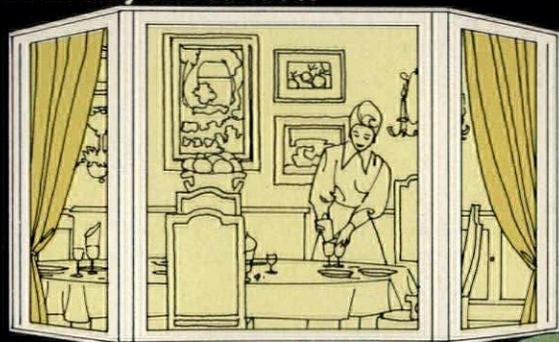
When a window leaks—or conducts heat—fuel gets wasted. Money, too. That's why Caradco double weatherstrips its casement windows—once around with tubular vinyl, once with stainless steel. That's why we make them of wood: tests prove wood is 1770 times better as an insulating material than aluminum, for example. That's why Caradco uses insulating glass, set in a vinyl glazing gasket to make it permanent, leak-proof and maintenance-free.



Caradco C-200' Casements swing to a full 90° opening to provide adequate space between the sash and frame to easily clean the outside glass surface from indoors. The neutral tone hardware adds a nice touch of excellence. Crank handle is at a convenient angle for smooth, easy operation.

Unique, modular arrangements complement any exterior. Four, five or six C-200' Casements can be assembled on a common radius to form a gracefully curved bow bay or a striking angle bay as shown below, providing a panoramic view. An accessory window seat is available. Concealed hinges have a stainless steel track and are not visible from the outside. Hinge design permits easy removal of sash.

Removable vinyl grilles are also available to further enhance the beauty of the C-200'. Grilles give the divided sash effect while preserving the advantages of having to clean only one surface.



Of course, these windows are factory primed outside . . . unpainted inside to permit choice of interior finish. And they're available as a complete package: storms, screens and removable grilles.

C-200' Casements satisfy. With style. With performance. With quality. We build them for builders and owners who appreciate their significant differences, and for anyone concerned with fuel costs and conservation, comfort and durability. For total window satisfaction—from architect to builder to owner—specify C-200' Casements by Caradco.

**Caradco
Window and Door Division**

Scovill

Main Plant, Dubuque, Iowa 52001. Hainesport Plant, Hainesport, N.J. 08036, Columbus Plant, Columbus, Ohio 43204, Sacramento Plant, West Sacramento, Cal. 95691

**The GE Microwave Oven
can roast a turkey, rent an apartment, cook a
hamburger, sell a house, bake a cake...fast.**



The Microwave Oven in the General Electric Microwave Cooking Center (Model J856) can be the margin of difference that makes a woman decide to rent one of your apartments or to buy one of your houses, rather than somebody else's. That's how much today's housewives are impressed by microwave cooking.

After all, it takes advanced cooking equipment to cook a 12 lb. turkey in 1½ hours, hamburgers in 3 minutes, bake a cake in 8 minutes.

And they also go for the P-7® Self-Cleaning Oven

System that cleans the entire oven electrically.

What's more, behind this oven and all other GE appliances is General Electric Customer Care... Service Everywhere.™ Which means that wherever your development is in the U.S.A., there'll be a qualified GE serviceman nearby.

For further information, call your GE Contract Sales Representative and let him explain how the microwave oven can help you stay ahead of competition.



GENERAL  ELECTRIC

elegance
quality
value
Decora
gets it
all together



Eljer has created an elegant new decorator brass . . . Decora. In satin-rich brushed chrome, with intricate bright chrome appliques. Available with sparkling crystal or decorated brush chrome handles.

For all its elegance, Decora is an outstanding value in decorator brass. It has the same fine quality and rugged reliability you've come to associate with Eljer — red brass for superior corrosion resistance, swivel-disc faucet mechanism for less washer wear, and fully renewable stems and seats.

Ask your plumbing contractor to show you samples of Decora. Or send for our full-color brochure: Eljer, Dept. HH, 3 Gateway Center, Pittsburgh, Pa. 15222.

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**When it comes
to residential
asphalt roofing...
It's Celotex.**

CIRCLE 30 ON READER SERVICE CARD





Whether it's Rustic Shakes†, or Traditional Shake asphalt shingles. It's Celotex. Whether it's green, white, brown, gray, tan. Or a square tab, random tab, hexagonal or T-shaped. Angled, lapped, "key"-locked or 4-corner fastened. It's Celotex. And if it's a Barrett or Philip Carey brand. It's Celotex. Whatever your asphalt shingle requirement: self-sealing, fungus repellant, a U. L. Class "A" fire-safety rating, or a 25-year bond. It's Celotex. Leaders in roofing.

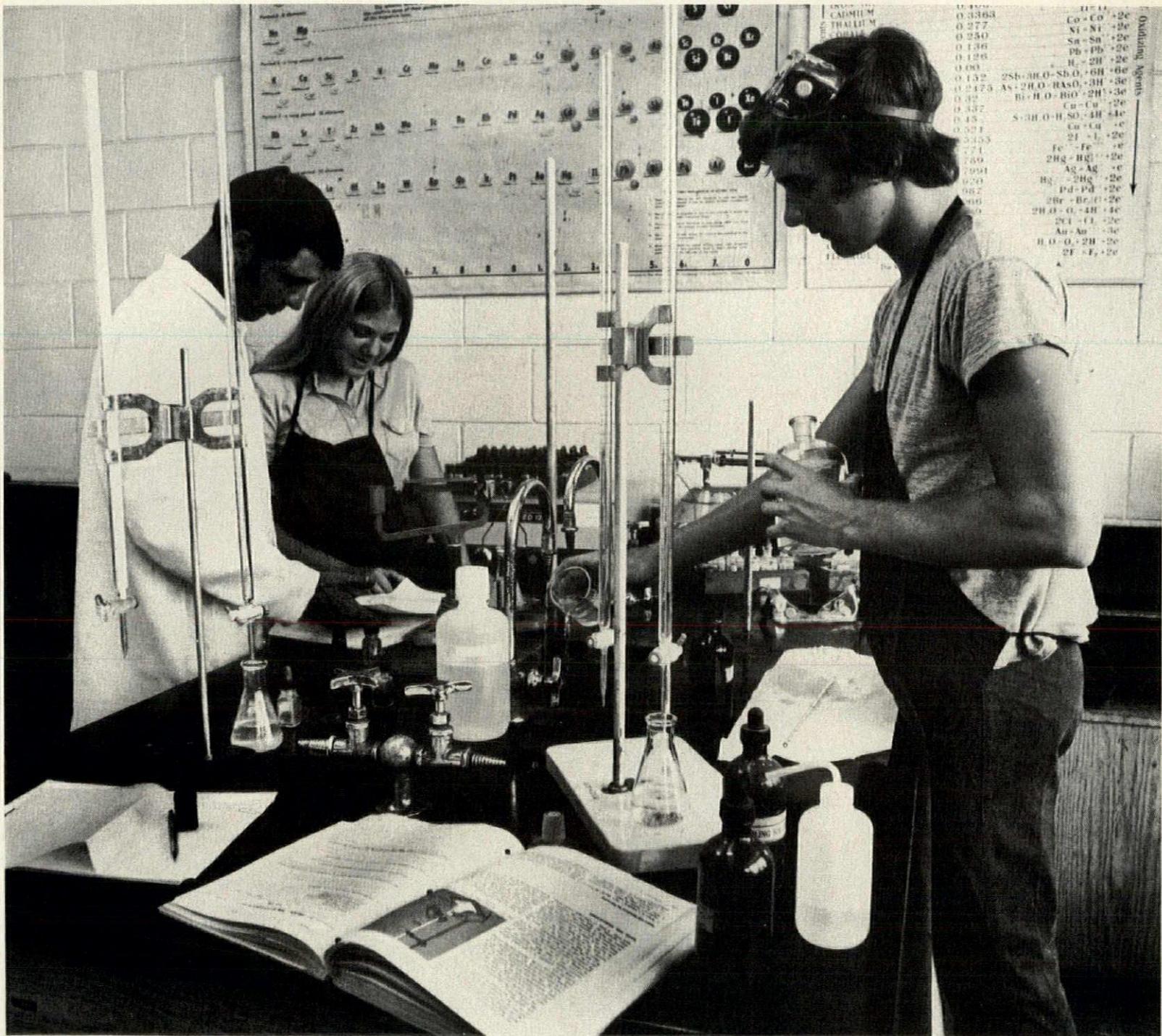
Celotex*
BUILDING PRODUCTS

Celotex understands the man who builds.

THE CELOTEX CORPORATION TAMPA, FLORIDA 33622
A SUBSIDIARY OF THE JIM WALTER CORPORATION

TRADEMARK (REGISTERED TRADE MARK)





15 years of high school chemistry down the drain.

Back in 1957, PVC drainage piping made of Geon® vinyl was installed in this chemistry laboratory. It's at Hoover High School in North Canton, Ohio.

Years later, Robert P. Braucher, Maintenance Director, now reports, "Service in the laboratory has been uninter-

rupted for more than 15 years of heavy use."

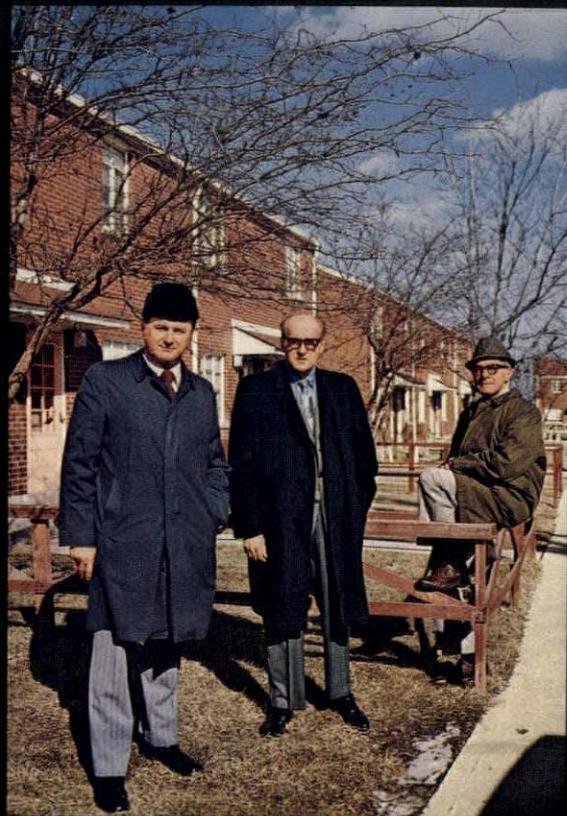
This drainage piping of PVC has survived countless classroom assignments, plus an unknown quantity of exotic extra-curricular mixes dreamed up by students.

If corrosion is a problem

you're facing in pipe, ask us about PVC. If you're interested in easier installation, lighter weight, cost savings, ask us. We're the people who started it all in PVC pipe. B.F. Goodrich Chemical Company, Dept. H-30, 6100 Oak Tree Boulevard, Cleveland, Ohio 44131.

B.F. Goodrich Chemical Company 

First begun in 1938, Covington's 801 unit Jacob Price, Ida Spence and Latonia Terrace complex was one of the first municipal public housing projects in the country.



Gardencourt was the one cabinet that met all our requirements for public housing."

*Bernard Grimm, Mayor, Covington, Ky. (right)
 Claude Hensley, Exec. Dir.,
 Covington Housing Authority (center)
 Paul Royster, City Manager (left)*

"When you're remodeling 801 units on a budget, it's pretty hard to find good-looking cabinets that can also take a lot of wear and tear. That's why Gardencourt was so ideal. It's tough enough to take hard use, yet so good-looking you could put it in any development."

Gardencourt. We had the needs of a lot of people in mind when we made it. That's why the components are specially constructed for extra strength, rigidity, and resistance to moisture and temperature changes. Nothing makes them warp or mildew.

These components are wrapped in a tough, fire-resistant vinyl, with a triple thickness of vinyl on door and shelf edges for even greater protection.

—eliminates the need for shelf paper.

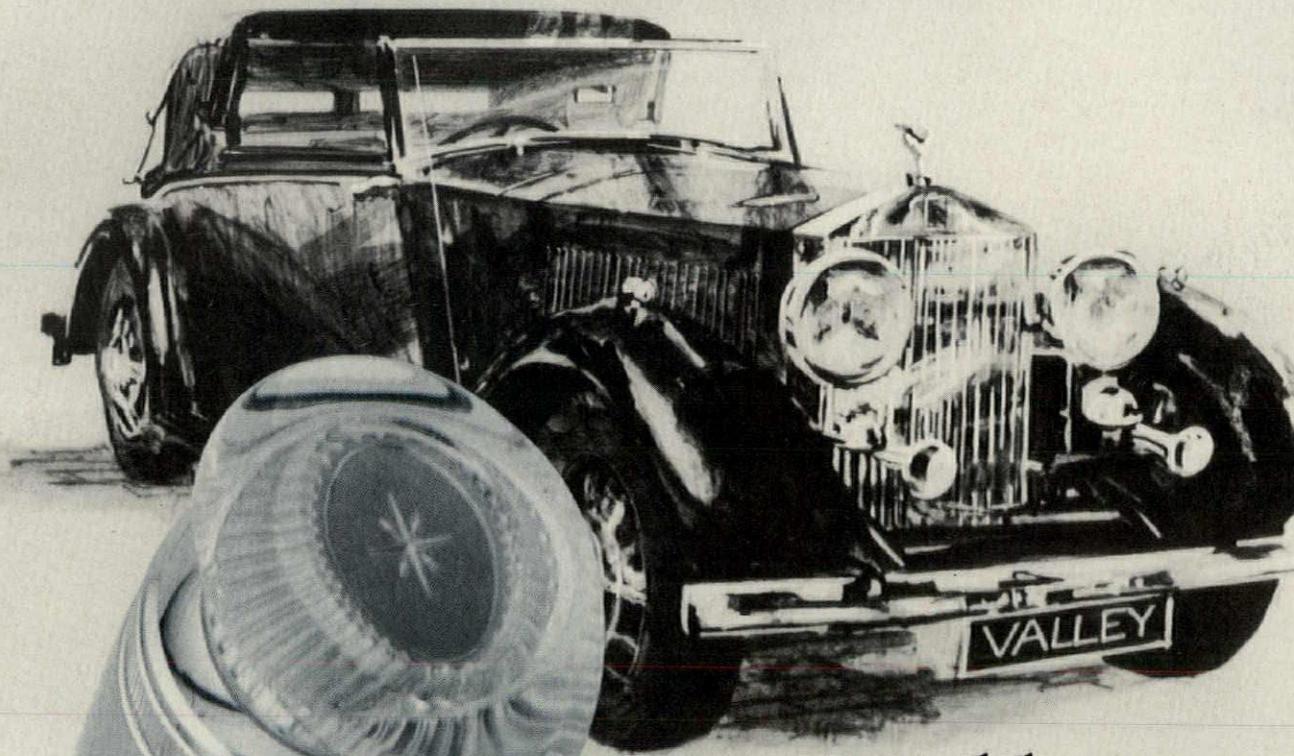
Tough polystyrene drawers are mar and stain resistant; hinges are self-closing, with single doors easily reversed to left or right.

Gardencourt is a great-looking cabinet that's made tough enough to stay that way—no matter where it goes.

See your Scheirich Distributor, or write H. J. Scheirich at our main plant. H. J. Scheirich Co., P. O. Box 21037, Louisville, Kentucky 40201.

SCHIRICH

CABINETRY



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We'll be around a long, long time

A classic doesn't come along too often. But when it does, it sets the pace for years to come. Rolls did it with their Classic 33. And Valley's new Starburst Series has done it, too.

Clean, simple lines that spell its elegance; "hydroseal" leak-proof, worry-proof action; feather-touch control and mirror-like "triplate" finish give every Valley faucet the quality, appearance and dependability that will last a long, long time.

Valley™ single control faucets

EASTMAN CENTRAL D

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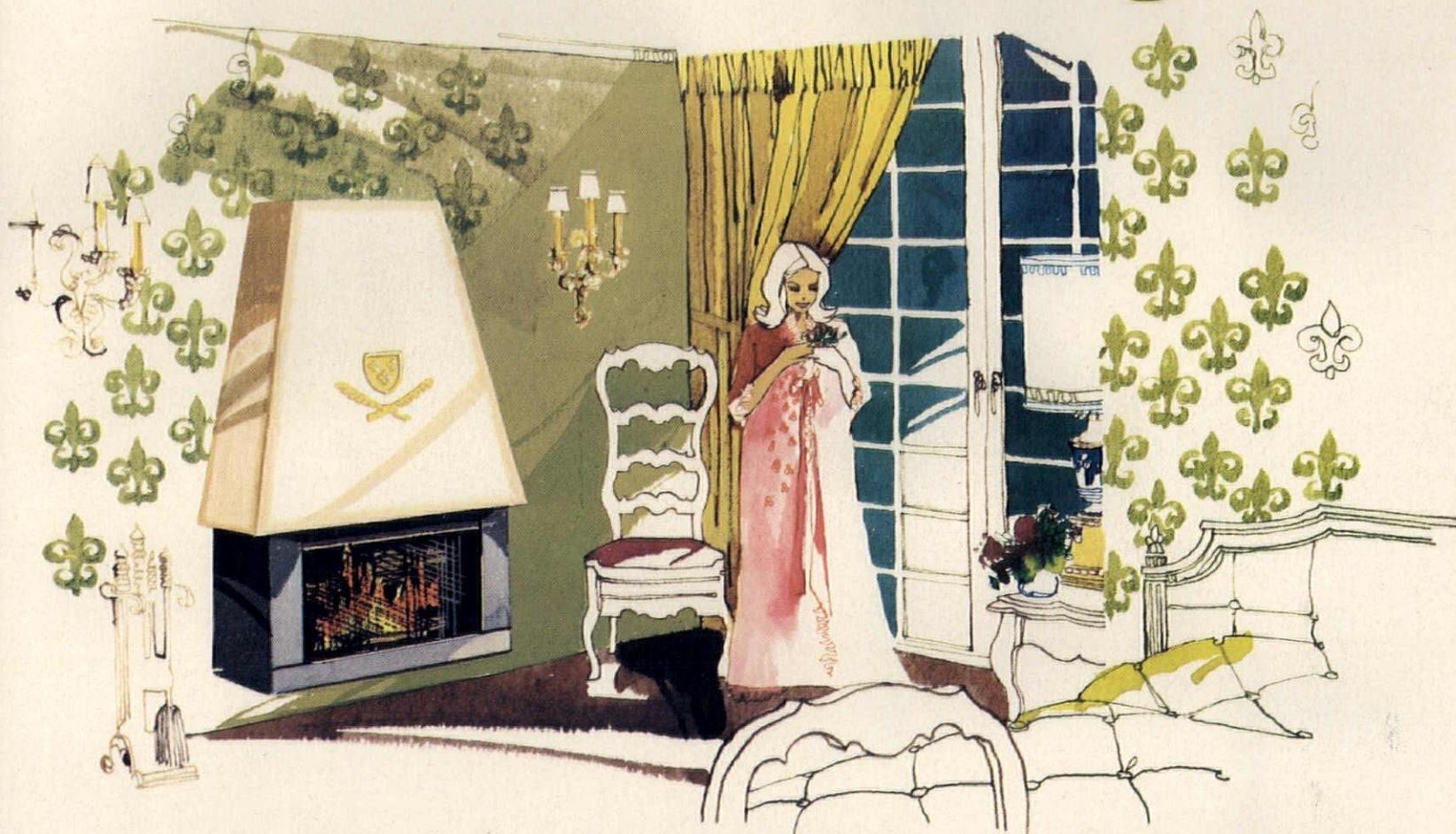
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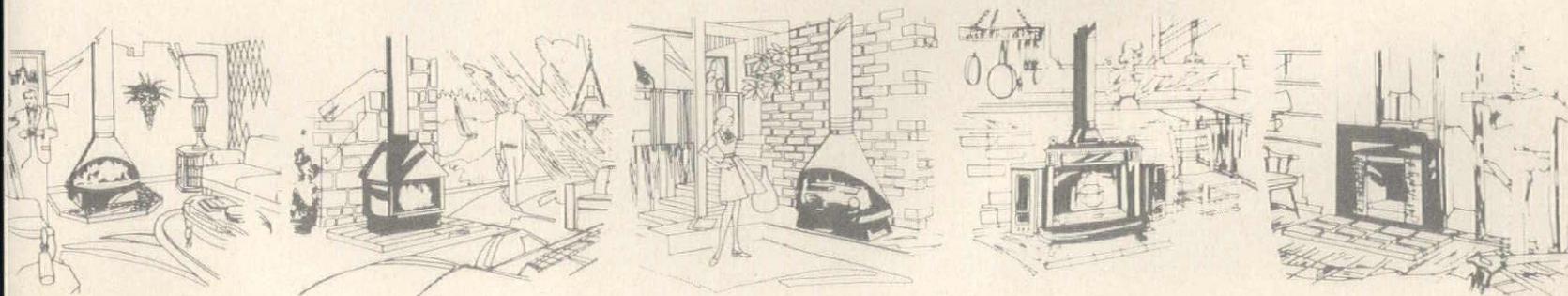


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H&H SEPTEMBER 1973 35

Tapping the young market: A little space goes a long way...

... if you don't skimp on exterior environment and interior soundproofing.

That's the opinion of W.R. Schulz Associates, whose newest rental project—The Cedars in North Tempe, Ariz.—is aimed at young singles and marrieds. Even though the apartments are small, the project, designed by Barrie H. Groen & Associates, is 97% occupied in the face of strong competition

that, in many cases, offers larger units for the money.

Here's why:

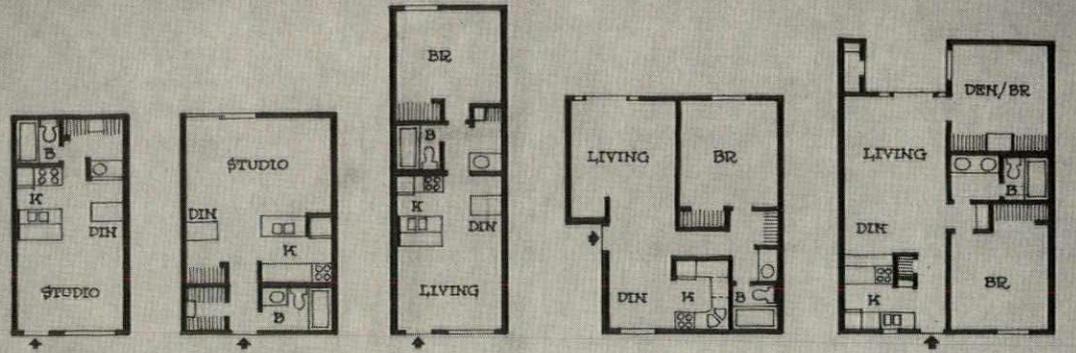
First, there's the outdoor environment—all of it man-made on what was once a flat, treeless site in a partly commercial area. To create an oasis-like setting and to give tenants attractive views from their apartments, Schulz mounded the earth to vary the contours, planted trees, installed fountains and laid out winding

walkways. And to break up the rooflines, some buildings were sunk four feet below grade.

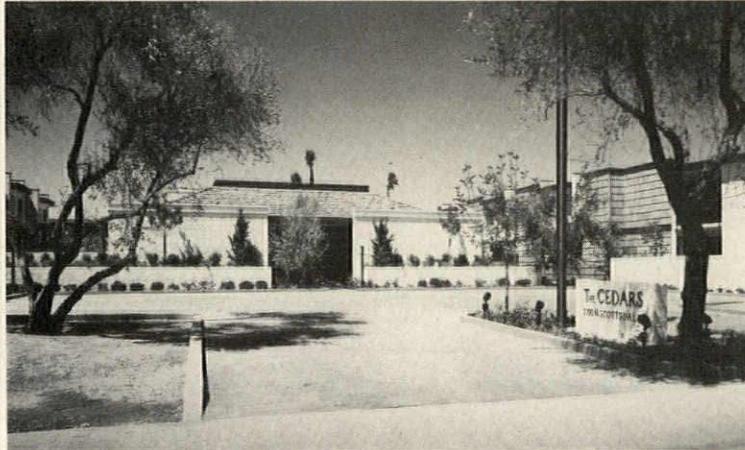
Second, there's a structural system that minimizes apartment-to-apartment noise transmission. All floors are 6", poured-in-place, reinforced concrete; all party walls are 6", pre-cast-concrete panels.

When completed, the project will have 469 units on 20 acres. So far 328 have been built.

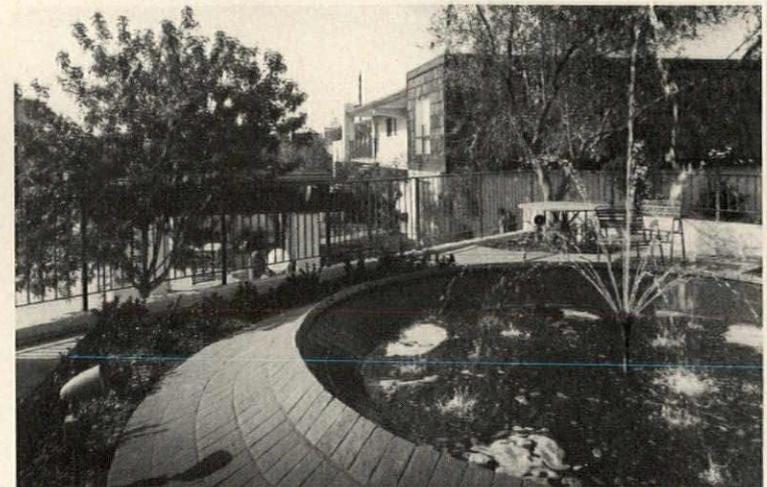
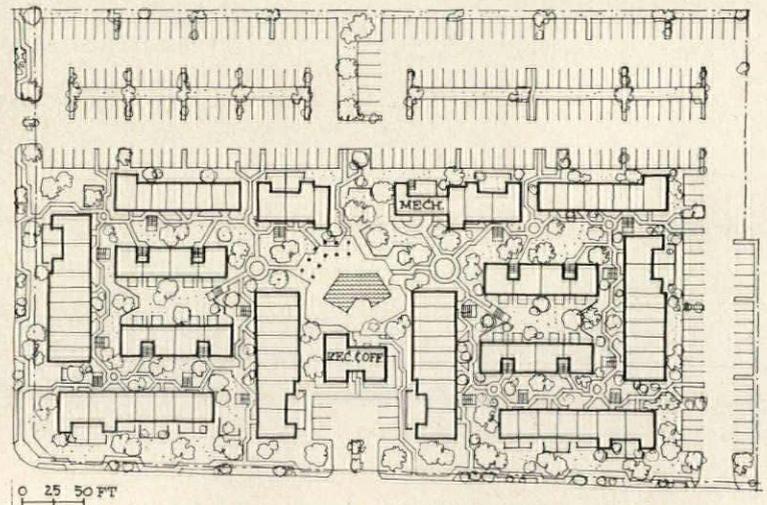
Five apartment plans at The Cedars range from a 308 sq. ft. efficiency renting for \$155 to a 750-sq.-ft. one-bedroom-and-den unit for \$245.



PHOTOS: MARKOW



Main entrance (above) is from a heavily traveled road. Building in center is rental office and clubhouse, which screens the swimming pool from passersby (see site plan). Most tenant parking is at rear of site. Parking ratio is 1.6:1 plus 10% for visitors.



Courtyard view (left) shows how the developer turned a flat, treeless site into a rolling, landscaped area. Fountain overlooks swimming pool.

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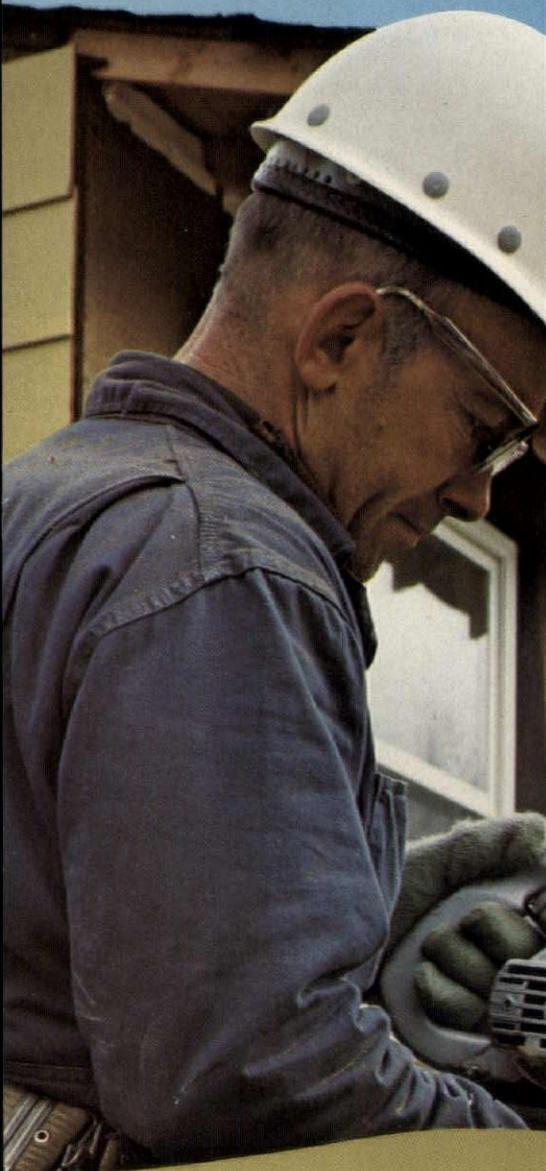
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An eye-catching bank in Charlotte, N.C.

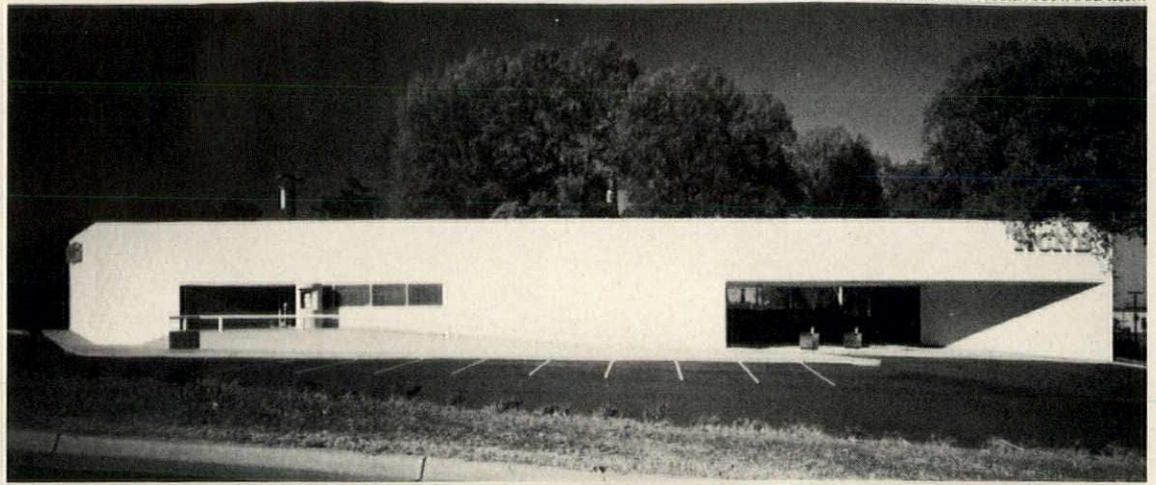
The drive-in bank was built in a rhomboid shape and set back on a 158' x 122' site. The results: 1) Good traffic flow through four drive-in banking lanes; and 2) on-site parking undisturbed by customers driving through.

The 2,400 sq. ft. building is wood-frame, sheathed with 1/2" structural plywood overlaid with 3/8" medium-density narrow-grooved plywood. Says architect Marley Carroll of Wolf Associates: "The basic shell went up in two weeks, which is about 80% faster than typical masonry construction."

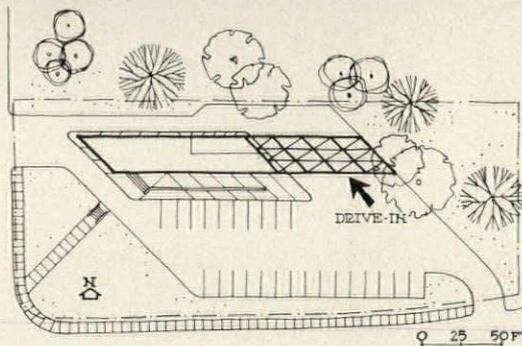
Owned by North Carolina National Bank, the structure was built by Rogers Builders Inc. a firm which also builds single-family custom homes.

The four drive-in lanes are served by two pneumatic tube-stations, which are controlled by tellers who observe customers from within the bank. The auto lanes (shown at far right) are covered by a steel-reinforced canopy.

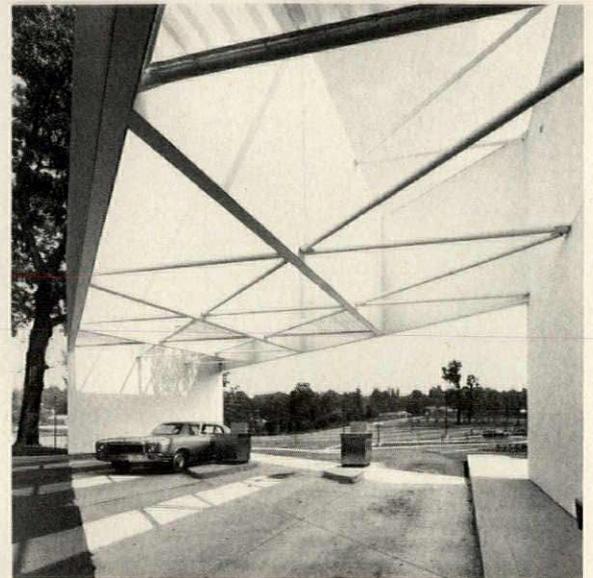
Total construction cost: \$115,000., including site work.



PHOTOS: AMERICAN PLYWOOD ASSN.



Drive-in banking lanes (at right in site plan) are set back in a corner of the site, which permits a good traffic flow without disrupting parking. Banking terminals are controlled by tellers inside the building.



PHOTOS: DON E. WOLTER

An office center in Foster City, Calif.

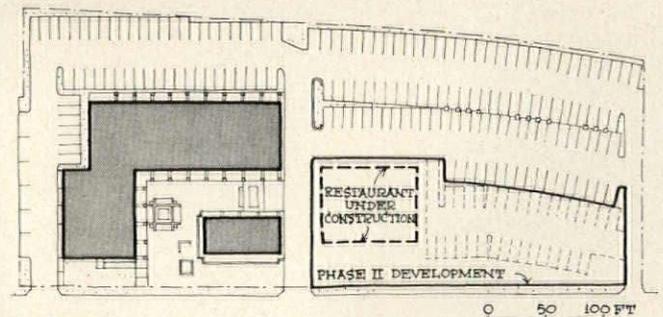
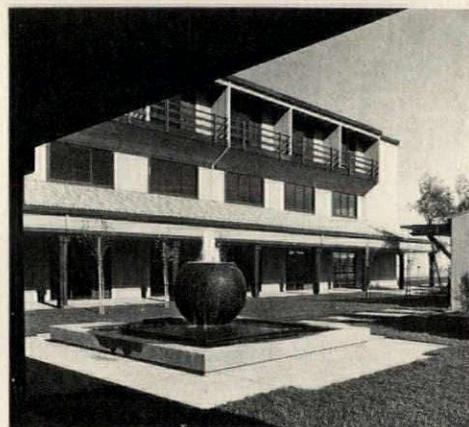
Small in scale and clad in red cedar siding, the center was designed to blend with houses and garden apartments. The aim: to attract tenants from downtown San Francisco.

The center was developed by Gus Enterprises, a young company that cut its teeth in residential condominiums. It consists of an L-shaped, three-story office building, a single-story office building and a restaurant (not shown in the photos).

The two office buildings are grouped around a courtyard, which is sheltered from the prevailing winds by the three-story structure's sweep roof. Adjacent is parking space for 136 cars.

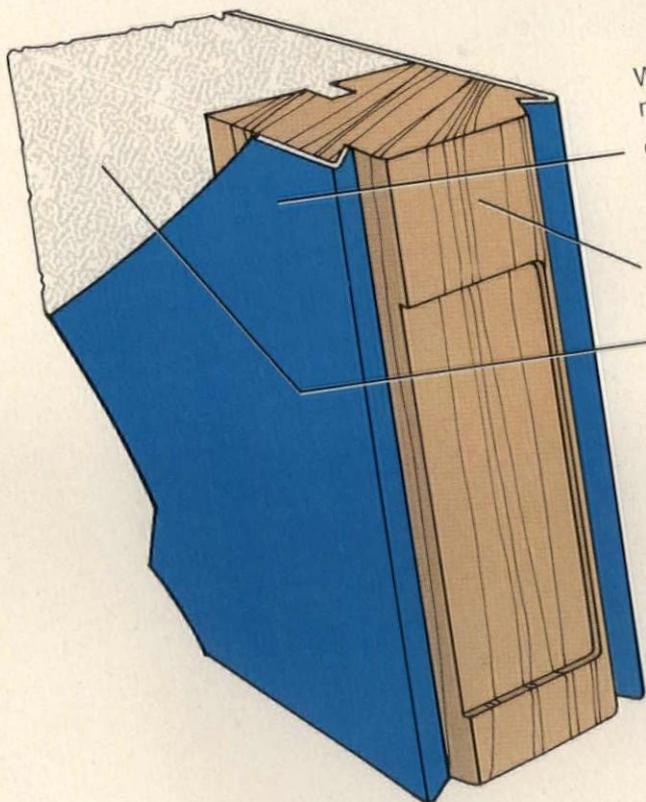
Finished in May, the offices are 65% rented at 52¢ to 60¢ a sq. ft. Construction costs, including landscaping were \$20.50 a sq. ft.

Architect: Charles Bass of Jorge De Quesada Inc. General contractor: Christensen & Sons.



Landscaped courtyard (left) is focal point of complex, which includes two office buildings—one with 32,000 sq. ft., the other with 2,000 sq. ft.—and a 6,000 sq. ft. restaurant.

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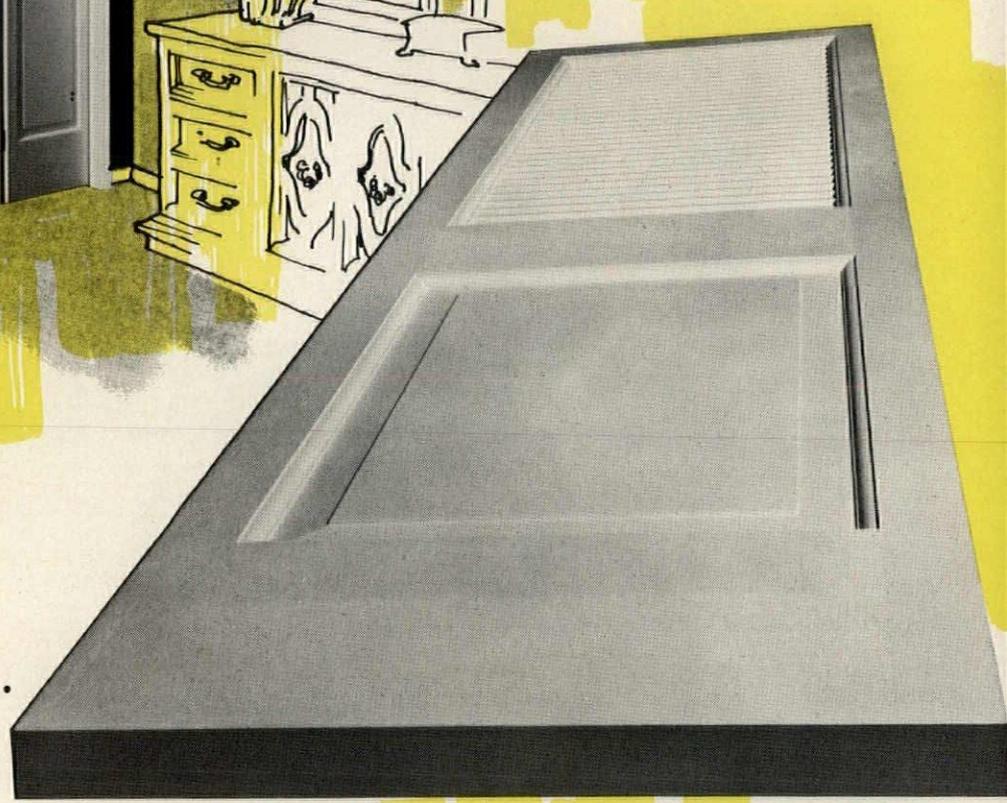


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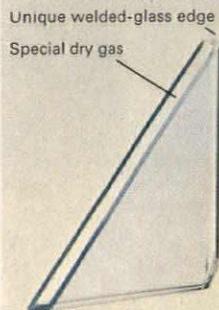


Take the next 3½ minutes to learn what your prospects will ask about PPG's *Twindow Xi* insulating glass.

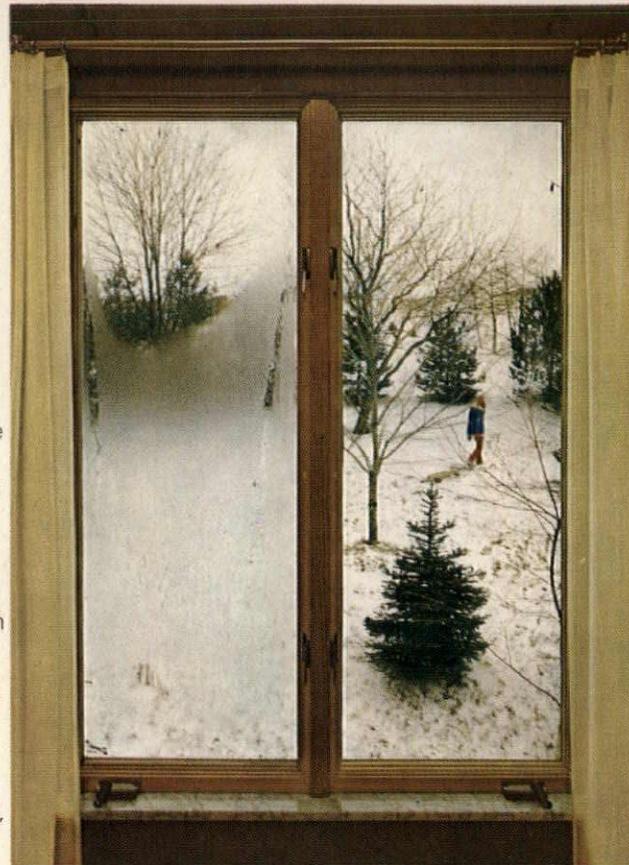
Through ads in BUILDING PRODUCTS GUIDE, HOUSE BEAUTIFUL, and BETTER HOMES & GARDENS, PPG is telling 25 million prospective home buyers about the value of having *Twindow Xi* insulating glass in their windows. Read what we're saying. You may want to use some of our words in your presentations.

"*Twindow Xi* insulating glass, a major breakthrough from PPG Research, is a remarkable cure for most cold weather ills you associate with poor windows—icy glass, dripping sash and sills, cold drafts, chilly rooms, storm windows, high heating bills. Life can be uncomfortable.

"In the past, most insulating glass units used dry air in the 3/16" space between the two panes of glass. In *Twindow Xi* units, a new ingredient—a special dry gas—is sealed permanently in the 3/16" space between the two panes. This makes *Xi* units approximately 20% more efficient as insulators than the older dry air units of the same thickness. More simply put, it means you'll lose a great deal less heat through the glass. And you'll be able to increase indoor humidity for comfort, with less chance of condensation on the glass. Losing heat becomes even more important when you consider that the nation's energy crisis is going to cause fuel costs to rise at a continuing clip. Save now, or you'll be paying later. (Incidentally, *Twindow Xi* units cost little more than adding quality storm windows later.)



This gas and glass sandwich saves more heat than an 8"-thick wall of face brick.*



Unretouched photo comparing *Twindow Xi* unit to single-pane glass—Outdoor temperature 20 F; indoor, 72 F/indoor humidity, 32%. *Twindow Xi* unit is pane on the right, of course.

"In *Twindow Xi* units, two pieces of glass are permanently fused together, in a patented manufacturing process. This 'welded,' all-glass construction gives you the true, airtight hermetic seal that ensures long life and trouble-free performance. Performance that will actually keep your rooms warmer while cutting your heating bills.

"Every *Twindow Xi* unit carries the *Xi* brand symbol permanently etched in a corner of the glass. Naturally, you'll find it on only the best windows. (You don't find gold leaf on a paperback novel, do you?) This *Xi* mark tells you that your window has welded-glass construction with the special, more effective gas sealed between. The seal is guaranteed for 20 years from the date of manufacture. (This date is etched in a corner of every unit.)"

And now back to you, the builder. If you'd like to have even more information on the *Xi* unit (there's quite a bit to say about this remarkable product), send us the coupon for our free booklet. PPG Industries, Inc., One Gateway Center, Pittsburgh, Pennsylvania 15222.



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During a period of twenty (20) years after date of manufacture, *Twindow Xi* Insulating Glass Units, installed in the United States or Canada, are guaranteed not to develop, under normal conditions, material obstruction of vision as a result of dust or film formation on the internal glass surface caused by failure of the hermetic seal other than through glass breakage. We make no other guarantee or warranty, expressed or implied.

This guarantee is effective only if installation is made in accordance with our specific instructions and does not apply to units damaged by improper handling or installation. This represents our maximum liability. Any units failing to comply with the terms of this guarantee will be replaced F.O.B. nearest shipping point to place of installation. This guarantee does not apply to replacement units beyond the original twenty (20) year period applying to the original unit.

*Comparison based on U-values (heat loss) from Handbook of Fundamentals, 1972, American Society of Heating, Refrigerating and Air Conditioning Engineers.

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PPG: a Concern for the Future



From New York's UDC: a subsidy project that capitalizes on its natural site

The state's Urban Development Corp. has lost its power to override local zoning [News, July] but not its ability to produce innovative low- and middle-income housing. Case in point: Ely Park Homes, an FHA 236 project outside Binghamton.

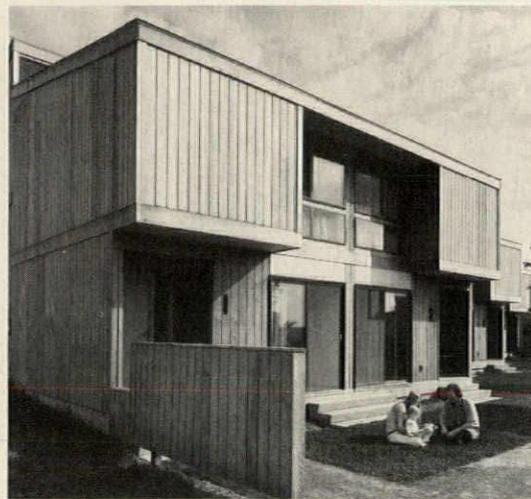
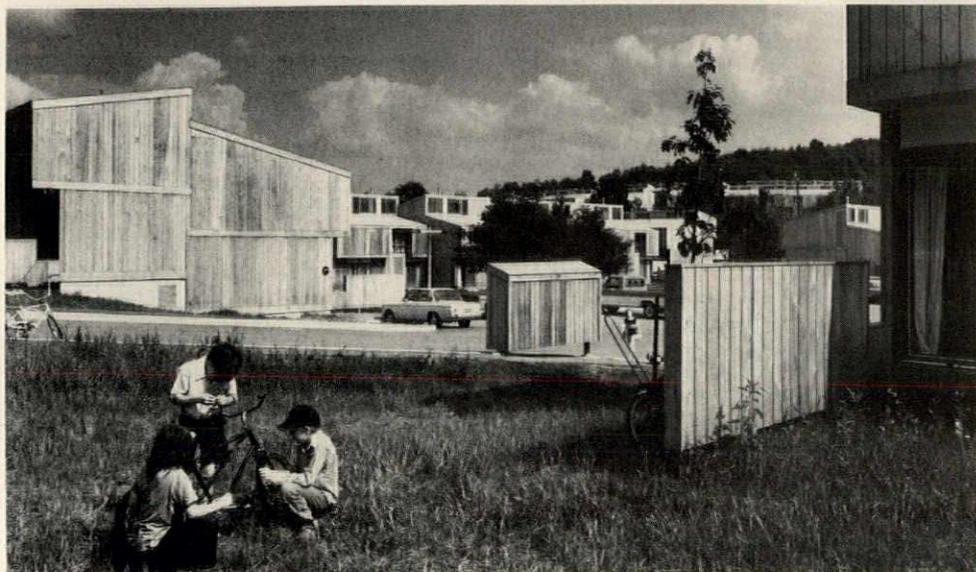
The hilly, wooded site was both a major attraction and a

major problem: Site preparation and subsequent restoration for the project's first phase (202 units) cost nearly \$1,000,000.

Because of this expense, and because more than half of the 87-acre site was too steep for building, the townhouses were closely clustered, and the original plan to include some de-

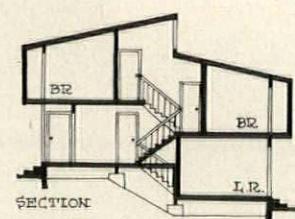
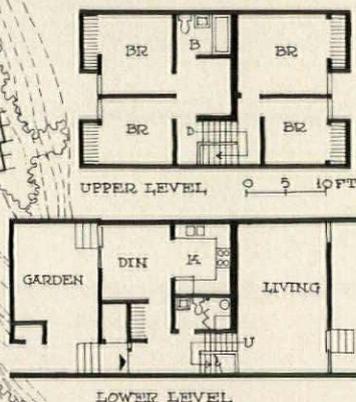
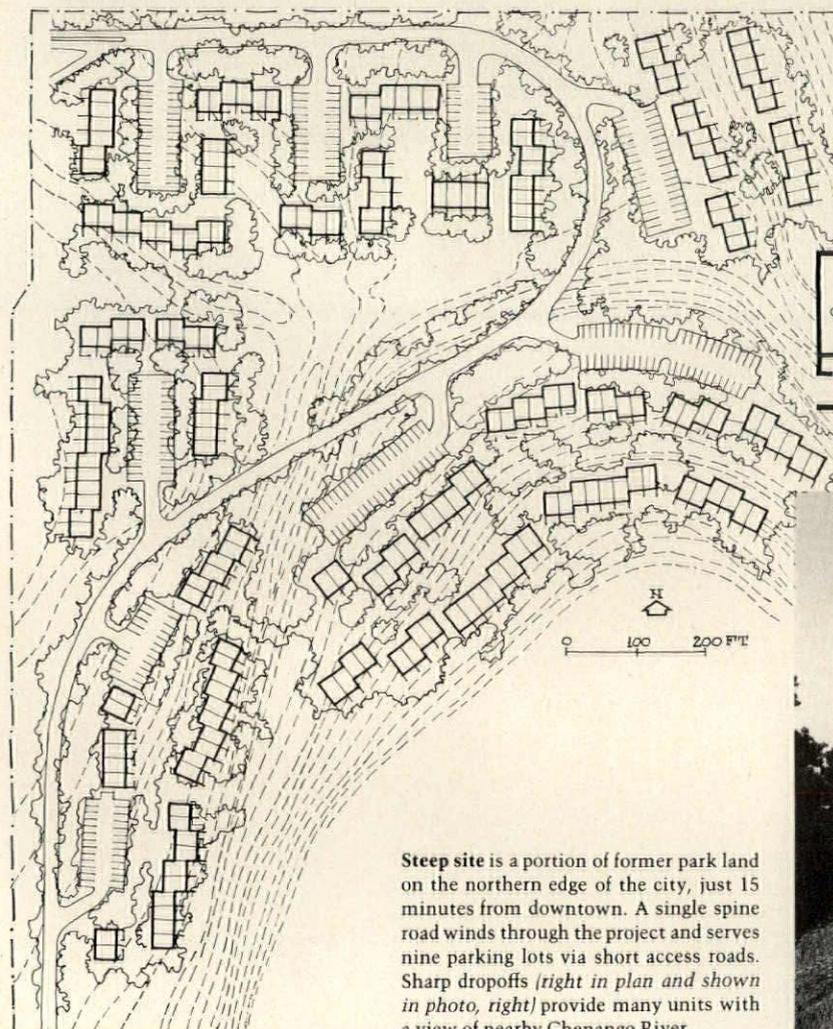
tached houses was abandoned. But the project's designer—The Architects Collaborative—kept a single-family feeling by orienting the houses to the common area and surrounding woods.

The final phase (212 units) is nearing completion, according to Vincent J. Smith, builder and project manager.



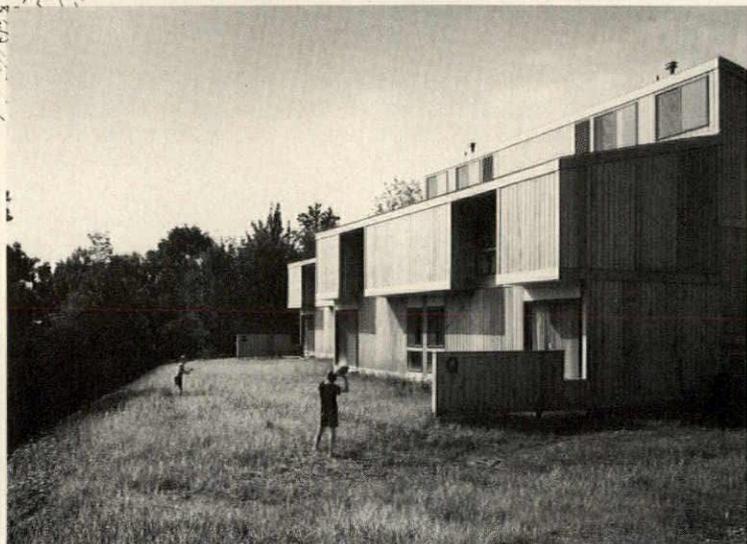
Boxlike units were designed as modules. Later, cost factors prompted decision to switch to panels built by National Homes Manufacturing Corp. at Horseheads, N.Y.

PHOTOS: WAYNE SOVERNS JR.



Floor plans, larger under UDC standards than under FHA, range from 575 sq. ft. for one-bedroom units (not shown) to 1,406 sq. ft. for four-bedroom units.

Steep site is a portion of former park land on the northern edge of the city, just 15 minutes from downtown. A single spine road winds through the project and serves nine parking lots via short access roads. Sharp dropoffs (right in plan and shown in photo, right) provide many units with a view of nearby Chenango River.



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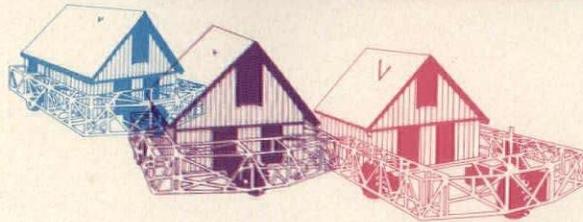
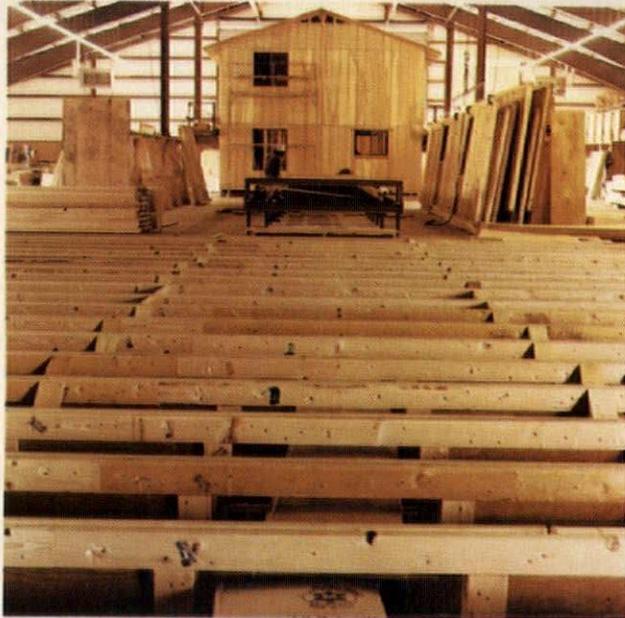
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"Population data is a key element of market research . . . But finding accurate sources, and interpreting the figures, isn't as easy as it might seem"

Since population data is vital to any market research program, every developer should be fully aware of two points: 1) Not all data sources are reliable and 2) how the data should be manipulated to improve the odds for a successful project. Thus, the purpose of this column is to point out some of the best sources of population data and explain how to use them.

Where to look. There are only a few basic population data sources: the *Census of Population*, which is compiled by the Bureau of the Census every ten years; special censuses conducted by local government agencies at three-to-five-year intervals to update the federal census; and data for the inter-census years provided by local city planners. Although each of these is subject to some error and ambiguity, it is worth examining them closely.

Most people have heard of mistakes reportedly made in the taking of the 1970 federal census. For example, population in areas with substantial racial minorities is frequently understated. Despite this, the federal census generally is the most accurate, detailed source of population data.

Some cities commission special censuses to make sure they are getting their fair share of sales tax revenues. Such censuses usually don't cover socio-demographic characteristics of the populace but are most concerned with head counts, household size and other fairly gross census criteria. State agencies and city planning departments usually provide whatever special census data is available.

The third source of commonly available population data is estimates of population change prepared by city and county planning agencies. The quality of this data ranges from very good to extremely poor. In some cases, local agencies estimate population for inter-census years by counting housing unit completions and multiplying them by an estimate of average household size. This kind of intermediate population estimate is particularly valueless for housing market research since the independent variable of population is in actual fact a variable, the estimate of which is dependent on housing completions—circuitous reasoning.

There is a fourth source of population data: compilations of publishing and broadcasting companies that estimate population and household income data for all parts of the country on a regular basis. *Editor & Publisher* is one such source. *Sales Management's Survey of Buying Power* is another.

Geographic definitions. There are several geographic definitions associated with census data collection: enumeration districts, block groups, etc. But the most common reference point is the census tract—geographic regions which have been delineated to encompass a total population on the order of 4,000 people with relatively homogeneous socio-demographic characteristics.

Census data also is reported on the basis of cities, counties and by SMSA (Standard Metropolitan Statistical Area). SMSA is a geographic definition designed to overcome the ambiguities introduced by the use of arbitrary political distinctions. Markets seldom fit nicely within the boundaries of cities, counties or states. Portland, Ore., for instance, is an SMSA that includes several counties and parts of two cities. Data about each of the constituent political divisions, if taken out of context, can be misleading. An SMSA is a logical economic entity and is a most useful way of reporting census information. The SMSA, quite obviously, is composed of a great many census tracts, frequently more than one county, generally more than one city and in some cases, parts of more than one state.

Projections. Whatever its source and its accuracy, historical population data is only indirectly related to the developer's problem. Future population patterns are of greatest interest to developers. If historical population data is sometimes fuzzy, the art of population projection borders on wizardry.

Such projections are nonexistent for most local areas. In some places city staffs prepare population projections. Elsewhere, special groups involved in various economic analyses prepare population projections.

In addition, the National Planning Association in Washington and the bureau of the Census frequently prepare rather broad-based population projections for large areas. State planning agencies and local colleges and universities are also useful sources.

In many areas, however, housing market researchers prepare their own projections. And their methods are nearly as varied as their creativity allows.

One approach is to extrapolate past trends. Extrapolations can be as simple as a linear extension of a line connecting points of population data drawn from historical evidence. Extrapolations can be more complex, using mathematical curve-fitting methods to provide nonlinear projections.

Another technique is to base population projection for a small area on projections

already prepared for larger areas. If, for example, it is discovered that population growth in a particular suburb is about 8% of the population growth of the SMSA, the distributive shares approach would be to assume that a general projection for the SMSA could be converted to a projection for the suburb by applying an 8% factor. Nonlinear applications of this technique are also used.

The cohort survival method is one of the fancier approaches to population projection. It applies birth-rate assumptions to each age group in the population. This approach is used to determine, by successive calculations, the change in the population, the advance in age of each age group (cohort) and additional population as a result of assumed births less deaths, i.e., national increase.

Obviously, this methodology is most applicable to large geographic areas. Attempts to apply it to small areas break down because of the monumental distortion that can be created by in-migration and out-migration from study areas. In fact, migration is one of the most significant sources of uncertainty and outright error.

Housing developers should be especially interested in areas with heavy in-migration since newcomers represent an immediate demand for dwelling units.

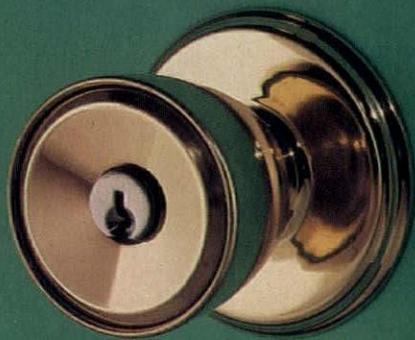
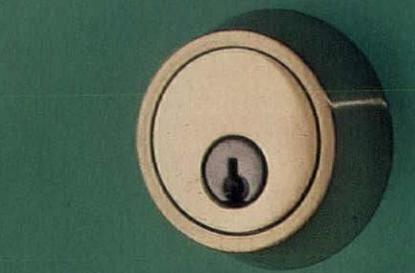
Qualitative factors. Reasonable accuracy of population data can be tested in a general way through allied economic indicators: for example by a proper interpretation of changes in school enrollment or by patterns of retail sales (when adjusted for inflation) in categories like food. Changes in an area's employment profile—particularly in the number of jobs in retail trade and the services—are also related to population change.

It is also extremely important to understand exactly who is represented by the numbers. In one instance we discovered that 6,000 of 27,000 people reported for a particular community were inmates of an institution. The institution, a state prison, was run efficiently enough to assure that these 6,000 men would not enter the housing market.

Another important factor: Some areas can enjoy substantial demand for new housing as a result of decreases in household size even with a static population base. It takes more units to house 100,000 people if the household size is 2.5 rather than 4.0 persons.

In summary, it is incumbent that the builder/developer determine how many of what kind of households can be expected to want his product at a given location. Population data is an important first indicator.

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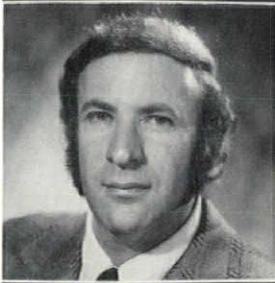


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"Mini-models are a great way to demonstrate your homes when it doesn't make sense to use full-size decorated models"

It's smart merchandising when the large-project builder sets up a substantial budget for decorated model homes and apartments.

But what happens when you only have 25 lots, or you're building on skip lots, or you're offering such fantastic values that you'll probably be sold out before your models are completed? Then it isn't really smart or very practical to get into the expense of model units.

For example, in analyzing building operations in some of the major housing markets like Atlanta, Houston, Detroit and Florida, we find large subdivisions with homes being offered by several small builders. These builders usually commit themselves to from five to 35 lots and it's just not economically feasible for them to amortize the cost of interior decorating, landscaping and maintaining model homes.

But on the other hand, it is very difficult for prospects to understand blueprints or relate to artistic renderings—yet alone get

excited enough to buy from them. So the small builder—or any builder operating under unusual conditions—should seriously consider the merchandising potential of mini-models like the ones shown here. They are being used to market \$75,000-\$90,000 homes under construction on 35 lots in Mt. Olympus—a large subdivision located in the Hollywood Hills area. The project consists of four basic house plans with 30 different elevations and is being built by an affiliate of Jack Shine's First Financial Group, First Western Development Co. On the basis of market research, it was concluded that this housing program could be marketed in nine months without using decorated models.

In working out the marketing details with FWD President David Bock, we concluded that there was a need for mini-models because blueprints and renderings could not really play up the home's interesting features: i.e. vaulted, two-story and clerestory ceilings, oversized rooms, raised platforms

for beds in master bedrooms, individual saunas in each master bath and curved staircases. In other words, the exciting elements that can best be shown in three dimensions.

The homes were previewed before construction started. During the first four weeks 11 of the 35 were sold using mini-models and renderings as principal merchandising tools. And, although sales are expected to level off to the original forecast, the mini-models were a significant factor in early acceptance.

And at another FWD project in the Los Angeles area called Garden Gate Townhomes, a cut-away model was used to market units before construction began. During the first weekend, 30 of 36 projected townhomes were sold; the other six went the following weekend.

Mini-model usage need not be confined to the smaller builder. Even when a high-budgeted model complex is to be used, what happens if models cannot be completed until the end of November or beginning of December? In most markets this is the worst time of the year for selling. If you wait until models are completed, you might find your prospect buying in a competitor's subdivision. But by setting up a sales program (using mini-models) prior to construction, or while full-size models are being built, you can get a jump on your marketing program.

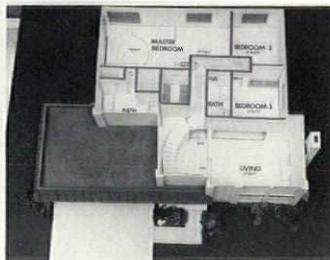
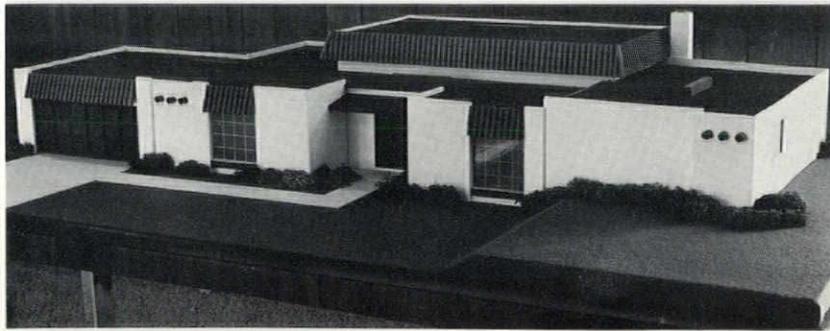
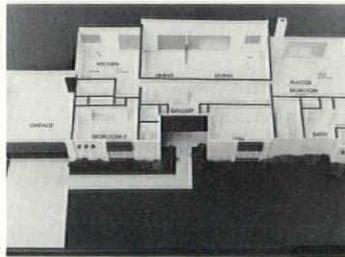
Of course, pre-selling is not always advisable. If the deals are not written up properly, or if there are lengthy construction delays, cancellations can occur. On the other hand, there are occasions where a project is unique, the location is unique and the timing is very important. That's one time to consider mini-models.

A word of caution: Mini-models make for interesting sales tools, but they can be easily abused by rough handling. So they should be demonstrated by salesmen only. Your prospects should not be allowed to remove the different elements and the models should definitely be protected from children.

Of course there are even better reasons for the salesmen to handle the mini-model. It is a fantastic conversation piece, giving him many opportunities to demonstrate the features of the house and to get his prospects involved in a way that is impossible from just blueprints.

Mini-models can be effective supplements to a normal model home presentation, or can give the builder a jump on the market during the construction period of the models, or, as Jack Shine has shown, when you're building in the right location, they can be all you need.

The mini-models were built by Bill Aguilar's Graphico Inc., in Orange, Calif., at a cost of about \$400 each. They are 1/2" to 1" in scale and are partially decorated with 1/2" scale miniature furniture (not shown in the photos) which was purchased in a toy store. Roofs are removable, as is the second story of the two-story homes, so prospects can view the entire living area.



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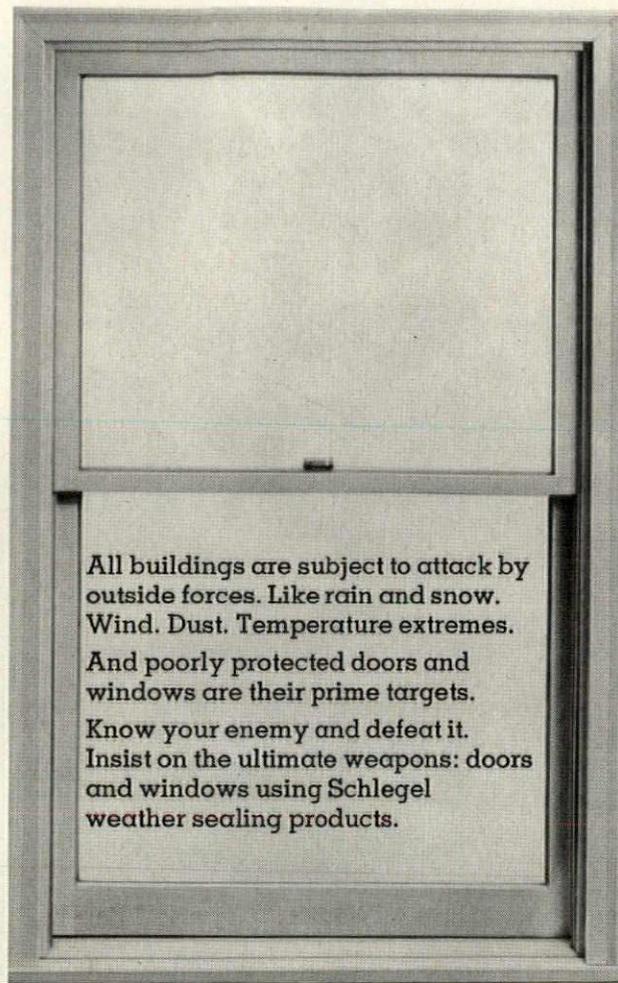
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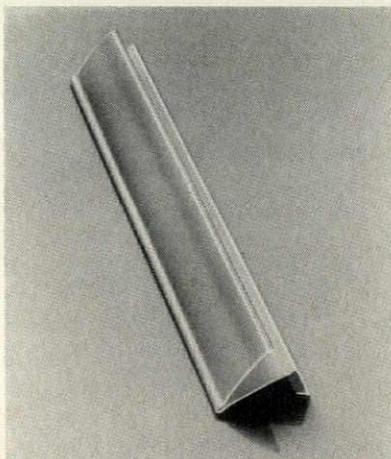
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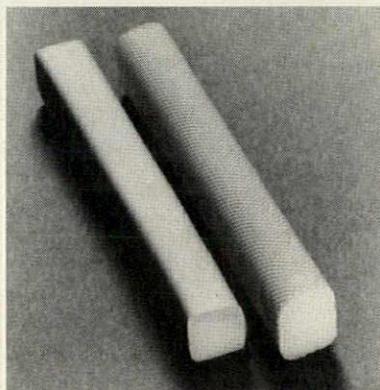
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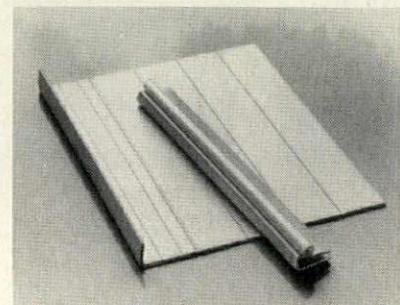
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Why land sale-leaseback is spreading: "Large professional developers can start more projects per year without increasing their capital"

We are in a period of increasing flexibility and adaptiveness in apartment and income-property financing.

One example is the rise in intermediate-term financing, discussed in a previous column.

Another example is the growth of land sale-leaseback financing.

Just three years ago this figured in about 5% of the deals submitted to our company. Now the proportion is up to 15% to 20%.

Who's using most of the land sale-leasebacks?

Primarily, it's the large professional developers—those more interested in a front-end profit than in an investment return. The sale-leaseback, subordinated to the first mortgage, may bring their total financing up to 90%—more than enough to cash out in most cases. Thus they are able to start more projects per year without increasing their capital.

Temptation. I would add a word of caution here. The sale-leaseback is an expansion tool, to be used with care. Its very ease and attractiveness could encourage some builders to overextend. Sufficient room should be left to cover possible cost overruns and slow rent-ups. The higher-ratio financing reduces the builder's equity needs but raises his break-even point.

With such financing the developer can build in larger phases than might otherwise be within his means. Or he might tackle larger projects than he otherwise could without a joint venturer.

There's another advantage to the land sale-leaseback. It eliminates the non-depreciable aspect of the project and reduces its total tax liability. In a typical first year, with good occupancy, this may triple the rate of after-tax return on investment. Needless to say, this makes the project a more attractive vehicle for syndication.

Sophisticated developers have also seized upon the sale-leaseback as a means of restoring tax shelter on an existing property. The land rent becomes a deduction against income. The proceeds of the land sale are treated as a capital gain.

The technique is also useful for refinancing an existing project which has a substantial term left on a mortgage with a lower-than-current interest rate. Combining it with a wraparound mortgage will give the developer more money than would be possible with a new first mortgage—and he will still retain his low interest rate.

An economical approach. What does the

developer give up to obtain these benefits? Surprisingly little.

The leaseback is much the cheapest form of junior financing. Land rents on a typically good project are within 1½% to 3% of the first-mortgage interest rate. There are kickers almost always, but they are not generally onerous.

There is, of course, increased risk to the cash flow, which is the last layer of the income stream. On a good apartment project the break-even point may be raised from 75%-80% occupancy to 88%-90%.

Nor is it hard to obtain this financing—always providing, of course, that the project is of high enough quality to justify the lender's risk in subordination.

Institutional investors, particularly REITs, find the vehicle attractive because it offers the combination of a high annual return with minimum administrative cost. It has residual value at the expiration of the lease plus the potential of extra income in the kickers. There are now even a number of trusts whose sole or primary corporate purpose is investment in subordinated land leasebacks.

Typical leaseback terms would be 10½% to 11% of the land-sale price as annual rent, plus 15% of any increase in gross income, plus 25% of net proceeds of any subsequent refinancing.

A typical term would be 40 to 60 years, with another 25-year renewal option based on then-appraised value. Some leases, with options, run to 99 years.

The typical arrangement would also in-

clude a repurchase option for the borrower, either at the then-appraised value or at a formula. There is a wide choice of possible formulas. Among them: the greater of cost or market; a multiple of rents paid in repurchase year; or 15%-25% of net refinancing proceeds.

Flexibility. Within this package there is great leeway for trading off of terms. Some investors, for example, will waive the kicker on refinancing proceeds if the borrower gives up the repurchase option. Or the investor may waive the income kicker in return for a higher annual rent. Some of the REITs have been particularly flexible in give and take on leaseback terms.

There is a hazard in making repurchase options too liberal. The Internal Revenue Service may then construe the leaseback as equivalent to a mortgage and this would affect the deductibility of the rent payment.

On proposed construction a sale-leaseback is negotiated much like a permanent mortgage—as a takeout commitment to be funded after completion and after closing of the first mortgage. A construction loan can usually then be obtained against the total takeout—first mortgage plus leaseback.

The principal criterion on committing a leaseback is the project's coverage of land rent. That is, the ratio of the cash flow after expenses and debt service to the land rent. This should be a minimum of 150% and may range up to 300%. The riskier the project, of course, the higher the coverage required.

One of the questions frequently asked about leasebacks is how they affect the resale of a project. If the leaseback is relatively young, the effect can only be positive. It increases the project's leverage and tax shelter. In theory a project close to the expiration of the last option should experience a decline in resale value. But there are not enough old leasebacks in existence to test that proposition.

In summary. The growth of the sale-leaseback technique has been one of the important factors that made possible the great expansion of apartment production of the past few years. It has been most used to date by large developers primarily concerned with front-end profits.

But it can be equally useful to the investment builder, who can immensely increase his leverage and tax shelter, and as a tool of refinancing. It offers a medium for the smaller builder to expand his operations. Risks and costs are limited as long as cash flow provides ample coverage of land rent.

Exotic financing

One difference between the current tight money period and those of 1966 and 1969 is that builders today have access to a wider repertory of financing tools, particularly in the multifamily and income project area.

One of these tools, the intermediate-term loan, which provides bridge financing when long-term loans are unavailable or undesired, was discussed in "The Mortgage Scene" in June. Reprints are available.

This month's column deals with the tool for meeting the equity gap in income projects, a gap that is becoming more common as costs keep rising.

ROBERT J. MYLOD, EXECUTIVE VICE PRESIDENT, ADVANCE MORTGAGE CORP., DETROIT, MICH.

The condo puzzle

How to solve the key problems in housing's only boom market

And the market is booming despite the tightening money squeeze. This year's condominium volume could reach close to 350,000 units—or 65,000 more than the 1972 total.

But this is also a relatively new market (for all practical purposes, it started in 1962). So even though condominium has become a household word, it still involves all sorts of unresolved problems, ranging from the filing of building papers to dealing with condo associations after a project is built out.

Significantly, most of these problems lie in the very areas that are making condominium successful. For example:

Condominium makes it possible to build for-sale housing priced significantly lower than conventional detached housing of comparable quality. But as yet, few potential buyers are comfortable with the idea of owning what is in effect a multifamily unit.

Condominium makes possible a virtually maintenance-free way of life.

TO NEXT PAGE

But the machinery for handling this maintenance is an increasing source of possible friction between the developer and his buyers.

Condominium makes possible the ownership of air-rights apartment units. But in so doing, it creates wickedly complex legal snarls in defining who is responsible for what.

Finally, while condominium has proved extremely popular with some segments of the market—notably very young families, resort buyers and older empty nesters—for other segments it represents a compromise. Surveys show that in middle price ranges, some 50% of condominium owners plan eventually to own a detached home. So in effect, the developer has to deal with a market that wants something else but is forced by financial pressure to buy condominiums.

A good indication of both the attractiveness of the condominium market and of the difficulties it poses is the series of seminars on solving the key problems of condominium which HOUSE & HOME has co-sponsored for nearly a year; ten sessions have already been held, and the level of attendance and interest has dictated still more sessions in the future.

It is the faculty of these seminars which has supplied much of the expertise in this issue of HOUSE & HOME. On the next 12 pages the experts pictured below will provide you with answers to the toughest questions that you are likely to encounter in the condominium market.

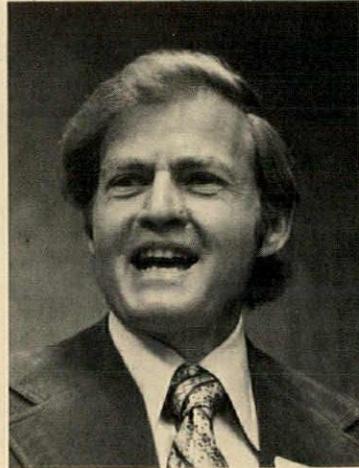
These are the experts



H. Clarke Wells



Lenard L. Wolfe



Jerome Snyder

H. Clarke Wells is senior vice president of L.B. Nelson Corp., an 11-year-old California-based apartment building firm which entered the condominium field about three years ago. Wells' column, *The Apartment Scene*, is a regular feature of *HOUSE & HOME*.

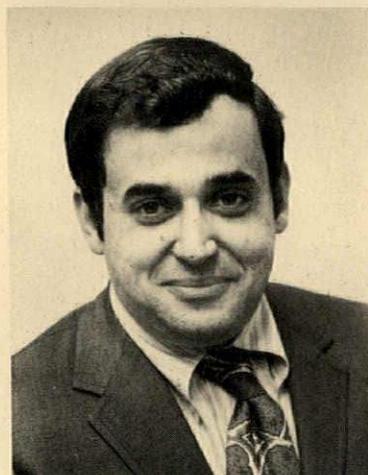
Lenard L. Wolfe, attorney with the Philadelphia law firm of Pechner, Sacks, Dorfman, Rosen & Richardson, is a specialist in real estate planning, zoning and related building subjects. He also is a contributing editor to *HOUSE & HOME*.

Jerome (Jerry) Snyder is president of J.H. Snyder Co. which, with Loew's Corp., has joint-ventured both low- and high-rise condominium projects from coast to coast.

Gabriel Gary Kotin is vice president and general counsel of Seay & Thomas Inc., a diversified realty company which develops, markets and manages a wide range of condominium projects.

William G. Bone is president and founder of Sunrise Corp., which was one of the early pioneers in developing resort condo projects in the Palm Springs, Calif. area and is now building in several other western states.

Barry M. Fitzpatrick is a partner in the Maryland law firm of Shaffer, McKeever and Fitzpatrick where he specializes in condominiums, cooperatives, planned communities and FHA-assisted housing.



Gabriel Gary Kotin



William G. Bone



Barry M. Fitzpatrick

The legal puzzle

Nowhere else does the newness of condominium ownership show up more strongly than in the realm of the law. As a developer, you must deal with a host of problems ranging from compliance with state condominium statutes to establishment of a viable insurance program. You and your lawyers will be sailing in largely uncharted waters, because there just hasn't been time for a body of condominium legal precedents to accumulate. But you still have to have at least a nodding acquaintance with basic condominium law.

Are condominium regulations the same in all states?

Not exactly. In each state the horizontal property act, which governs condominium development, is based on a model act issued by the FHA. But each state made variations—some minor and some major.

So while all condominium development is similar, procedures and regulations differ from state to state. These differences significantly affect every phase in developing a project, and, thus, its ultimate profit.

How do you go about creating a condominium?

First, immerse yourself in your state's horizontal property act. It's your bible and the vehicle that lets you legally convey title to air lots.

"Keep in mind," says Barry Fitzpatrick of Shaffer, McKeever and Fitzpatrick, "that the horizontal property act is a title statute, so all kinds of basic and familiar rules apply. Also, it's important to think of every condominium as essentially a subdivision. Much of what you learned as a subdivider dealing with lots and blocks is true for condos."

As with any subdivision, the first requirement for a condominium is to prepare a plat. But a condominium plat differs from a normal subdivision plat in one major respect:

It includes a floor-by-floor plan of the buildings to show the dimensions and location of each air lot. Each unit must have a permanent identifying designation and more and more title companies are asking that plans include floor sections and exterior wall thicknesses.

Again, as with any subdivision, the plat is not legally binding unless it is filed for recording by the developer and certified by an architect or surveyor. Some states require an engineer's certification. And, in a title state, the plat probably must be executed by all mortgagees involved in the project.

What's the next legal step?

Draw up a master deed. Required by statute, the deed sets forth the covenants and restrictions that will govern the condominium and spells out the rights and responsibilities of the developer and his buyers. Specifically:

- It must include a legal description of the property and of each housing unit and all commonly owned elements. The simplest way to do this is to include the plat in the

master deed by reference.

- It must distinguish between two types of elements: those limited to use by a particular unit owner or group of unit owners—a balcony, for example—and those available for the general use of all owners.

- It must set forth each unit owner's proportionate share of the project. This apportionment can be based on the value of each unit (not necessarily market value) in relation to the value of the whole project or on net saleable square footage. These proportionate shares, which become fixed once they are recorded, determine an owner's monthly expenses and the weight of his vote in the condominium association.

Despite its seemingly straightforward purpose, the master deed can be a booby trap for the developer.

Why is the master deed potentially dangerous?

"If something terrible is going to happen in a condominium project, it will probably be because of an oversight in the master deed," says attorney Fitzpatrick.

Consider an actual case. A developer completed 25 units of a 50-unit project, sold twenty and then had trouble moving the remaining five because of an unexpectedly soft market. So he decided not to build out the rest of the land. But since this situation was not covered in his master deed, he couldn't sell the unused acreage. It no longer belonged to him. Instead, it was a common element owned by the condominium association.

The moral, says attorney Lenard Wolffe of Pechner, Sacks, Dorfman, Rosen & Richardson: "When drafting the master deed, think today of what might happen tomorrow."

Obviously, what's needed is a knowledgeable and experienced lawyer. But the wise developer should be intimately familiar with the provisions of his master deed because the stakes are too high to risk any errors. Furthermore, there is a shortage of attorneys with in-depth experience in condominium law, particularly in localities where condominium development has just started.

How should a housing unit be defined in the master deed?

To avoid future trouble the deed must tell precisely where the unit starts and stops—

not only from side to side and front to back but also from top to bottom.

Side-to-side and front-to-back dimensions are measured between the outer surfaces of the drywall on opposite walls. In other words, the drywall—but not the insulation, framing, sheathing and siding—is included in the unit.

Top-to-bottom dimensions are measured from the top surface of the ceiling drywall to the bottom surface of the floor covering. In a two-level unit, the measurement should extend through the floor structure of the second level unless this structure includes utilities used by the owners of other units. In a high-rise, concrete slab building, individual ownership starts with the unfinished bottom surface of the ceiling slab and ends with the unfinished top surface of the floor slab.

If you don't spell out the limits of ownership, you could wind up like the developer whose sloppily drawn deed included the finished floors in the common elements. So, legally, the maintenance, repair, replacement and insurance of carpeting, tile and hardwood flooring became a common expense.

It is presumed that anything within a housing unit is paid for by the unit owner, anything on the outside, by the condominium association. So where ambiguous situations may arise, spell out who is responsible for what. Examples: windows, doors, balconies, patios, through-the-wall air conditioners, backyard air-conditioning compressors.

Finally, the master deed should include easements so that maintenance and repair personnel have access to individual units for service of common elements and neighboring units.

How can you limit your payment of common expense assessments for unsold units?

Short of limiting inventory, it is foolhardy to try. Once you convey the first unit to the first buyer, you have a partner. You become a condominium owner of the remaining unsold units—and are thus obligated by statute to pay their pro-rata share of the total costs.

"The real danger," says Fitzpatrick, "is that if you didn't budget in the beginning and pay your fair share, the owners association may sue you later."

TO NEXT PAGE

Where can you get help in preparing a master deed?

In addition to your lawyer, and possibly consulting attorney who specializes in condominium law, your title company should be brought into the picture.

"It's good to have another set of knowing eyes go over all those documents," notes Fitzpatrick. "The title company may have some new special requirements. This is a very fast moving field, and what was not needed a month ago may be essential now."

At the same time, you should try to obtain a title-company commitment to protect the mortgagee against statutory defects in the permanent loans on individual units. Says Fitzpatrick: "This will make your mortgagee sleep better at night, and it may cut down on the review time when the documents are sent him prior to recording."

What protection will your lender expect in the master deed?

At the very least he'll insist that since assessments for common expenses are a lien on each unit, this lien must be subordinate to the first mortgage.

Also, if your deed gives the condominium association the right of first refusal on resale of units, this right should not apply to units foreclosed by the lender.

How can the master deed protect against unit owners who default on their assessments?

The deed should provide that, at the option of the condominium association, a default in one month's payment can be considered a default for the next 11 months. That way, the amount to collect will be large enough to interest a lawyer.

As a further constraint against the recalcitrant unit owner, you should ask the lender on the individual loans to provide that a default in the payment of any assessment is also a default under the mortgage.

Should the master deed differentiate between the developer, as the owner of unsold units, and the individual unit owners?

Definitely. The rights and responsibilities of each should be precisely delineated. Otherwise, a rule that's to keep owners in line can backfire against the developer.

A case in point: In his association bylaws, a developer required that 1) units could be used only as residences, 2) no commercial activity could take place in the project, and 3) no signs except physicians' name plates could be posted.

Subsequently, the association got into a dispute with the developer and slapped him down with his own requirements: It insisted that he close his models and remove all his merchandising signs. So there he was with unsold units and no tools to sell them.

Do condominium projects have to be registered with state agencies?

Yes. Many states require that condominium offerings be registered with the state real estate commission, the attorney general's office or some other state agency.

Typical states are Michigan, New York, Oregon, New Jersey, Virginia, Washington and Hawaii.

Even if you are not building your project in one of these registration states, but your advertising and promotion reaches them, you must register. New York is by far the most adamant and the most difficult and unreasonable state to deal with in this respect.

When does a condominium come under S.E.C. jurisdiction?

Any condominium project, particularly in the resort or second-home field, is likely to come under S.E.C. jurisdiction if it is sold with any suggestion of investment. Hence it can be considered a security. And if the S.E.C. does have jurisdiction, then your state's securities commission is likely to have jurisdiction also.

Though the S.E.C. attitude toward condominiums is very much in flux, Fitzpatrick says that condominiums will be considered securities if they have rental-pool arrangements, or if they are offered and sold through written or oral representations which emphasize economic benefits.

So it's a matter of emphasis. If you emphasize the investment opportunity—with or without a rental pool—then the offering is very likely to come under S.E.C. jurisdiction. Of course, the S.E.C. reserves for itself the right to decide which condominium offering is a security and which is not.

How can a developer avoid registering his condominium with the S.E.C.?

Guard against inadvertent investment overtones.

Fitzpatrick recommends handling sales contracts this way:

1. Insert provisions that no rental pool, rental arrangement or rental service is offered by the developer or any third party. If the owner wants to rent his unit, it is his own responsibility.

2. Insert provisions that no warranty of any kind is made regarding the tax treatment of a purchaser by the Internal Revenue Service. Recommend that each buyer consult with his own tax counsel for advice. This guards against an emphasis on taxes, tax shelter or investment.

All advertising, promotional material and verbal sales presentations should also refrain from promising rental income or tax benefits. Even mentioning the *possibility* of these advantages is risky and may produce a negative reaction from the S.E.C.

How do you legally preserve your options in case sales don't go as planned?

There are two basic methods: Build the project as several condominiums, each having its own master deed, or let one master deed cover the entire project, even if it is built in phases. Here's how they work:

The multi-deed method. Suppose your plan calls for 500 units on 50 acres. Start with 100 units (the first phase) and allot ten acres for the buildings and common elements. This phase should have its own set of documents. Subsequent phases should be handled the same way so that at the end of each phase you are free to stop and use the remaining acreage for another purpose or sell it.

The recreation facilities are set up as a homes association, and as each condominium phase is completed it is plugged into the association.

The single-deed method. Your deed assigns to the first phase 100% interest in the common elements. This percentage is then reduced as you complete subsequent phases.

At first glance, this method seems to offer greater flexibility, but in reality it boxes you into a tight and dangerous position. For example, in a 500-unit project your initial homeowner assessments will be based on the premise that all the units will be built. If you decide later to build only 250 units, assessments will rise sharply, and you'll be open to litigation.

But that's not the only problem. Here are three others:

- The capital cost of your recreation package will have to be written off by 250 rather than 500 units.

- You'll have trouble with your lender if he has insisted on a percentage of sales before putting up his money. In condo jargon this is called the pre-sale requirement.

- You'll lose ownership of the unbuilt land because it's considered one of the common elements.

Do HUD's rules on interstate land sales apply to condominiums?

HUD says they do. The industry says they don't. And right now many condominium developers are ignoring them. Thus far, HUD's reaction has been some saber rattling but a minimum of legal action.

That could change, however. And, Fitzpatrick points out, you're running a big risk if you shrug off the Interstate Land Sales Registration Act. Legally, he says, the act applies to any condominium unless it qualifies for one of these four exemptions:

- It was built out before it was offered for sale.

- It includes less than 50 units.

- It is merchandised only in the state where it is located.

- The developer contracts to complete the last unit within 24 months after starting the project. This, says Fitzpatrick, is the best

Condominium insurance: Does your umbrella coverage leak?

It shouldn't but it might because insurance is one of the toughest condominium problems.

The basic reason is that the insurance industry hasn't kept pace in terms of underwriting and policy writing concepts.

"So, at this point, we don't have sufficient loss experience to tell how this situation is going to be remedied," says attorney Barry Fitzpatrick.

The foundation of condominium insurance is the single master policy that insures both the common elements and each individual unit owner. It's paid for at common expense, and individual certificates of insurance are issued to unit owners and mortgagees.

The master policy avoids a serious problem: Several insurance carriers squabbling over who pays for what if common elements and several living units suffer a simultaneous loss.

Though many companies do not offer a master policy, attorney Len Wolffe notes that some large national firms—INA, Aetna, Hartford, among others—do.

Coverage should be 100% of replacement value, less a deduction for foundations and excavations.

"Make sure that it's a first-rate reputable company with a solid record of prompt and fair payment," says Wolffe. "And make sure that the carrier is licensed to do business in your state so that you can sue him easily if it's necessary."

Here are the key points when setting up the master policy:

- Provide coverage to insure payment of assessments for units destroyed by fire while they are being rebuilt.

- Provide that the policy cannot be canceled or substantially modified by the carrier, even for nonpayment of premiums, without 30 days written notice.

- Provide directors and officers liability insurance. "While you and your people are building and selling out, you will control the association," notes Fitzpatrick. "Therefore, all of you will be the potential target of law suits."

- Provide bailor-bailee liability insurance. This covers the association when personal property is damaged or stolen within the common elements. For example, if a car were stolen from the project's garage, this insurance would protect the association if it was found at fault.

- Provide fidelity bond insurance to cover employees or agents who are responsible for handling association funds.

- Insert an A.I.M.A. clause. It stands for as the interests may appear at the time of the loss, and covers the developer whose financial interest in the project is continuously changing.

- Provide water damage insurance, or at least try to, although it's often difficult coverage to get. If you fail to get it, retain the correspondence that shows you tried, just in case later you are faulted by the association for not providing it. This coverage is particularly important in a high-rise where a single broken pipe or clogged washing machine can cause thousands of

dollars damage to units and common elements below.

- Provide flood insurance, possibly through a federal subsidy program. "Most insurance agents don't know they can write it," says Wolffe. "If you can get it, grab it."

- Make rebuilding mandatory in the master deed in case of fire loss. Obligate the owner to use his insurance money to rebuild his unit instead of walking away and leaving you and the association with a burnt-out wreck.

- Check to make sure that the standard provisions for public liability, workmen's compensation and theft are part of the master policy.

The master policy's coverage is described in the master deed and by-laws. Send these sections to your insurance agent and obtain from him a statement that the policy delivered to you meets these requirements in every particular. Better yet, obtain a letter from the carrier.

In addition, the master deed should contain a statement recommending that individual unit owners obtain tenant's coverage for personal liability and effects and unit improvements. This protects you against the over-zealous salesman who says, "The master policy covers your entire unit inside and out." Then when \$5,000's worth of custom-made bookcases go up in smoke, the unit owner is likely to sue the developer when it's discovered that this loss isn't covered by the master policy.

way to avoid HUD registration if you're selling interstate.

What is a quadrominium, and how does it fit in?

It is a condominium in which several owners

hold title to a unit for use at different times of the year.

Usually found in very high-priced resort communities, the quadrominium is physically the same as any condo unit, but its legal structure is different. The owners take title

as tenants in common among themselves, and each owner can mortgage his tenancy in common. If one owner defaults on his mortgage, the mortgagee forecloses only on the interest of that mortgagor; the titles of the other owners are not affected.

The financing puzzle

As a group, lenders are notoriously conservative. Faced with a relatively new concept like condominium, they can be downright backward and put up so many hedges that the deal becomes impossible. They have to protect themselves, but so do you, so you have to know both how to educate and how to negotiate.

What's the biggest headache in financing?

It's getting lenders to appraise on a retail instead of wholesale basis.

Appraisal at retail value will give you the full amount you need for construction and mortgaging out. You usually find retail appraisal in areas where condominiums have

proven track records.

But, where condominiums are unknown, wholesale appraisal is likely to prevail because lenders treat it as if it were a rental

project. Value is figured from a capitalized income stream and you come up with a number that bears no relationship to the total selling price of the units (although hopefully, it will bear some relationship to construction costs).

How do you handle wholesale appraisal?

There are several solutions. Here are two:

1. Suggest to the mortgagee that he draft his commitment so it has a floor and a ceiling. The floor is an amount based on wholesale value. If during construction, you demonstrate that you've sold a predetermined percentage (40% is typical) of units to bona fide buyers with 5% deposits, contracts and proven qualifications for financing, then the loan is increased to a much higher level—the ceiling.

"If you're in the right market," says Fitzpatrick, "this won't create a problem because by the time you need the difference you've hit the required percentage in pre-sales."

2. You can get a back-up commitment to supply the difference between the amount based on wholesale value and the amount needed to develop and build the job. The back-up commitment is used only after the original loan is 100% drawn.

If you get retail appraisal, what other problems is the lender likely to present?

You've got to negotiate the pre-sale requirements. Usually, the permanent lender will

close only when a certain percentage of units are sold. You should aim for 10% to 30% and be willing to settle for 40% which is the normal figure for many parts of the country.

What if you don't get to the pre-sale requirement point on time? You can buy an insurance policy. It's a commitment from a lender, usually an REIT, for a short term permanent loan. So if the job bombs out you've got a home for the construction loan.

When a project is completed and mostly sold out, how do you free up the cash in the unsold units?

When negotiating the original permanent loan, put in a provision that allows you to close a certain percentage of units in your own name so that you can cash out.

If you can't get this provision, or forget to put it in, find another source of permanent financing to cover these last units.

What are the special problems in financing a high-rise condominium?

The biggest problem is that you can finance other types of developments in stages, but a high-rise has to be financed all at one time.

Also, condominiums are still so new that in many areas there is a 50% pre-sale requirement before you can get some or all of your construction loan.

This can be more of a problem with a high-rise than with a low-rise project. If, for example, you were building 200 townhouse condominiums, you could break the project

into five stages of 40 homes each and fulfill your obligations by pre-selling 20 units in each stage. But in a 200-unit high-rise, there would be no way around the requirement to pre-sell 100 units.

Something else to watch out for is the temporary negative cash flow that could result from an early payback provision based on the percentage of the mortgage to the sales price. Lenders often require such a provision because they want their loan fully repaid before the entire project sells out; that way they will be sure to receive payment even if some units are left unsold.

You could end up with a temporary negative cash flow in the following situation:

Suppose that your construction loan provided 80% of your financing for a 100-unit high-rise. If you sold an apartment for \$50,000, 80% of the sales price—or \$40,000—would represent that unit's portion of the amount you borrowed.

But if the entire loan had to be repaid by the time 80% of the units were sold, each time a unit closed you might pay at the rate of 110%. Thus, in the above example, you would give the lender \$44,000. Since your buyer would have already given you a 10% downpayment, he would pay \$45,000 at closing. So you would be left with a mere \$1,000. And if you were also committed to making land payments each time you closed a unit, you might well find yourself with less money in the bank than you had before the closing.

The association puzzle *One novelty of condominium ownership is that it requires buyers not just to live close together but to share in the management of much of the community in which they live. This creates problems not just for residents but for you the developer. Since you must also share in the management during the buildout period, such problems may affect your sales adversely. And even after buildout, association troubles can haunt you if you haven't done your homework properly.*

When can you begin protecting yourself against suits for fraudulent maintenance assessments?

When you are drawing up the master deed. The deed must state the monthly assessment to be paid by each unit owner. And this assessment will be based on your operating budget, which will include both routine maintenance costs and a separate mandatory reserve for such major jobs as replacing roofs and boilers and repaving parking lots.

"Even if you have a competent in-house

staff, consult outside professionals," says Fitzpatrick. "They'll do more than help you estimate your maintenance costs and reserve needs. You can also ask them for written opinions stating that both estimates are adequate. And those opinions can stand you in good stead if, at some future date, the owners' association decides to sue you for fraudulent presentation of cost estimates."

Accurate cost estimates are also an increasing concern of lenders because of the decisions in several recent law suits. In these

cases the courts ruled that the lender was a joint-venture partner of the developer and, thus, liable for the developer's acts.

Who should control the condominium association?

During construction the developer should retain control by appointing the majority of the board of directors.

Not until the project is almost sold out should the unit owners take over and appoint their own board. Otherwise, the developer

risks interference that could hamper his construction and sales.

"Don't promise to relinquish control on a particular date," says Len Wolffe. "You never know ahead of time whether a strike or some other problem will delay construction or sales. A good time to let the unit owners take over is when you have sold the next to the last unit."

Should you manage the association?

Only during construction, says Wolffe. His advice: Set up a separate management company to limit the liability of your development company. Then after all units are sold, it's best to bow out, leaving the association to hire its own management.

However, if you have experienced in-house property and community managers, you may want to manage the project after it's sold out and after you no longer control the association. The method: While you still control the association, have your management company sign a contract with the association for a period of time considered normal in the area.

But you must obtain outside bids from reputable management companies, and your management fee must come very close to the lowest bid. All bids should be filed in case the association later challenges the terms of the contract.

"As a matter of fact," says Wolffe, "any developer who manages his own project should keep a record, filed chronologically, of everything that could possibly become part of a law suit. This will make it easier for his lawyer to reconstruct events and also to support his actions before a judge."

Should you involve residents in the project while you're still building?

There are two schools of thought. One says set up committees, get feedback, put residents on the board, and you'll get them on your side.

"I wouldn't do it," says Wolffe, "but a lot of very successful people do. A number of professional management companies strongly recommend this approach.

"So, if you have a staff person who can spend 75% of his time listening to mindless minutiae without breaking under the strain, then by all means investigate this route. If you or your management company don't have this type person, go the other route."

The other route—and the one Wolffe recommends—is, in his words, to "keep the residents at arm's length."

"Be as polite and as civil as possible," he says, "but don't tolerate interference."

However, he adds, you should be sure the residents are informed—preferably with a newsletter. Besides helping to promote sales, it keeps the means of disseminating information in your hands rather than in those of potential antagonists.

How do you make sure the project will be well managed after you give up control of the association?

Your master deed must require professional management for the project. So the residents should not be permitted to undertake self-management—to bring in a friend or relative, for example, who needs a job, comes cheap and has no experience.

In the long run, self-management lowers the value of the project and thus hurts the developer's reputation and his relationship with lenders.

How can you control the aesthetic appeal of the project after turning it over to the association?

If only for your prestige and reputation, any project you develop should continue to look its best long after you've sold out.

But there are always a few owners who paint the windows and doors a bright color, install a tacky canopy over their entranceway, hang laundry on the balcony, fly flags from windows, dismantle a jalopy in the driveway or carpet their balconies in different colors—an innocent practice that makes for an ugly patchwork on high-rise buildings.

To cope with such possibilities, set up an architectural control committee while you still manage the association. Staff it with responsible residents and one or two of your employees, and be sure it develops workable procedures.

The committee's authority can be vested in the master deed, but hard and fast rules should not be included. It's easier for sensible people to deal with problems as they arise than to rely on regulations.

How should you deal with prospects who get upset over many restrictions?

Treat the restrictions as positive features. Have your salesmen explain that these provisions are protection for the community as a whole. A few bad owners won't be permitted to damage the common elements, throw trash around, make excessive noise or otherwise downgrade the project.

"People generally appreciate this approach," says Wolffe, "because often it's precisely these unpleasant things that people are trying to escape when they come to a new community."

Are there ways you can aid the association after the project is built out?

Yes. The developer has clout in many areas where the association doesn't, and it can be in his own best interest to use it.

For example, you can lean on subcontractors to provide quick service in remedying defects, and you can put the heat on appliance manufacturers to go beyond the strict provisions of a warranty.

This is the kind of action that can build up good will for you with the association. It could pay off later if you and the association have a major confrontation.

How should you deal with complaints—reasonable or not—from unit owners?

First, budget \$50 to \$75 per unit to cover the cost of fixing minor problems.

"It's cheaper, easier and more effective to deal with complaints by remedying them than it is to fight them legally," says Wolffe. "Besides, unit owners do a lot of talking among themselves, so you are better off fixing problems than having owners bad mouth the project."

The next step is to build into the master deed machinery for taking care of grievances before they mushroom into *causes celebres*. "This view isn't what you promised me," or "The bathroom is supposed to be 10' x 12' but it isn't that way now," are among the type of complaints that are difficult to solve quickly.

Wolffe suggests that the following procedure, which he calls the marshmallow defense, be written into the master deed:

First, owners must notify the developer by certified mail that they have a complaint. The developer has 20 days to respond. Owners have the right to a hearing or meeting before the association, and they can have counsel present. If the determination goes against the developer, he has 30 days to provide satisfaction.

"As a practical matter," says Wolffe, "the complainant is usually a hot-tempered woman or hen-pecked husband who flies off the handle when he doesn't get instant satisfaction. Then he sees his lawyer, and everyone's psychological position becomes fixed. The next thing you know you have a law suit, and the complainant goes around with a petition and gets 19 other unit owners to join in."

The marshmallow defense allows rational thinking to solve the problem because there is sufficient time for the complainant to cool off.

How should you deal with disputes between unit owners in your project?

Picture a quiet old lady, whose cooking makes peculiar odors, living next door to a group of young drummers. She can't stand their drumming at all hours of the night, and they hate the smell of her cooking.

The solution is to draft into the condominium documents a method of resolving disputes between owners at a very subdued and low key level.

Typical methods: Ask the association or another project's association to arbitrate the dispute. If necessary, provisions can be made to ask for the services of a recognized arbitration organization.

The homes association: often a viable alternative to pure condominium

It works for attached single-family or townhouse projects. Each owner holds fee simple title to the land his dwelling sits on and is a member of a nonprofit corporation—the homes association—which owns the common elements and is responsible for their maintenance, repair and insurance.

"If you are a townhouse builder, there is nothing that you can do with a condominium that you can't do with a homes association," says Barry Fitzpatrick. "The big difference is that the homes association is much simpler and less costly."

Here's why:

- You save time—and money—by eliminating the one or more registration processes required for condominium.

- If you are the first in town with a condominium, you must educate the

public and lenders to this unfamiliar type of ownership. A homes association is so near to conventional ownership that such education is unnecessary.

- Phased development is simpler, hence faster with an association than with condominium.

- You can reduce your liability for common expense assessments more easily in a homes association than a condominium.

- An FHA or VA condominium townhouse project will come under section 234 of the National Housing Act and will have to meet prevailing wage requirements, cost certification and multifamily processing which at its very least takes nine months. And FHA says that before it will insure the mortgage, 80% of the units must be sold.

On the other hand, a homes association in a FHA-VA project comes under section 203B of the National Housing Act where processing time is usually nine weeks.

To qualify for homes association ownership, a project should meet two requirements:

1. No dwelling unit may encroach vertically onto any other unit.

2. Each unit must be located on its own lot without violating local requirements for density, minimum lot size, utility connections, street frontage and setbacks.

"When these two characteristics are present," says Fitzpatrick, "forget condo and go with the homes association. Or at least think long and hard about it. There's nothing magical about condo. The homes association is more likely to produce less sweat and a higher profit."

The high-rise puzzle

You think there's no place to go but up? Think again. Building a high-rise condominium is different from any other type of condo; it's far costlier—and far riskier. That means you have to have the right product at the right time and at the right price. Because once you start going up, you're committed to going all the way.

If you have the option to go high-rise or low-rise, wouldn't lower land costs per unit make high-rise more profitable?

No. Higher construction costs would more than offset the savings on land.

According to G. Gary Kotin of Seay & Thomas and Jerome Snyder of J. H. Snyder Co., there are only two situations in which high-rise would be preferable: when you are building in a high-rise area such as a big city, and when you can capitalize on a view.

Snyder's successful Coronado Shores project [H&H, Sept. '72], a string of 15-story towers on a narrow island between the Pacific Ocean and San Diego Bay, was originally conceived as garden apartments. After a year and a half of rejecting site plans that allowed views of the bay or ocean for only 20% or 25% of the units, "we finally decided to bite the bullet and go high-rise," says Snyder.

Now all of the units have waterfront views, 75% of the site is available for recreation and open space, and the towers are selling out almost as soon as they are completed

at prices ranging from \$33,000 to \$98,000 compared to the top price of \$50,000 Snyder had planned to charge for garden apartments.

Do I have any choice about type of construction?

Technically, yes. Realistically, no. There are three types of high-rise buildings—steel frame, ductile frame and flat slab concrete—but the first two are so expensive to build that your apartments would have to sell for at least \$70 a square foot.

Most builders use the flat slab method for condominiums or rental apartments. Its drawback is that it allows very little flexibility in layout, so planning has to be very careful.

Still, no matter how carefully you plan, you'll always find that you should have done some things differently. If you are constructing several buildings, try to remain as flexible as possible so that you can make changes in the second one.

For example, when Snyder found that studio apartments, which had sold well at a similar project, did not sell in the first

Coronado Shores tower, he was able to discontinue them in the second.

Is there an optimum height for a high-rise condominium?

The optimum height varies according to location and market.

As far as construction costs are concerned, Kotin found that in Chicago the difference in cost per salable square foot between an eight-story building and a 22-story building was only 2%. However, depending on building codes, there are certain points at which construction costs rise sharply: for example, when a smoke tower, higher-speed elevators or an extra bank of elevators become necessary.

Who should build the job—you or a general contractor?

"Don't try to build a high-rise yourself if you haven't built one before," says Snyder.

In normal times you should find a general contractor who will guarantee cost. If, for example, he guarantees the job will not cost more than \$6 million, you can do your plan-

ning and pricing based on that figure. Should he succeed in bringing the job in for \$5.5 million, you both share in the savings according to a formula you have agreed on in advance.

In boom times general contractors do not have to take the risk of guaranteeing cost and so they generally quote excessively high prices. Then it becomes more economical to do the job on a construction management basis.

Construction management people act more or less as your agent and receive a fee. They subcontract all the work and generally are top-level supervisors. However they do not guarantee costs. Thus, if you have a choice, use a general contractor who will give you a firm price.

What will the project cost?

You can get an idea of cost from some composite figures Gary Kotin has prepared based on 13 recent projects in several parts of the country (see box).

What should you look for in an architect?

No matter how satisfied you are with your present architect, if he hasn't built high-rise before, he's not for you—particularly if this is your first high-rise.

And if your architect has worked only with rental apartments, be sure he understands that condominium buyers are much more demanding than renters (see below).

Your contract with the architect should provide for him to redesign the project at no additional fee if construction bids exceed the cost limits you gave him—the normal AIA contract does not include this provision. Also be sure that your architect's contracts with structural and mechanical engineers provide for any necessary redesign.

What should you remember about planning a high-rise condominium?

The first thing to remember is that you will be selling a view. You might consider using single-loaded catwalk corridors if you are in a part of the country where weather permits so that all of your units will look out on the view.

If your market is primary housing, you'll need bigger rooms, more closet space, larger lobbies, corridors, common areas, laundry rooms, etc. than in a rental building.

And you'll also need more storage space—particularly if you're building for families moving from single-family homes. Kotin suggests that in addition to the usual basement lockers and a secure area for bicycles, you use the space behind the elevators on each floor, next to the garbage chute, for storage bins that are tall enough to hold skis in the North or golf clubs or water skis in the South.

"What all of this means," says Kotin, "is

WHAT HIGH-RISE CONSTRUCTION COSTS (based on composite of 13 actual projects)

	Per sq. ft of salable space	Percent of sales price
Land cost (including demolition but with sewer and water available to the site)	\$ 4.81	9.1%
Poured-in-place concrete slab construction, including open garage	30.38	57.3%
Architect-engineer (below average—should be about 1/3 higher)	1.03	1.9%
Project management development fee (including overhead, legal, title, taxes, insurance, unsold unit assessment)	2.50	4.7%
Finance cost (on development, equity and land loan—also includes placement fee, supervision or inspection fees, etc.)	4.72	8.9%
Marketing costs (unusually low because distorted by very large project included in composite)	1.83	3.5%
Total	\$ 45.27	85.4%
Profit	7.73	14.6%
	\$ 53.00	100.0%

that you'll have a lower ratio of salable area to gross area than in a rental high-rise of comparable size. It's an additional factor to remember when you're pricing your units."

Chances are that you will be using more glass than you would use in a low-rise. This makes it necessary to air condition the building, including the corridors, no matter what part of the country it is in.

Snyder offers some other dos and don'ts:

- Always build balconies. Although people don't use them, they like to know they are there.

- Get a landscape architect who is experienced with high-rise. Otherwise he may not take into account the fact that people will be looking down on the landscape. What is attractive at eye level often looks sparse or cluttered from the air.

- Be particularly scrupulous about maintaining the grounds of a high-rise. Every brown patch of grass and every bit of sand or dirt in the bottom of the pool is visible from the air.

- Sink your tennis courts at least five feet. This way you don't have to surround them with high, prison-type fences.

- Provide maid service. It's a good selling point.

- Avoid penthouses. Not only do they cost more to build than standard units but you lose the revenue on the units you could have built instead.

"Just call the whole top floor penthouse, put PH on the elevator button and people will love it," says Snyder. "And if you feel you personally must have a penthouse, do yourself a favor and go live in somebody else's

building. Let him lose the money."

How extensive should high-rise recreational facilities be?

As with any condominium, this depends on your market and your location. But Kotin sees a trend away from elaborate amenity packages.

"Particularly in high-rise," he says, "we find that people don't want to get into community activities within the building."

Thus Seay and Thomas's recent projects have included only the bare minimum of recreational facilities: small swimming pools with large decks and meeting rooms that are "not as plush as they would have been two years ago."

Expensive amenities may even hurt sales, according to Kotin. "People look at them and say, 'We're the ones who will have to pay for their upkeep.'"

Snyder disagrees. He believes the New Year's Eve atmosphere in the Coronado Shores clubhouse every weekend is a good sales tool for new prospects.

But he does admit that the only way amenities will work is for the developer to force-feed them to the buyers. The clubhouse at Coronado Shores was empty, he says, until it began dispensing free liquor.

What is the formula for pricing high-rise condominium apartments?

More than with any other type of project, the desirability of a high-rise unit varies according to its location within a building.

"If you price your apartments according to square-footage alone you'll be in desperate

trouble," warns Snyder. "Buyers will pick the best apartments and leave you with the worst."

A good example is a Florida condominium that sold out one entire line of apartments—from top to bottom floors—in the first day of sales. No one could understand why, because the other units were selling slowly even though many had ocean views.

It turned out that because of the curve of the building, the units that sold out so quickly had an unrestricted view of the Boca Raton Country Club. The developers hadn't noticed, but the buyers were quick to spot it the first day.

So if your building is to sell out evenly you must price the less desirable units lower and the more desirable units higher—just how much higher you may not be able to determine until you start selling.

Kotin tells of a 33-story building in Chicago where he priced the units with views of the lake or of downtown Chicago \$3,000 above the identical units with less spectacular views. Within two weeks he had increased the differential to \$4,500 and finally, eight weeks later, he upped it to \$6,000. The building then sold evenly.

Ocean views are so highly prized in Snyder's Coronado Shores that he charges a \$20,000 differential on a 2-bedroom apartment (from \$59,900 for the bay view to \$79,900 for the ocean view) to keep the buildings selling evenly.

The old formula of charging floor-by-floor increments has fallen into disuse because sales people found it too confusing. Instead, a height premium is added every three or four floors. Increments ranging from \$500 to \$750 every three or four floors on units selling at \$60 a sq. ft. seem to be about average.

How can you pre-sell a high-rise condominium?

The very nature of a high-rise makes it impossible to sell from model apartments until construction is almost finished. So, in general, you have two alternatives: a small on-site sales office or sales pavilion with furnished models.

Of these, an on-site office is the least expensive. And it can be surprisingly successful, says Kotin. He cites one project where he not only got deposits for 25% of the units before half the caissons were in the ground, but also discovered a bigger demand for two-bedroom units than had been expected. Since it was still early enough to change plans, he switched from one-bedroom to two-bedroom apartments.

Other builders opt for the sales pavilion—particularly in multi-phase projects or in a single-phase project if the pavilion can later be converted to a recreation center.

Says Jerry Snyder: "You have to be realistic about what a pavilion will accomplish because your furnished models can't show people all the things you're selling—the

view, fancy lobbies and corridors, doormen and the like."

Snyder solved this problem at Coronado Shores by maintaining some furnished apartments in the project's earlier buildings. Prospects for the buildings under construction are invited to use these apartments so they can get the feel of what it's like to live in the project.

"It's pretty hard to stay in one of our units without buying," says Snyder.

Is there any other way to show prospects the view?

Kotin describes two methods Seay and Thomas is using:

For a \$60 million multi-phase project, the company had the view from a high floor filmed and then edited so that the entire 24-hour day was compressed into about six minutes. Thus prospective buyers visiting the model in the sales pavilion can look out the window and see what the view would be like at any hour of the day.

For a single-phase project the company had color pictures taken from a helicopter showing what the view would be from different floors. Now a prospective buyer can see the view in all directions from the apartment he is considering even though the building is still in the early stages of construction.

These same photos, showing the view from the 25th floor, have been used successfully in a series of ads.

The conversion puzzle *Switching rental apartments to condo apartments is the latest craze, particularly in areas where the rental market is soft, and apartment building owners are beset by tenant unions and other management problems. But it's not always the best answer; a bad rental building will usually make a bad condominium, and converting may simply mean trading one set of problems for another. In short, it will work well only if you know what you're doing.*

What is the best location for a conversion?

Downtown areas where there is no buildable land nearby are generally the best bet.

"Only one building in a thousand could compete with new construction," says H. Clarke Wells of L.B. Nelson. Thus his company avoids the suburbs and concentrates on areas where there is little or no new housing. These also have the advantage of being close to jobs and shopping.

In resort areas where new construction has been stopped by such environmental moratoriums as California's Proposition 20, condominium conversion offers a way to provide

for-sale units in desirable locations. For example, Nelson's condominium conversion in downtown Santa Cruz is competing successfully with new housing being built outside the city and selling at twice the price.

Is there an optimum-size project for conversion?

Generally smaller projects—those with fewer than 100 units—are easier to convert than larger ones.

Many communities and lenders require that 50% or more of the units be sold before the project can be legally converted or mortgages granted. Also, if the tenants decide to

fight the conversion, the fewer you have to deal with the better.

These considerations are doubly important because your profits depend on how fast you can complete the conversion. Not only will you lose rents during the conversion period, but you will find that the longer buyers must wait for final closing the more apt they are to change their minds. Also, as time drags on, it becomes harder to convince prospective buyers that you're actually going through with the conversion.

One way around these problems is to phase larger conversions into small chunks. However, renters tend to move out as soon as word

gets around that the building is being converted, so you will have to do a delicate public relations job to keep from losing large amounts of rent.

What is a good mix?

Beware of projects with a large percentage of one-bedroom or studio apartments unless you are certain that you have a market for them.

One-bedroom condominiums are not difficult to move in resort areas where they'll be used as second homes or in areas with a high percentage of well paid singles. In most metropolitan areas, however, they will increase your sell-out period because they will be used as primary housing and thus will not appeal to a large percentage of the typical mix of families, young marrieds and singles.

"Even a surprisingly high percentage of singles want two-bedroom apartments when they are buying rather than renting," says Wells. "In California we wouldn't take on a conversion with more than 25-30% one-bedroom."

What else should you look for in choosing a building for conversion?

Look for low turnover and low vacancy rates as transients are unlikely sales prospects and high turnover and vacancy could be a clue to something wrong with the building.

Apartments renting in the middle to high range generally make better conversions than low-priced apartments because the tenants are more likely to be able to afford to buy and because you cannot be accused of causing a housing shortage by taking lower-rent apartments off the market. However, you may find a building in a good location where the rents are low because the building is older.

In such a case or in other instances where you are going to do extensive rehabilitation and could gain time by emptying the building during construction, none of these considerations need apply.

How much refurbishing is practical?

The more refurbishing you do, the longer it takes to complete the conversion and thus the greater the risk.

"Conversions shouldn't require more than redecorating, possibly new kitchen appliances and bathroom fixtures, but not new windows and doors," says Wells. He suggests that you delay selection of some of the finishing materials and appliances so that the buyers can choose the colors.

Extensive refurbishing may become worthwhile where a building has a really prime location. For example, Equity Specialty Plan Inc. converted some apartments in a section of Los Angeles where the homes sold at over \$60,000. Bargain prices of \$16,500 to \$22,500, however, resulted in only six sales in three months. But when the com-

pany did extensive remodeling and raised the prices by 50% more than the cost of the improvements, the remaining 53 units sold out in two months.

Does conversion affect a building's status under the local building codes?

This varies from place to place, but in many communities apartments are considered single-family homes instead of multifamily when they are converted to condominiums.

This means upgrading the construction to include such things as two-hour instead of one-hour firewalls—a costly possibility with townhouses but out of the question with apartment buildings.

Other typical code requirements when a building is converted from apartments to condominiums include: additional parking spaces or garages, more open space or green area, separate sewer laterals from each unit to the main sewer trunk and separate gas, water and electric meters.

"Structural alterations are usually impossible or unfeasible, and variances are tough to get," says Wells. "So it's essential to research building codes thoroughly before closing the purchase of a potential conversion."

Does conversion mean you would need further subdivision approval because you are creating, say, 20 separate title entities in place of one?

Again, this varies from place to place. As a general rule, if the building complied with the subdivision ordinance when it was built, no further subdivision approval should be required on conversion.

"There is some precedent in the courts that conversion from rental to condo is not a change in use within the meaning of the zoning ordinance," says attorney Barry Fitzpatrick.

However, as you probably won't want to test a community's regulations in the courts, you should determine what will be expected of you before you buy the building.

Is there apt to be any difficulty in financing a condominium conversion?

Yes. The major problem is finding a lender who understands conversions. Lenders do not recognize the value of a building as a condominium until it becomes a condominium, so they base the loan on the building's value as a rental.

In addition, the heavy cash flow involved in refurbishing a building often makes the necessary cash investment appear to be out of line compared to the anticipated return—even though profits based on sales price are usually higher than profits from newly built condominiums.

Sometimes it helps to look for financing outside of the community as the local bankers may be too close to the situation to see

a project's potential as a condo.

If you don't need new financing, will the present permanent lender be able to release units from the loan on an individual basis?

Yes, if you're lucky enough to have a lender who understands condominium conversion, or if the building was constructed recently enough so that the loan documents provide for per-unit releases.

Generally, however, you have to persuade the permanent lender of the merits of conversion and the advantage of getting back his 6% money so that he can put it out at 12%, or whatever the going rate is. Surprisingly, he won't be easily convinced.

"My experience with getting lenders to release individual units has been bad—particularly with the insurance companies," says Fitzpatrick. "It's getting better because they're beginning to understand conversions a bit better. But usually their reaction is still negative."

What can you do if the lender refuses to release individual units from the loan?

Refinance the whole deal with a lender who understands and will agree to conversion.

Typically, your source will be a short-term lender such as an REIT, the service corporation for a local S&L or a commercial bank that regards the loan as construction financing.

Generally conversions are financed with a bridge mortgage in which the lender makes a loan based on the building's value as a rental and allows you to repay it as each individual sale is closed. The same lender may provide the individual mortgages to your buyers.

Lenders often require pre-sales of from 51% to 80% before they will consider the building as a condominium. Try to avoid such pre-sale requirements, as they will force you to wait until that percentage of sales is made before your buyers can get mortgages and you can close individual sales.

Should profits from a condominium conversion be treated as a capital gain or ordinary income?

"There is absolutely no track record at the Internal Revenue Service on this," says Fitzpatrick. He suggests taking the conservative approach and reporting such profits as ordinary income.

If you owned a building for seven years, for example, you could show that you had investment motive if you sold it to another investor. But Fitzpatrick says you would have a tough time convincing the IRS that you converted the building to condominium and sold it as individual units—thereby attaining dealer's status—simply because the market "constrained" you in that direction. Unfortunately, the IRS will seldom rule in

advance on dealer status.

"If you're going to roll the dice on that one with the IRS," says Fitzpatrick, "try to close all the sales in one reporting year so that there'll be only one year for them to audit."

Is your profit more likely to be considered a capital gain if you sell your rental units to another corporation that will then resell them as condominiums?

Yes, if the corporation is not identified with you and you are not in any way a dealer—i.e., a seller of condominiums. In actual practice, however, the answer is less clear-cut. Take a situation described by Fitzpatrick:

After a developer has held a project long enough to demonstrate investment motive, he creates a limited partnership, vesting 30% of this partnership interest in a third party. The developer then sells the project to the limited partnership at a price somewhere between wholesale and retail, treating the profit as capital gain. The limited partnership then markets the individual condominium units and treats the profit as ordinary income.

"This is a real coin flipper," says Fitzpatrick. "It may work and it may not."

Are there any differences between insuring a condominium conversion and a new condominium project?

There is one major consideration: If you have converted, say, a ten-year-old building and subsequent changes in the building code or the zoning ordinance have made it a non-conforming use, it could not be rebuilt if it were totally destroyed by fire.

You can insure around this risk by getting an endorsement that will provide the condominium association with funds to pay the difference between building under the old code and building under the new.

How do you find out how many tenants you can expect to convert before you buy a project?

Get permission from the owner to interview a majority of the tenants as the owner's representative on the pretext that you want to know what can be done to improve the project and the apartments. At the same time run a checklist designed to estimate your refurbishing costs.

The people who do this interviewing must plan their questions very carefully because you can't let the tenants find out about the intention of converting to condos.

What conversion rate can be expected?

The percentage of tenant conversions depends on the rental range. If you expect a high percentage of tenants to buy their own units, you must look for projects in the over-\$400 a month range. Thus, while desirable, converting tenants should not be your prime consideration in deciding whether to convert

a building.

"Our batting average for tenant conversions in a half dozen projects in all rental ranges has run from 0% to 20%," says Wells. "And the project in which we converted no tenants—and never expected to—was our most successful."

Once you buy a building, how do you handle the existing tenants?

As soon as possible after the purchase, approach each tenant personally to explain that his apartment will be sold but that he should not panic because he will be given plenty of time to move out. At the same time tell him that he has the opportunity to buy the apartment and that purchase can be very attractive financially.

You should come armed with the following: sales price of each apartment, financing terms and purchasing procedure, monthly maintenance costs and description of how the condominium association will operate, condominium documents, arguments on owning vs. renting and inducements, such as redecorating or refurbishing, to make purchase attractive.

It is essential that you do this quickly and thoroughly. If you let rumors start you'll have premature moveouts, loss of potential buyers, unnecessary vacancies and possibly a time-consuming and expensive tenant uprising.

Must this tenant contact be on an individual basis?

Not necessarily. Wells describes how L.B. Nelson handles it:

In a 13-story tower that it is converting in downtown Oakland, Nelson invited all of the tenants for cocktails and dinner at the best restaurant in town. Seventy-two percent of the tenants attended, plus about a half-dozen interested outsiders. Representatives of the lender and title company were on hand to answer questions about the availability of mortgages and generally to bolster confidence of the tenants in the stability of the deal.

The dinner got off to a good start with the announcement that the well liked resident manager had decided to purchase her own apartment. The company showed color slides of the interiors of some of the better decorated apartments to reassure everyone of the value of the property, then handed out a sales brochure and price list and described the refurbishing that would be done and the decorating that would be available to purchasers. The lender's representative explained that monthly payments would be lower than current rents.

"What we were doing in effect was merchandising these people's own apartments and making them realize what great investments they were," says Wells. "Some of them were really surprised."

What questions are the tenants likely to ask when you tell them that their building is being converted?

Obviously they want to know how soon they would have to move out. Also: Would the company honor leases? Would it refund security deposits and cleaning fees?

Potential buyers often bring up specific doubts: Is the heating system adequate? How is the percentage of ownership determined? Who owns the land? Does everyone get a garage space with his unit? Do the cash reserves cover kitchen appliances inside the living units? Would they have to pay for refurbishing common areas if they bought? And, most important of all, what are the problems involved in reselling?

And the less familiar they are with the condo concept, the more questions they'll ask.

How do you handle non-buyers?

First of all, be as flexible as possible in dealing with them. This is important for two reasons: You don't want to panic people into moving out prematurely, and you don't want to deter potential buyers by taking a hard-line approach with renters. If you impress them as being a tough guy, they may decide you're too dangerous to do business with.

In many instances renters provide the margin between the success and failure of a conversion. Even though your sales may be successful, you can lose too much money if the rents are not coming in while interest, taxes and other expenses continue. Rental income is particularly important if you have a large pre-sales requirement before you can convert sales into closings.

In a large conversion, with a sales period that stretches out for many months, you can often re-rent apartments on a month-to-month basis if you charge one-half to three-quarters of the going rate.

How do you set the price of condominium apartments?

You have to do some comparison shopping in the area as pricing depends to a large extent on demand. In some communities you can get only 70% or 80% of the footage price of nearby single-family homes; in others you can get the same price or even more.

Pricing is also based on what the market will bear—in other words, what your particular project has to offer. A good indication is the rental price of the apartments.

There are exceptions, of course, such as when you have done extensive refurbishing to upgrade the building or when the apartments have been renting at less than their potential. (One hundred percent occupancy over an extended period often means that rents are too low.)

In basing your prices on former rents, remember that tax advantages make a \$50 a month increase mean far less to the buyer

of a \$50,000 condominium than a \$5 increase means to the buyer of a \$15,000 condominium.

One more thing to keep in mind is that you must reserve the right with the condominium association to sell unsold units at lower prices than the ones you started with.

Is there a difference between marketing a condominium conversion and a new condominium?

Yes, and it's a critical difference. In marketing conversions you don't have the opportunity to pre-sell units six to eight months in advance of delivery as you do in new housing.

"Taking on a conversion is like being handed a 50- or 100- or 200-unit subdivision of new homes in which not one sale has been made but all the homes are completed and your company is carrying them," says Wells. "This may sound obvious, but I haven't met one newcomer to the field who fully understands it."

What it means is that you have no time to fine-tune your advertising and sales promotion and to pinpoint your market—and you will pay dearly for every mistake you've made once the marketing program is launched. You will also find it hard to set

a marketing budget as you cannot calculate the sellout period with any accuracy.

How can a conversion compete with new condominiums?

Conversions generally have one great advantage over new condominiums: location.

The older buildings are generally in the convenient closer-in areas where there is no vacant land for new construction. And sometimes, even after refurbishing, you can sell apartments in older buildings for less than newly built condominiums.

Presley Company found a way to bring both of these assets to the attention of prospective buyers with an ad for a Washington, D.C. conversion headlined:

WHY PAY 1973 PRICES FOR 1973 WORKMANSHIP?

Their copy pursues that theme, stating that the size and workmanship of the units reflect the tradition and quality of the past at prices unheard of in this day and location. It describes the convenient location of the building and the refurbishing that was done, even offering a copy of the engineers' report. Then it concludes: "If you feel that they don't build them as they used to, you'll find our condominium to your liking."

Cost of converted apartment

Sales price	\$31,500	
less 10% downpayment	3,150	
	<hr/>	
Amount of mortgage	\$28,350	(to be financed at 7½% interest over 30 years)
Monthly mortgage payment	200	
Real estate taxes	47	
Homeowner's association	60	
	<hr/>	
Total	307	
Tax write-off	47	(assuming person is in 20% bracket)
	<hr/>	
Adjusted monthly cost	\$ 260*	

*\$40 less than the tenant was paying as rent.

The resort puzzle

So much of the resort housing built in the last few years has been condominium that the terms are practically synonymous; people no longer buy golf-course cottages or ski chalets, they buy golf-course condominiums or ski condominiums. The reason is that resort development and condo ownership go together beautifully, facilitating the joint ownership of a host of recreation facilities, and giving buyers maintenance-free weekend and vacation living and often the means of renting their units for extra incomes. But to be successful in resort condos you must first understand the vagaries of the resort market.

How should resort-home floor plans differ from those of primary housing?

They should reinforce a mood of ease and informality. They should be open, emphasizing multi-purpose rooms rather than more formal living rooms, and including such sex appeal items as garden kitchens, 10' ceilings, atriums, etc.

You will probably require fewer bedrooms since the buyer is apt to be in the 50-plus age bracket, with fewer children living at home. Ski areas are the major exception to this rule because buyers are much younger and have more children with them.

Another exception can occur when the project is one to which buyers may eventually want to retire. In that case, your condos

will need, in addition to the attributes noted above, most of the basic qualities of a good first home.

How far should the project be from your prospects' work or primary homes?

No more than 150 miles. You will want to promote your units as weekend homes as well as resort homes, and three hours is about the limit that people can spend on the road and still have time to eat and start unwinding on Friday evening.

There's another important point about location: It's often wise to build a resort project where there is also some demand for primary housing. This is a form of insurance in case

you are not entirely successful in selling the project as secondary housing.

Should the land plan have an internal or external orientation?

Internal orientation is advisable—preferably with a wall around the project. External orientation is cheaper—no walls and fewer streets—but you lose much of the security that is particularly important in a second-home condo community. However, you probably won't be able to afford a walled community unless your unit prices are \$25,000 or more.

What about security?

For an inward-oriented, enclosed project,

you have three choices: a manned system, an unmanned system or a combination of the two. A round-the-clock guard will cost about \$25,000 a year, and probably should not be considered unless that figure represents no more than 10% to 15% of your total condominium maintenance budget.

Developer William Bone, president of Sunrise Corp., suggests a perfectly adequate unmanned system that costs no more than \$3,000 or \$4,000 to install. It's a crossarm at the project entrance, and it's activated by a card that all residents possess. A guest gains access by telephoning his host from the entrance; the host then pushes a special button on his house phone to raise the gate. The only operating cost is the cost of the phone tie-in—\$3 a month in California—and the phone company simply adds it to the resident's bill.

A combined system would consist of the crossarm installation for night use and a daytime guard to let service and delivery people pass without the inconvenience of using the phone system.

For an open unwallied community, of course, you can't do much except hire a full-time guard.

What kinds of parking should you provide?

It depends on the density. If density is less than eight units to the acre, provide attached garages because they can be a strong sales asset. If it's eight to 12, plan on carports, either attached or detached. If it's more than 12, try for subterranean parking. It's a good way to preserve the open look that is particularly desirable in resort projects.

If you opt for an attached garage, consider the car-and-a-half size. The extra storage space is relatively inexpensive and can be a strong marketing feature for the typically tight resort-condo plan.

Are there any special construction problems in resort areas?

Yes, and they can sandbag you if you are not prepared for them.

For one thing, lead times are apt to be longer than you expected because it's hard to get prompt deliveries of materials in isolated areas. For another, your labor costs will be high because skilled labor is usually scarce, and unskilled labor is usually low in productivity. You may have to import some key tradesmen and put them up in local motels. In some locales there's also a weather factor, with periods of extreme heat or extreme cold shortening the building season or reducing day-to-day productivity.

Delays, low productivity and the resultant extension of your construction loan could boost your housing costs by \$2 a sq. ft. That would amount to \$3,000 on a 1,500 sq. ft. unit—possibly enough to threaten its salability in your market.

Does it pay to offer a package of furnishings with each unit?

Yes, and much more so than with primary homes, into which the buyer usually moves the furniture and furnishings he already owns. In contrast, the second-home buyer generally has to start from scratch, and if you do the decorating and furnishing for him you save him the time and effort—and turn a profit for yourself. Often this service is what closes a sale.

You should, however, offer a choice of separate packages in case the buyer does not want the entire deal. Examples: furniture in one package, carpets, drapes and wallpaper in another, linen in a third, and kitchen equipment—tableware, pots—in a fourth.

What do you budget for model decoration?

Ten dollars—and up—per square foot. Since the vacation condo is strictly a discretionary item, you can't afford anything less than a first-class decorating and furnishing scheme that will create an immediate and powerful impact. You should hire the best decorator you can find. He (or she) should know how to decorate to sell units, not just to make them pleasant to live in, and he should know precisely what market you are aiming for. Otherwise prospects won't relate to the decorating scheme.

What are the limits to customizing a resort condo?

Your buyers, being affluent and often used to custom housing, will usually ask for many changes; you have to stop at the point when it starts to hurt you in the pocketbook. This means primarily no structural changes.

If you go even a slight bit beyond your limit for one buyer, you'll have everybody else clamoring for the same thing, and you'll wind up with chaos in the construction department. So if possible, you should limit customizing to decorator items such as carpets, floor tile, kitchen and bathroom counter-tops, etc.

Should a community building be part of the amenity package?

Not necessarily. Many second-home buyers are not particularly gregarious, and Bill Bone points out, "We find that in recent years such facilities are so seldom used that more often than not the homeowners' associations keep the clubhouses locked up."

However, if you are building a recreation-oriented project like a tennis or golfing community, then you should go all out to provide a well-equipped clubhouse and full-time pro. And you can consider a bar and dining room to make it a real country club.

7 condominium projects for 7 different markets

They illustrate one of the most important reasons for the condominium boom: flexibility. There's almost no market—geographic or demographic—that can't fit into the condo concept. And just about every market has segments that will be attracted to condominium's key advantages—lower costs and maintenance-free living.

On the pages that follow, you'll see proof of this flexibility—seven condo projects, each designed to solve particular marketing problems.

Specifically:



1. How to grab the young sophisticates



2. How to tempt a small-town market



3. How to win over a skeptical market



4. How to win the budget-conscious market



5. How to lure the second-home market



6. How to attract mobile empty nesters



7. How to pull in single-family owners

Solana Beach, Calif.

Condo

1

Striking design grabs the young sophisticates

They lined up at a trailer sales office the night before Seascape II opened; they bought up two-thirds of the 51 units on opening day, and they cleaned out the rest seven months before the job was built out.

"If you want to know why we came up with a smash hit, I think it was the controversial design," says Dave Stubbs, sales manager of Westward Construction Co. "It's a far cry from typical southern California architecture. Everyone either loves it or hates it."

Those who love it, and who make up the bulk of the buyers, are young professionals—doctors, attorneys, architects and the like.

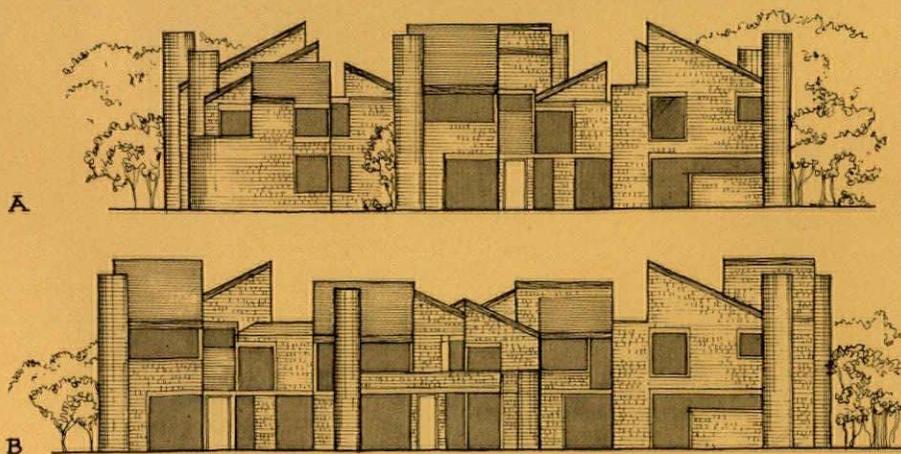
"They're the kind who not only accept new ideas but also seek them out," says Stubbs.

The most controversial feature—and one that Stubbs terms too expensive to repeat in a period of rising costs—is the cylindrical, towerlike chimney design. Controversy aside, however, the feature that really makes the project work is the subterranean parking. This solution of the perennial parking problem permitted the central part of the site to be raised, thus providing overviews to all directions.

The sophistication of Seascape II buyers showed up in another way, says Stubbs. They recognized the value of the project's oceanfront location. The area had been more-or-less bypassed for residential development in recent years because of freeways which had shunted people away from beach property. And Seascape buyers—along with builders who recently have begun to develop the area—realized that property values would be increasing rapidly. As a matter of fact, many units bought from plans have been resold at substantial profit—in one instance, for \$14,000 over the original price.

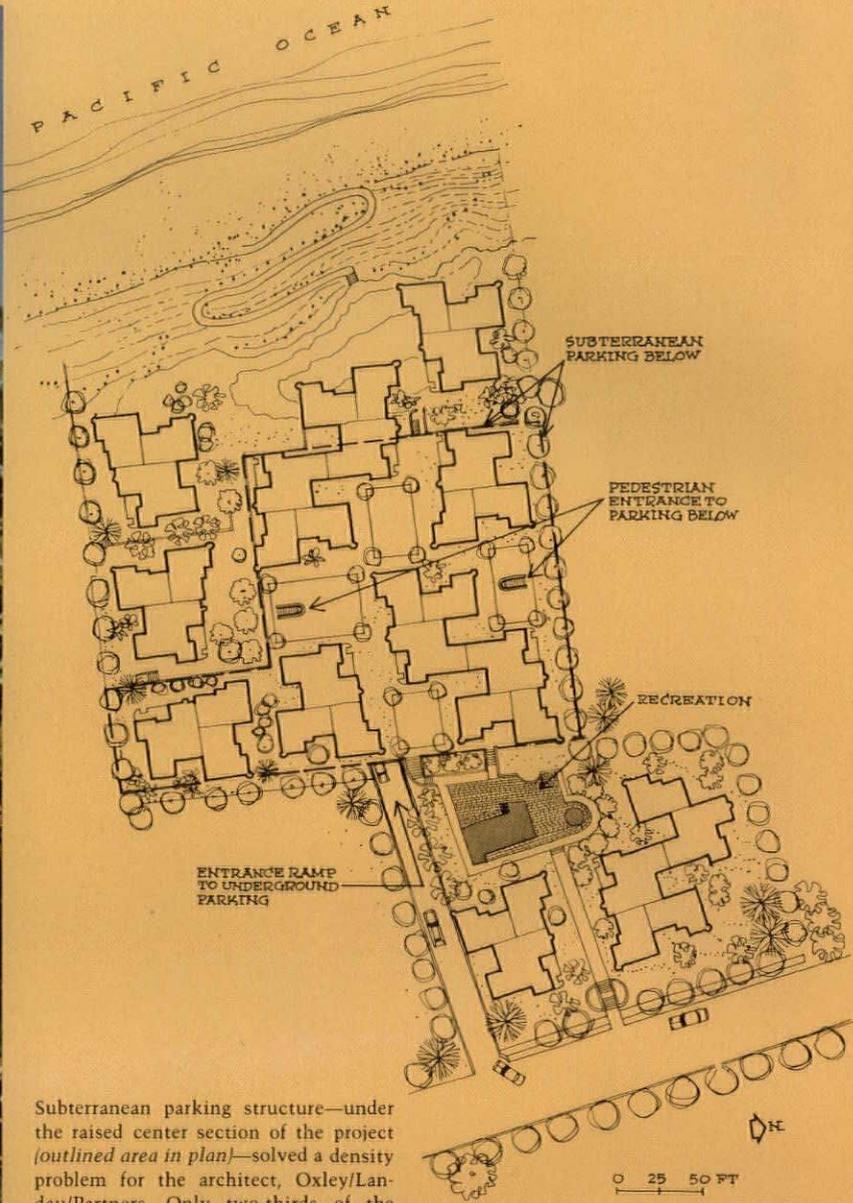


PHOTOS: JULIUS SHULMAN

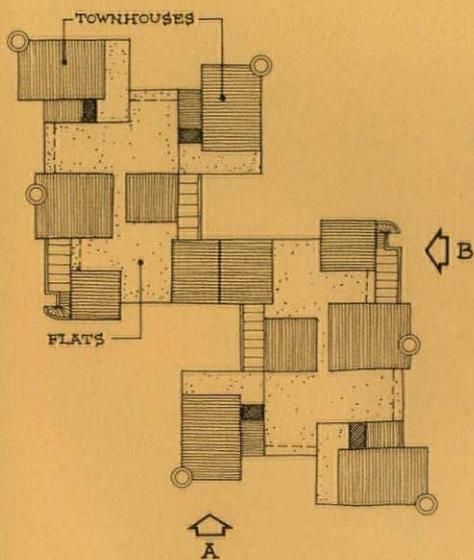


Irregular shape of buildings (photo, top, elevations, above and diagram, right) helped create large courtyards and small, intimate spaces between the buildings. Although there are only two basic floor

plans—two-level townhouses and single-level flats (floor plans, overleaf)—their combination into four- and eight-unit buildings provides the project with a great deal of visual variety.

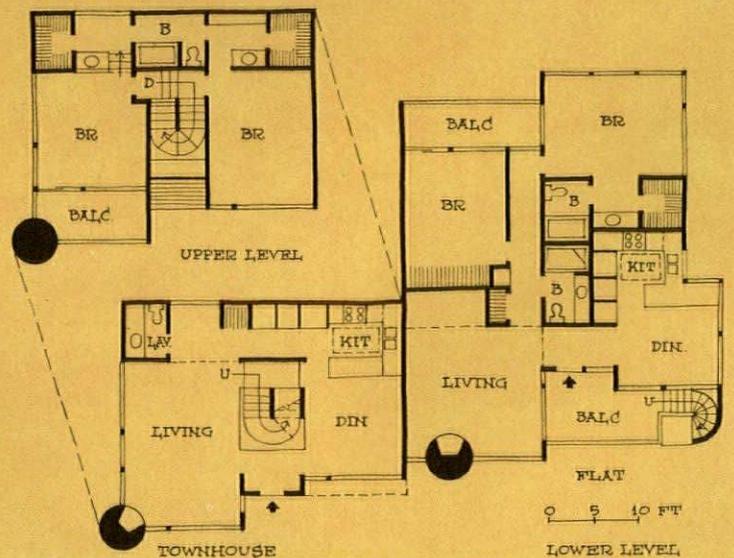
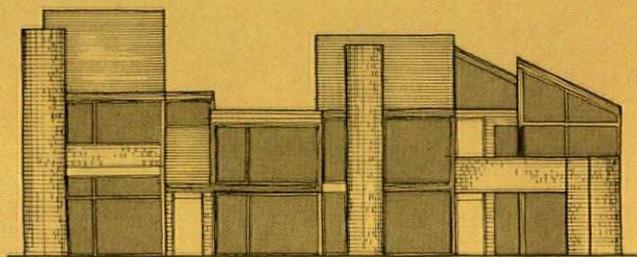
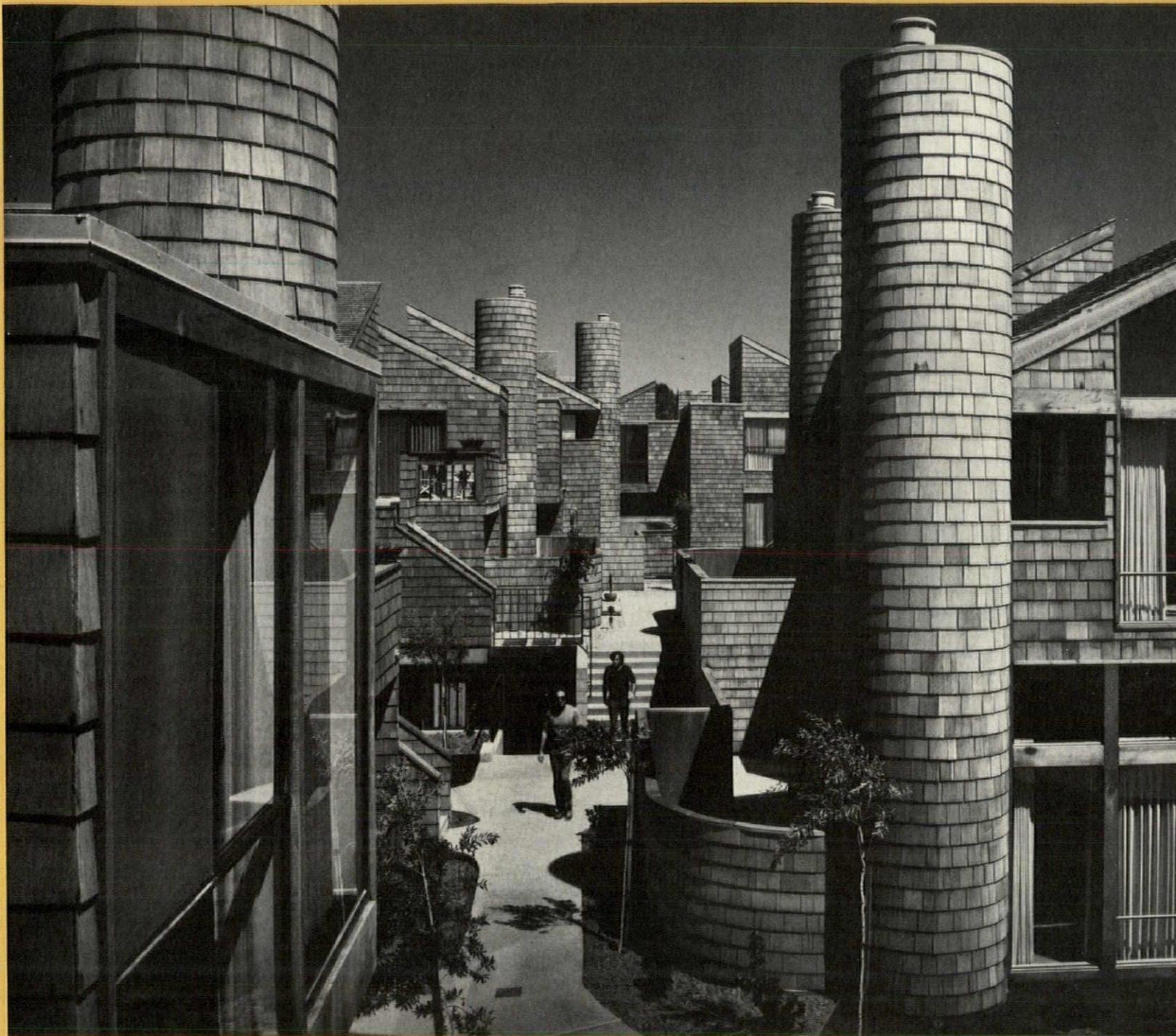


Subterranean parking structure—under the raised center section of the project (outlined area in plan)—solved a density problem for the architect, Oxley/Landau/Partners. Only two-thirds of the three-acre site was buildable. So above-ground parking would have seriously limited the number and size of landscaped areas between the buildings (photo, below). It is these areas that counterbalance the usual effect of a relatively high net density—24 units per acre.



B UNIT BUILDING





Two-level townhouses and flats-over-flats are combined to form the varied building shapes. The townhouse plan contains 1,500 sq. ft.; the flat, 1,200 sq. ft. Double-height entries are skylighted. Sloped ceilings and exposed wood beams are featured in the top levels of the townhouses. Units sold for \$29,500 to \$52,500.

Vast window walls open oceanfront units to a sweeping view. Many living rooms have 10'-high ceilings and most open to balconies (photo, below). Cedar shingle cladding was carried indoors as a major finishing material.

PHOTOS: JULIUS SHULMAN



Extreme contrast between the tight inner area and open oceanfront perimeter of the project is strikingly apparent in the photos above and right. Stairway in the inner-area photo leads to the raised portion of the parking structure (site plan, previous overleaf). Directly to the left of this stairway is one of the pedestrian entrances to the parking area. Also evident from this photo is another element that contributes to the success of the project's design: the use of only two basic building materials—cedar shingles and glass—which softens the highly sculptured effect created by the strong geometric building and chimney shapes.



Hyannis, Mass.

Condo 2

Landscaping- plus tempts the fussy, small- town market

You're building the first condominium in a place like Hyannis, Mass. (1970 population 6,047), and your prospects tend to be nit-pickers. How do you attract 700 prospects during the first week and sell out your units in a few months?

At the 57-unit Hyannis project shown here, developer Nick DePamphilis faced just those problems and got just those results.

"The key," he says, "was a real understanding of our prospects. First of all, most of them were used to dealing with small builders on a one-on-one basis. For example, they expected to ask for, and get, certain changes while their houses were under construction. But we couldn't make a lot of changes in a speculative project like this, so we customized it in another way: We dressed up the open areas."

That meant an expensive landscaping program that called for maintaining the topography, siting units to save trees and adding to natural landscaping.

"Secondly," says DePamphilis, "our prospects were wary. They wanted evidence that we would deliver what we promised in the housing itself and also in the amenities."

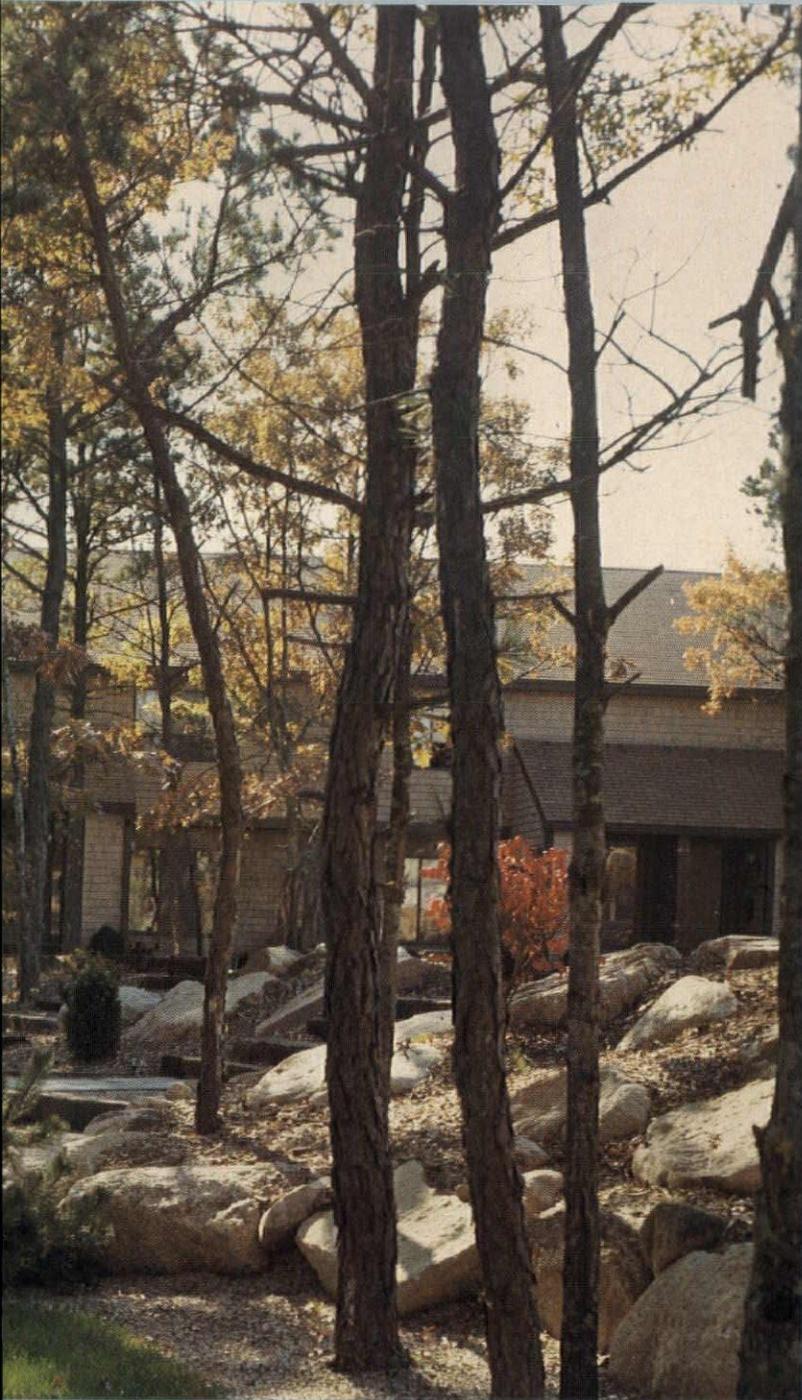
So DePamphilis built the clubhouse (*lower photo, right*) and a swimming pool—along with the housing units.

"That way," says DePamphilis, "we left no doubt that the promised amenities would be ready when buyers moved in."

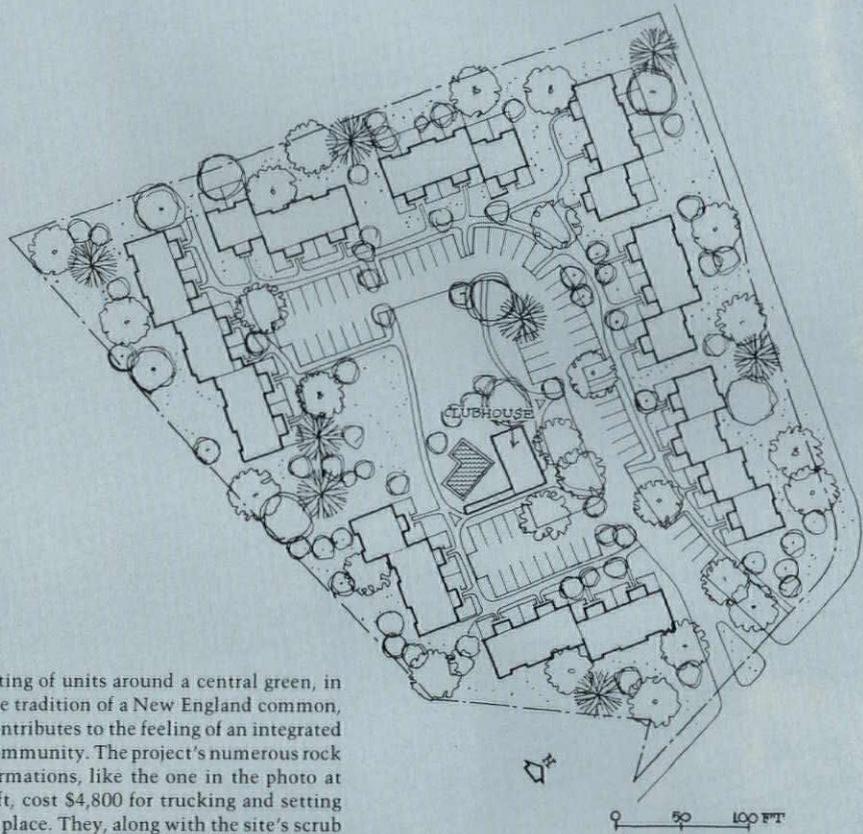
DePamphilis' approach proved out not only in the quick sellout but also in rapid appreciation of the units. The low-end price, originally \$24,500, was first raised to \$26,000 and later to as much as \$32,000 for units in choice locations.

Recent resales also reflect the appreciation. A \$28,000 unit was resold for \$36,000 and a \$28,500 unit for \$37,500.

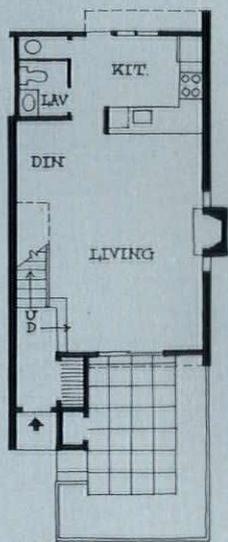
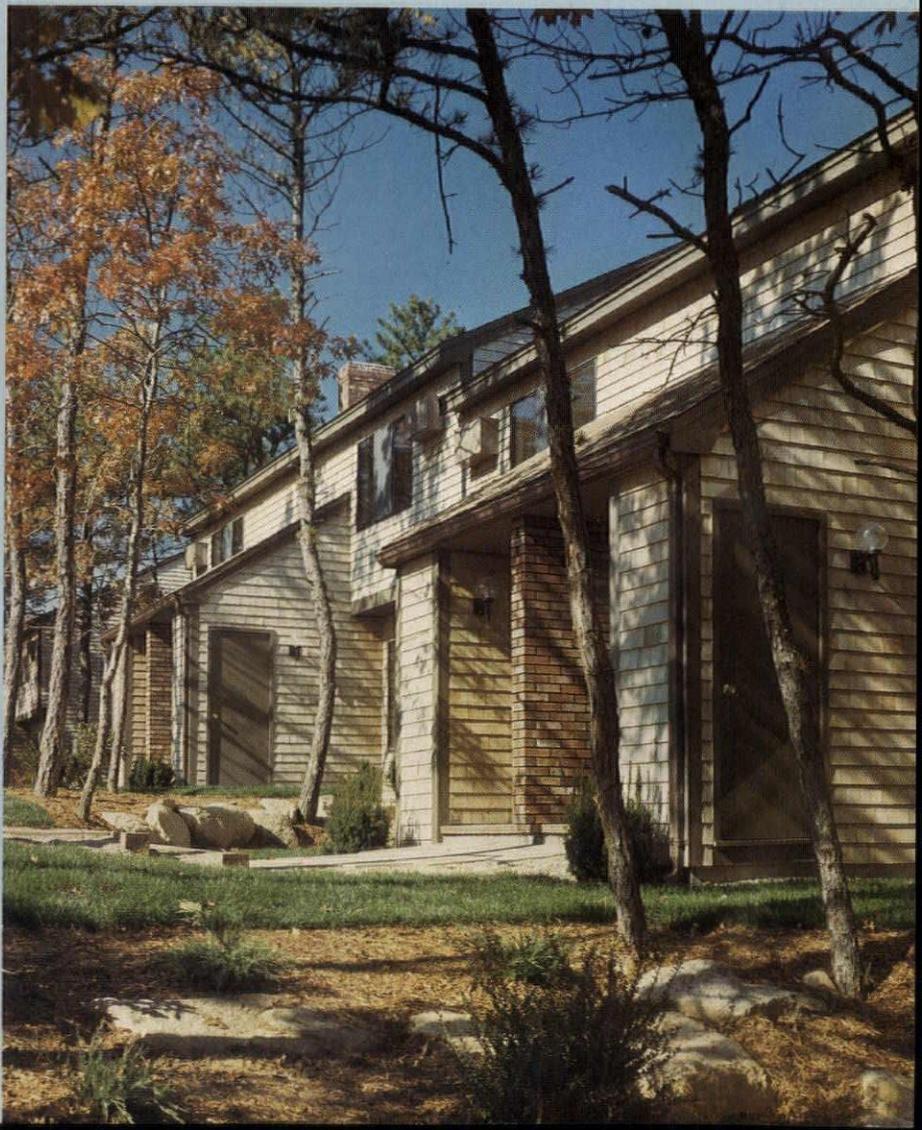




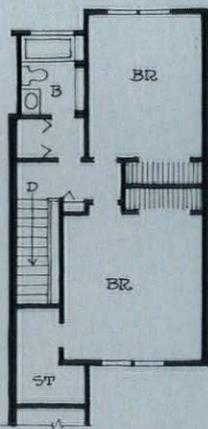
PHOTOS: RALPH HUTCHINS



Siting of units around a central green, in the tradition of a New England common, contributes to the feeling of an integrated community. The project's numerous rock formations, like the one in the photo at left, cost \$4,800 for trucking and setting in place. They, along with the site's scrub pines, are considered an integral part of the project's overall design. Bleached cedar shingles and stained trim typify Cape Cod architecture. Architect: Childs Bertman Tseckares Associates Inc.



LOWER LEVEL
0 5 10 FT



UPPER LEVEL

Two-story, 1,150-sq.-ft. floor plan was used throughout the project. Although the kitchen is dead-ended at the rear, its separate entry minimizes traffic through the living room. Minimal closet space is partially offset by storage space off the patio.



Woodlike setting of project belies its urban location—not far from the center of Des Moines. Much of the 39-acre site's natural topography was left undisturbed and units were clustered around streams that meander through the site. Pedestrian walkways and bridges (photos above and right) interconnect the various clusters and the community center building and recreational facilities (site plan, facing page). Of a planned 168 units, 40 have been built in the first phase. Cedar plywood siding and bronze aluminum-clad windows were chosen to complement the natural environment. Developer: Southern Hills Development Co.



Des Moines, Iowa

3 Condo Environmental quality wins over a skeptical market

This award-winning* project, the first condominium in Des Moines, was almost a marketing catastrophe.

Five months after opening day, only four buyers were living there.

A long spell of bad weather had made a shambles of the original construction schedule. And conservative Des Moines prospects, accustomed to conventional homes on conventional lots, had to be convinced of the benefits of shared open space.

The convincers were a few pioneer families who decided to take the plunge early in the project's life.

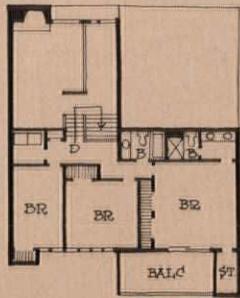
These early buyers were quick to recognize the livability of The Park: its heavy emphasis on natural landscaping, the clustered mini-neighborhoods and the individual privacy designed into each of the units.

"These people became our best salesmen," says John D. Bloodgood whose architectural firm designed the project. "They talked up the project's advantages—the centralized social and recreational center and absence of through traffic, for example—to friends and relatives."

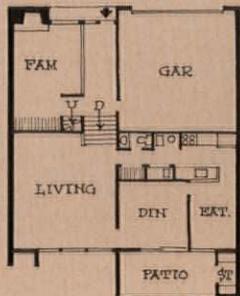
The result: 20 more units sold in a couple of months.

One of the most inviting aspects of the project is its broad market appeal. Three basic housing types—studio homes, tri-levels and one-level courtyard houses—were designed for a wide variety of families, from empty nesters to couples with several children. And housing types were mixed in each of the mini-neighborhoods to minimize stratification by age, family-type and income.

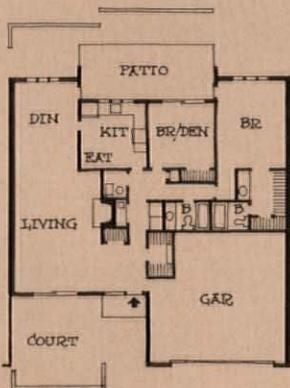
*The Park received an Honor Award in the 1973 AIA Iowa Design Awards Program, a First-award in the 1973 Plywood Design Awards sponsored by American Plywood Assn. and a Runner-Up award in a joint NAHB-Better Homes and Gardens competition for PUDs [H&H, May].



UPPER LEVEL



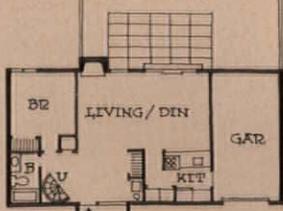
LOWER LEVEL



0 5 10 FT

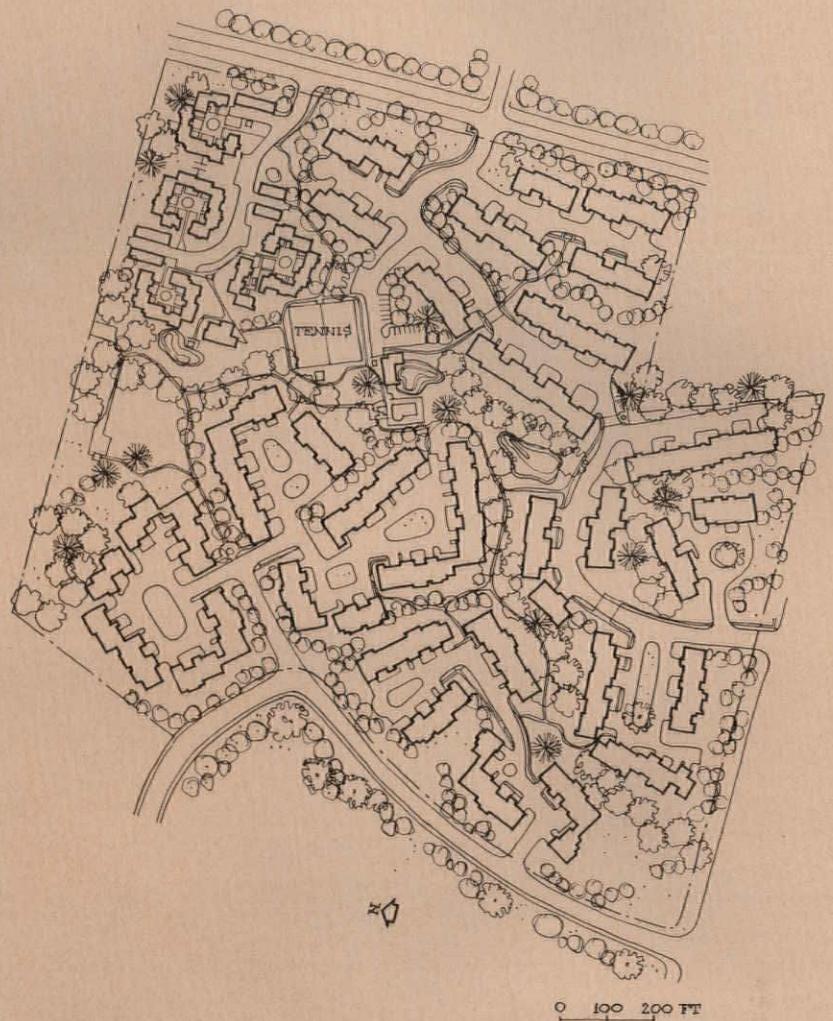


UPPER LEVEL



LOWER LEVEL

Three best-selling plans include (from top to bottom) a tri-level design intended for growing families; a two-bedroom, one-level plan aimed at empty nesters; and a two-level, loft-bedroom layout for younger families. Photo at right shows entrance to the latter unit and spiral staircase that leads up to the loft. Altogether there are 11 floor plans ranging from 1,152 to 2,340 sq. ft and priced from \$41,550 to \$72,250.

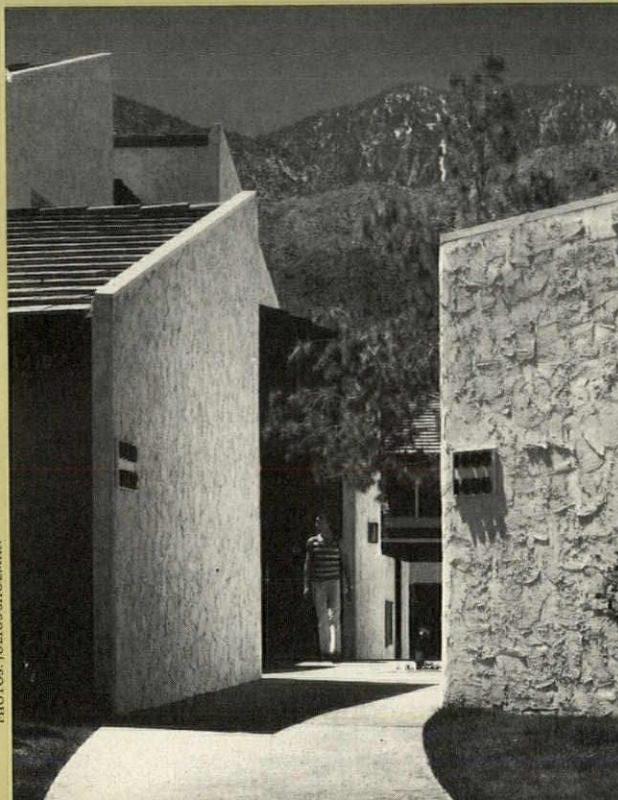


PHOTOS: MICHAEL C. MITCHELL, COURTESY AMERICAN PLYWOOD ASSN.

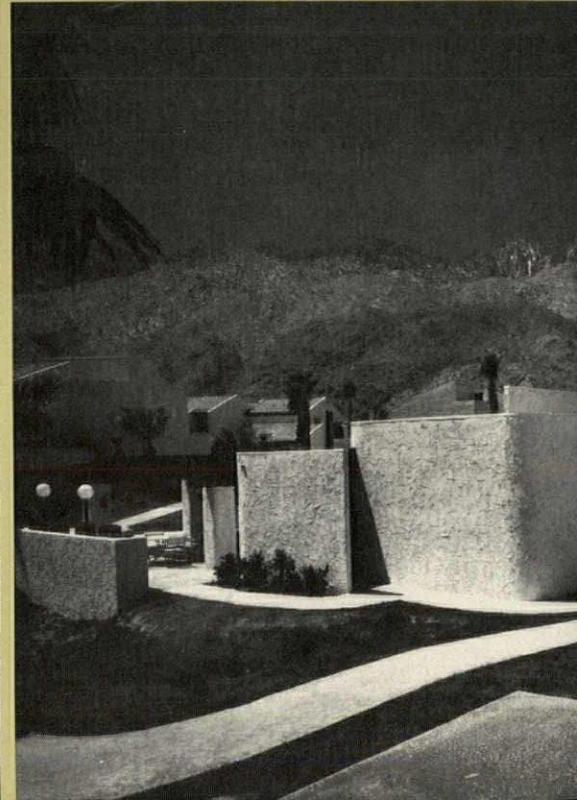




Low-profile of the project—in striking contrast to its massive background of hills—is evident in the streetscape above. Even the landscaping used throughout the 6.5-acre site is in the same low scale. Approaches to entrance courts (photo, near right) were broadened by diagonally clipping living-room walls in some ground-level units. (See floor plans, facing page.) The project's main recreation area (photo, far right) is defined by a varied-shaped swimming-pool pavilion (center structure in photo).



PHOTOS: TULLIUS SHULMAN



Palm Springs, Calif.

4

Condo Value for the dollar wins the budget-conscious market

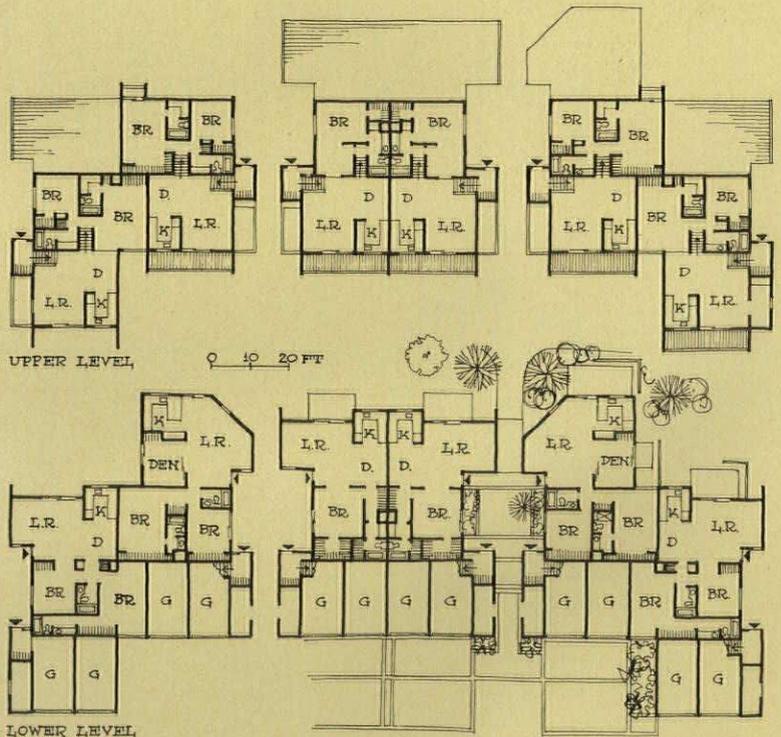
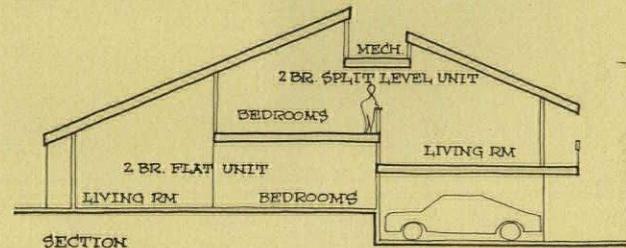
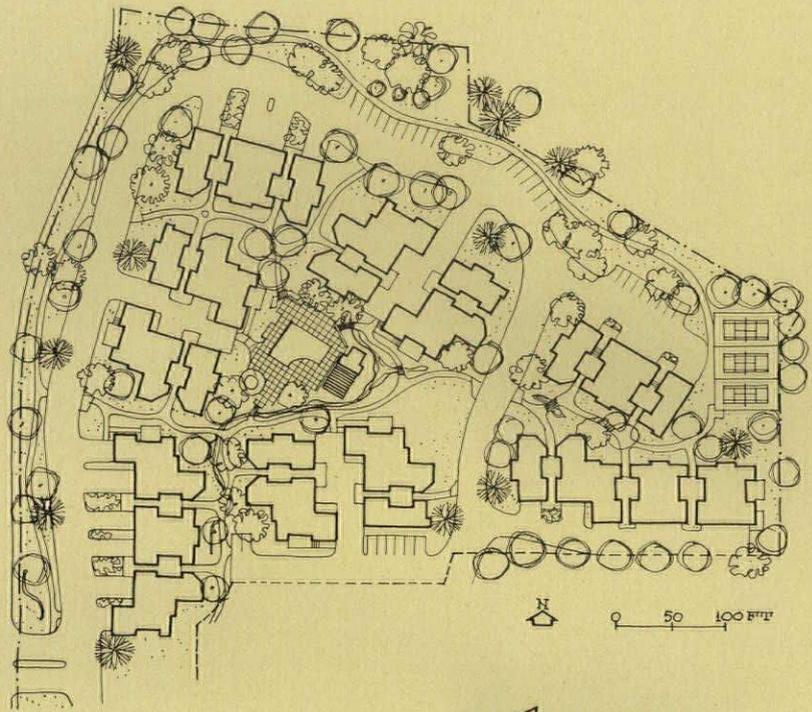
Even buyers with plenty of discretionary spending power don't always opt for high-priced second homes—particularly if they can get good value in an excellent location. That's the first lesson to be learned from Biltmore Condominiums, where units were priced from \$19,950 to \$27,800. The second lesson: If you find a vacuum in a market, you can't go wrong by filling it.

Both points are proved by the project's sales record: All 78 units were sold from scale models in one weekend. And an additional 300 to 400 backup deposits were taken. The buyers: empty nesters and retirees, who could easily have afforded much higher-priced housing, and young families straining their budgets to acquire a second home.

None of this was magic, says Leon Ruderman, president of the architectural firm that designed the project—Goodkin, Ruderman, Valdivia. It was the result of extensive market research by the developers, Shareholders Capital Corp. and Lewis Goodkin and Associates, that revealed a shortage of Palm Springs housing in the \$20,000 to \$30,000 price range.

Obviously, the project had to have more going for it than price. Of prime importance was the unit arrangement—a take-off on basic fourplex design, but one that avoids the sterility of most fourplex plans. As the site and floor plans on the facing page show, units are clustered in groups of four (in one- and two-story elements) around entry courts.

Also since the project was designed primarily as a second-home community, its recreational facilities were planned to encompass a variety of activities—swimming, tennis, biking and hiking, for example.



Five basic floor plans are shown above as they relate to each other within the building clusters. As the typical section indicates, only bedrooms (or baths, which are not indicated) are stacked—a deliberate attempt to minimize sound transmission from top units to those below. Upper units are entered at ground level, with living areas one-half level above entries; bedrooms one-half level above living areas.

Port Ludlow, Wash.

5

Condo

Established rec package lures second-home buyers

But it's the floor plans in this 30-unit project that clinched the sales.

The second-home community—a miniscule part of a 3,000-acre Port Ludlow resort complex being developed by Pope & Talbot Development Inc.—had a ready-made market. Prospects were vacationers at a nearby P&T rental-pool condo. They already were sold on the area and knew what recreational facilities were available.

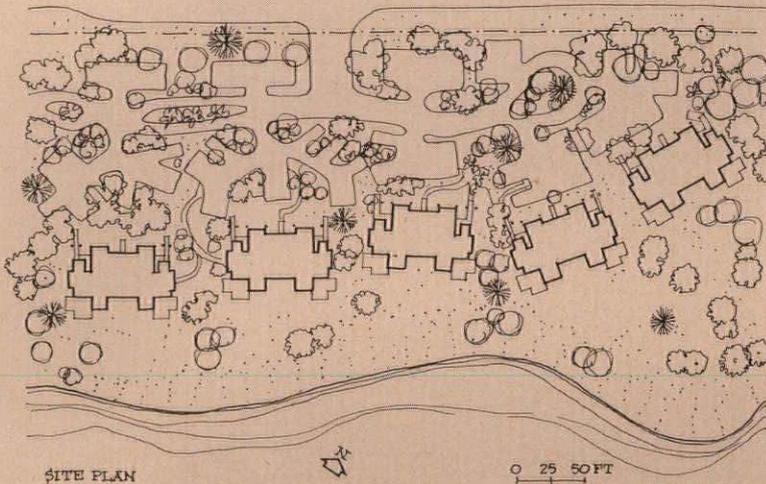
"But despite this reservoir of prospects," says area manager John Maher, "we felt it was important to offer buyers more than just the conventional second-home community. We wanted to provide a real home-away-from-home. After all, basic requirements are pretty much the same whether a family is vacationing or in its primary home. For example, a large family still needs some privacy between adults and children."

So at Port Ludlow Condominiums No. 1, Maher worked with architect Robert E. Cooper to develop three basic plans—each aimed at one of three buyer profiles developed from market research. The markets: army and navy officers who were looking for an eventual retirement location as well as a second home; mature families who like to entertain weekend guests; and young families with several active children.

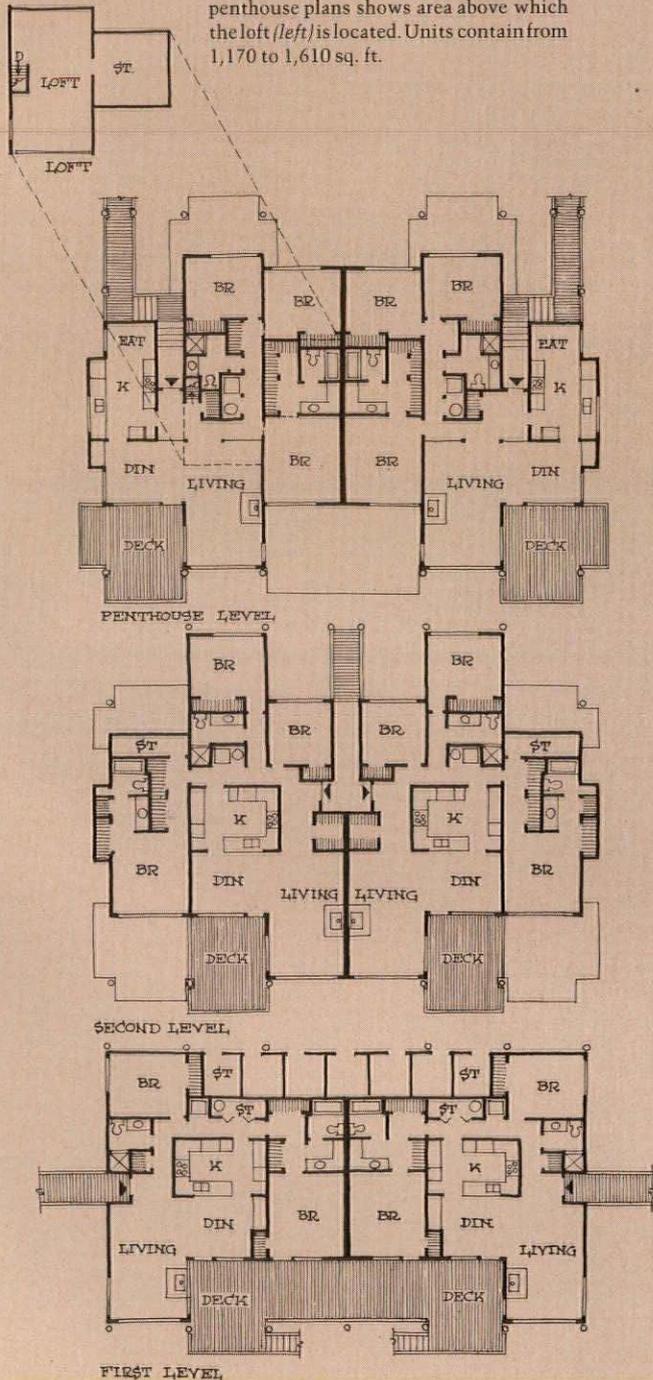
"There's no doubt," says Maher, "that the rec package is important in a resort condo."

"But to compete with the great number of such projects being built today, you've got to offer buyers as good design as they have in their primary homes—particularly when your units are high-priced for the area."

And these units fit that bill: They sold for \$42,900 to over \$53,000 for 1,170 to 1,610 sq. ft. of living area.



Each of the five buildings shown in the site plan contains twin, mirror layouts (floor plans, below) that were designed for one of the three specified markets: first floor for retirees; second floor for entertainment-oriented, mature couples; penthouse for growing families. Dotted line in penthouse plans shows area above which the loft (left) is located. Units contain from 1,170 to 1,610 sq. ft.





View-oriented elevations of buildings (photo, above) overlook a saltwater inlet that runs along the southern perimeter of the 3.5-acre site. Photo at far left shows how glass window walls open that view to kitchens and living- and dining rooms in second-floor units. Separate entrances to each unit are reached via bridges (photo, near left). Building exteriors are compatible with the site's natural landscaping, with the pole supports echoing the quality of the site's tall fir and cedar trees.

PHOTOS: VERN GREEN

Menlo Park, Calif.

6

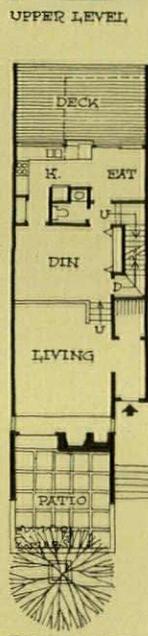
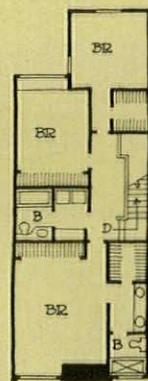
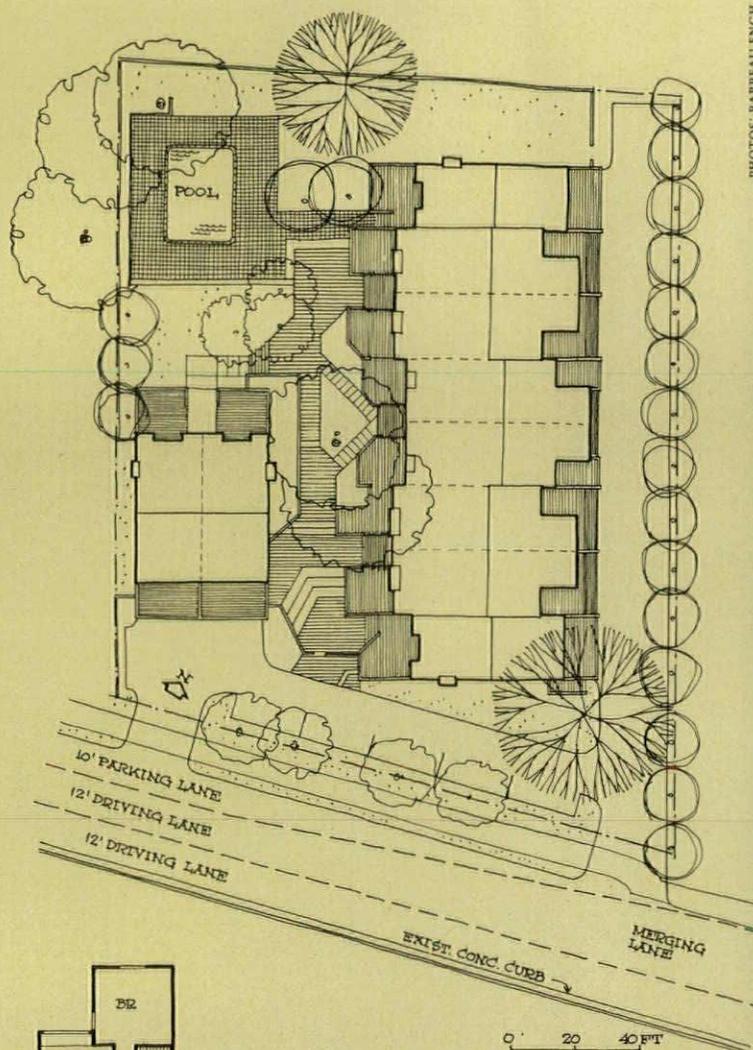
Condo Vest-pocket plan attracts mobile empty nesters

This ten-unit enclave was designed to attract a very special but growing market: middle-aged couples who are free to travel frequently because their children have left home.

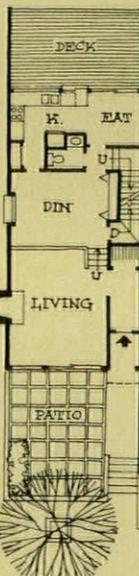
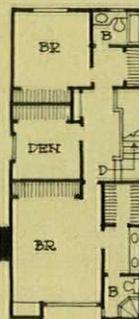
"To these people maintenance and security problems of single-family homes have become a nuisance, if not a downright worry," says Ryland Kelley, of Hare, Brewer & Kelley, developer of White Oak Townhouses. But, Kelley adds, they are also reluctant to become renters. They enjoy being a viable part of a community and savor the greater privacy that comes with home ownership.

In effect, then, White Oak was planned to offer the best of two worlds—maintenance-free condominium living in units replete with detached-house characteristics. For example, floor plans include areas for formal entertaining and ample sleeping space for visiting children and grandchildren, while front patios and rear decks provide maximum outdoor privacy. Additionally, although eight of the ten units are combined into one entity, recessed dual entries were used to lessen the row-housing effect.

Although the project ran into some initial problems—controversy over an adjoining project forced the developer to rent out the units on 12- and 18-month leases—a look at the current sales record shows the marketing plan was right on target. Five of the original leases have expired, and these units are now occupied by empty-nester owners. Buyers also are waiting for leases to expire on the other five units.



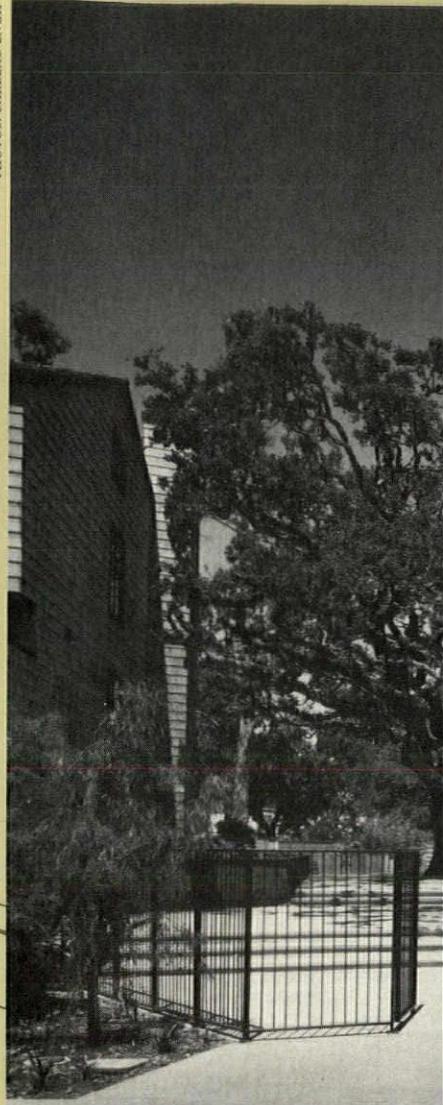
UPPER LEVEL
LOWER LEVEL
3BR - 2BATH



UPPER LEVEL
LOWER LEVEL
2BR - 2BATH & DEN

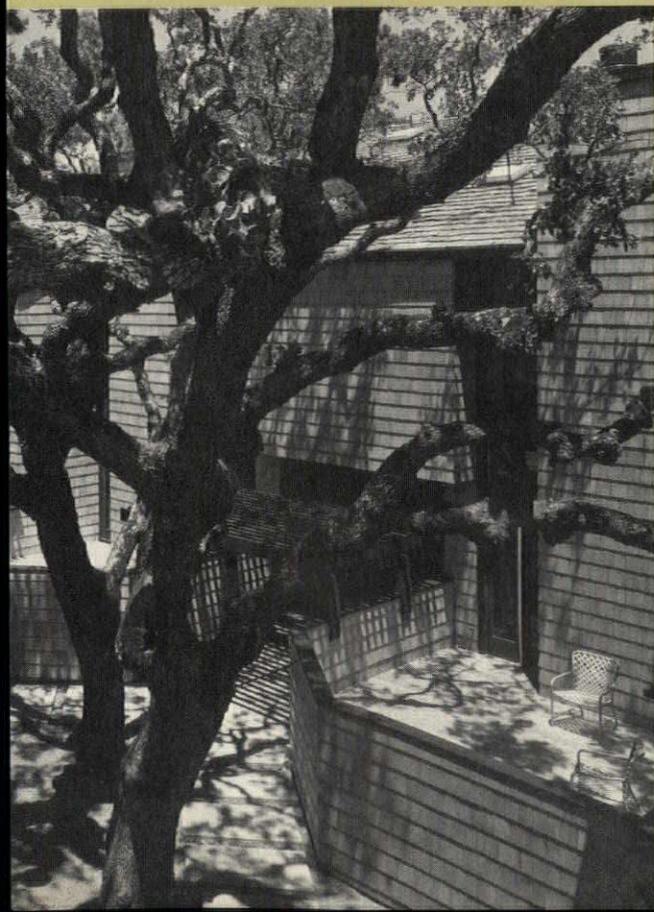
Proximity of a nearby freeway (see site plan) presented a design problem: how to protect the one-acre site from visual and noise factors generated by constant traffic. But it also provided two marketing advantages: quick access to San Francisco and built-in security for the project via regular police patrols on the freeway. The design problem was solved by inward orientation of the units around a landscaped court and by a buffer of guest parking spaces between the court entrance and the freeway. The units—four 2-bedroom and six 3-bedroom plans—sold for \$55,000. Not included with the floor plans is the garage level, entrances to which are shown in the photo at far right, facing page.

PHOTOS: BARREAU ENGH





Outdoor privacy between units is assured at the front by shingled patio walls (photo, below left) and heavy landscaping, which runs through the middle of the entry court (photo, left). Extensive use of glass at the rear (photo, below) opens eat-in kitchens to views beyond the broad decks that are over the garages. Tree at right of bottom photo is one of a solid row separating garage entrance road from adjoining property. Frank L. Hope & Associates was the architect.



Chamblee, Ga.

7

Condo

House-like plans pull in single-family owners

When you're out to turn the single-family owner into a condo buyer, keep away from apartment-type design. So says H.R. Ransom of Multicon Properties Inc., builder/developer of Wren's Cross, the 91-unit project shown here.

Why? Because even if the prospect is tired of maintaining a single-family home, he's still geared to a single-family life style. Which means—at least in the upper-middle price range—that he wants lots of bathrooms, ample kitchens and a family room wherever possible.

It is the family room—included in a majority of Wren's Cross units—that, Ransom says, is the most apparent reason for the project's rapid success. Although Wren's Cross opened only last November and will not be completed until the end of the year, all units are sold.

Ransom's marketing theory is supported by buyer reaction to a one-bedroom plan (*not shown*)—it was the least popular of the lot. The best-seller has three bedrooms, two-and-one-half baths and a family room although most buyers are empty nesters or middle-aged couples with a young child.

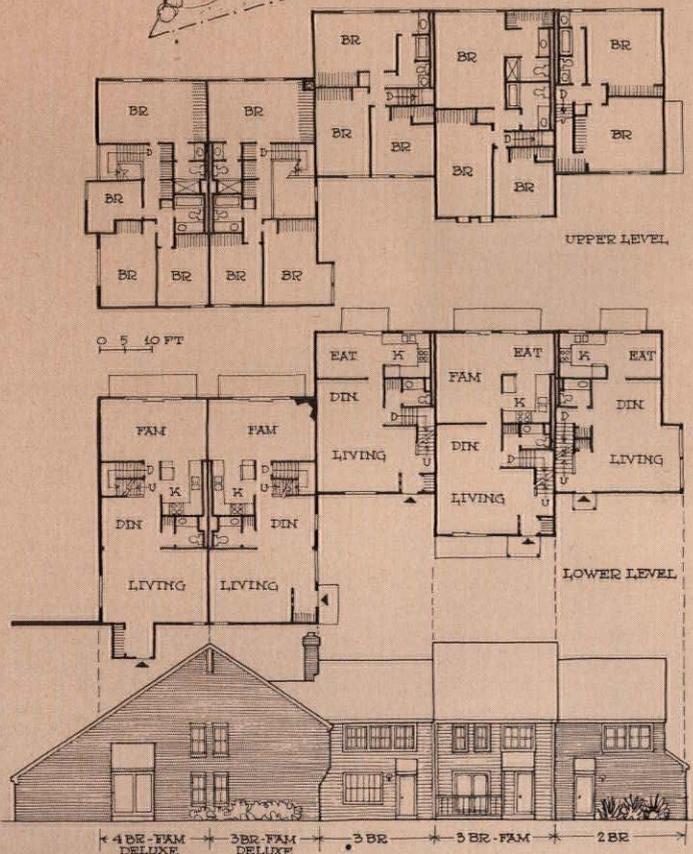
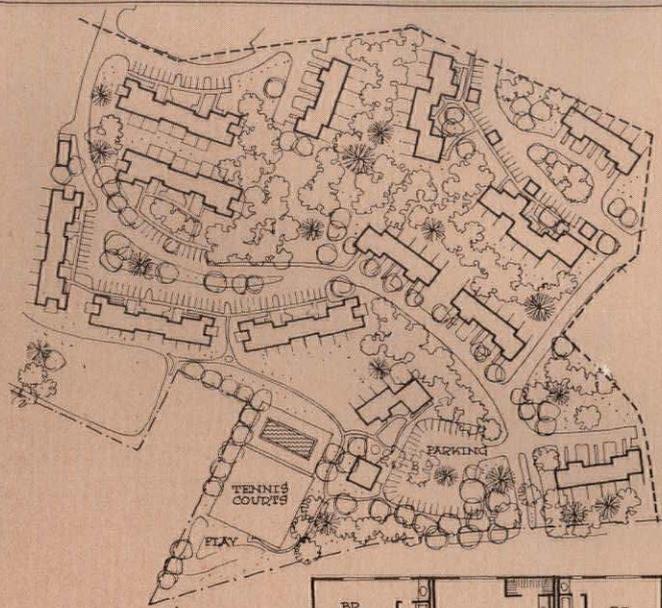
Ransom cites additional reasons for the project's success: the recreational facilities—a 3,500-sq.-ft. clubhouse, swimming pool and lighted tennis courts; a prime location; and much lower price tags than other condos in the area.

"Our prices ranged from \$35,000 to \$43,000," he says, and few of the others included family rooms even though they sell for \$50,000 to \$75,000.





PHOTOS: LEO M. WITHELM



Five of six available floor plans are shown as they are grouped within townhouse rows. Most popular, the three-bedroom with family room, is second plan from the right. Square footage ranges from 1,247 to 1,753.

Despite townhouse grouping of condos, the total effect of the project is much like that of neighboring detached-home communities. This single-family character was achieved by offsetting adjoining units, intersecting gables at end units (*photo, left*) and using traditional materials—beveled siding and bricks—as well as white trim, small-paned windows and other traditional detailing. The rolling nature of the 16-acre site allowed each unit to have a walk-out basement or basement/garage (*photo, far left, plan not shown*) Architect: Trott and Bean Associates AIA.

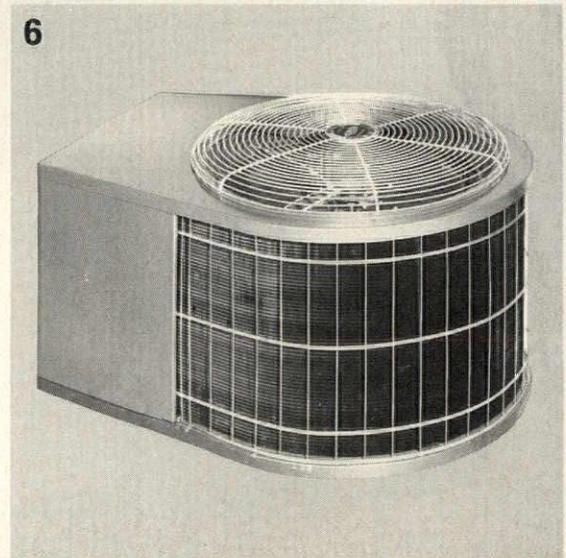
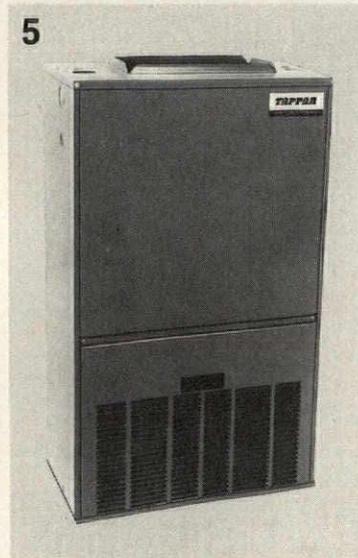
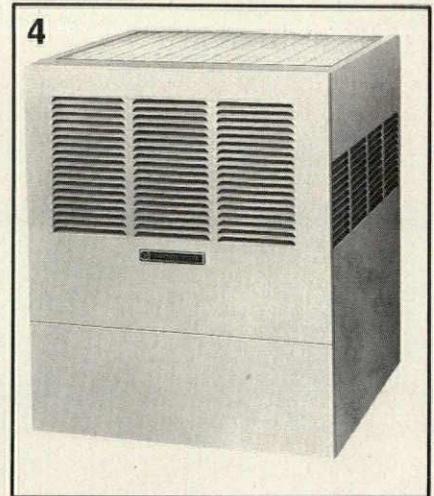
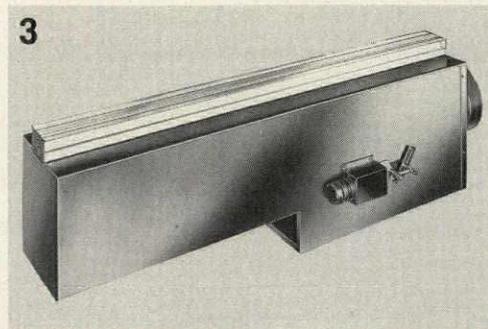
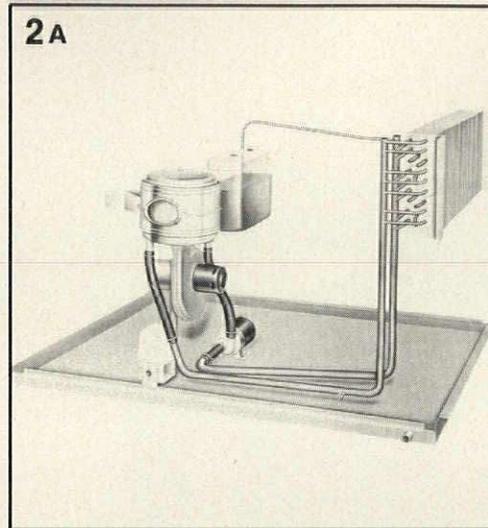
Interior environment: Fuel crisis sparks the need for improved indoor climate control

Growing fuel and power shortages afford builders an opportunity to market more livable housing and help alleviate a national crisis at the same time. By proper selection of heating, air conditioning, humidification and ventilation equipment—as well as thermal and acoustical insulation—builders can not only cut fuel consumption and waste, but also save themselves, their buyers and tenants money in the long-run.

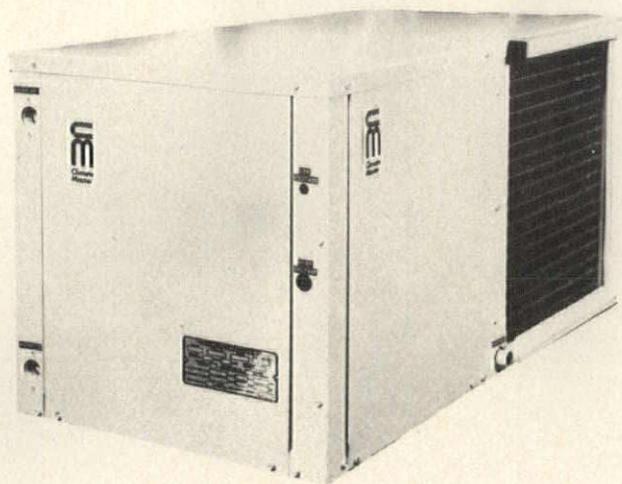
To make the choices that will insure a well controlled interior environment, there are three major questions to consider:

- What specific heating/cooling needs are dictated by a project's topography and climate?
- What fuel is most plentiful and least costly in the area?
- What combination of products will work best in the given situation?

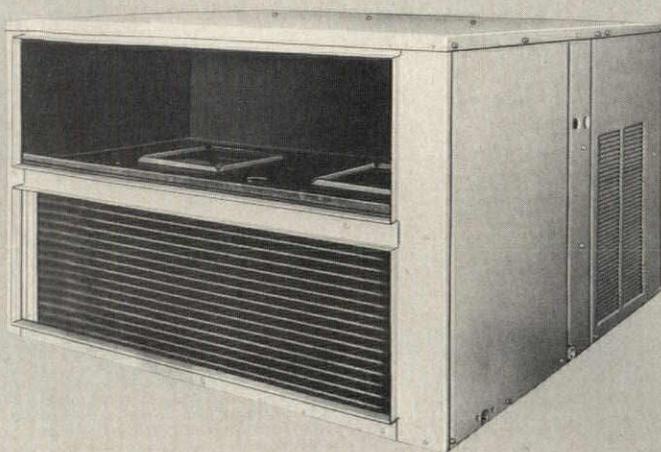
On the following pages and picking up again on page 133, HOUSE & HOME presents a selection of products engineered to help create a livable interior environment that is neither costly nor wasteful.



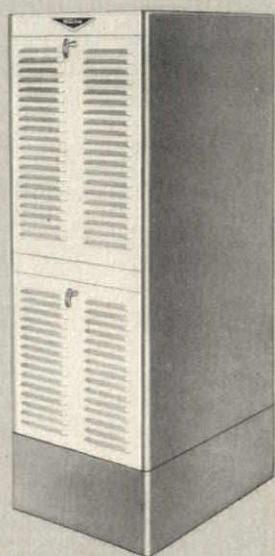
7



8



9



10



Heating/Cooling

Packaged terminal air conditioner (1), Zoneline™, is available for cooling only or in combination cooling/electric heat. Offered in four cabinet designs, the Zoneline features Spine Fin™ heat transfers, heavy galvanized construction and a choice of rustproof outdoor grilles. General Electric, Louisville, Ky.
CIRCLE 255 ON READER SERVICE CARD

Heat transfer module (2B)—small enough to hold in your hand—is actually a miniature heat exchanger capable of heating an average size house. Unit, combined with a central air conditioning package, creates a system (2A) that provides heating and cooling at low operating and energy costs. Amana, Amana, Iowa.
CIRCLE 256 ON READER SERVICE CARD

A low velocity, variable air volume air conditioning system (3) is designed for use in structures that require zoned cooling. The system is engineered to provide a comfortable indoor climate by varying the volume instead of the temperature of the air. York, Borg Warner, York, Pa.
CIRCLE 257 ON READER SERVICE CARD

Roof-mounted heating/cooling unit, "Direct-Pak" (4), is compact and lightweight. Available in a range of sizes, unit features bottom supply and discharge for easy installation. Components are completely assembled, prewired and system charged. Gaffers & Sattler, Los Angeles.
CIRCLE 258 ON READER SERVICE CARD

Compact vertical electric furnace (5), with a built-in cooling coil, is designed for apartment application. The "Hider", standing waist high and about a foot deep, is small enough to fit into a closet yet powerful enough to provide environmental control. Tappan, Elyria, Ohio.
CIRCLE 259 ON READER SERVICE CARD

Central air conditioning (6), "Power Saver" consists of an evaporator coil

installed within the heating system and a compact compressor located outdoors. Solid state controls automatically regulate the fan to the speed called for by the cooling load. Whirlpool, Benton Harbor, Mich.

CIRCLE 260 ON READER SERVICE CARD

Water-to-air heating/cooling units (7) are suitable for ducted vertical or horizontal installation. Furniture-styled freestanding console models that recess into the wall and supply direct air are also offered. Stub-out connections for water and condensate pipes make for easy installation. Climate Master, Ft. Lauderdale, Fla.
CIRCLE 261 ON READER SERVICE CARD

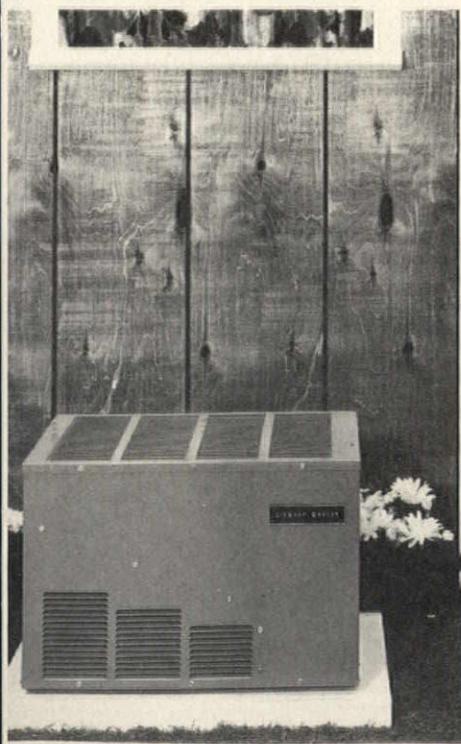
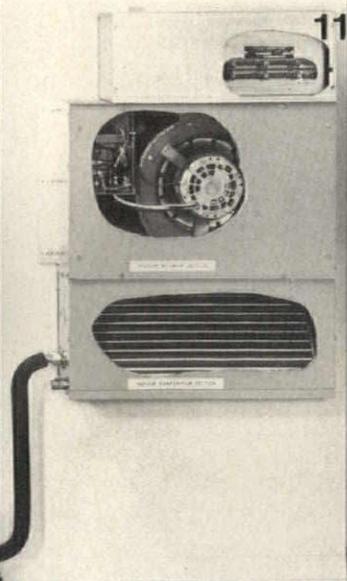
Single package air conditioners (8) are built for cooling and electric heat. Available in a wide range of cooling capacities with compatible heat kits, compact units are factory-assembled, prewired, charged and tested. Mueller Climatrol, Milwaukee, Wis.
CIRCLE 262 ON READER SERVICE CARD

Counterflow oil-fired furnaces (9) feature vestibules that enclose controls and burners. Units are equipped with a copper-coated "Ocototherm" heat exchanger that agitates burning gases, producing more heat and wasting less. Thermo-Products, North Judson, Ind.
CIRCLE 263 ON READER SERVICE CARD

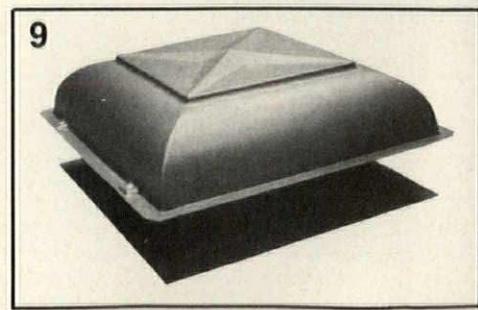
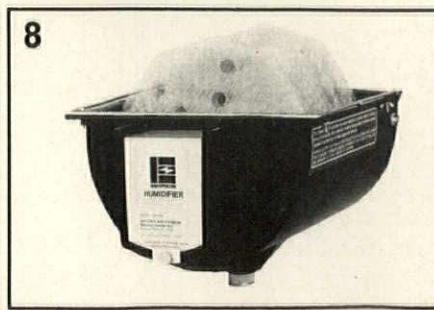
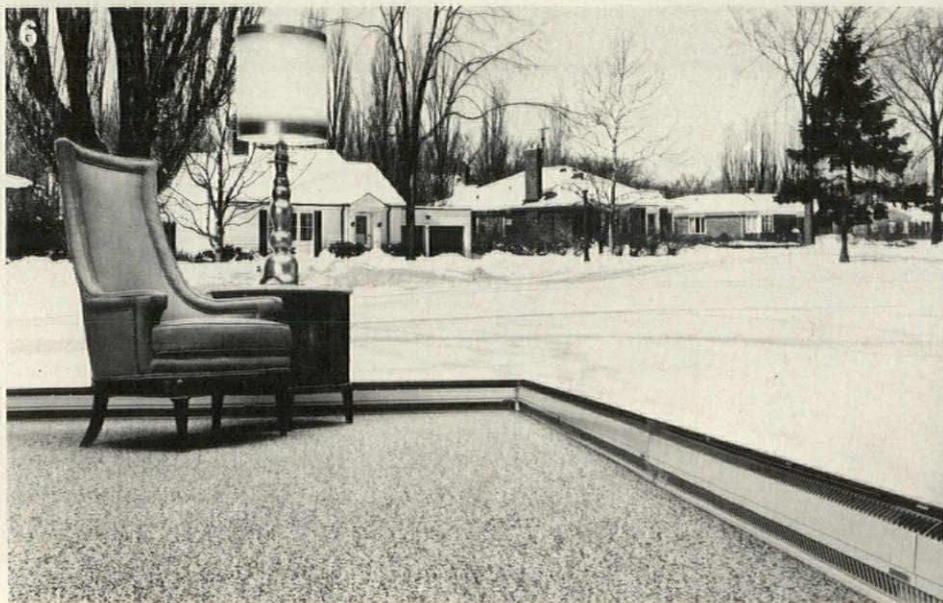
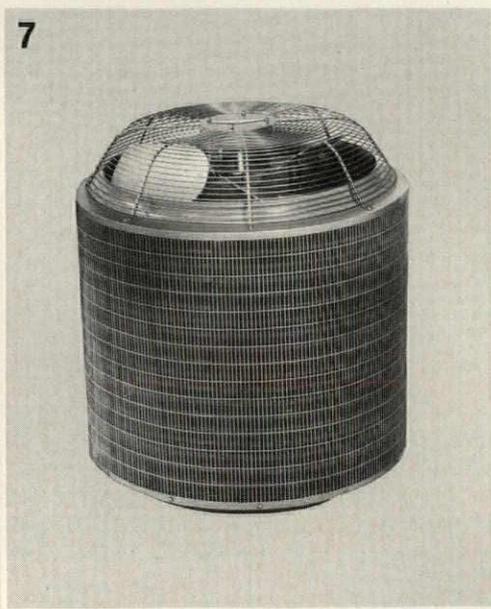
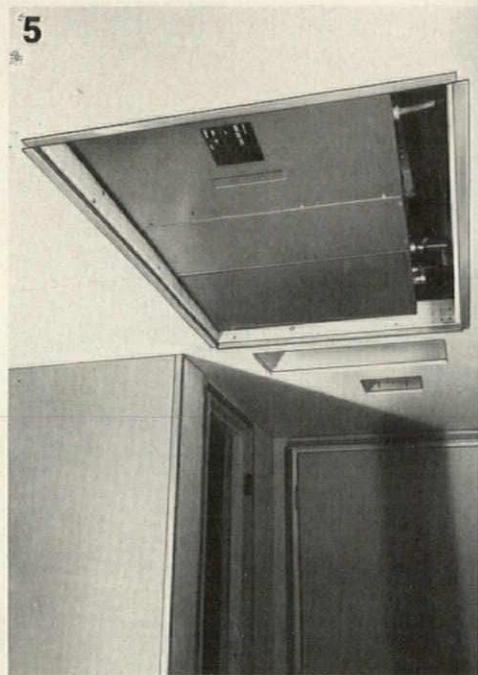
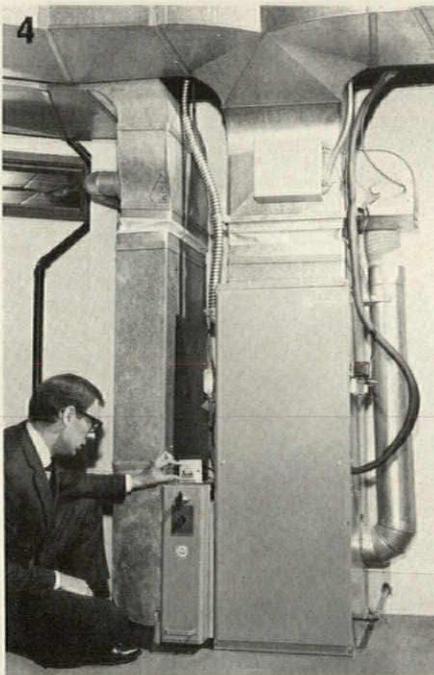
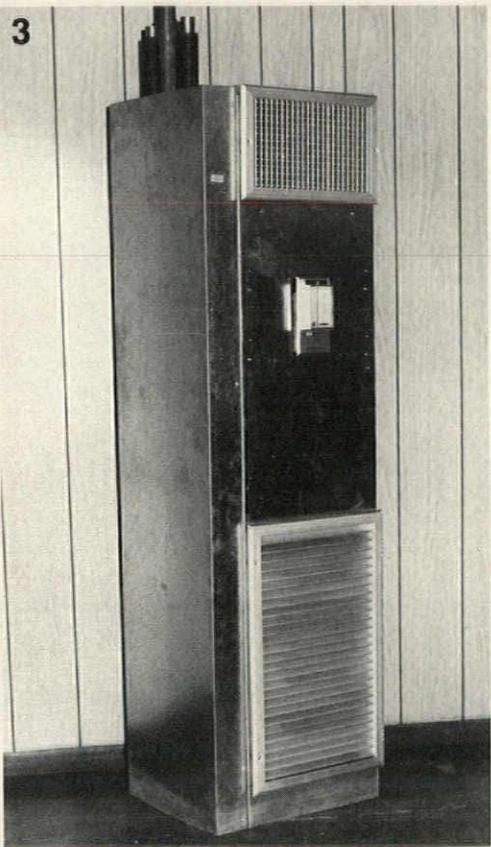
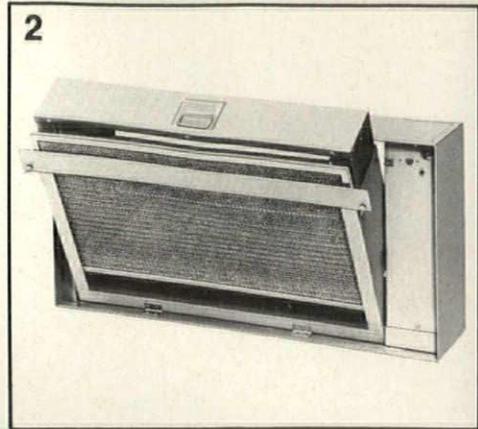
Oil-fired boiler (10) includes the DH-F flame retention burner never before available in a non-packaged model. The burner (*lower portion of the unit*) is sling-mounted for easy installation. Boiler controls are front-mounted. American Standard, New Brunswick, N.J.
CIRCLE 264 ON READER SERVICE CARD

Air conditioner (11), available in a wide range of sizes, features optional heating. The "Tri-Line II" condenser and modular evaporator blower combines with electric, hot water or steam heat sections. Stewart-Warner, Lebanon, Ind.
CIRCLE 265 ON READER SERVICE CARD

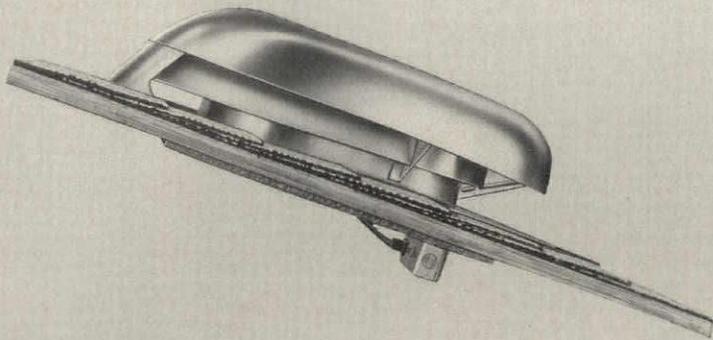
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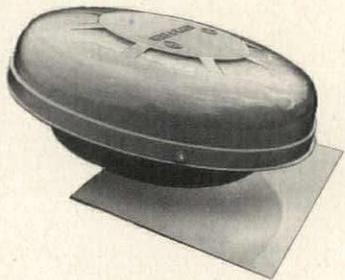
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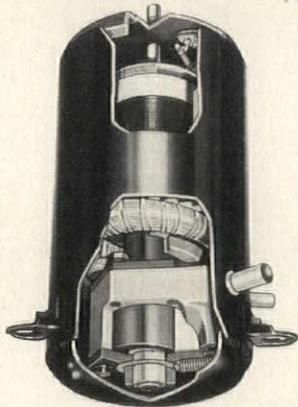
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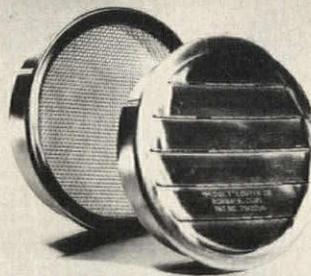
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14



15



11



for maximum flexibility, the system can be installed in upflow, downflow or horizontal positions. Air Comfort, McGraw-Edison, Albion, Mich.

CIRCLE 270 ON READER SERVICE CARD

Baseboard heating (6) is available in three output sizes and seven different lengths. Units, which can be wired from either end, are easy to install using fully exposed mounting holes set 2" apart along the length of the baseboard. A full line of accessories, including thermostat kits, is offered. Markel, Buffalo, N.Y.

CIRCLE 271 ON READER SERVICE CARD

Round condensing unit (7), available in 3½, 4 and 5 ton capacities, features a quiet top air discharge. The highly efficient, easy-to-maintain unit utilizes an extended single-row condenser coil that offers little resistance to airflow. International Heating & Air Conditioning, Utica, N.Y.

CIRCLE 272 ON READER SERVICE CARD

Ventilation

Power humidifier (8), which provides necessary moisture for dry indoor air, can be mounted in any forced-air heating system. The device prevents furniture dry-out, lowers heating costs, reduces static electricity and provides personal comfort. Electro-Air, Emerson, McKees Rock, Pa.

CIRCLE 273 ON READER SERVICE CARD

Roof exhaust fan, "Breezcap" (9) features a quiet, permanently lubricated ball-bearing motor. ABS plastic unit, with an integral bird screen, is equipped with an automatic thermostat set to maintain a 95°F level. Humidistat is optional. Penn Ventilator, Philadelphia, Pa.

CIRCLE 274 ON READER SERVICE CARD

Power roof ventilator (10) pulls hot air out of the attic to cool the entire house. In an air conditioned building the load on the A/C unit is greatly reduced, lowering both operating costs and energy consumption. Vent has an adjustable thermostat. Leigh

Products, Coopersville, Mich.

CIRCLE 275 ON READER SERVICE CARD

Attic ventilator (11) is used to dissipate super-heated air that accumulates in that area. The process keeps the house cooler, reduces air conditioner load and eliminates condensation problems. Unit includes a shrouded motor, 12" fan and automatic thermostat. Humidistat is optional. Leslie-Locke, Lodi, Ohio.

CIRCLE 276 ON READER SERVICE CARD

Power attic ventilator (12) is specifically designed for roof or gable installation. It can be mounted in pitched, vertical or horizontal positions. Unit, which pulls heated air from the attic, is controlled by a pre-set adjustable thermostat. Butler, Mineral Wells, Tex.

CIRCLE 278 ON READER SERVICE CARD

High efficiency rotary compressor (13) is used in energy-conserving residential central air conditioning systems. Unit is smaller, lighter and contains fewer moving parts than conventional compressors. Power transmission is direct and smooth with no motion conversion necessary. Fedders, Edison, N.J.

CIRCLE 277 ON READER SERVICE CARD

Thermostatically controlled power vent (14) exhausts super-heated air from attic and crawl spaces. The unit features a "Laminar Flow" design that prevents back pressure. Heavy-duty ABS plastic roof vent is suitable for installation in pitched, vertical or horizontal positions. Lomanco, Jacksonville, Ark.

CIRCLE 279 ON READER SERVICE CARD

Midget louvers (15) provide added ventilation for a structure and prevent damaging moisture build-up. Easy-to-install units can be placed in various locations, such as sidewalls, basements and soffits, to free trapped moisture. Louvers come in a full range of configurations. Midget Louver, Norwalk, Conn.

CIRCLE 280 ON READER SERVICE CARD

Rotary central furnace humidifier (1), featuring eight polyester fiber pads, adds moisture to dry indoor air. The easy-to-install unit mounts flush to the bottom of the main supply duct of forced warm air heating systems. Humidistat controls are available. Carrier, Syracuse, N.Y.

CIRCLE 266 ON READER SERVICE CARD

Compact electronic air cleaner (2) is designed for use with closet or attic installed forced-air heating systems. Through-the-wall cleaner features a filter that keeps large particles from entering the return air stream and an ionizing cell that removes smoke, odors and other pollutants. Lennox, Marshalltown, Iowa.

CIRCLE 267 ON READER SERVICE CARD

Vertical fan coil unit, "Vertipac" (3) provides all-in-one cooling, heating

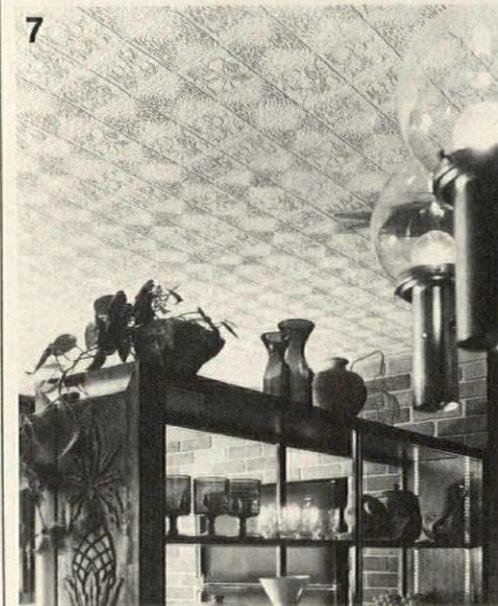
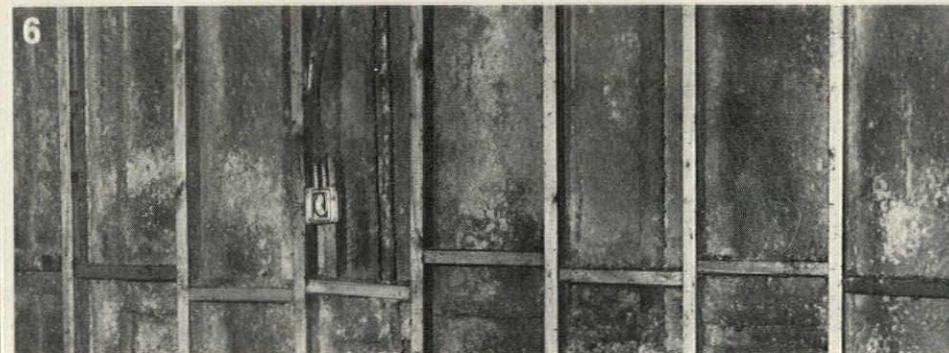
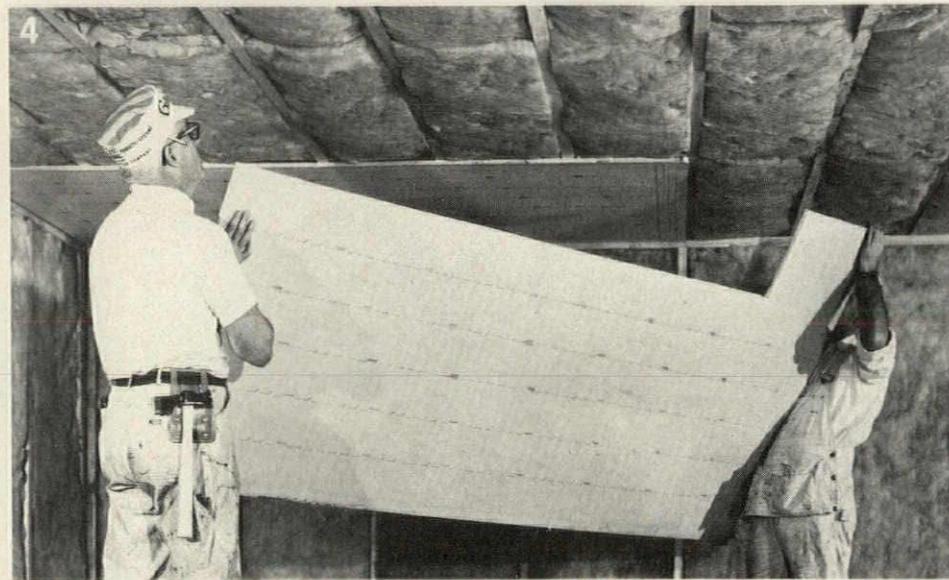
and humidification. Compact units, which stack in a vertical tier throughout a structure, can be installed in a corner. Easy-to-maintain units permit individual control. Modular Energy, Brooklyn, N.Y.

CIRCLE 268 ON READER SERVICE CARD

Heat pump (4) is an electric comfort conditioning system that provides cooling in the summer and—by reverse operation—heat in the winter. One space-saving unit supplies both functions. The forced-air system can incorporate such options as humidifiers and electronic air cleaners. Westinghouse, Pittsburgh, Pa.

CIRCLE 269 ON READER SERVICE CARD

Electric comfort system (5) features twin blowers with 3 or 4 speed motors that provide quiet operation and a full range of air delivery. Built

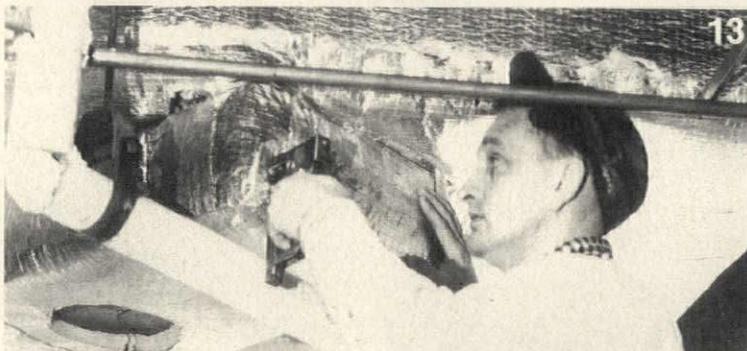
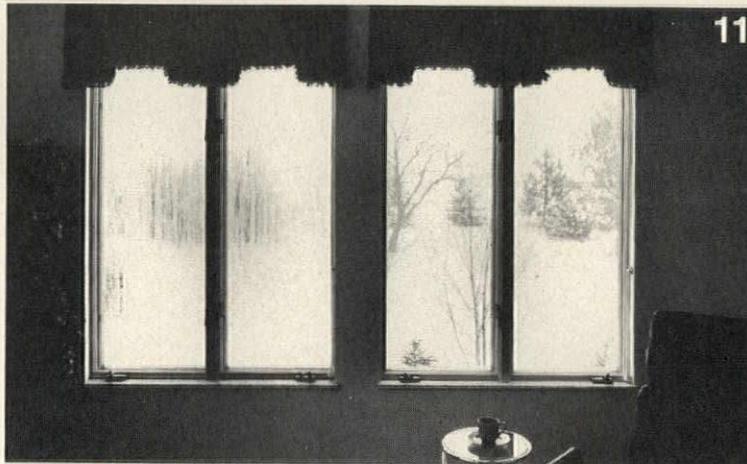
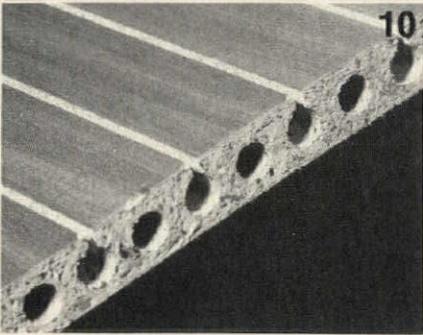
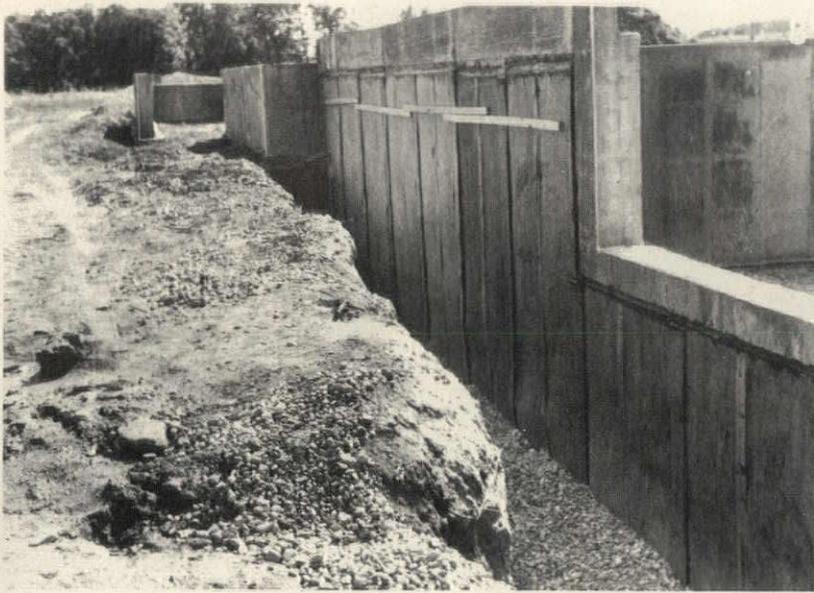


Insulation

Acoustical ceiling (1) provides quiet conditioning for any room. The pattern, "Sonata", a two-tone white and wheat tint deep-textured design is available in 12" x 12" tiles or 2' x 4' lay-in panels for suspended ceiling systems. Tiles feature special interlocking joints that conceal installation staples giving a seamless look. Jim Walter, Tampa, Fla.

CIRCLE 281 ON READER SERVICE CARD

Thermal and acoustical insulation, "Thermafiber" (2), can be used as blanket, loose-fill, or semi-rigid insulation for curtain walls, column fireproofing and perimeter application. Material is spun mineral fibers formed into mats of varying dimensions and densities depending on use or into pellets for pouring or



W. R. Meadows, Elgin, Ill.
CIRCLE 288 ON READER SERVICE CARD

Acoustical ceiling tile (9) absorbs up to 75% of the noise generated in a room. "Traverta", a non-directional deep-textured, fissured pattern, complements any decor. The absence of V-joints between the 12"-square tiles gives the ceiling a monolithic appearance. Simpson Timber, Seattle, Wash.

CIRCLE 289 ON READER SERVICE CARD

Acoustical wood wall-paneling (10), "Trysil", is available in a choice of 15 wood veneers. The paneling is backed with numerous circular chambers that absorb about 70% of the sound in a room. Noise penetrates the panels through slots and is lost in the chambers. Bangkok, Philadelphia, Pa.

CIRCLE 290 ON READER SERVICE CARD

Gas-filled insulating glass windows (11) provide excellent thermal insulation and minimize condensation. Two pieces of glass are permanently fused together with a special dry gas hermetically sealed between. All windows using "Twindow XI" carry the XI trademark in the corner. PPG Industries, Pittsburgh, Pa.

CIRCLE 291 ON READER SERVICE CARD

Fiber glass thermal insulation (12) reduces heat transmission. Elimination of heat-loss or gain keeps fuel costs and consumption low. The foil-faced material is installed between studs during construction. Johns-Manville, Denver, Colo.

CIRCLE 292 ON READER SERVICE CARD

Insulating facing and jacketing (13) provides an effective vapor barrier suitable for use around heating ducts and pipes. "Pyro-Kure", a non-combustible material, is made of layers of kraft, glass fiber reinforcing, foil and/or vinyl bonded together in different combinations to produce various grades of insulation. St. Regis, Attleboro, Mass.

CIRCLE 293 ON READER SERVICE CARD

blowing. U.S. Gypsum, Chicago.
CIRCLE 282 ON READER SERVICE CARD

Fiber glass insulation (3), designed for maximum thermal performance, comes in three versions. Kraft-faced material is available with a decorative basketweave printed on the facing. Extra-wide, rigid unfaced insulation stays in place without stapling. Foil-faced is print-free. Certain-teed, Valley Forge, Pa.

CIRCLE 283 ON READER SERVICE CARD

Radiant-heating ceiling system (4), "Panelectric", requires no ductwork or motors. Controlled by a low voltage thermostat, system consists of Fireshield, 3/4" thick gypsumboard panels with radiant-heat cables embedded in them. Ceiling is conventionally installed then connected to an electrical system. Gold Bond, Na-

tional Gypsum, Buffalo, N.Y.
CIRCLE 284 ON READER SERVICE CARD

Sound control material, "Acoustipad" (5), is suitable for use in wall, floor and ceiling construction. Made of layers of mastic, resinated cotton and heavy kraft stock, the material is easy to cut, handle and install. It has excellent sealing properties and can conform to almost any shape. Globe Industries, Chicago.

CIRCLE 285 ON READER SERVICE CARD

Spray-on insulation (6) for noise control is a cellulose-based material especially suited to multifamily construction. "Celbar" provides coverage of wall board, studs and piping, sealing all cracks and holes. It bonds to metal, sheetrock or wood, breaking the path of sound vibrations and reducing noise transmission.

National Cellulose, Houston, Tex.
CIRCLE 286 ON READER SERVICE CARD

Acoustical ceiling tile (7) is designed for the kitchen—a high noise level area. The pattern "Gourmet" is a checker-board of fruit figures and abstract swirls sculptured on a white surface. Vinyl-coated tiles can be installed by a variety of methods to create a seamless looking ceiling. Armstrong, Lancaster, Pa.

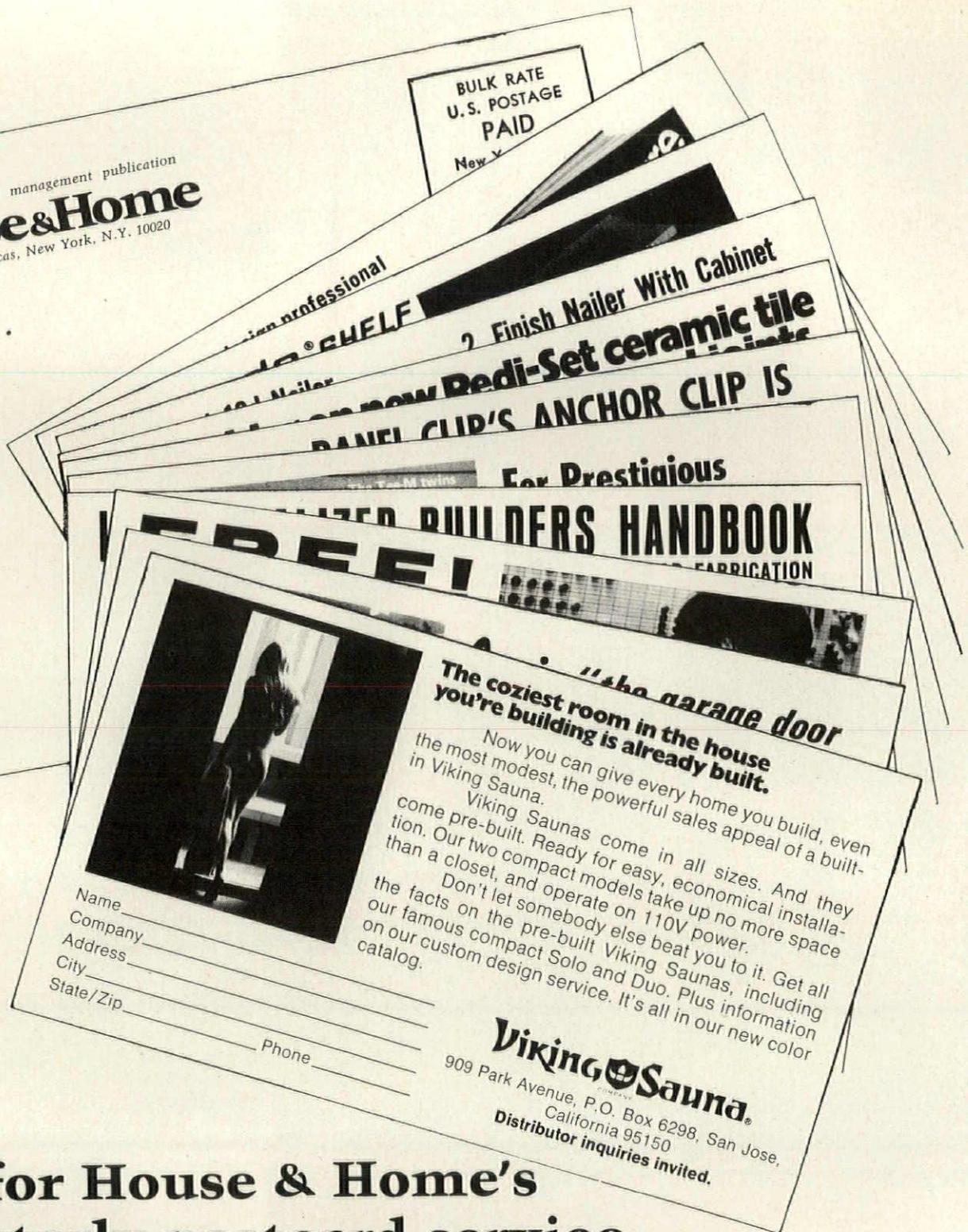
CIRCLE 287 ON READER SERVICE CARD

Water vapor seal (8) prevents moisture from entering a building and migrating from the ground through the structure. Premoulded Membrane™, with a Plasmatic™ core, is installed on the outside of foundation walls prior to backfilling and also applied directly to soil before basement concrete floor is poured.

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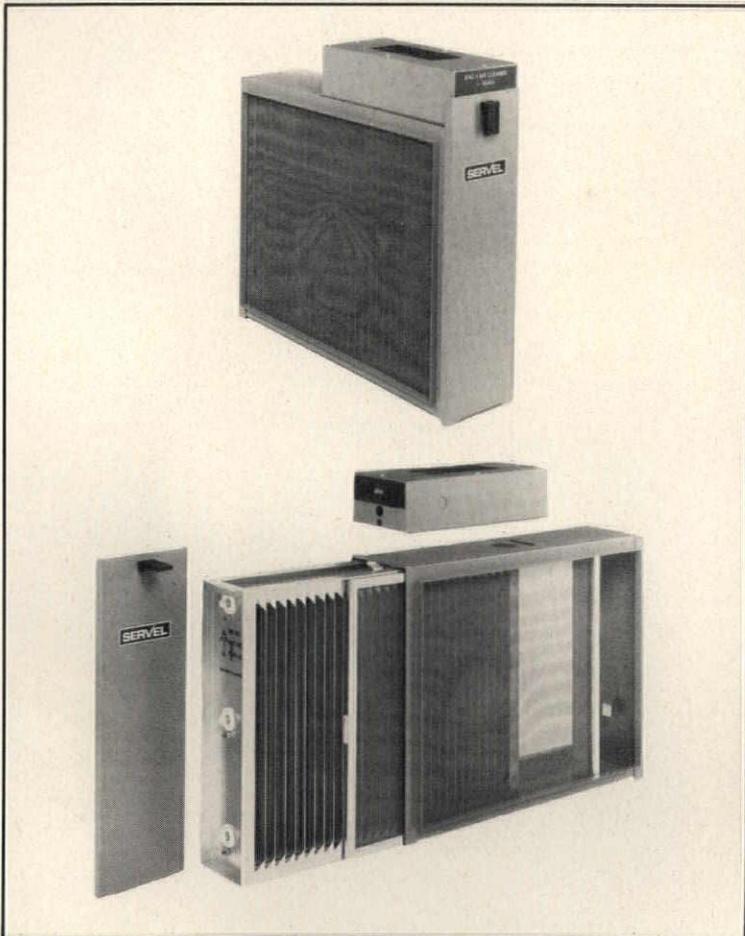
It's dealer's choice! So watch the mails for the full deck of product postcards — coming your way from House & Home, soon!



Decorative heat source is an integral part of this completely assembled fireplace unit. The fireplace, shown in a corner installation, features 1,500 watt/120 volt forced-air heat with thermostatic control. Brick unit comes with a wood-laminate mantel, electric log sets and flush built-in screen. Monoline, St. Joseph, Mich. CIRCLE 241 ON READER SERVICE CARD



Through-the-wall air conditioner has a high efficiency rating to hold down operating costs and conserve electricity. Unit, with a slide-out chassis for easy installation and service, features a temperature-anticipating thermostat, a six-way air control, an oversized condenser coil and an anti-ice device. Freidrich, San Antonio, Tex. CIRCLE 243 ON READER SERVICE CARD

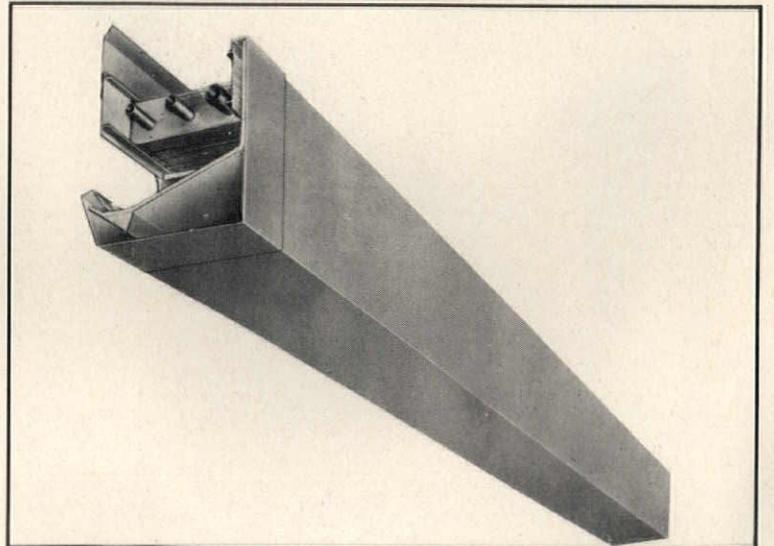


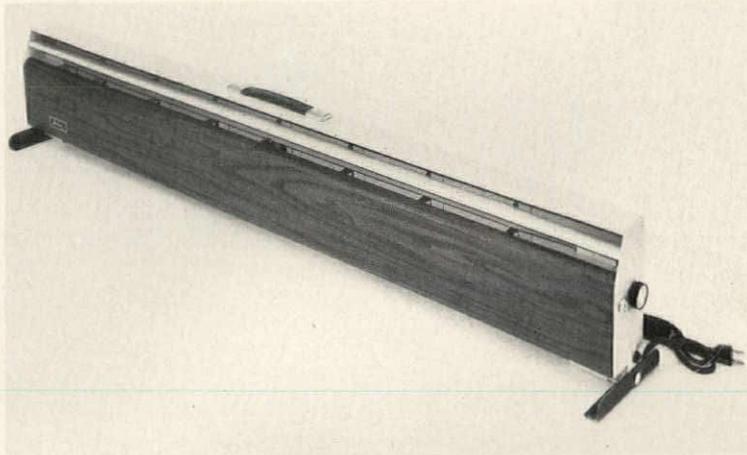
Prewired, preassembled "Servel" air cleaner can be installed in almost any central forced-air heating, cooling or ventilating system. The compact unit, containing three main components—a powerpack, an ionizing section and a collection section—creates a virtually pollution-free indoor atmosphere. Arkla, Little Rock, Ark. CIRCLE 242 ON READER SERVICE CARD

Floor drop-in heater features a special fan and grille design that produces a 5' wide warm-air flow pattern at 4' up from the floor. Unit is equipped with a switch/thermostat accessory that permits it to be used without heat as an air circulator. Chromalux, Emerson, St. Louis, Mo. CIRCLE 244 ON READER SERVICE CARD



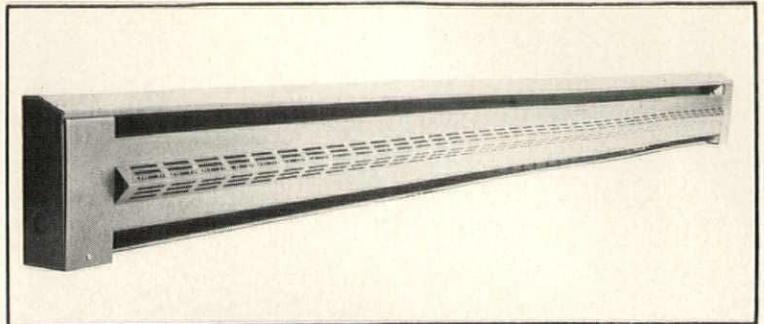
Heating and air conditioning valance for ceiling application combines hot water heating and chilled water cooling systems. The square-pan design completely conceals drain fittings and connections. Easy-to-install units can be used wall-to-wall. Edwards, Pompton Plains, N.J. CIRCLE 245 ON READER SERVICE CARD



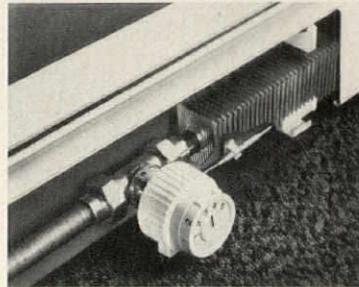


Portable electric baseboard heater plugs into any standard 120 volt outlet. Unit has no fan or motor to make noise, no moving parts to replace and no hot glowing wires or exposed heat elements. An automatic thermostat shuts off at a safe temperature limit or in the event of inlet or outlet blockage. Automation, Continental, Baltimore, Md. CIRCLE 246 ON READER SERVICE CARD

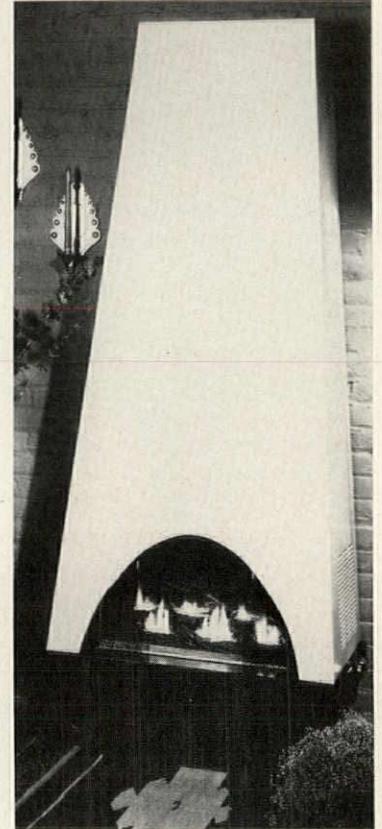
Heat pipe reclaims wasted heat energy that is normally lost as flue gas. The unit, installed in the flue, transfers the heat from hot gases (but not the gases themselves) to fresh air which is circulated by an electric fan. The easy-to-clean, automatic "Air-O-Space Heater" features an adjustable temperature range. Isothermics, Clifton, N.J. CIRCLE 247 ON READER SERVICE CARD



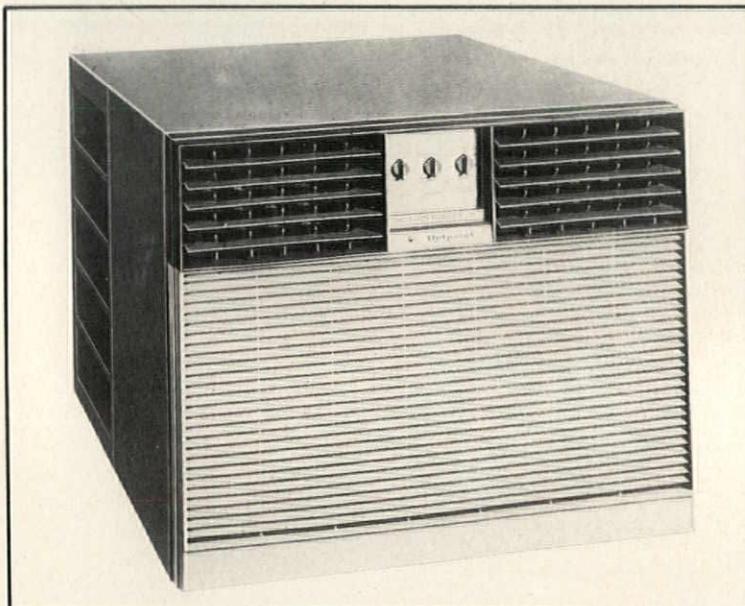
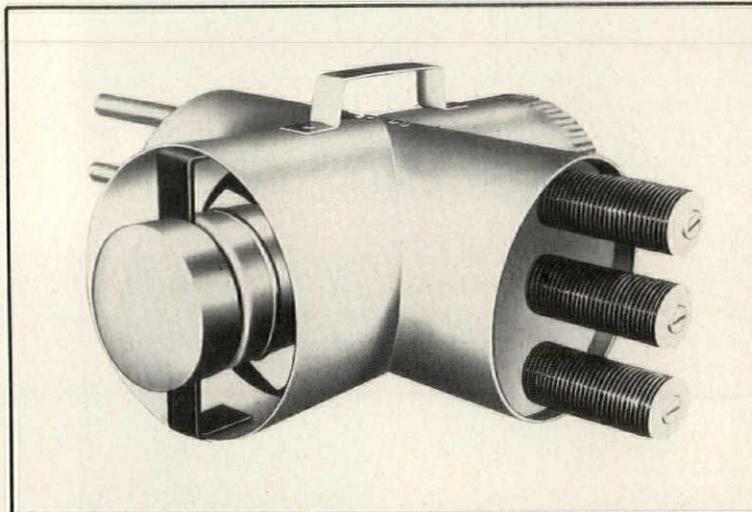
Two-stage modulating baseboard heater provides comfort and conserves energy. As the temperature falls, the first stage is energized. Should this fail to compensate for a rapidly dropping temperature, a second stage is activated. Available in lengths from 2' to 10', units are controlled by line or low voltage thermostats. Cadet, Vancouver, Wash. CIRCLE 249 ON READER SERVICE CARD



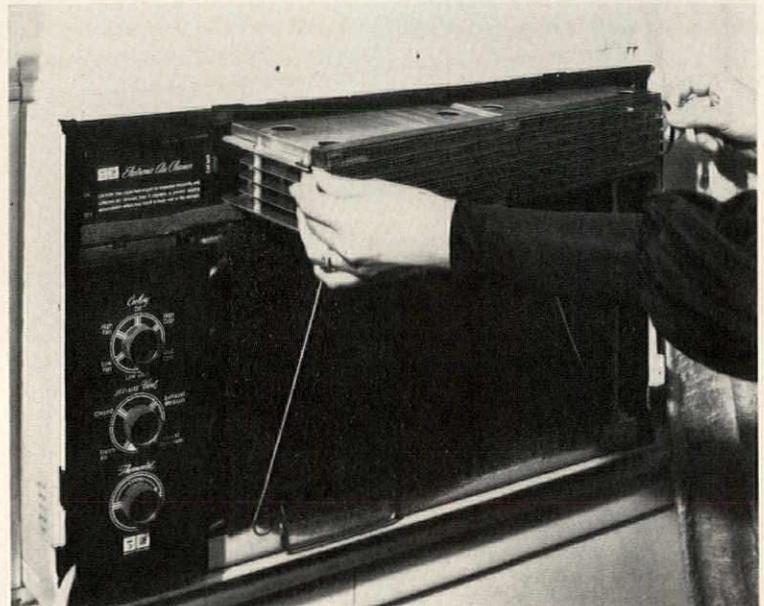
Non-electric valve is designed for hydronic baseboard heating application. Easy-to-install valve features a small sensing bulb with accuracy to $\pm 1^\circ \text{F}$. Unit has a minimum temperature setting to prevent freeze-up and a maximum to prevent damage to controls. Danfoss, Mahwah, N.J. CIRCLE 250 ON READER SERVICE CARD



Gas log fireplace/heater provides room decoration and warmth. The unit contains two individual heat sources—the gas logs with 20,000 BTUH input and a separate 35,000 BTUH input heater for additional warmth on colder days. The fireplace comes in two models in a choice of colors. Temco, Nashville, Tenn. CIRCLE 251 ON READER SERVICE CARD



Giant capacity, 27,000 BTUH room air conditioner is designed to meet the need of small stores and public areas. The unit features three fan speeds and quiet, twin turbine-type blowers with dual air direction systems. The chassis can be installed and serviced from the outdoors, minimizing interior disruptions. Hotpoint, Louisville, Ky. CIRCLE 248 ON READER SERVICE CARD



Room air conditioner features a removable electronic air cleaner that entraps and filters out dirt and dust. Units, available in three capacities, feature three cooling speeds, an air exhaust and fresh air ventilation system and sliding front panels in simulated woodgrain that conceal controls. Frigidaire, GM, Dayton, Ohio. CIRCLE 252 ON READER SERVICE CARD

"Ticket-Operated Maytags give us better laundry room security and tight money control at Channelwood Village," reports Mr. Reeves.

These washers and dryers minimize coin-box problems. Instead of coins they use an Electronic Ticket that is invalidated on insertion.



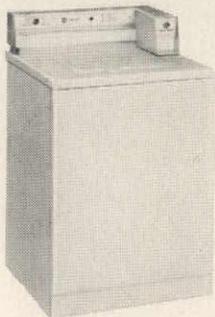
Channelwood Village is a new community in Opportunity Park, Akron's 400-acre urban renewal area. Conceived by the Akron Chapter of Alpha Phi Alpha and federally financed, it was built by Forest City/Dillon, Inc.

Channelwood's 551 units include high-rise apartments, garden apartments and town houses. The complex's laundry rooms have Ticket-Operated Maytags, 32 washers and 32 dryers. These use an exclusive Electronic Ticket instead of coins.

"It was natural for us to pick Ticket-Operated Maytags because we've had years of experience with them," says Mr. Gerald C. Reeves, Forest City/Dillon's Property Management Coordinator. "They give us better security and money control, because tickets are sold in the office. In addition, we have found Maytags work dependably and residents like using them.

"The combination of Maytag and Coin Rentals, Inc., the local Maytag Route Operator, has made our laundry operation run smoothly," concludes Mr. Reeves.

Naturally, we don't say your experience will be exactly like that at Channelwood Village, or that Ticket-Operated Maytags will eliminate all security problems. But if you want a significant improvement over coin-operated equipment, plus famous Maytag dependability, mail the coupon now.



Mr. Reeves with Mr. James R. Williams, Chairman of the Board of Alpha Phi Alpha Homes, Inc.

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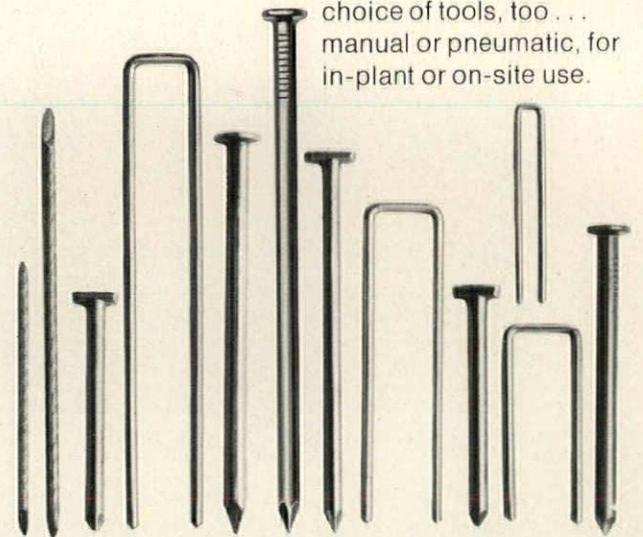
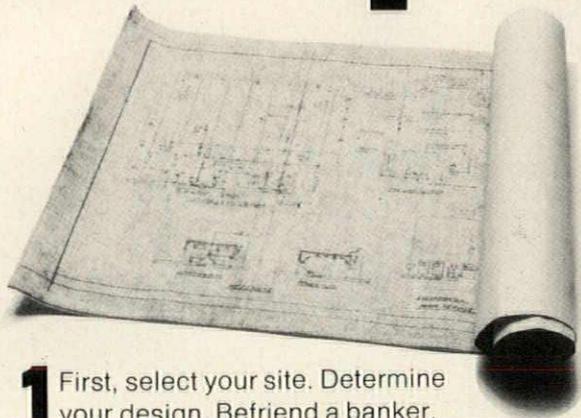


Send details on how Ticket-Operated Maytag Washers and Dryers can help curb security problems, and contribute to a more trouble-free self-service laundry operation.

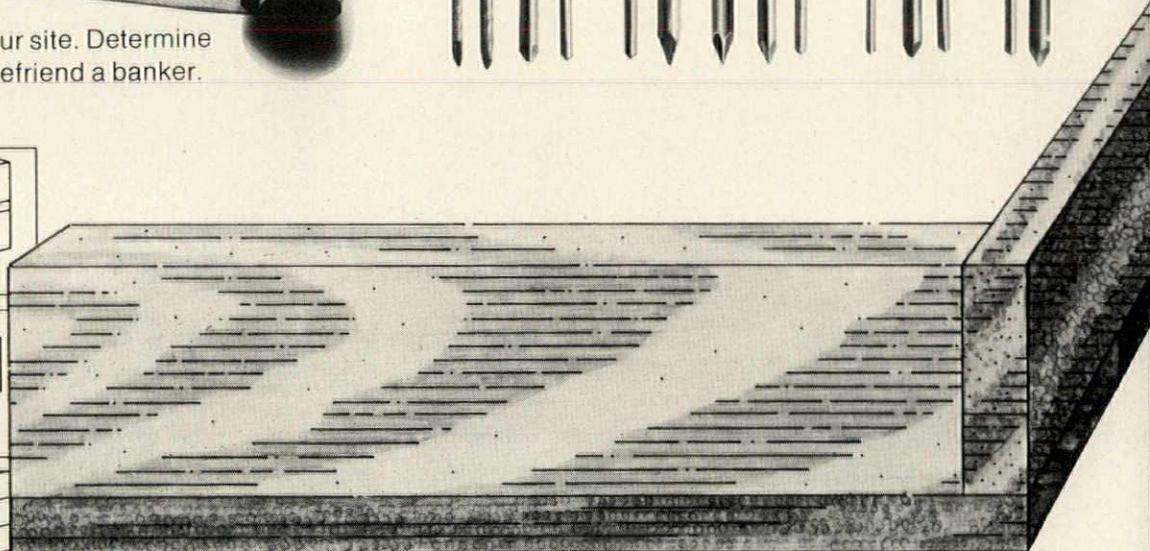
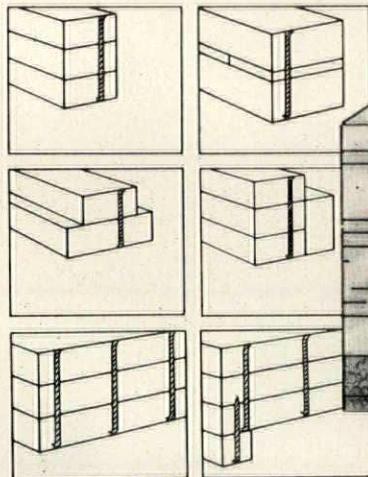
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Our House Recipe.

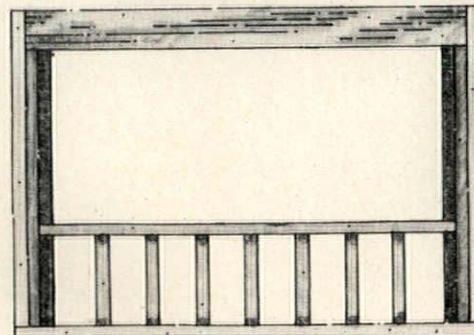
2 Next, gather a liberal assortment of Bostitch nails, staples and other fasteners. You'll find everything you need because Bostitch makes a complete line. Bostitch gives you a choice of tools, too . . . manual or pneumatic, for in-plant or on-site use.



1 First, select your site. Determine your design. Befriend a banker.

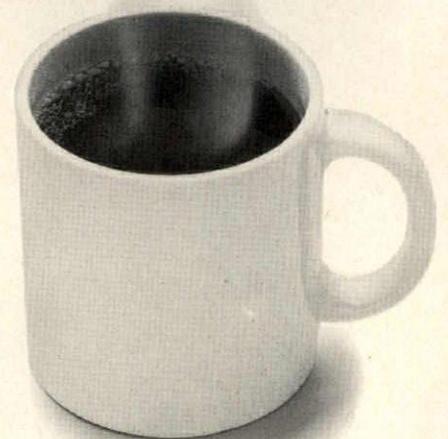


3 Here's a handy hint. Your sills, posts, headers, girders, and all other subcomponents will blend together faster with our Auto-Nailer Model Titan 40SC. It nails at speeds of up to 90 nails per minute, making its own nails from a coil of Threadlok™ nail stock. The Titan's powerful clamping system automatically aligns, removes warpage, and presses the members while nailing. The result is alignment so accurate, sub-components are interchangeable.



4 Now add one Bostitch Auto-Nailer Model Hercules 9 and make all the window frames, outside door frames, and two-piece sills you'll need. This high-speed jamb nailer will make a profitable addition to your systems building facilities, even if you use it for as few as seven window units a day.

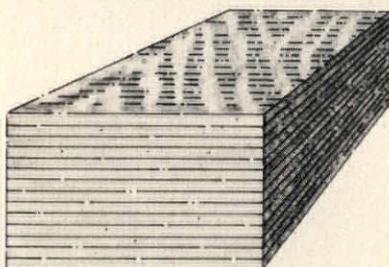
5 Take a break. You're not really tired, of course. But look at all the time you've saved. Go on. You deserve it.



6 Now for the flooring. The Bostitch N3 portable coil nailer will really floor you. It lets you drive up to 300 nails without reloading. That's five times faster than you could do it by hand.

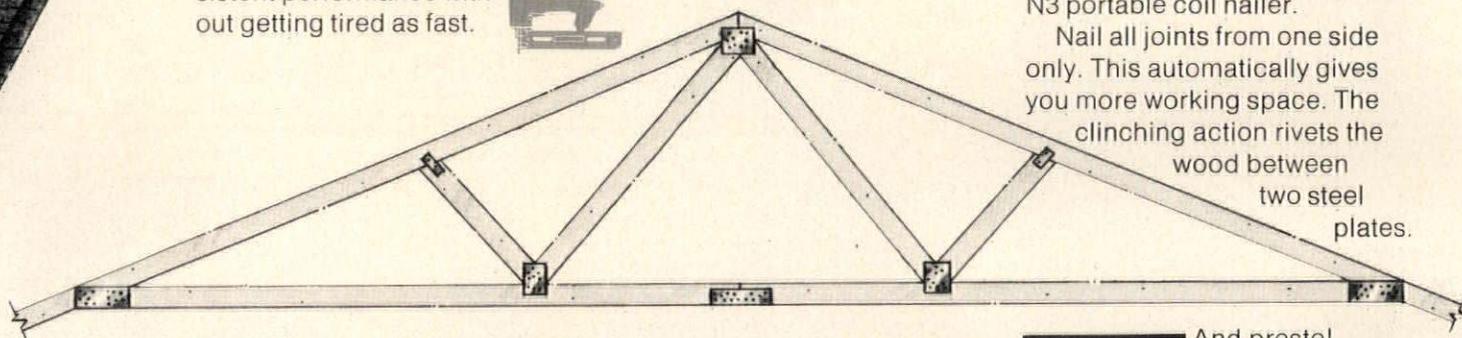


7 The sheathing's a breeze, too. With the Bostitch Model T36, you get speed, accuracy and uniform drive every time. Its low recoil drive action means your crew will get more consistent performance without getting tired as fast.



8 Time to make the roof trusses. You'll need some truss members, truss plates, and our versatile friend, the Bostitch N3 portable coil nailer.

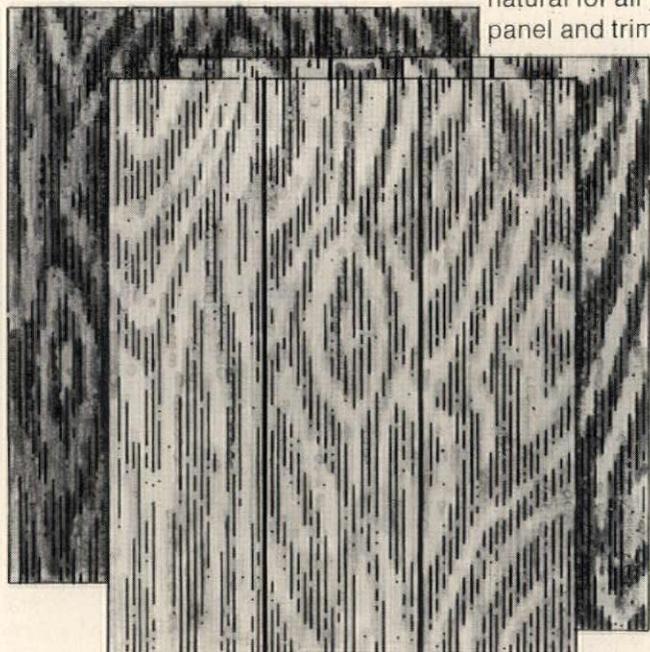
Nail all joints from one side only. This automatically gives you more working space. The clinching action rivets the wood between two steel plates.



And presto! You've got a truss tough enough to take more racking than it would ever receive... in shipping, handling, and installation.



9 A few interior panels, some trim here and there, and you're home with the Bostitch Model T28. Its lightweight design and powerful drive make it a natural for all your panel and trim work.

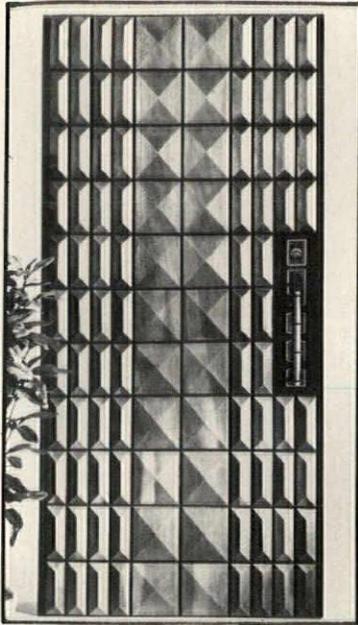


10 Well, you're through. Easy, wasn't it? But the best is yet to come. Now get ready for your just deserts: profits served and serviced à la Bostitch. For our complete recipe book on profitable home building, write Bostitch, 114 Briggs Drive, East Greenwich, Rhode Island 02818.

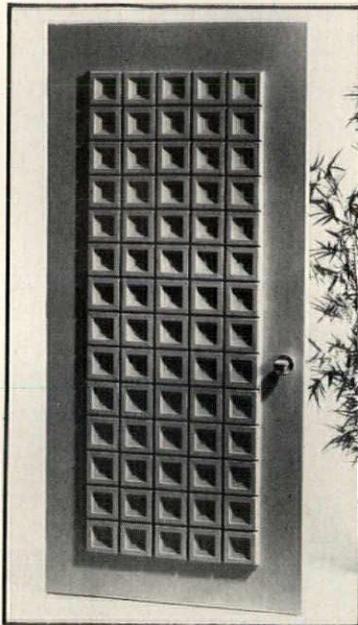


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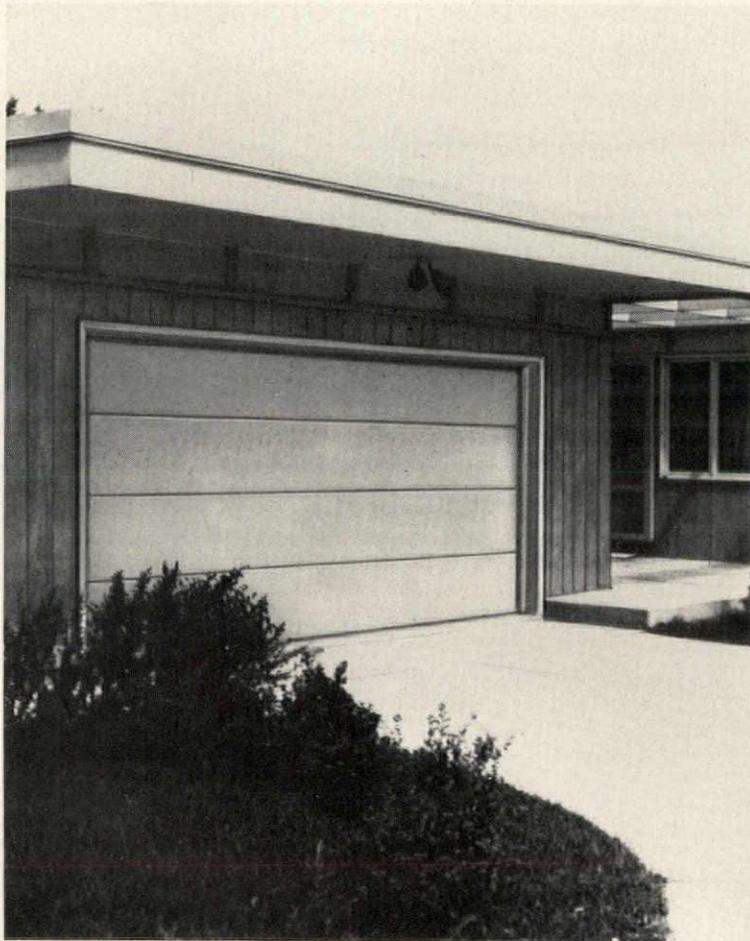
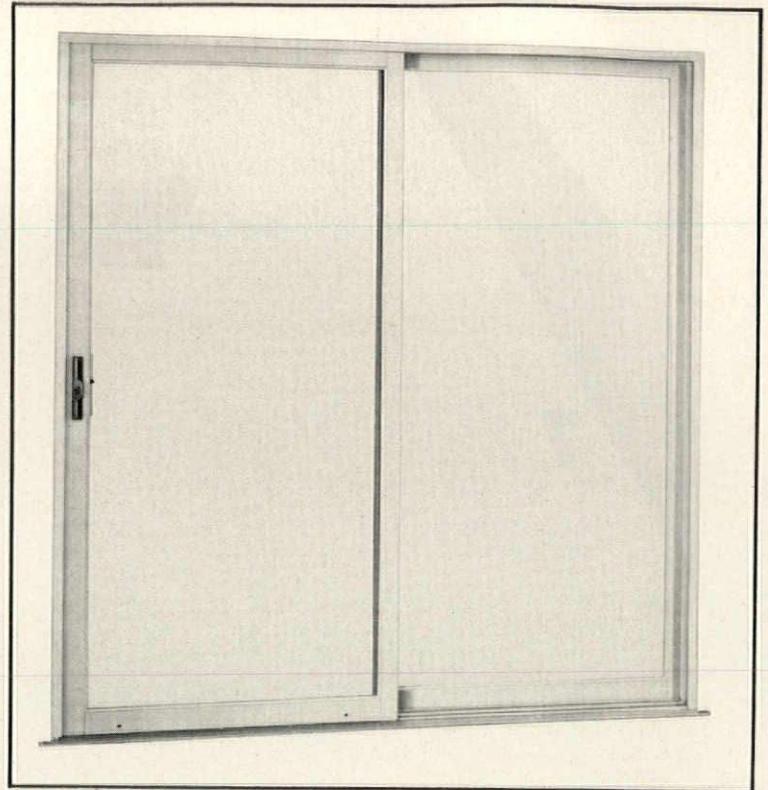


Decorative door set with a unique three-dimensional design is offered in complementary panels as well. Molded of rigid polyurethane, units come in a selection of woodtones including walnut, oak, white oak and pecan. Available in various sizes, all panels can be worked with conventional tools and easily applied using panel adhesives or finishing nails. Formel, North Kansas City, Mo. CIRCLE 212 ON READER SERVICE CARD



Decorative door molding, "Dimension", features a series of raised squares that covers all but the perimeter of the door exterior. As the light hits the pattern of squares, shadows are created at everchanging angles. The molding, which is permanently affixed to the door surface, is heat and weather resistant. Units come in double and single sizes. Pease, Ever-Strait, Fairfield, Ohio. CIRCLE 213 ON READER SERVICE CARD

Sliding patio door is constructed of wood and tempered insulating glass. A vinyl boot glazing, which forms a permanent seal between the two materials locks out moisture and weather. Doors are factory-finished in a neutral color and can be painted if desired. A removable screen panel and key lock are included. Malta, Malta, Ohio. CIRCLE 215 ON READER SERVICE CARD



Flush garage door, "Raider", is 1" thick with all framing members constructed of seasoned redwood. A heavyweight, honey-comb core insulating barrier is permanently bonded to preprimed hardboard facings with a waterproof glue. Door is available with window-lites and a wide selection of moldings. Each door carries a factory registration number that makes replacing parts easy. Raynor, Dixon, Ill. CIRCLE 214 ON READER SERVICE CARD



Wood-panel sectional overhead garage door, "Chameleon" features design versatility. Five translucent DuPont Lucite acrylic window-lite elements can be combined in a variety of ways to blend with any architecture. Inset and raised hardboard panels also are used to create interesting patterns. Door is available in both double and single sizes. It is factory finished in neutral white. Clopay, Cincinnati, Ohio. CIRCLE 216 ON READER SERVICE CARD

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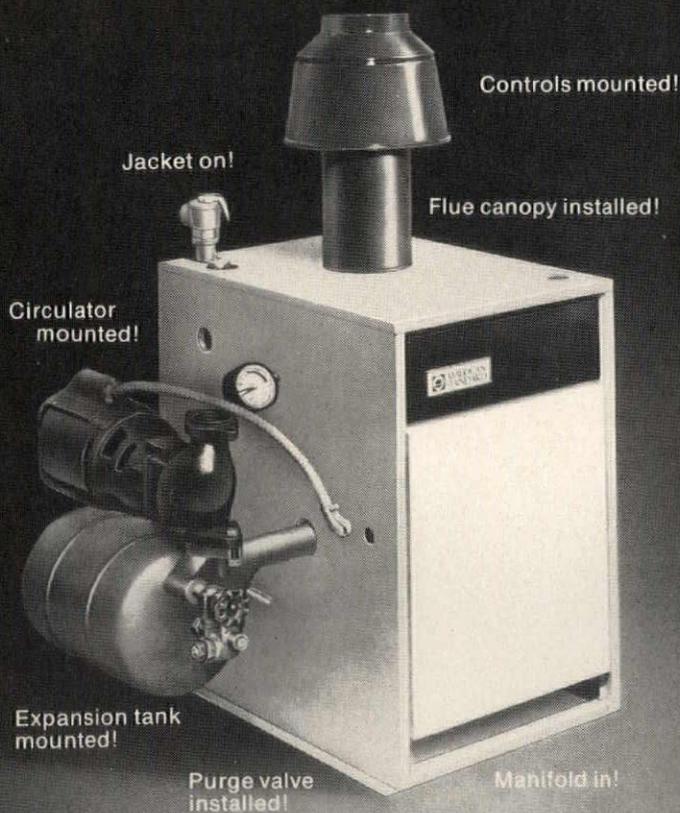
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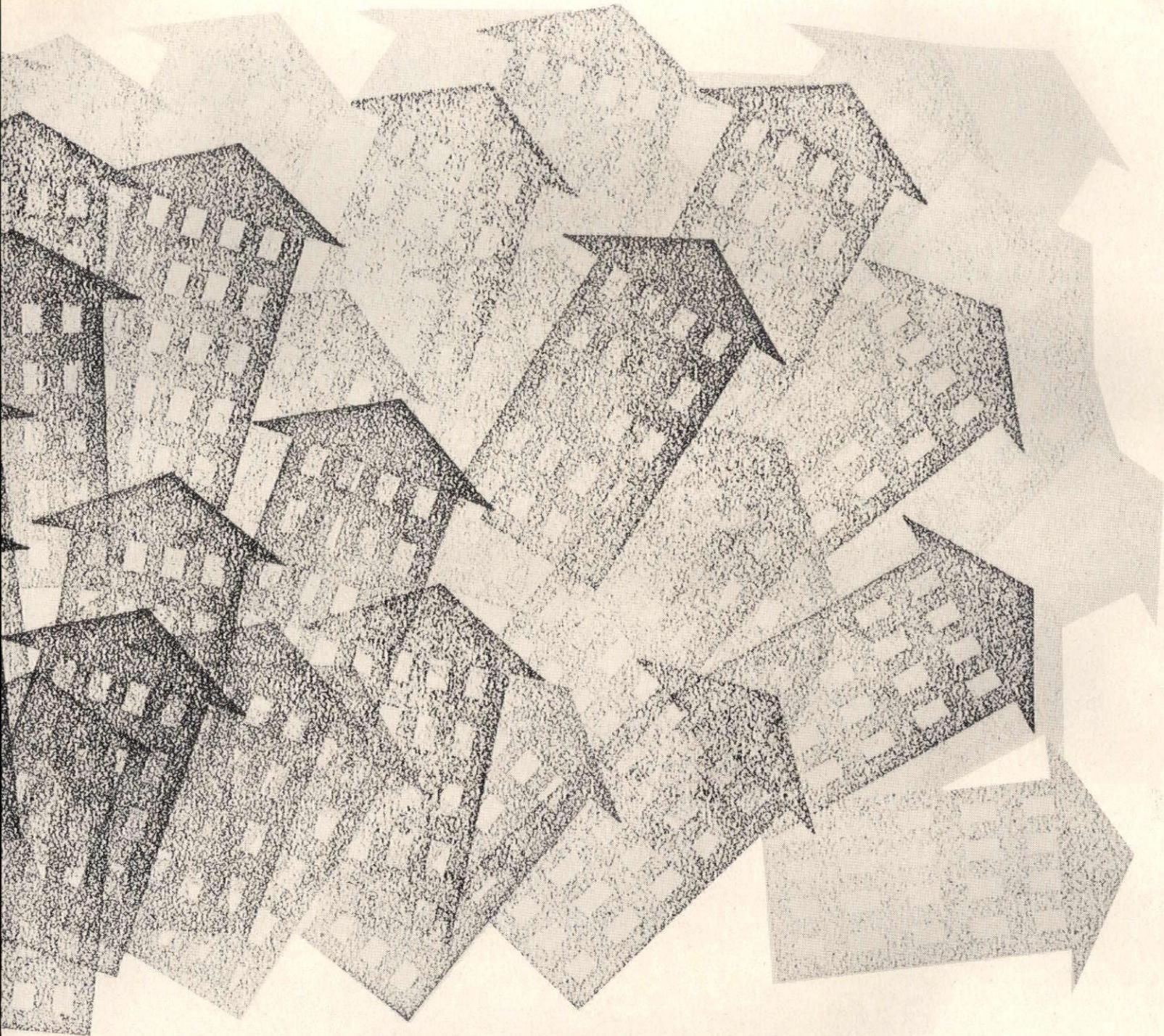
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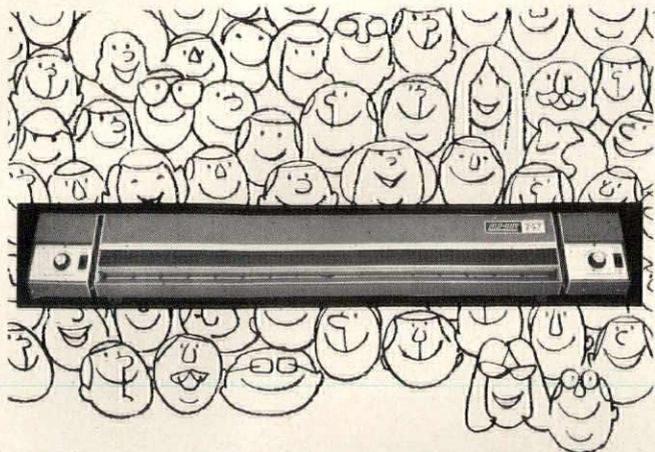
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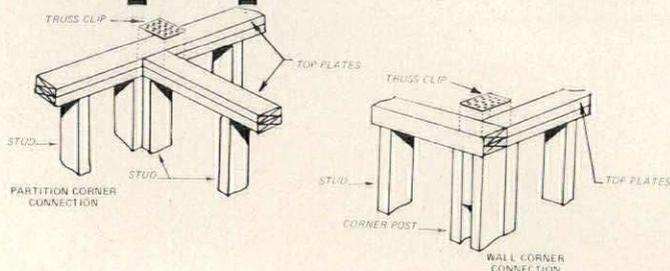
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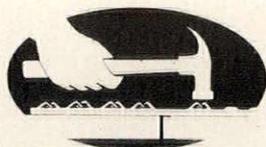
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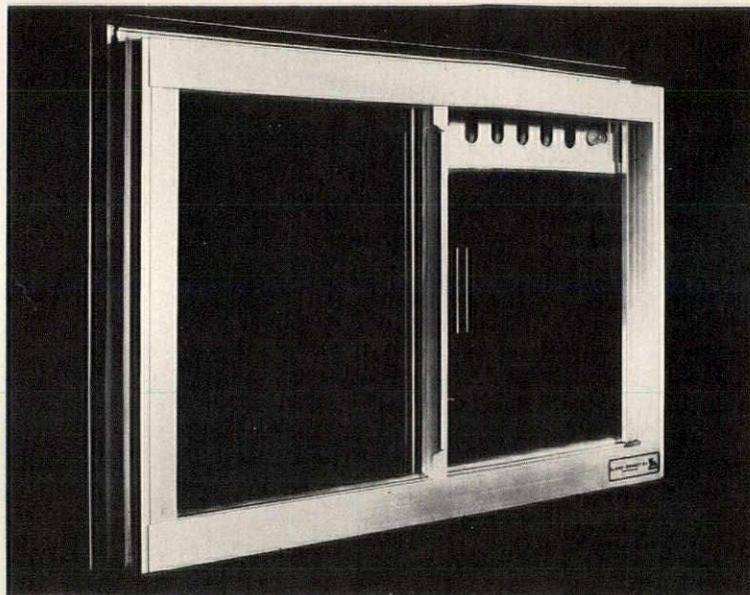


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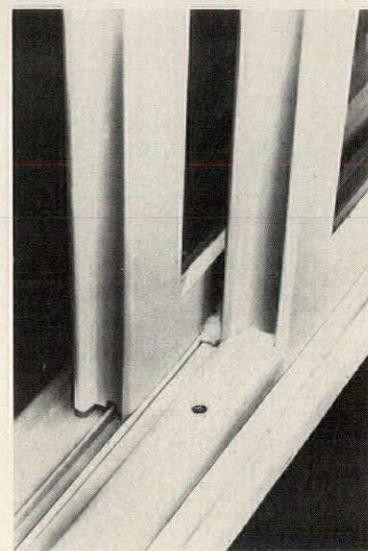
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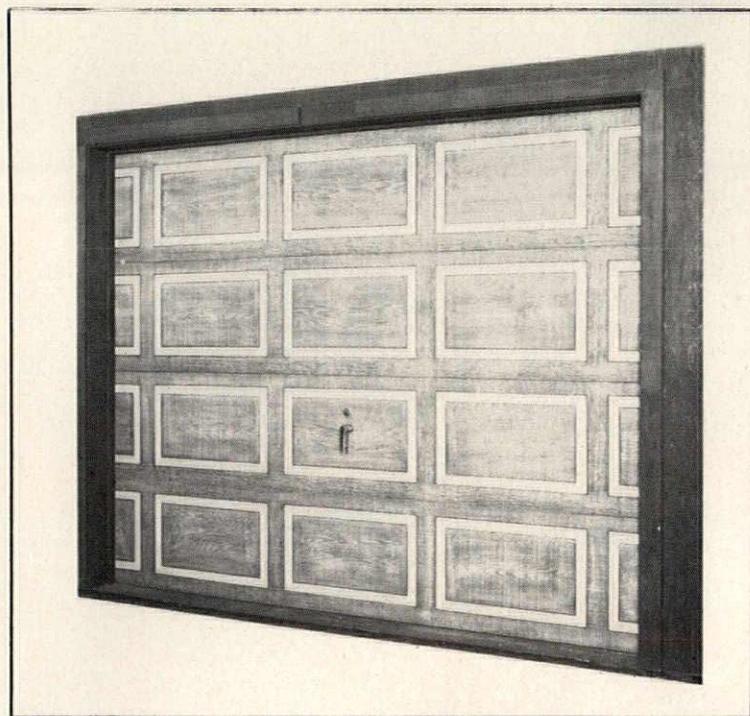
Sliding window can be locked in a slightly open position and still protect against intrusion. Made of an alloy of aluminum, magnesium and silicone, the easy-to-install unit is fully weather-sealed. A permanent plastic vent permits an air flow even in cold or wet weather. Eland-Brandt, Amsterdam, Netherlands.

CIRCLE 220 ON READER SERVICE CARD



Prefinished wood patio door features adjustable tandem wheels for smooth, quiet rolling. Constructed with 1" tempered glass, doors are equipped with vinyl seals, weatherstripping and locking mechanisms. Interior wood sill shown is vinyl-wrapped to eliminate frost build-up. Biltbest, Ste. Genevieve, Mo.

CIRCLE 221 ON READER SERVICE CARD



Double-side flush garage door features a rough-sawn, woodgrained texture in a panel design that blends with any exterior. Factory-primed doors have kiln-dried wood frames. Sheets of closed-cell insulating foam are laminated to outside and inside weather-resistant hardboard panels. Easy-to-install unit—in single and double door models—provides thermal and acoustical insulation. Phenix, Shawano, Wis.

CIRCLE 222 ON READER SERVICE CARD

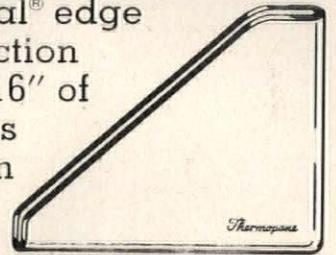
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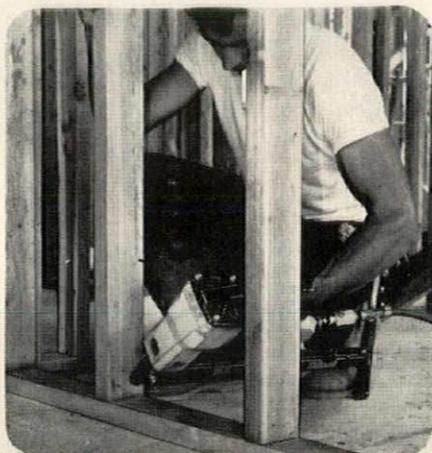
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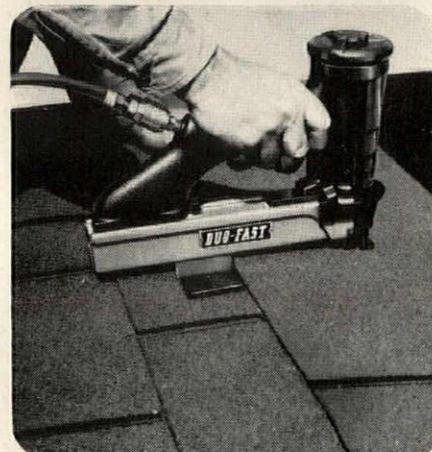
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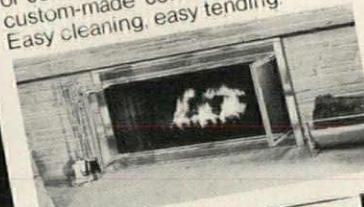
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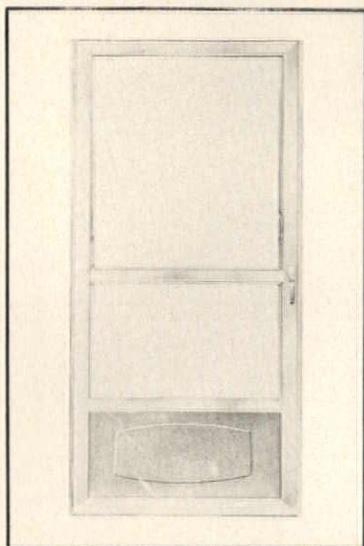
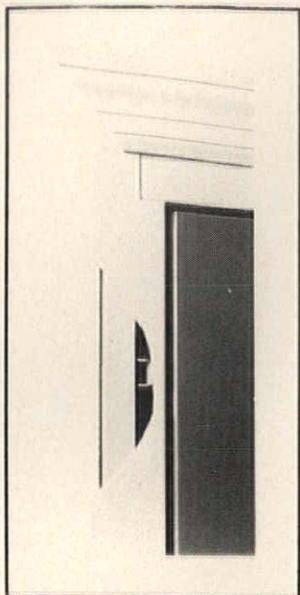


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CIRCLE 83 ON READER SERVICE CARD



Door and frame for remodeling use is designed to easily replace damaged wood entry units. A screw actuated shim (detail above left) eliminates unnecessary shimming and adjustment. The insulated steel door is fully weather-stripped. It comes in a variety of designs. Perma-Door, Cincinnati, Ohio.

CIRCLE 217 ON READER SERVICE CARD

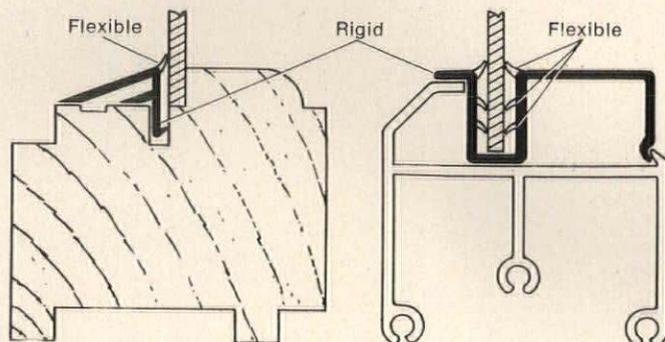
Combination storm and screen door is made with impact resistant tempered glass. The 1½" thick door will not sag, warp or twist. Available in mill, anodized and electrocote black or white finishes, the door comes in single-lite and hi-lite models with embossed leather-like kickplates. Season-All, Indiana, Pa.

CIRCLE 218 ON READER SERVICE CARD



Sliding glass patio doors have special safety locking features. Available in a two-panel reversible model and a multiple panel unit, the door is equipped with a patented locking device that secures the inactive panel to the frame sill. Units feature door handles with anti-lockout latches and double security night locks. Doors come in anodized, white or bronze. American Aluminum Window, Malden, Mass. CIRCLE 219 ON READER SERVICE CARD

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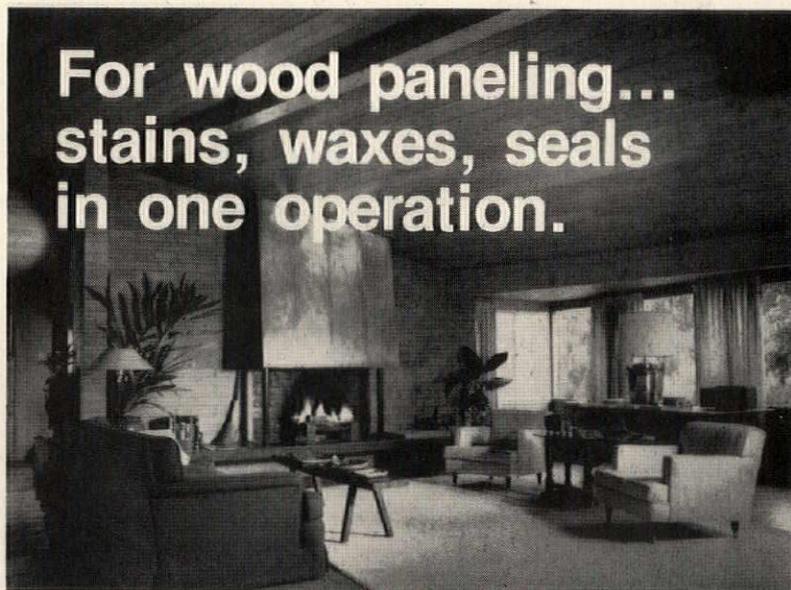
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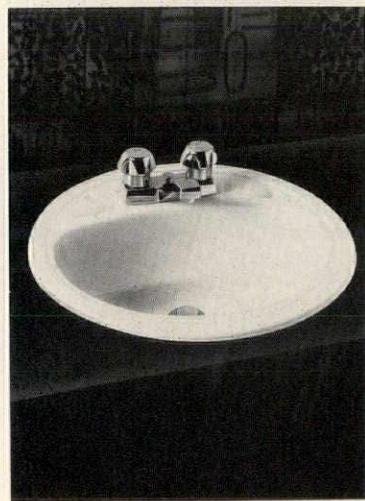
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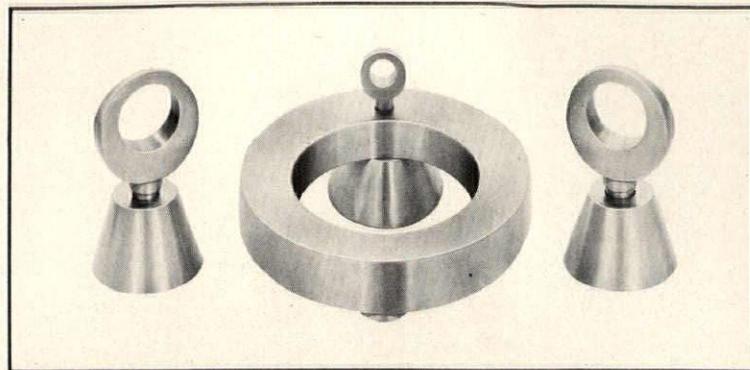
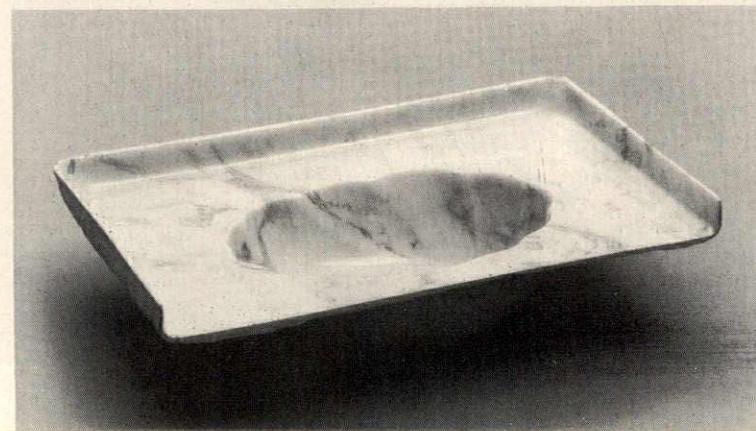


Contemporary-styled medicine cabinet with a large, graceful oval mirror door can be surface mounted or recessed. Available with incandescent sidelights (shown) or unlighted, the unit comes in silver, walnut, gold or white and gold finishes. Also shown is a black and white "Madeira" vanity. General Bathroom, Elk Grove Village, Ill. CIRCLE 206 ON READER SERVICE CARD

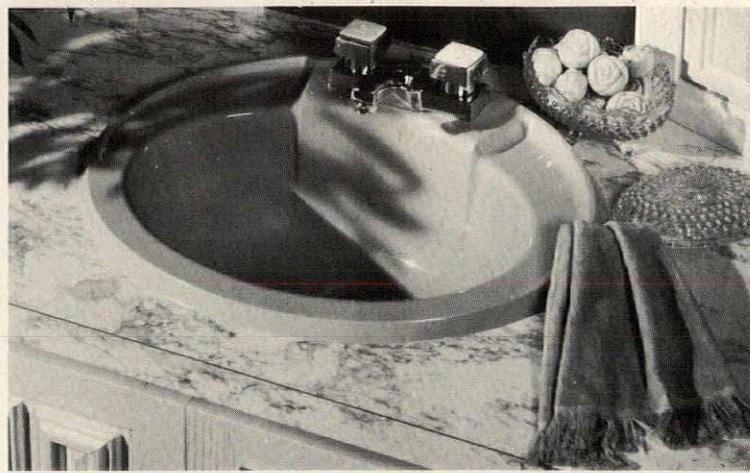


Self-rimming countertop lavatory, "Bayside," is made of acid-resistant enamel-formed steel. The 19"-round unit features a front overflow, two soap depressions and a fitting ledge. It comes in white and six colors. Eljer Plumbingware, Pittsburgh, Pa. CIRCLE 207 ON READER SERVICE CARD

Prototype vanity top with a sculptured bowl is of Swedcast® decorative acrylic sheet in a marble pattern. Any design or texture can be cast into the thick, clear acrylic material. Sheets are conventionally thermoformed into shape. Pattern versatility provides for customized bathroom fixtures. Swedlow, Florence, Ky. CIRCLE 208 ON READER SERVICE CARD



Trendsetting "Pisces" bathroom fittings—part of the "Tomorrow" line—come in a wide-spread lavatory set (shown), a 4" centerset, a matching tub set, a shower set and tub/shower combinations. A choice of four metal finishes is offered. Artistic Brass, Los Angeles. CIRCLE 209 ON READER SERVICE CARD



Injection-molded lavatory is of solid ABS plastic with polycarbonate for added strength. The 20"x17" oval "Futura" has a high-gloss finish that will not chip, scratch or break. It is available in avocado, harvest gold or white. The self-rimming unit is easy to install with three faucet holes on 4" centers. Bemis, Sheboygan Falls, Wis. CIRCLE 210 ON READER SERVICE CARD



Molded fiber glass corner shower units can incorporate optional self-extinguishing resins that prevent flame spread in accordance with ASTM-D 635-68 requirements. Easy-to-install units are available in harvest gold, avocado or white with folding door panels in a choice of seven colors. Kinkead, U.S. Gypsum, Chicago. CIRCLE 211 ON READER SERVICE CARD

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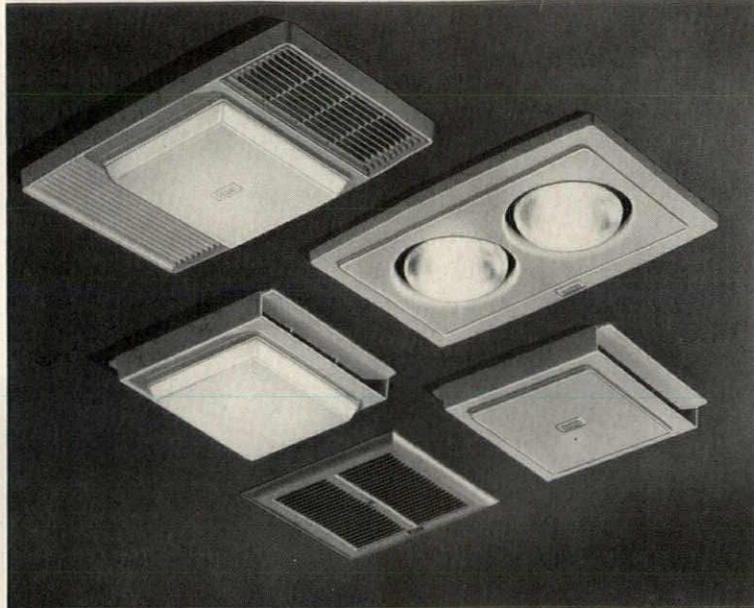
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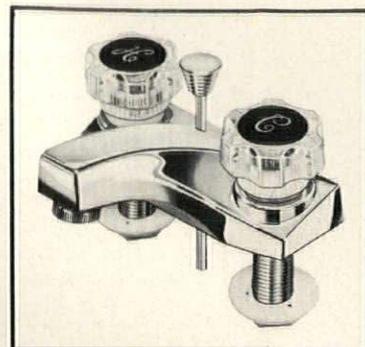
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Swing door cabinets add a decorative touch to the bathroom. The easy-to-install, recessed units can have left- or right-hand openings. Doors have magnetic latches. Cabinets, with two adjustable glass shelves, come in various frame finishes with plate or double-strength glass mirrors. Faries-McMeekan, Elkhart, Ind. CIRCLE 200 ON READER SERVICE CARD



Full line of ventilating equipment for bathrooms includes fans, heaters and vents as well as light/vent combinations. Plastics such as Lexan, Noryl and Cylolac are widely used as construction materials. Attractive unbreakable grilles are finished in neutral off-white. Units operate at low sound levels. Broan, Hartford, Wis. CIRCLE 201 ON READER SERVICE CARD



Silhouette lavatory faucet, "Waverly," available in chrome, gold or royal avocado, is designed for 4" center mounting. Triple-plated units have contemporary lines and uplift spouts. Offered in the round crystal handles shown or with chrome levers, faucets feature a Celcon seal. Mansfield, Perryville, Ohio. CIRCLE 202 ON READER SERVICE CARD



Wall cabinets with decorated mirror doors provide a unified look. Doors, which can be mounted for left- or right-hand swing, are set as shown so that when both are opened a three-dimensional viewing effect is obtained. The central mirror, available in various widths, comes with top and bottom frames. Chemcraft, Elkhart, Ind. CIRCLE 203 ON READER SERVICE CARD



Decorator glaze ceramic mosaics in brilliant cherry-red are used as wainscoting with a traditional flocked wallpaper design. Part of the Romany-Spartan® line, the 1"x1" mosaic tiles are available in 11 decorative colors. United States Ceramic Tile, Canton, Ohio. CIRCLE 204 ON READER SERVICE CARD



Decorative-framed bathroom cabinet is coordinated with a matching framed mirror to provide total harmony in a two-lavatory bathroom. Sculptured-looking frames are available in a choice of finishes. Mirror units are offered in traditional rectangular shapes, octagons, cathedral tops or graceful ovals. Miami-Carey, Monroe, Ohio. CIRCLE 205 ON READER SERVICE CARD

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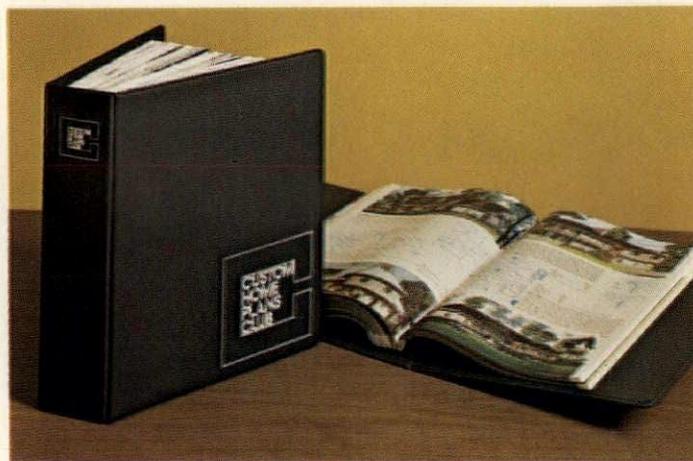
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and get 1,000 home designs now the next 12 months plus 12 sets for homes of your choice.

membership fee, members may obtain additional working drawings at a 35% discount off published prices which range from \$25 to \$50 for single sets and from \$50 to \$75 for four-set packages—depending largely on the square-footage of single-family homes and the number of units for multi-family dwellings.

Drawn to FHA and VA general standards, these blue line prints—size 36" x 20"—are easy to read on a white background. Depending on the size and complexity of the house design, plan sets may include as many as nine sheets. Notes and drawings indicate location and types of materials to be used. With complete freedom of choice, Club members may order their 12 sets of detailed working drawings at any time during the 12-month membership period.

Club working drawings include: (1) Floor Elevations, (2) Complete Framing Plans, (3) Wall Sections, (4) Floor Plans, (5) Basement/Foundation Plans, (6) Roof Plan, (7) Plot Plan, (8) Kitchen Cabinet Details, (9) Fireplace & Built-in Details, (10) Specification and Contract Booklet.

plus itemized lists of building materials for accurate bids and reliable cost estimates

To eliminate the time-consuming task of taking off material requirements from each set of plans ordered, the Custom Home Plans Club automatically provides members with item-

ized lists of building materials needed to obtain reliable bids, to make accurate cost estimates, and to order building materials from suppliers.

The lists include the size and quantity of all millwork such as doors, lumber and built-ins . . . framing lumber . . . roofing . . . flooring . . . wallboard . . . masonry . . . concrete . . . reinforcing . . . insulation . . . beams . . . finishing materials, and more.

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Enclosed is a check for \$240 for a full year of membership in the Custom Home Plans Club. For this I am to receive immediately a binder containing 1,000 home designs, plus a portfolio of 5 new designs each month for the next 12 months.

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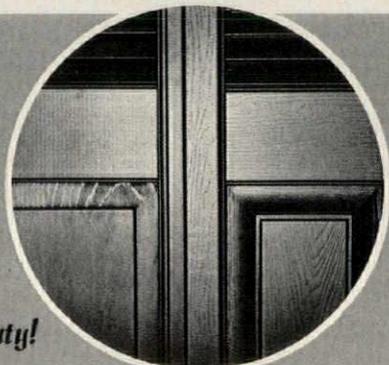
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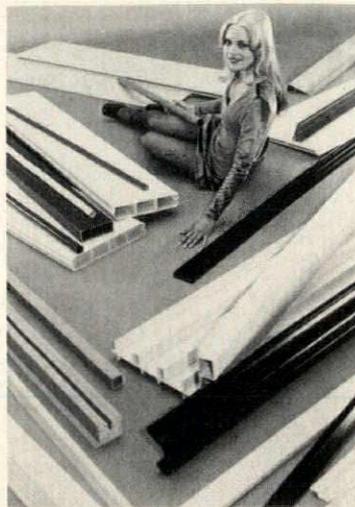
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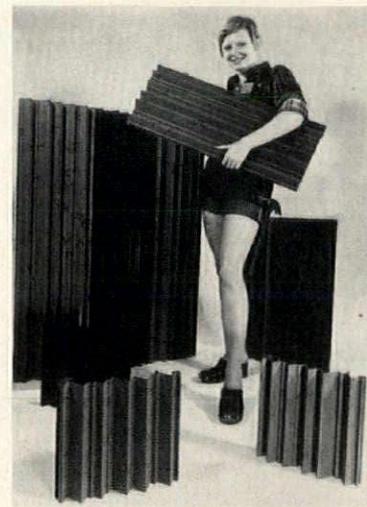
CIRCLE 154 ON READER SERVICE CARD

PRODUCTS/STRUCTURAL



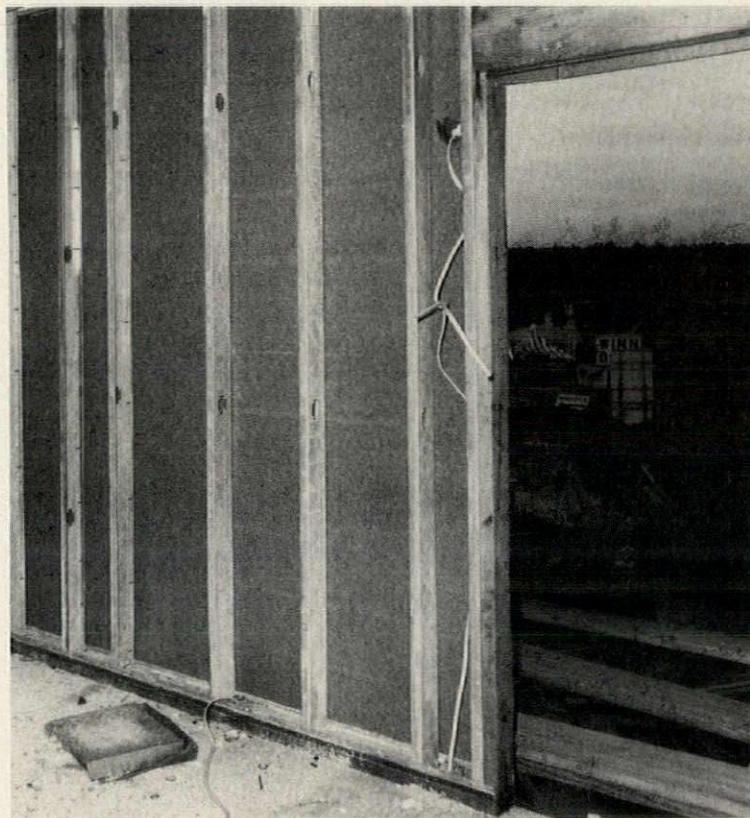
Wall shapes of multi-directional fiber glass mat-reinforced plastic can replace metal and thermoplastic extrusions. Glaspul® comes in hollow panels that can be foam-filled for thermal efficiency, tubular shapes, "I" beams, squares and angles. It is lightweight, rigid, and easy to maintain. Pultrusions, Aurora, Ohio.

CIRCLE 223 ON READER SERVICE CARD

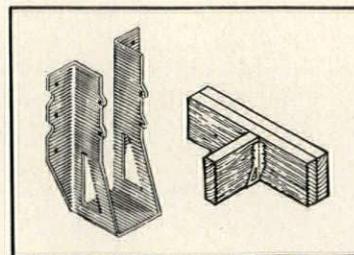


Extruded wall panel system, "EZ Wall", expands and contracts at joints to accommodate field tolerances and imperfections. Head, sill, flashing and trim sections are available. A variety of textures and colors can be seen from different angles due to changes in depth along the vertical plane. Alcoa, Pittsburgh, Pa.

CIRCLE 224 ON READER SERVICE CARD



Metal stud system, for dry wall or plaster, provides extra strength. The web of the stud is reinforced with both horizontal and vertical ribs. Constructed of several gauges of steel, the easy-to-install units can be cut to fit. Warp- and flameproof studs in a variety of sizes accept screws or glue. Vulcan, Birmingham, Ala. CIRCLE 225 ON READER SERVICE CARD



"U-Grip" joist and beam hanger is suitable for use with 2'x4' to 4'x14' members including doubles. The hanger eliminates the need for ledger stripping, notching and shimming. Unit is manufactured of zinc-coated steel and furnished with special nails that provide maximum shear holding power. TECO, Washington, D.C. CIRCLE 226 ON READER SERVICE CARD



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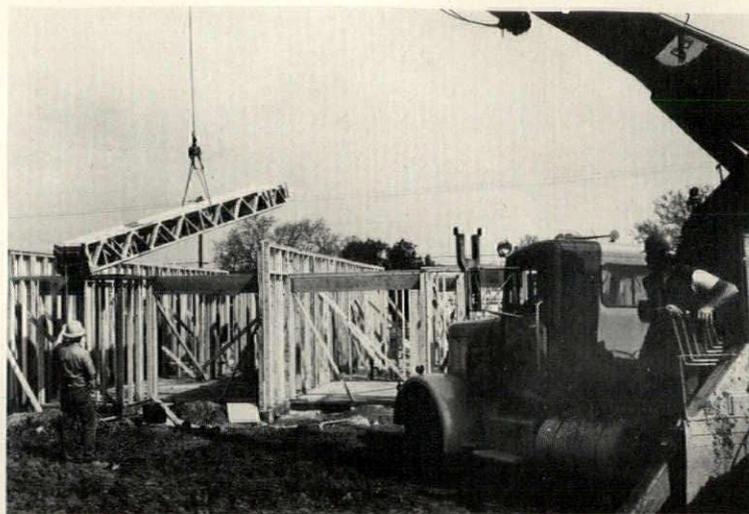
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CIRCLE 85 ON READER SERVICE CARD

PRODUCTS/STRUCTURAL

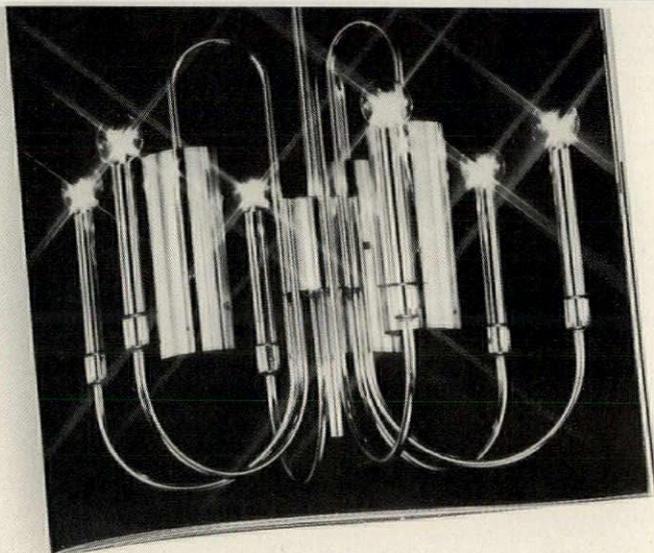
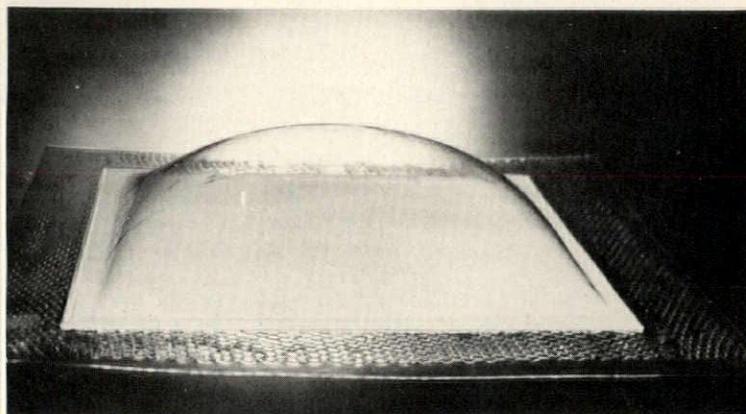


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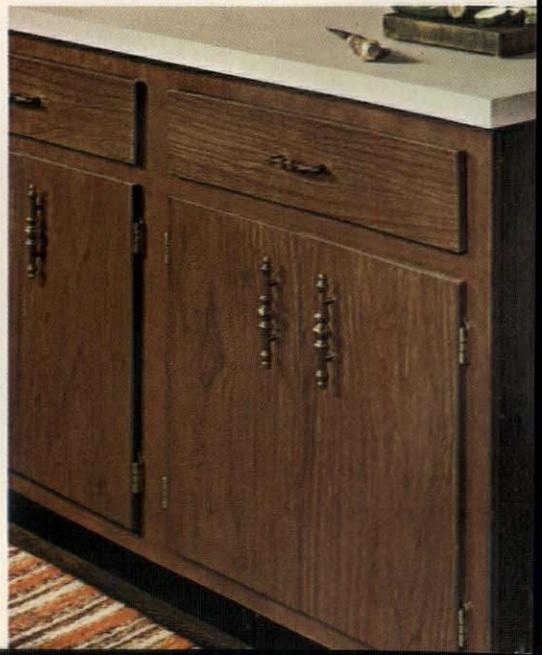
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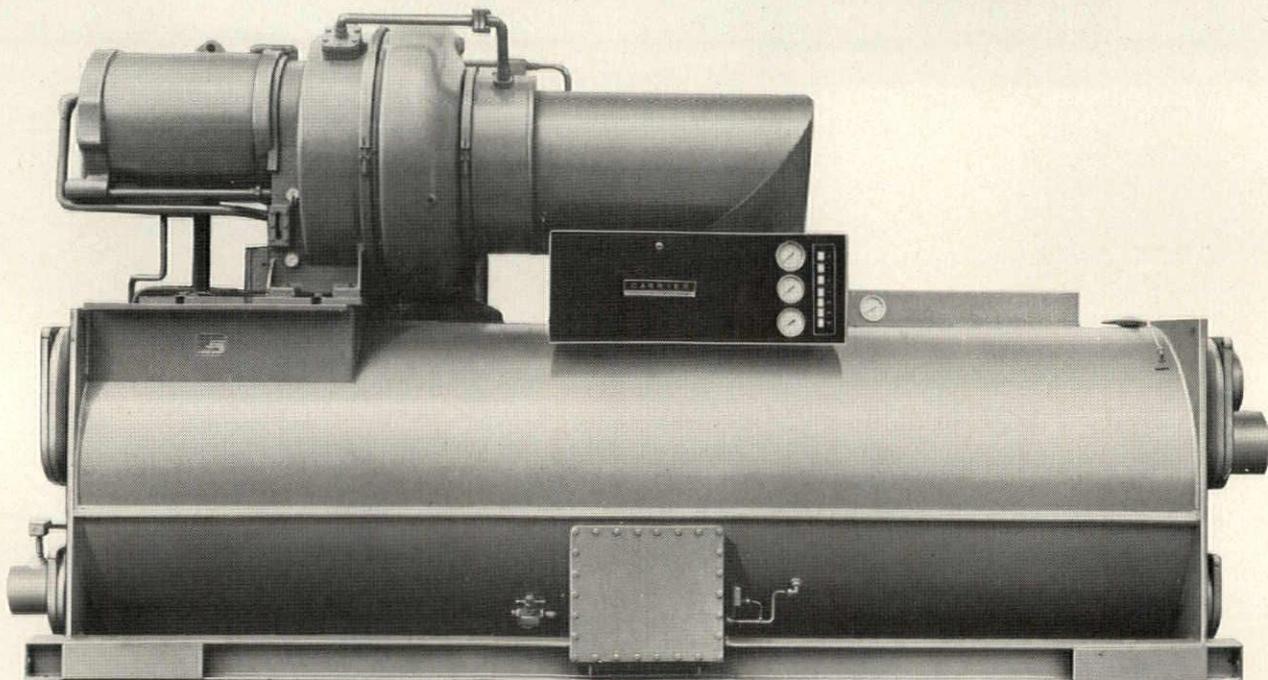
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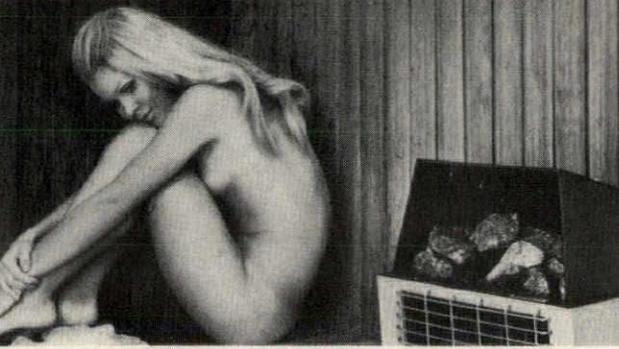
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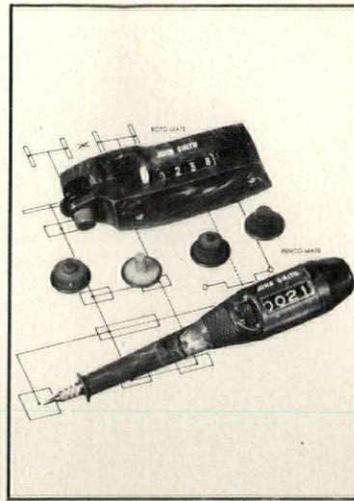
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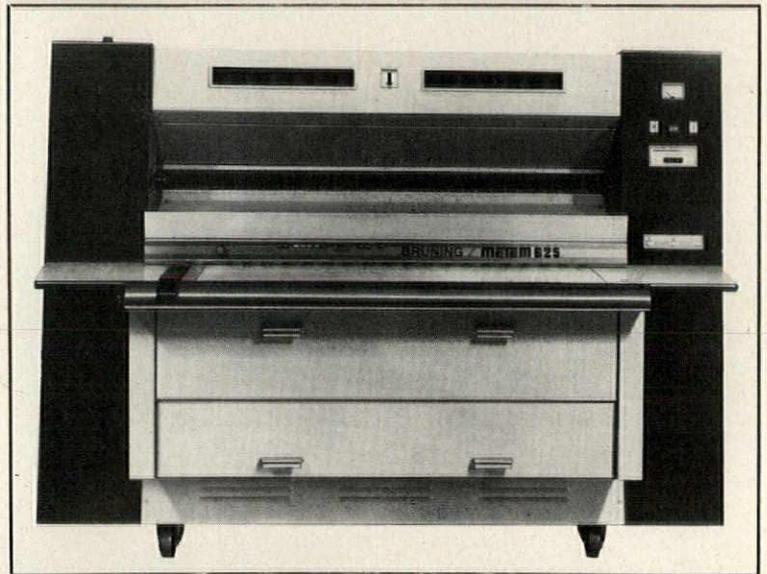
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Hand-held, non-electric devices make estimating simple. "Roto-Mate" reads direct footages from scale drawings in any of five scales. "Penco-Mate" provides accurate counting and marking for blueprint take-off estimating and inventory. Units have digital counters in the handles. Esti-Mate, Philadelphia, Pa. CIRCLE 295 ON READER SERVICE CARD

A 48" diazo white printer, suited for high volume, high-speed production, automatically reproduces prints in exact original size. The unit has controls located on the front panel to give the operator full command. Bruning, Schaumburg, Ill.

CIRCLE 296 ON READER SERVICE CARD



Vertical filing system for blue prints and plans features self-centering pivoted binders that clamp up to 100 sheets without pre-fastening or punching. The 18"-wide modular racks can be wall mounted as shown or used as mobile files. Rigid steel brackets with stud mountings provide secure suspension for file. Plan File, Los Angeles, Calif. CIRCLE 297 ON READER SERVICE CARD

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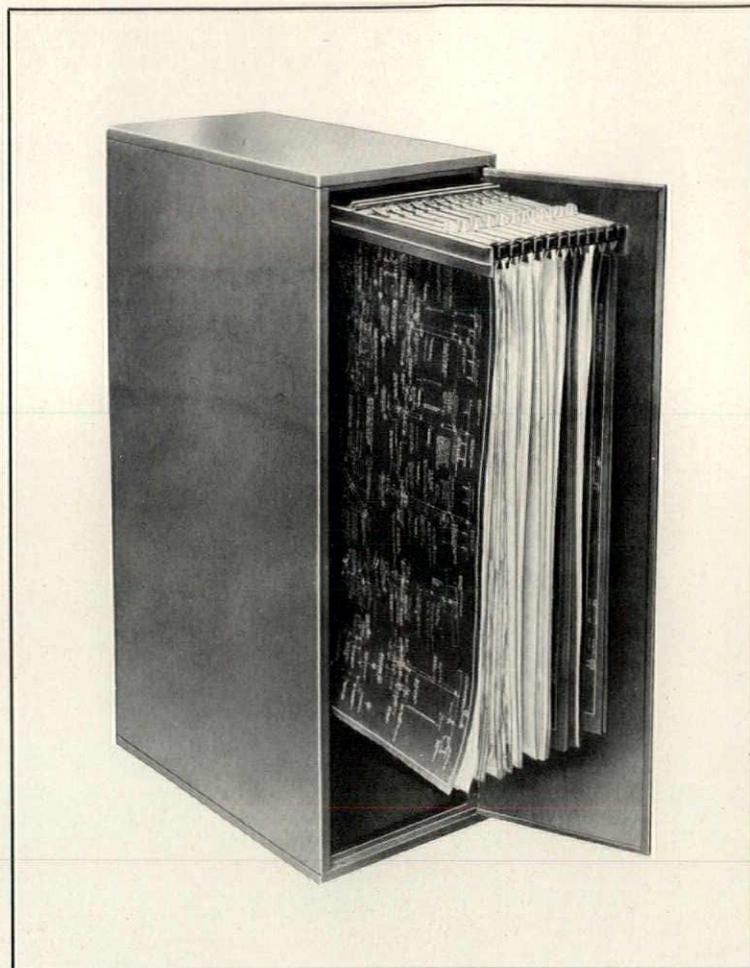
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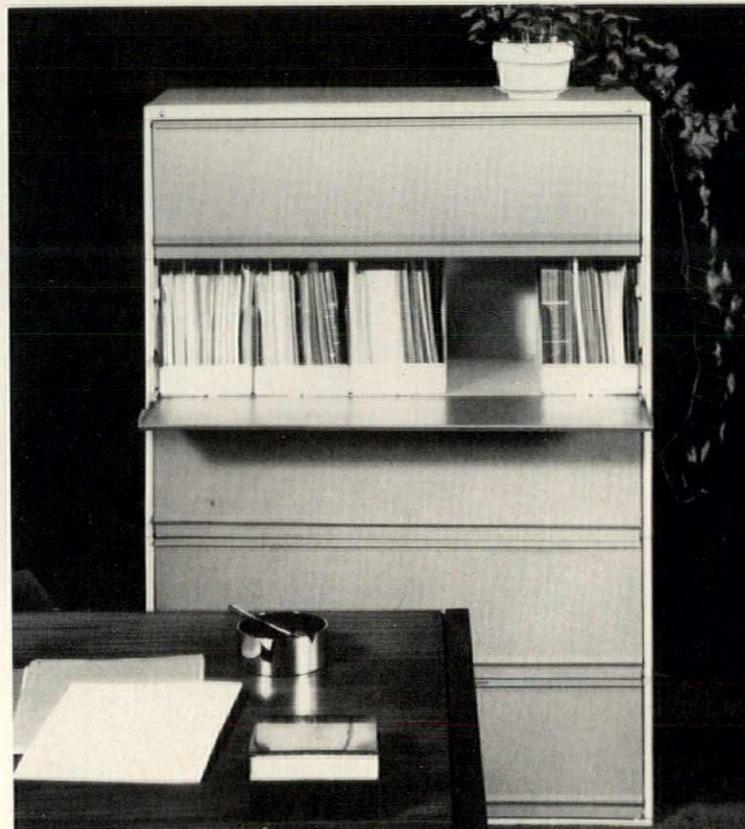
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Sturdy steel cabinet provides lock and key security for plans and prints. Unit features easy-access, slide-out racks that securely hold binders in place. The 52"-high cabinet, which can accommodate sheets in widths of 24", 30" and 36" in lengths up to 48", is available in standard gray and a range of eight custom colors. Plan Hold, Carson, Calif. CIRCLE 298 ON READER SERVICE CARD



Modular-type lateral filing system is a space-saving decorative element. It consists of bases and tops, all steel tiers and optional doors secured together to form 36"-wide units. Available in 15 colors with or without door locks, files come in different depths and heights to accommodate all size materials. Supreme Equipment, Brooklyn, N.Y. CIRCLE 299 ON READER SERVICE CARD

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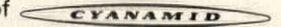
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Patterns: Poppy, 881, Salem Birch, 443, and Butcherblock Maple, 204.

Vanitory: Fire Agate, 820, and Gunstock Walnut, 492. Walls: Spring Pastorale, 691.

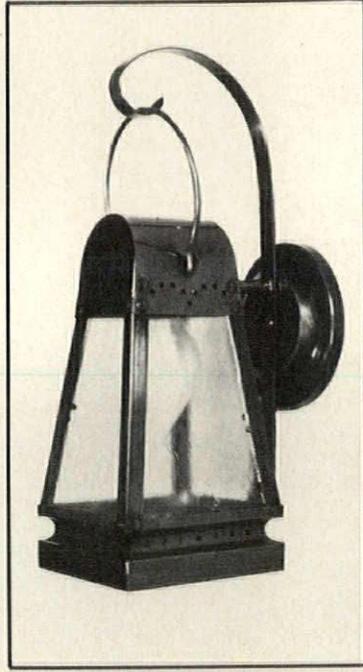


PRODUCTS/LIGHTING



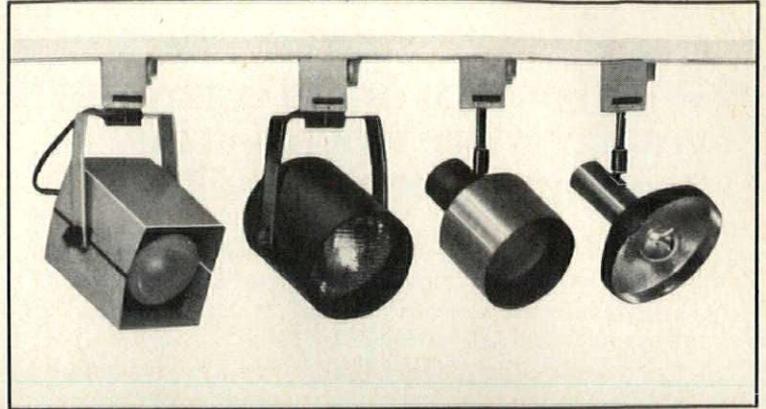
Hand-leaded brass hanging lantern measures 24½" high and 12" wide. The unit, with matching chain, accommodates three candelabra base bulbs up to 60 watts each. Lantern, with clear acrylic panels, comes in brass or bronze finish. A wall light is also available. Georgian Art Lighting, Lawrenceville, Ga.

CIRCLE 229 ON READER SERVICE CARD



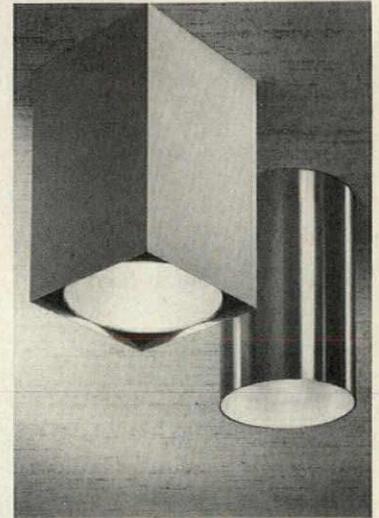
Wall-mounted fixture is part of the "American Heritage" line, designed in honor of the nation's bicentennial. The colonial-inspired lantern, for indoor or outdoor use, comes in antique copper, black or weathered-brass finishes. Units feature seeded glass panels for an authentic look. Wasley, Plainville, Conn.

CIRCLE 230 ON READER SERVICE CARD



Adjustable lighting fixtures, "StarSpots" attach directly to the "StarTrack" three-circuit system. Designs include (left to right) "Square Shooter", "Par-46 Cylinder Beam", "Baffled Step Cylinder" and "Micro Crown No-glare" with a controlled beam. Swivelier, Nanuet, N.Y.

CIRCLE 232 ON READER SERVICE CARD

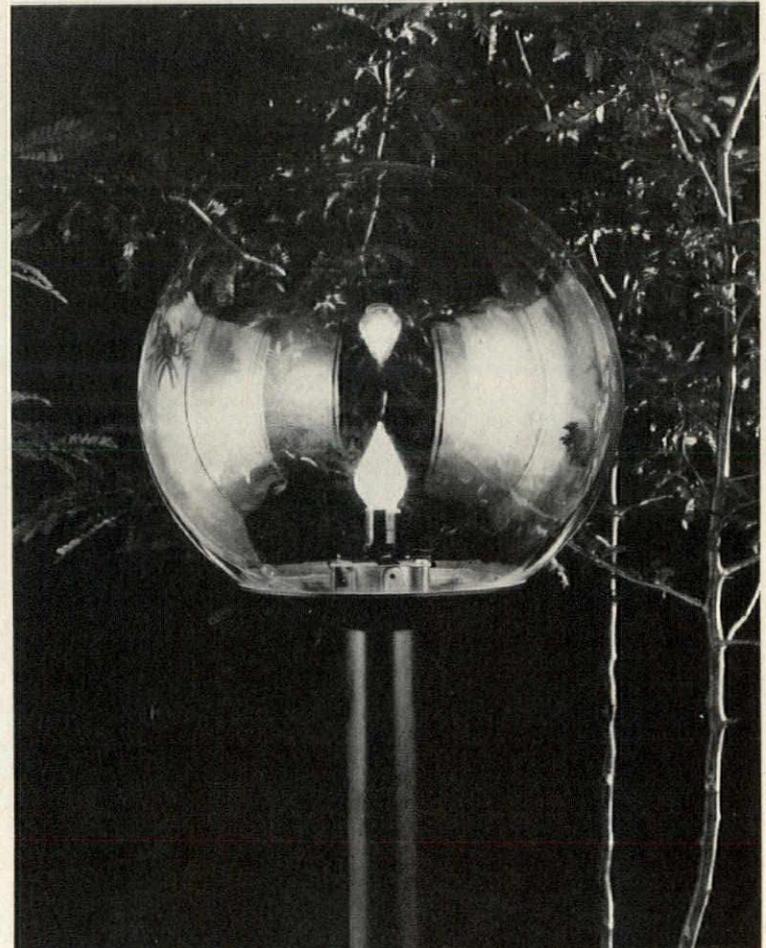


Mercury vapor downlights, in cylinder and square shapes, are available with ceiling or wall bracket assemblies. Suitable for indoor or outdoor use, units feature a heavy-gauge aluminum construction. Offered in a choice of finishes in 8" and 12" sizes, the fixtures fit 3¼" or 4" outlet boxes. Prescolite, San Leandro, Calif.

CIRCLE 233 ON READER SERVICE CARD



Shadow-free fixture casts a warm light over or around a bathroom or vanity mirror. The three-light, brass-finished unit can be easily installed over the mirror and/or on the sides. It includes a handy convenience outlet. The fixture measures 4½"x22"x8¾" with the 5"-round white, non-glare, long-life bulbs. Chemcraft, Elkhart, Ind. CIRCLE 231 ON READER SERVICE CARD



One-piece seamless acrylic-sphere light fixtures are for indoor or outdoor application. Units will not yellow, warp, embrittle or disintegrate. The durable spheres come in 14", 16", 18", 22" and 24" diameters in a choice of clear, smoke or white. Other specified colors and shapes can be ordered. IBAC Industries, St. Paul, Minn. CIRCLE 234 ON READER SERVICE CARD

CIRCLE 16 ON READER SERVICE CARD



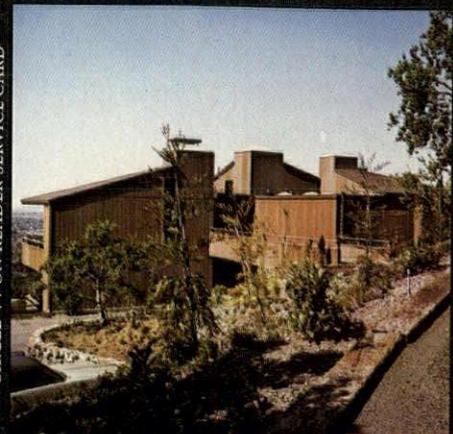
Custom Ruf-Sawn redwood plywood on contemporary Town House complex

CIRCLE 24 ON READER SERVICE CARD



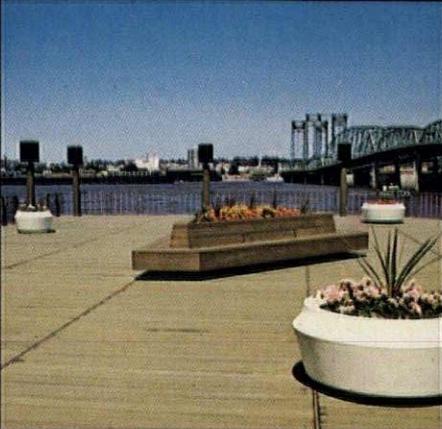
Traverta ceiling tile provides fire safety and noise control

CIRCLE 44 ON READER SERVICE CARD



Inverted Batten Ruf-Sawn redwood plywood on custom residence

CIRCLE 12 ON READER SERVICE CARD



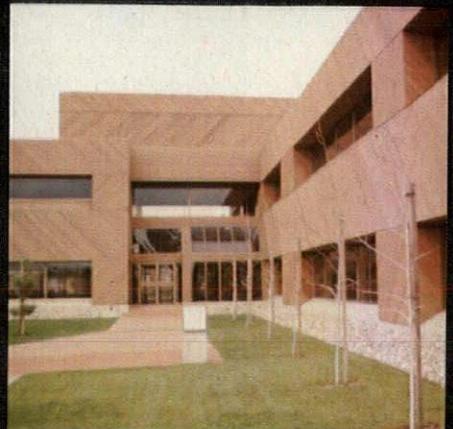
Redwood lumber for commercial decks, patios and stairways

CIRCLE 20 ON READER SERVICE CARD



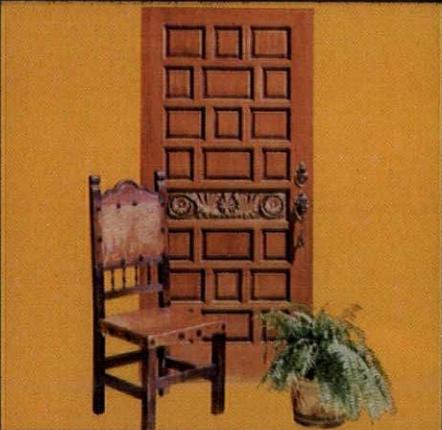
Ruf-Sawn 316 plywood siding overlaid especially for painting

CIRCLE 40 ON READER SERVICE CARD



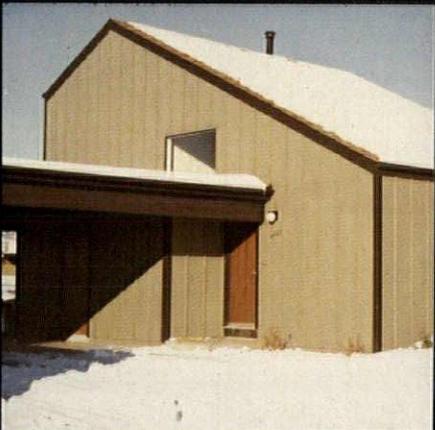
Redwood lumber siding lends lasting warmth to office buildings

CIRCLE 9 ON READER SERVICE CARD



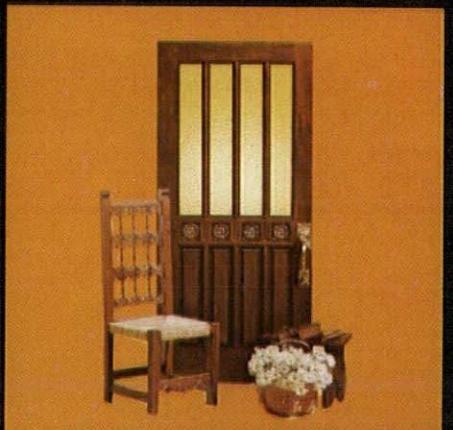
Castillo pattern entrance door from the International series

CIRCLE 18 ON READER SERVICE CARD



Ruf-Sawn 316 was the answer for low-income housing project

CIRCLE 36 ON READER SERVICE CARD



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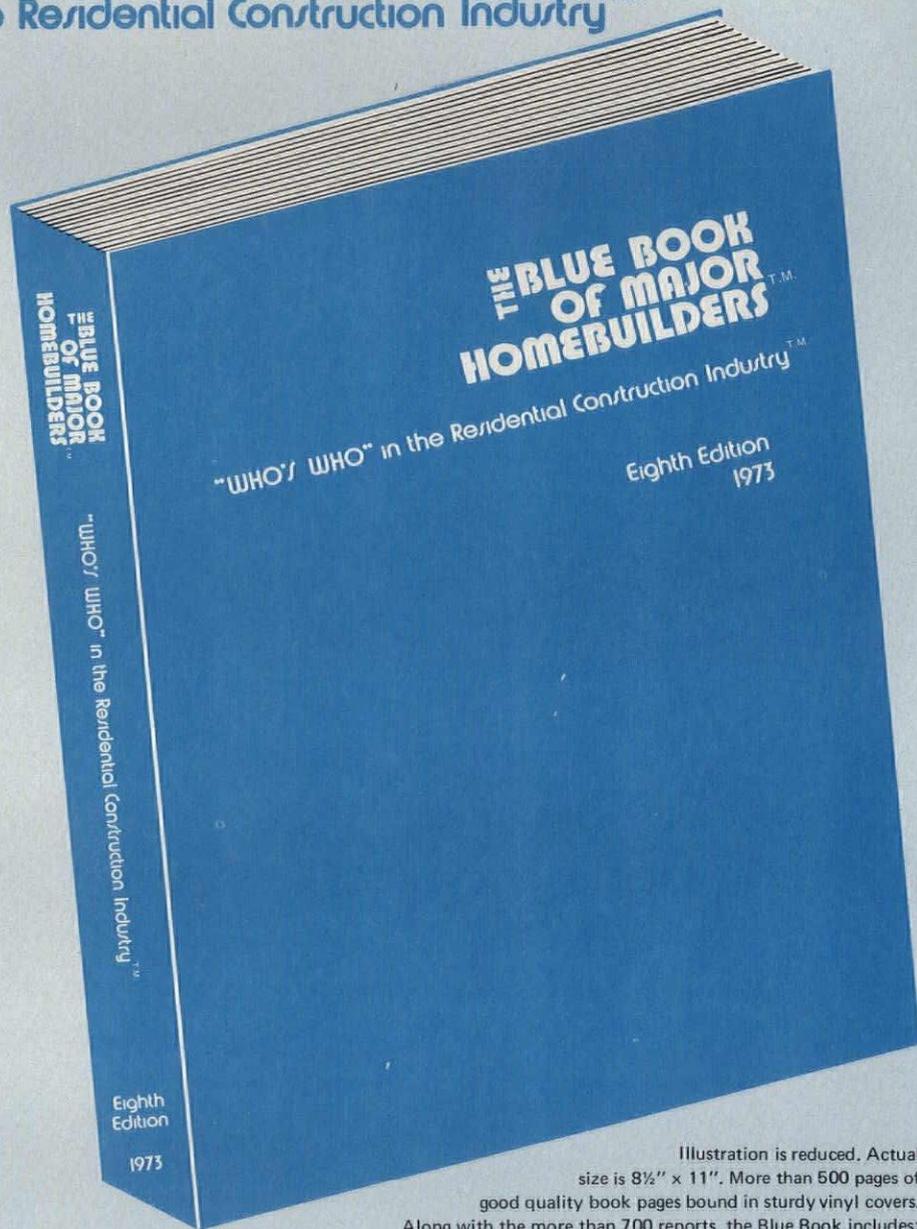


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CIRCLE 170 ON READER SERVICE CARD

THE BLUE BOOK ANSWERS MANY KEY QUESTIONS FOR ALL.

SOME KEY QUESTIONS:

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4. What is the current financial status of the publicly-held builders? Are they making money?
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And many other firms whose business depends on the growing housing industry.

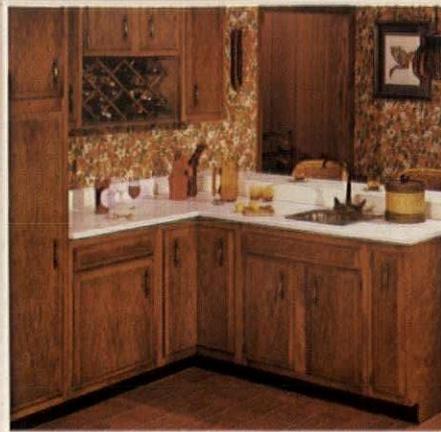
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Like fine furniture, KK cabinets enhance every decor. Decorating and accessories can change the mood from Mediterranean to Early American.

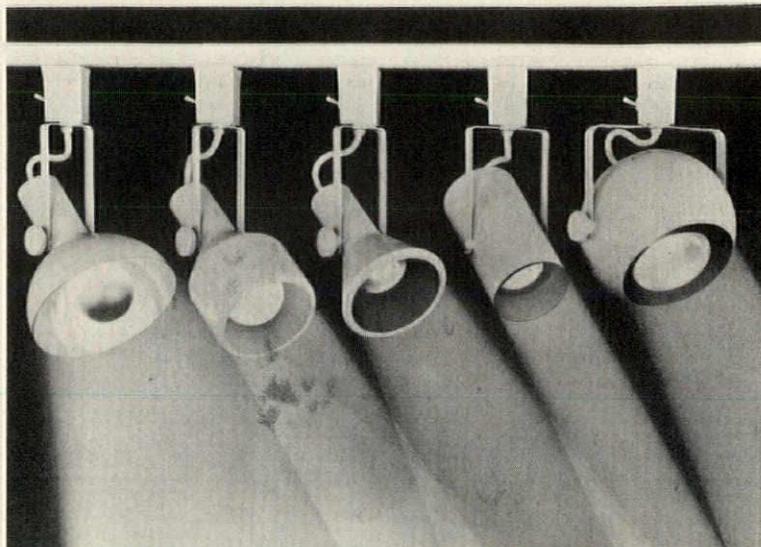
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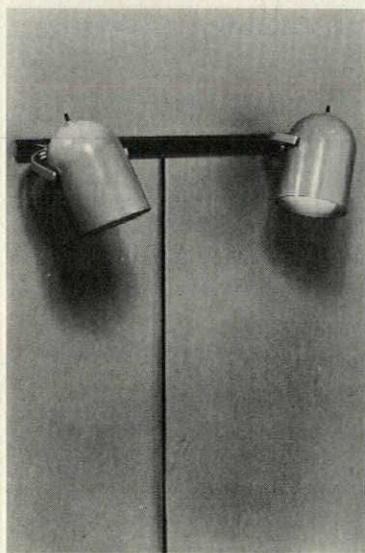


Forget
Them!



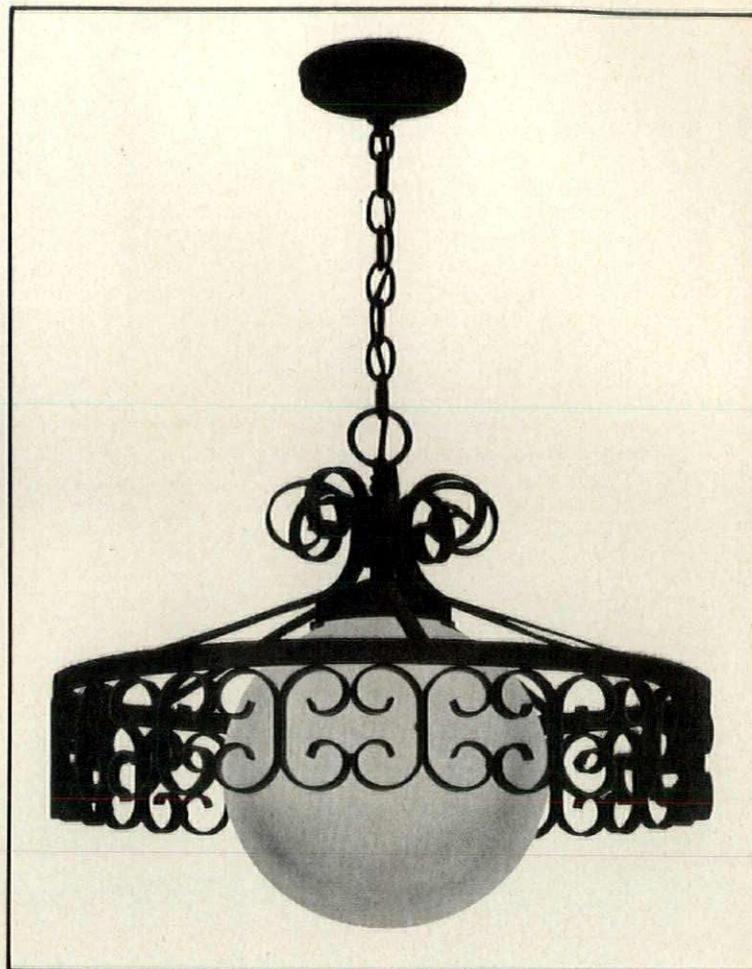
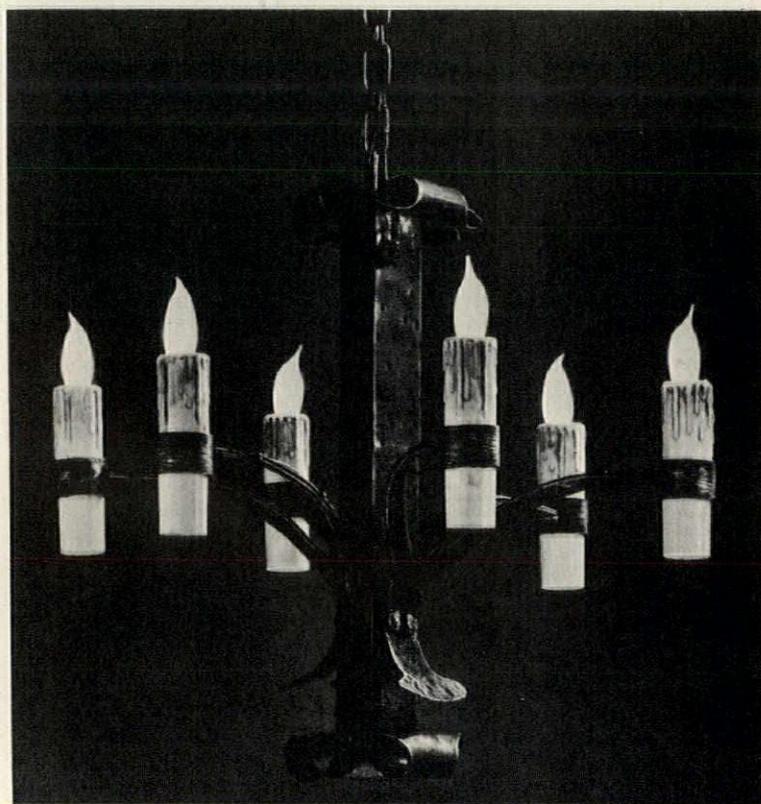


Track lighting system features a central track that can be recessed, surface-mounted or suspended by pendant stems. Individually switched lighting units can be swiveled, angled or pointed in any direction. Available in a variety of sizes and shapes, the fixtures are finished in a soft white to blend with any interior. Thomas, Louisville, Ky. CIRCLE 235 ON READER SERVICE CARD

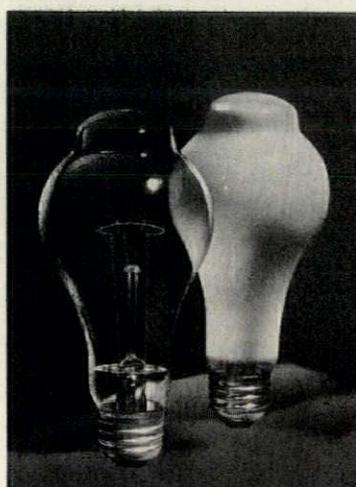


Multi-purpose light is inspired by stage lighting. Flexible helmet shades swivel to direct strong beams for reading or as accent or indirect light sources. "Lime lites" are available in one-, two- and three-light floor models and one- and two-light wall versions in a variety of finishes. Lightolier, Jersey City, N.J. CIRCLE 236 ON READER SERVICE CARD

Chandeliers, designed for Mediterranean and country interiors, are constructed of Swedish iron. The imported fixtures have hand-hammered center columns rolled at both ends. Chain-hung, rustic-looking lights come in a choice of three or six candle versions. Progress Lighting, Philadelphia, Pa. CIRCLE 237 ON READER SERVICE CARD



Black scrollwork fixture with a 10" center globe is designed to blend well with contemporary or traditional interiors. The light casts an over-all glow interspersed with the patterned shadow of the scroll. The 21"-diameter chandelier suspends to 42" and utilizes a 150 watt incandescent bulb. Del-Val, Willow Grove, Pa. CIRCLE 238 ON READER SERVICE CARD



Incandescent bulbs provide a 4,000-hour rated life without sacrificing light output. A single-coil filament is produced according to a patented "Copperflex" process that results in a tougher, longer-burning unit. Dome shape of the bulb adds 12% to the surface area. Available in 40, 60, 70, 100 and 150 watt sizes, the bulbs come in clear or frosted glass. Duro-Test, North Bergen, N.J. CIRCLE 239 ON READER SERVICE CARD



Par 38 Quartzline® projector lamp produces three times as much light during its lifetime as a conventional lamp. Designed for spot and flood applications where high lighting levels are required, the lamp has a wattage of 250, instead of the standard 150. A self-cleaning "tungsten-halogen" lamp inside the outer bulb provides maximum efficiency. General Electric, Cleveland, Ohio. CIRCLE 240 ON READER SERVICE CARD

Jeno's® pizza ordered the works on Gulistan carpet of Herculon®...



and picked up right away.

Gulistan "Testimony" carpet, with pile blended of HERCULON* olefin fiber and nylon, had a run-in. With a piping-hot portion of Jeno's† exclusive Serv-A-Slice pizza. But for "Testimony" it was merely a parlor game. Its lush plush pile cleaned up quickly and easily.

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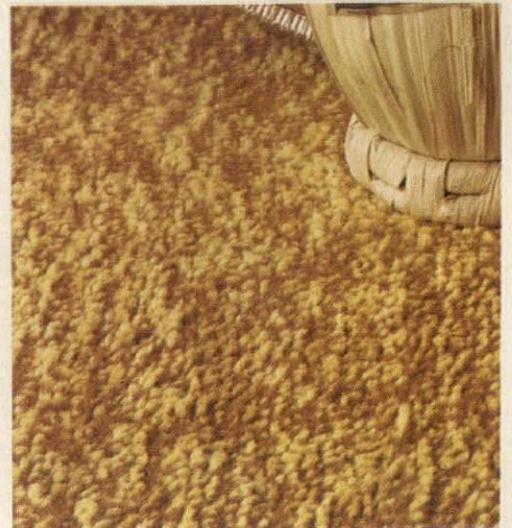
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CIRCLE 173 ON READER SERVICE CARD

H&H SEPTEMBER 1973 173



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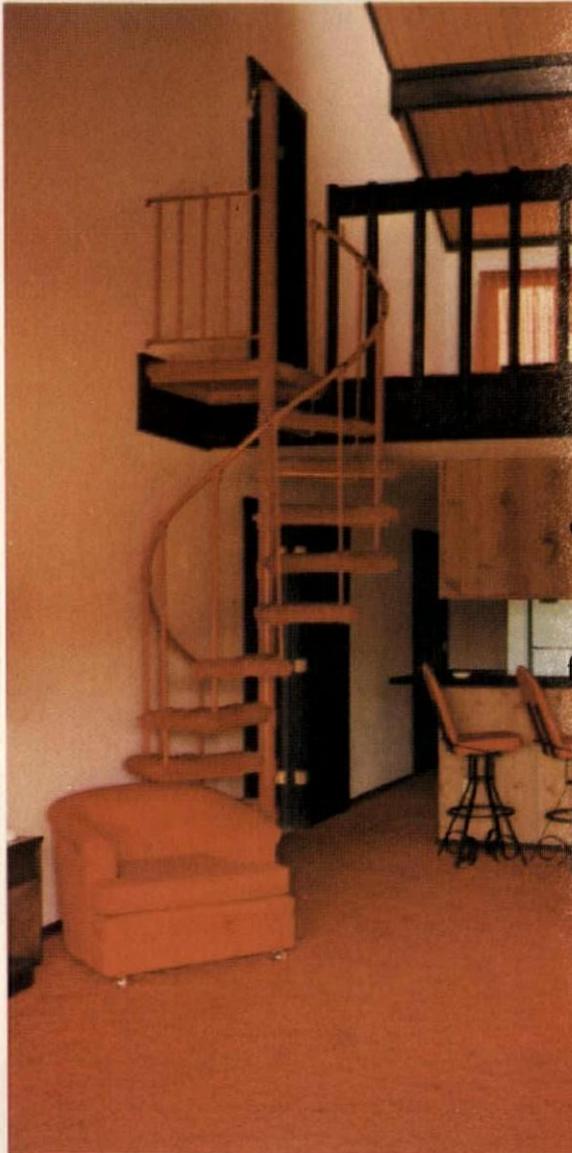
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Old pros, up to something new

Urban Housing records the proceedings of the international conference on urban housing held at Wayne State University, Civil Engineering Dept., Detroit, Mich. in May. The hard-bound, 8"x10", 280-page book is divided into five major sections: Urban Environment Analysis and Planning, Urban Housing Environmental Relations, Urban Housing Socio-Economic Evaluation, Planning and Design and Construction and Operation. Edited by Dr. Vasily Kouskoulas, conference co-chairman, Department of Engineering at Wayne State University, the book intersperses many charts and photographs within the text. The proceedings are available for \$20 including postage and handling from Mrs. Pat Schneider, Civil Engineering Department, Wayne State University, 667 Merrick, Detroit, Mich. 48202.

Draft regulators, power venters, domestic and industrial inducers and a complete line of chimney caps are cataloged in a soft-cover three-ring binder. Information is contained on a single sheet for each product. Pages include illustrations, charts, diagrams, text and specifications. Walker Manufacturing, Kinston, N.C.
CIRCLE 301 ON READER SERVICE CARD

Electric heating/cooling systems are discussed and illustrated. Specifications and capacity data for 20 heating/cooling combinations are given. The brochure is hole punched for binder filing and contains drawings and charts as well as text. McGraw-Edison, Albion, Mich.
CIRCLE 303 ON READER SERVICE CARD

Porcelain enamel weatherability is discussed in detail in this folder. The results of 30 years of research are included. Topics discussed: color stability, gloss retention and corrosion resistance. Charts complement the text. Porcelain Enamel Institute, Washington, D.C.
CIRCLE 304 ON READER SERVICE CARD

Precast prestressed concrete connection design manual contains information on production, erection, standardization, volume changes and force systems. The soft-cover, 100-page book is divided into four chapters: General Considerations for Connection Design, Connection Design Procedures, Typical Connection Details and Design Examples. The latter section presents 18 problems and solutions using step-by-step calculations. To purchase *PCI Manual on Design of Connections for Precast Prestressed Concrete*, send \$4 to the Prestressed Concrete

Institute, 20 N. Wacker Dr., Chicago, Ill. 60606.

Controlling Urban Growth—But for Whom? analyzes the social implications of timed residential development in suburban areas. The analysis is based on the well publicized [News, page 12] controlled-growth ordinance passed by Ramapo Township (Rockland County, N.Y.) and upheld last year by the N.Y. Court of Appeals. Single copies of the 41-page booklet are available for 75¢ in check or money order. Write The Potomac Institute Inc., 1501 18th St. NW, Washington, D.C. 20036.

Indoor and outdoor lighting, in handcrafted brass designs, is featured. Each model is pictured in full color. Accompanying text lists fixture size, bulb capacity and available finishes. Georgian Art Lighting Designs, Lawrenceville, Ga.
CIRCLE 317 ON READER SERVICE CARD

On-site modular building system, for use in single and multifamily housing and light commercial construction, is described. The concept—which employs conventional post-and-beam construction on a four-foot module and Gold Bond Tectum II brand wall and ceiling panels—is described in terms of ad-

vantages to the builder. Diagrams, specifications and text fill the ten-page brochure. Gold Bond Building Products, division of National Gypsum, Buffalo, N.Y.
CIRCLE 308 ON READER SERVICE CARD

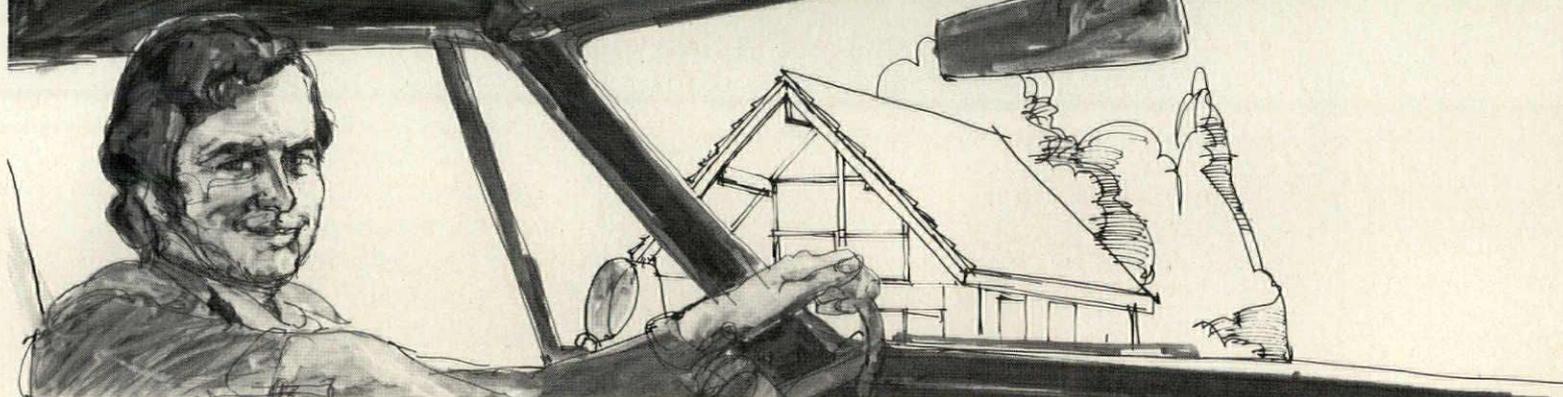
Vinyl and vinyl asbestos flooring is illustrated in actual room settings and in color chips. Solid tiles and sheet flooring are described in text and accompanied by specifications. National Floor, Florence, Ala.
CIRCLE 302 ON READER SERVICE CARD

Electronic air cleaner is featured in a four-page folder of illustrations, charts, diagrams and text. Lennox, Marshalltown, Iowa.
CIRCLE 305 ON READER SERVICE CARD

Steel home-building products are listed and their attributes described in a four-page brochure. Photographs are included. American Iron and Steel Institute, New York City.
CIRCLE 309 ON READER SERVICE CARD

Interior environmental control brochure describes a unit which heats, cools, humidifies, dehumidifies and contains an electronic air filter. Cross-section diagrams, simple illustrations and specifications are included. Dornback, Eastlake, Ohio.
CIRCLE 310 ON READER SERVICE CARD

Jim Brady, V.P. He exchanged his title for a million-dollar business.



Within three years, Jim Brady expects his Union, New Jersey, Lindal distributorship to gross \$5 million annually.

And we're not about to argue with his optimistic projection.

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For another, he grossed \$1 million during his first year as an independent distributor of our precut leisure homes. (Imagine what he'll do when he really knows the business.)

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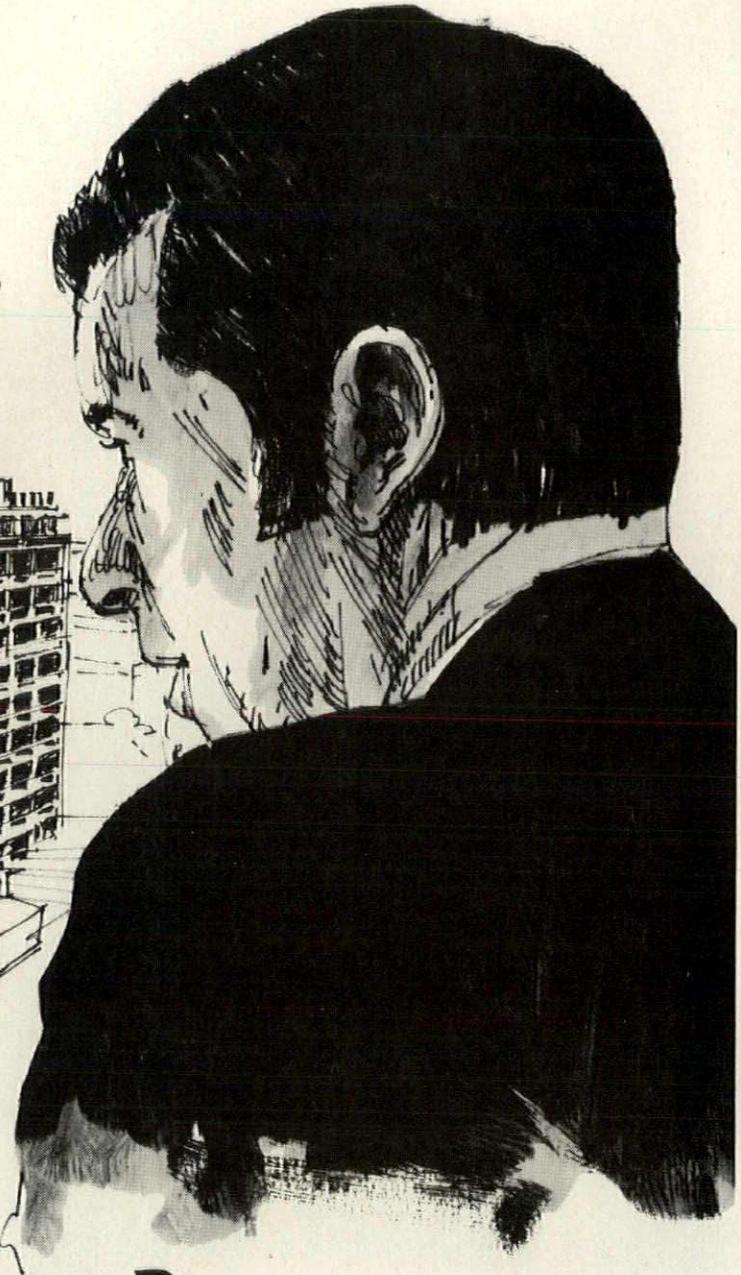
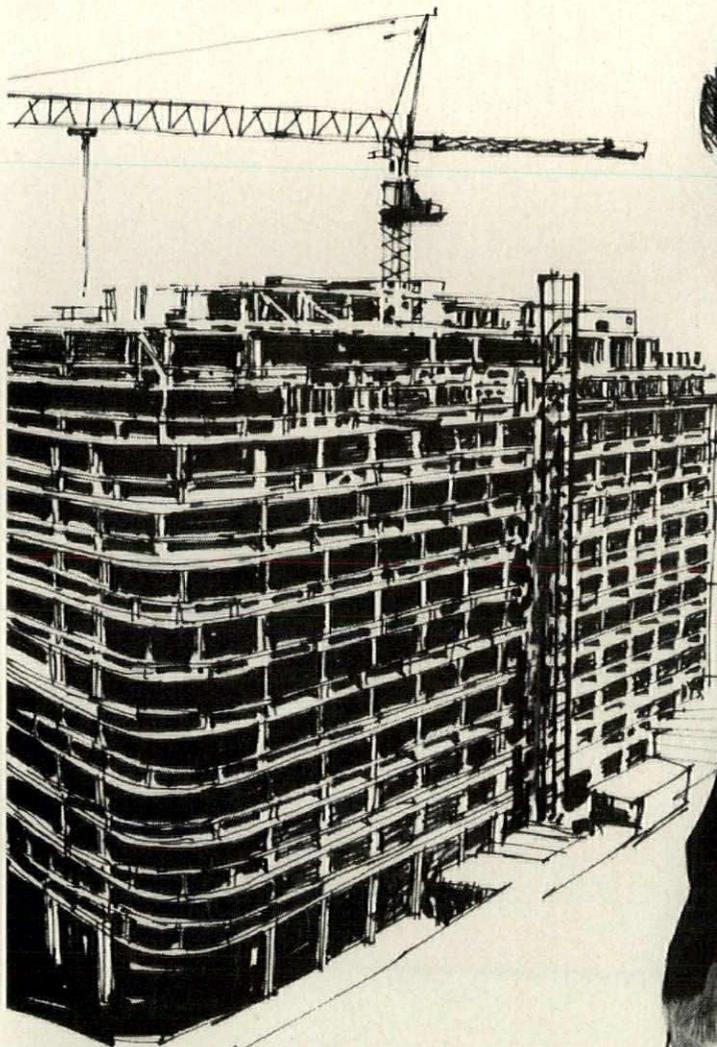
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MEDUSA CEMENT COMPANY Division of Medusa Corporation

CIRCLE 177 ON READER SERVICE CARD

H&H SEPTEMBER 1973 177



How do you select an electrical contractor?

NECA study reveals opinions of general contractors.

NECA, the National Electrical Contractors Association, recently completed a study among key decision makers on the building team to determine what characteristics they look for in selecting or recommending electrical contractors for new construction and modernization projects.

Most participants agreed: Competence is the single most important characteristic looked for in professional electrical contractors. Closely related qualifications include integrity, reliability, efficiency, quality of work, financial

position, caliber of work force and equipment, and ability to coordinate with other construction craft groups. All these qualities are found in professional electrical contractors. Advantages?

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really makes a home appealing to a potential buyer.

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GAF Timberline. The reliable roofing.

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