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House & Home

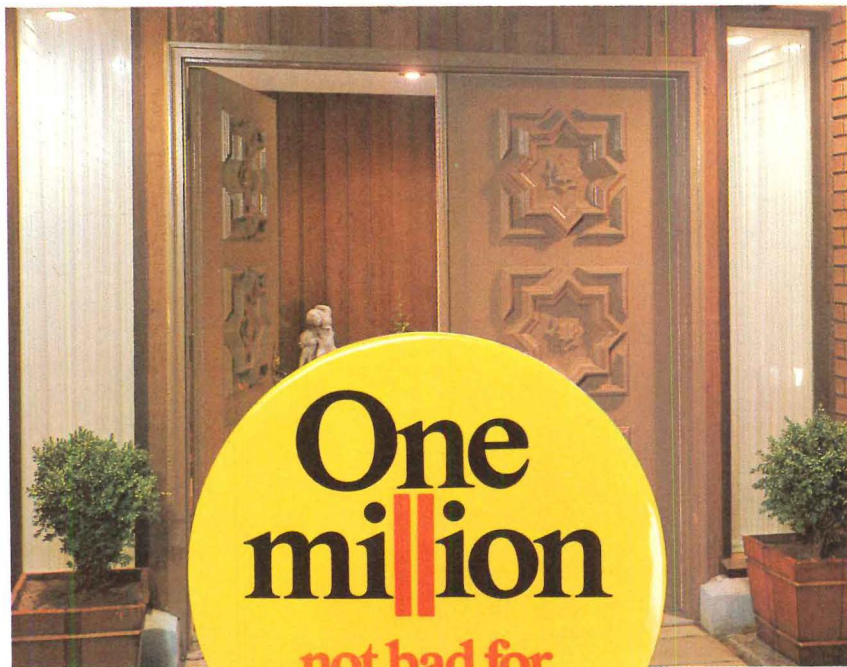
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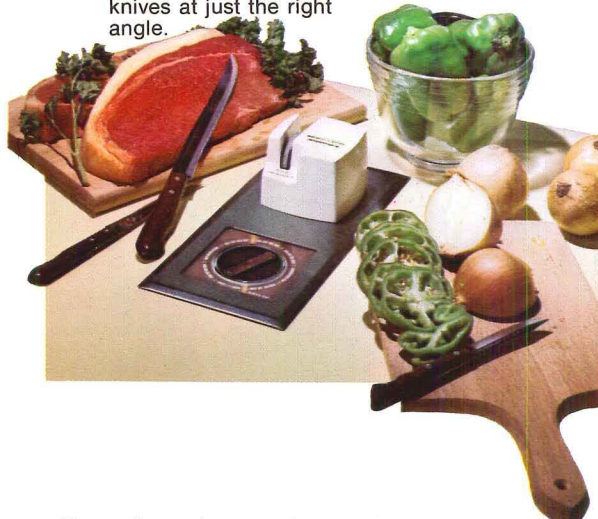
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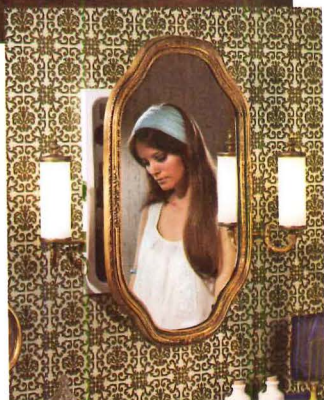
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House & Home

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'72 housing bill: money for states, cities—and for home buyers rather than builders

Congress is going to enact a massive housing bill this year.

The 1972 Housing Act is already shaping up as a broad mix of numerous housing and community-development proposals. Some are brand new, but others have been around for years.

Block grants, the outright grant of funds to state and metropolitan housing authorities, now appear to be replacing revenue sharing as the heart of the bill. The Nixon Administration has lately appeared to be about ready to agree to Congress' block-grant approach.

But while the grant programs have already been debated extensively on Capital Hill, housing and mortgaging interests are today preparing to push strongly for amendments to broaden their base of operations and strengthen financial institutions.

Financial plans. Back-stopping most of those special interests is the vaunted report of the President's Commission on Financial Structure and Regulation—the Hunt commission—which wove into its study many suggestions that may find their way into the jumbo bill.

Congress failed to act on a housing bill in 1971, in fact, because it wanted to wait for the Presidential commission's report, now in the hands of the lawmakers (*story, p. 18*).

While many Congressional aides deem the report a political document, they all concede the recommendations will be the source of lengthy Congressional debate prior to any major housing bill this year.

HUD streamlining. The Department of Housing will again trot out its Consolidation and Simplification Act in an effort to combine some 50 separate programs into eight.

That legislation also carries new authority for Secretary Romney to set maximum rates on FHA mortgages, but it permits him to set different rates for different programs. It would also allow a dual interest-rate experiment for mortgages, with one rate set administratively, and allowing discounts and the other floating free but barring discounts.

Grants and subsidies. Congress will probably continue to make political hay over the im-

portant question of block grants to state and metropolitan housing authorities for development.

The administration had made a big pitch in 1971 for revenue sharing—leaving many of the decisions on where federal money is to be spent to local government. The housing subcommittee of the House, however, is leaning much more in the direction of the block-grant approach, which would call for workable programs to be submitted to the government before money is doled.

The subcommittee also proposes a different tactic with

Romney TACLES city-suburb problem

The watchword for housing in 1972 may be TACLE.

Not the bruising, hard-hitting variety you see on the TV screen—although Congress may decide to bruise it somewhat—but a new approach to community development that aims to take care of the nation's social and economic ills.

It is the brainchild of Secretary George W. Romney, and it is one of two new schemes being spiritedly publicized by his Department of Housing and Urban Development for this election year.

The other is a program that will experiment with housing allowances for poor families and which will signal a major change in HUD policy: namely, doling out the funds to families, not to builders or lenders.

Goals. Operation TACLE, which is not aimed at replacing Operation Breakthrough, stands for Total American Community Living Environment. It proposes to have a single federal official prime the pump for local development plans that strike at the roots of social and economic ills. The plans would have a broad base—that is, they would have to embrace not only the urban but also suburban or perhaps even regional areas.

The housing-allowance proposal, for its part, would give needy families the chance to seek better housing in the open market—a departure from current programs which restrict the poor to designated areas or projects.

The program will be tested in



HOUSE'S PATMAN
His absence will be noted

housing subsidies. Greater emphasis would be placed on subsidies going directly to buyers or renters rather than to builders or landlords. HUD is already

six metropolitan areas. About 1,000 families in each area will participate. The program is expected to cost about \$10 million a year for three years, and will cover both rental housing and home buying.

The plan is sure to arouse the ire of homebuilders and landlords, who traditionally have been on the receiving end of subsidies from the government.

The Romney touch. Operation TACLE is based on a favorite Romney theme: greater involvement by private industry in revitalizing the cities.

What Romney suggests is another national competition—similar to that which took Operation Breakthrough off the ground. This new contest for local face-lifting would have 14 winners. While the Romney plan has the support of some Nixon Administration officials, local officials have not been quick to sing its praises. They express concern that the plan might mean less money for them.

Shadow and substance. Operation TACLE is the kind of high-gloss, low-cost program that politicians love—particularly in election years.

With a Democratic Congress, however, and a Presidential election, the Secretary's schemes for rebuilding the cities, and his faith in the willingness of private industry to help him, are likely to take a back seat to the political reality of a Congress that is going to be more eager to campaign than legislate. —A.M.

beginning an experimental program designed to do much the same thing (*story below*).

Local authorities. The subcommittee's bill would also permit the establishment of state and metropolitan housing agencies and aid in their funding through federal grants. This proposal has already come under fire from industry spokesmen, who feel this would give these local authorities too much power.

But the administration now appears ready to agree to block grants over the revenue-sharing scheme. Aides to the housing committees in Congress indicate that the political problems of permitting revenue sharing have so far been impossible to overcome, and they expect block grants to become the basis of the bill.

Into law by summer? There is little question but that Congress will enact a bill, but many observers doubt that the legislation will reach President Nixon's desk much before summer—even though lengthy hearings were held during 1971 on many items.

The housing subcommittee of the House has still not reported out a bill. When it does, the proposal must go to the full Banking Committee. That committee is likely to insist on full hearings on other housing matters—including the Presidential commission's report—before it passes on any big housing bill.

Key absentees. Tied into these logistical problems is the hard fact that not much work can be done in the House Banking Committee unless its chairman, Wright Patman, directs it. And Patman faces a primary fight this spring. The housing legislation may well be held up by Patman's absence.

In the Senate the problem is much the same. The Banking Committee's chairman, John Sparkman, indicated last year he was waiting for the Presidential commission's report before getting down to serious business on housing.

Now that this is published, however, lengthy hearings are a certainty—and that means simply that the housing bill will have to wait on those debates.

—ANDREW R. MANDALA

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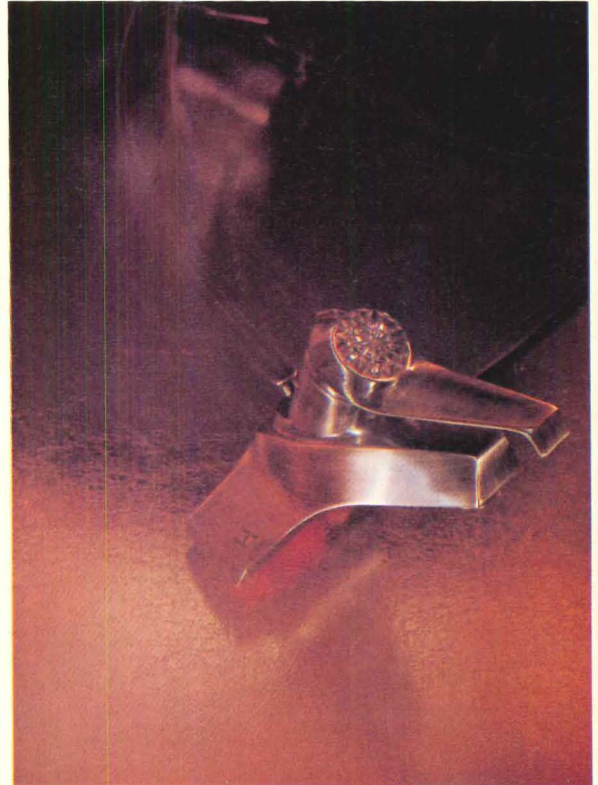
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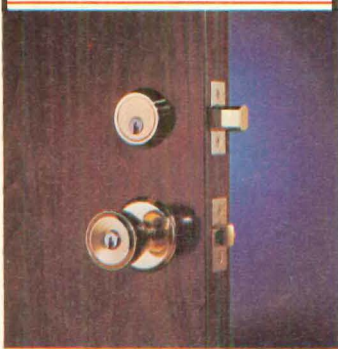
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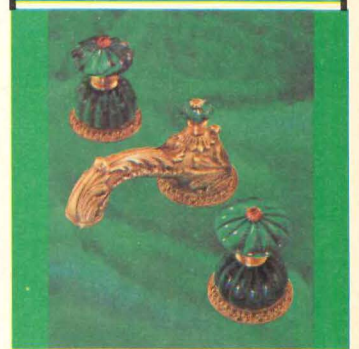
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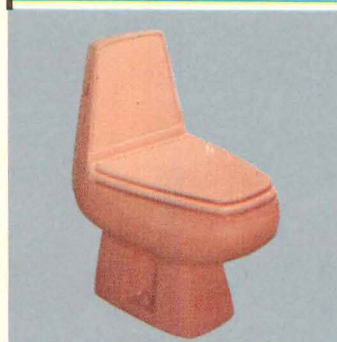
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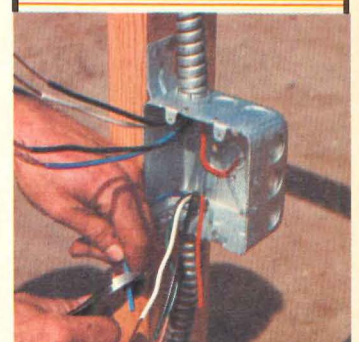
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**CIRCLE 29 ON
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Major scandals rock HUD's big subsidized housing programs for the nation's poor

This will be another big year for housing production, but congressional investigators are now well on their way toward making 1972 even more noteworthy as the year of the big-time housing scandals.

The House's obscure little government operations subcommittee, headed by Representative John S. Monagan (D., Conn.), has already exposed a potential loss of \$200 million for the FHA in Detroit, where speculators sold thousands of FHA-appraised and -insured houses to Negroes at tremendous markups.

Most of the homes were abandoned almost as quickly as they were sold, and the resultant foreclosures turned much of the inner city into a vast area of desolation that one observer described as a wasteland.

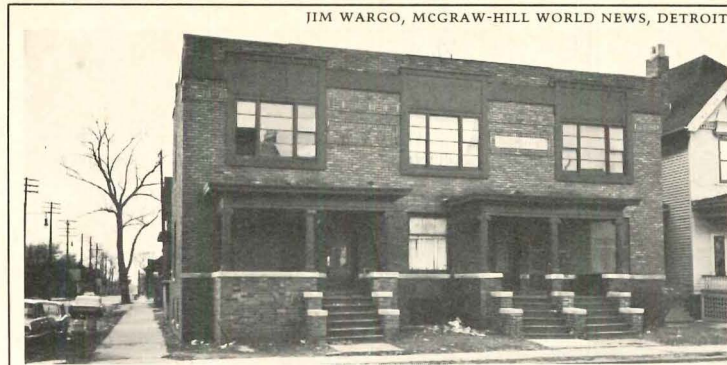
Baltimore—and more. Other investigators are joining the Monagan group.

Representative Clarence Long (D., Md.) criticized a builder of FHA Section 235 projects in his district after his white suburban constituents complained about wet basements and other faults. At Long's request the Baltimore office of the Army Corps of Engineers inspected one of the subsidized interest projects and reported that the houses showed poor workmanship and poor design on a poor site.

A team of FHA investigators from HUD headquarters in Washington then found that 96% of the 122 houses had defects sufficient for legitimate complaints—1,000 deficiencies, all told—despite the fact that during construction FHA inspectors had found no flaws needing correction.

Monagan is preparing for a year-long series of hearings around the country. His aides say HUD is equally vulnerable in such cities as Boston, Philadelphia, Chicago, Miami, Ft. Worth, Dallas and other cities in the South and West.

Misused programs. Thus far, the Monagan committee—and earlier, the House Banking Committee—has focused on inner-city houses rehabilitated under special FHA programs that promoted home ownership among the poor. Buying at low prices,



ABANDONED UNITS point up claimed abuses of HUD's program for Detroit's poor. Inner-city triplex at 2703-2709 W. 14th St. was bought for \$4,000 by Jacgru Investment Co., a concern owned on record by a Jack Green, which is one of several names used by an investor named Jacques Grunbaum. (Unlike most Detroit realty companies, Jacgru is not listed with the Wayne County clerk.) Corner flat (left) was sold to Mary Ella Sims, a welfare mother of four, for \$9,400; middle flat to Elnora Tabron for \$9,400; and third flat (right) to Melvin Hawthorne for \$9,650. Two Section 221 mortgages and one Section 203 (Hawthorne) were arranged by Detroit's Consolidated Mortgage Co., insured by FHA and sold to FNMA. Only the middle flat is still occupied. The Sims mortgage has been foreclosed, and the Hawthorne mortgage is being foreclosed. FHA must reimburse FNMA for the mortgage amounts.

speculators rehab a unit and then get an FHA appraisal of market value that gives them a big profit when they sell at minimum down-payments of \$200 or even less.

But the Monagan committee now plans to look into programs involving new construction—individual homes and apartments—under which defaults and foreclosures are occurring at alarming rates.

That includes particularly the big Section 235 program that subsidizes all but 1% of the mortgage interest for poor and moderate-income home buyers, and the Section 236 program that pays similar subsidies for multifamily units and provides practically risk-free profits for both builders and investors, who can use the tax losses generated by liberal depreciation allowances.

High default rate. Housing subsidy programs—once limited almost entirely to public housing—accounted for 500,000 starts last year and more this year, according to Housing Secretary George Romney.

As HUD's assistant secretary, Norman V. Watson, noted last September, the number of subsidized housing projects in default is startling—from zero in the fall of 1970 to an average of almost 8% by the end of 1971. That includes 9% of the more than 1,700 projects built under Section 221d3 and 8% of the Section 236 projects. As Watson says, "Eight percent is a hell of a lot," and much higher

than the default rate projected for these programs.

Detroit's debacle. In Detroit, which has a long tradition of home ownership, Monagan's committee was told that FHA has already had to take title to 5,800 houses and that another 20,000 FHA-insured homes are in "serious default." Monagan says that FHA will have to take title to another 15,000 of these houses within the next year or so. That would bring foreclosures to around 20,000—at an average cost per unit to FHA of almost \$10,000—or \$200 million. As Monagan points out, FHA's insurance reserve totals \$1.6 billion, but it would not take many other Detroiters to put the fund in serious jeopardy.

Secretary Romney told a news conference that such figures were "loose estimates," and he said the Detroit situation was the result of policies pursued beginning in 1967 "under congressional pressure" by the Johnson Administration. "The relaxation" of FHA procedures "went too far," Romney said, adding that the Nixon Administration "began to tighten up in the spring of 1969."

Relaxed standards. The houses involved were insured under several programs designed to permit poor families to buy. The 221d2 program, for example, lets families buy unsubsidized housing with only a \$200 down payment. The 223e program permits HUD to insure mortgages in all declining areas of a city under conditions that would not be ac-

ceptable under normal FHA requirements. The Section 235 program subsidizes all but 1% of the interest on housing sold to poor and moderate-income families, and Section 237 permits the sale of houses to families that could not meet HUD's regular credit requirements.

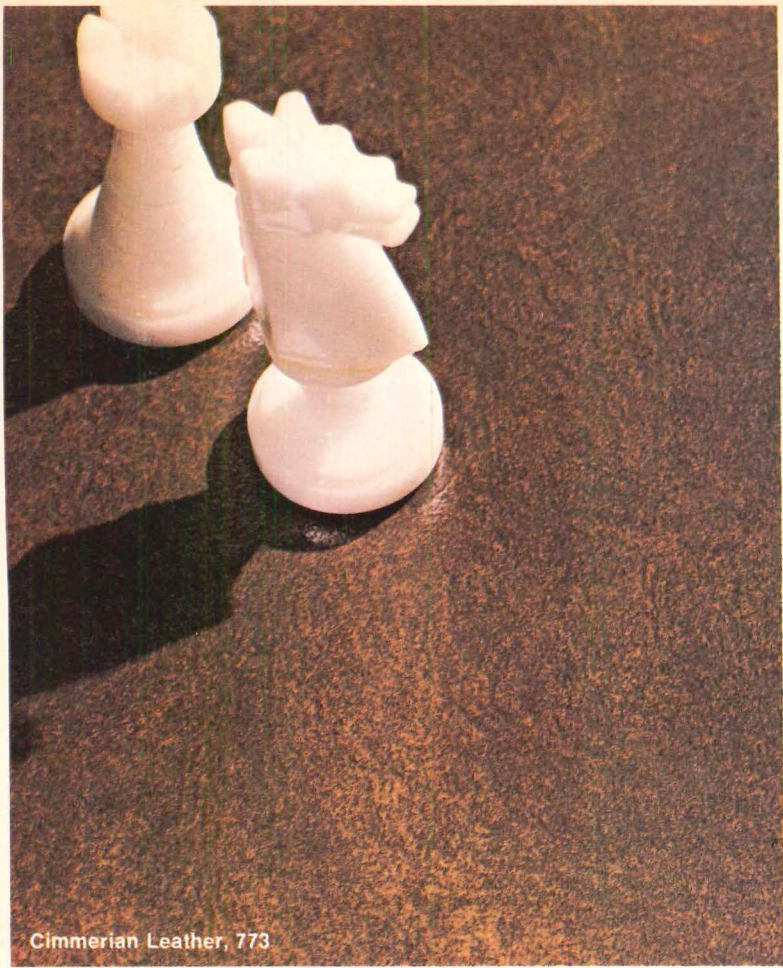
During each of the three years 1968-69-70, FHA insured about 16,000 mortgages in Detroit—and during 1968 and 1969 some 45% of them were the regular, unsubsidized mortgages under Section 203e, the basic insurance program. But in 1970, two low-income programs accounted for 72% of all mortgages insured, and by 1971 FHA foreclosures in Detroit rose to 381 a month from an average of 96 a month in 1968.

Appraisal scandal. William C. Whitbeck, FHA's director in Detroit since August 1970, has a staff of 414, and his area office is the largest in the country. He admits that "a number of substandard homes" were insured, contributing to the defaults. In January of this year, he said, 20 fee appraisers were dropped by his office. And he added: "Fully 63.2% of the mortgages in default" are in the subsidized 221d3 and 236 programs.

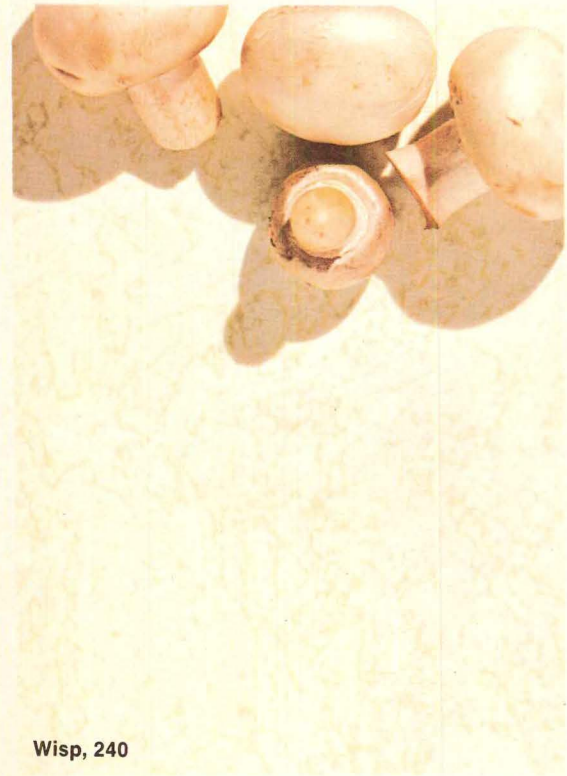
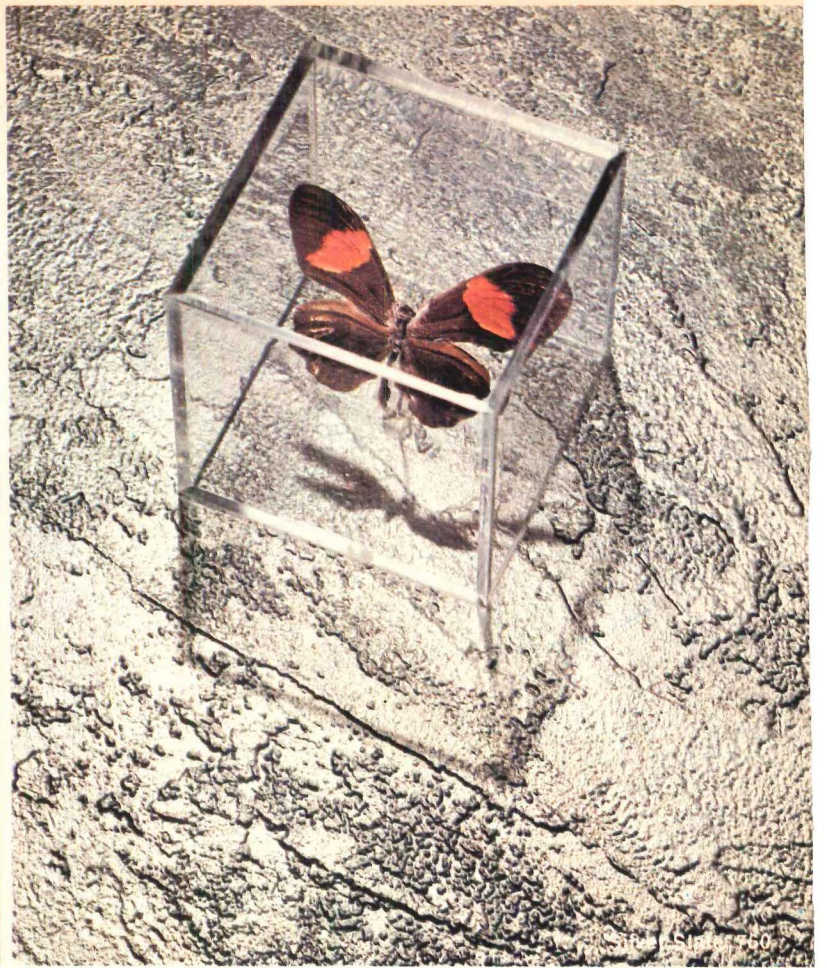
The Detroit hearings showed, says Monagan, that "even if the concept of many of these programs is good, the way they have been operated is completely unsatisfactory." Monagan has an investigatory staff of four, headed by a former HUD official, Richard Still, which is getting a great deal of support from the General Accounting Office. The GAO has 80 professionals auditing HUD programs—40 in Washington and 40 in the field.

Indictments. In Philadelphia, where the House Banking Committee exposed program failures a year ago, a federal grand jury has already handed up eight indictments.

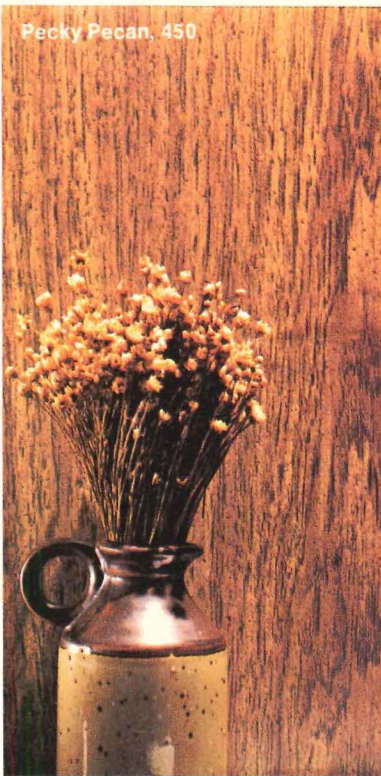
In both Philadelphia and Detroit congressional investigators moved in following publication of a series of stories in the *Detroit News* and *The Philadelphia Inquirer*. The *Inquirer* has filed suit in federal district court under the "freedom of information act of 1967" to force HUD and FHA to release the names of appraisers of specific properties. —D.L.



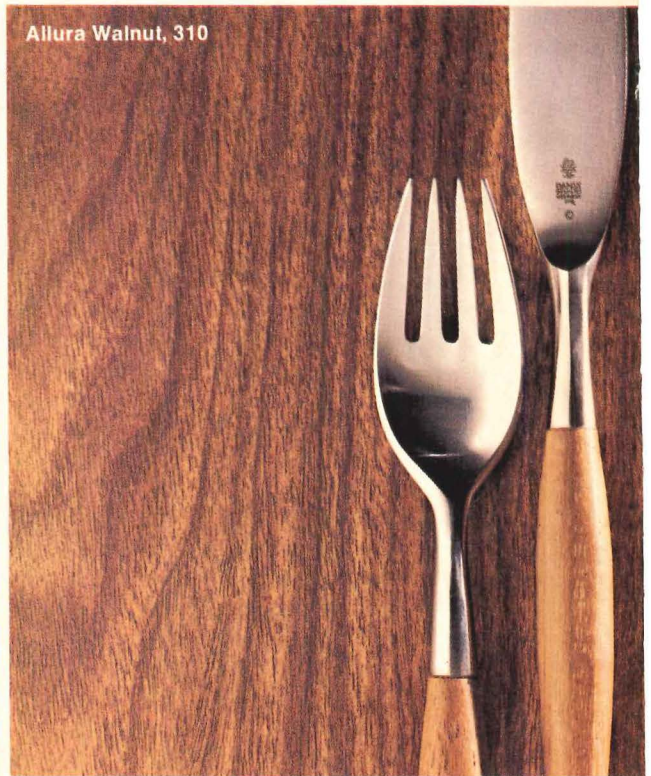
Cimmerian Leather, 773



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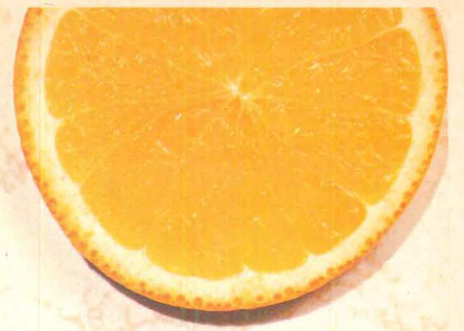


Allura Walnut, 310

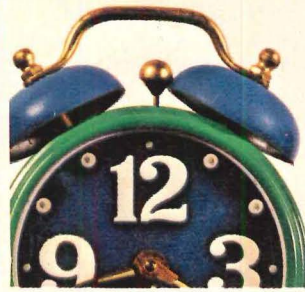
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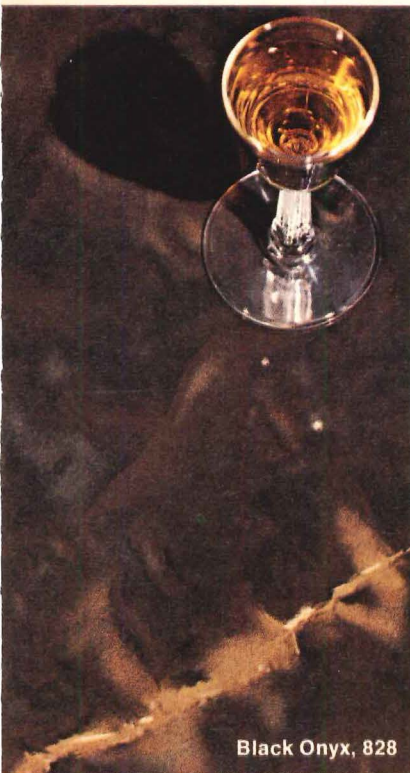
Bronze Tableau, 797



Orange Gossamer, 362

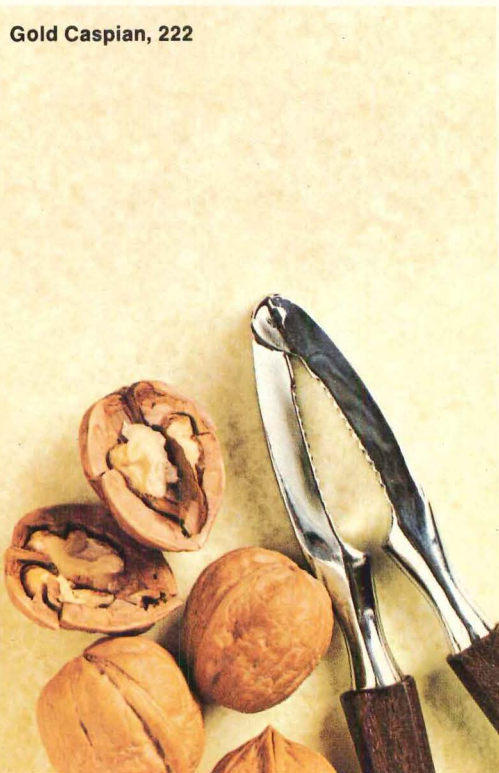


Neutral White, 918

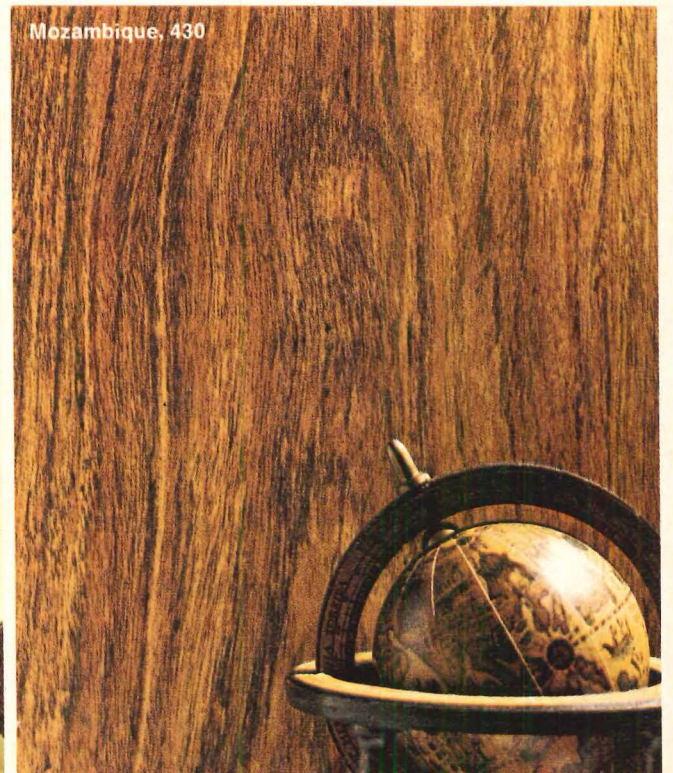


Black Onyx, 828

Gold Caspian, 222



Mozambique, 430



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Is—or isn't—HUD forcing low-cost housing into the suburbs? A look at some cases

The bitter dispute over building a \$30-million housing project for the poor in Forest Hills, Long Island—only eight miles from Times Square—has blown into the White House and out again without changing or clarifying the rules of the site-location game.

The local controversy escalated when New York's conservative Senator James Buckley took up the cause of residents trying to block the bulldozers from preparing a site for three 24-story apartment houses for 840 families. (Senator Jacob Javits supports the projects.)

Senator Buckley sought to confront President Nixon squarely on the issue of housing poor blacks and whites in middle-class neighborhoods for the first time since the President's statement of June 1970 on equal housing opportunity.

Side step. The White House's "review" of the project, however, brought forth a response not from President Nixon but from Housing Secretary George Romney.

Romney's answer to the residents of Forest Hills—and any others who want to block housing projects in their areas—usually the suburbs—was: "Take your case to city hall."

Critics of the Forest Hills plan said they found reasons aplenty to attack the location, the design, the size and the cost of the project. It is located in a swampy area that requires expensive piling. The critics say the 24-story buildings are too high, concentrating population and overloading schools and most other services; that any 12-story design on more sites would be better.

Hands off. Romney pointed out that the project "was actually started in 1966, and approval for the particular approach was essentially given in 1968. So it's not a project that came into being in the last two or three years." (That took the Nixon Administration off the hook.)

Romney's decision was, as expected, that he could find no basis for overruling local officials or suspending construction contracts.

As Romney told newsmen later, the department "properly deals with the elected or



Angry demonstrators fling a torch at the building site and a challenge at Mayor John Lindsay by way of protesting decision to build low-income housing in their middle-class neighborhood in Forest Hills, N.Y. Torchlight parades and rock throwing, appeals to Secretary Romney and President Nixon, petitions to impeach the mayor and even suing him for fraud were to no avail; work has now begun.

appointed local officials. If we undertook to shape our actions to conform with what neighborhood groups want to do, then we would be by-passing local government and the federal government would be intervening in local affairs. And this would

be wrong. You would create chaos, governmentally."

Policy—or lack of. Romney's most detailed explanation of federal law and policy on the issue was put on the record at a December hearing of House judiciary subcommittee, whose

Panel opposes class integration

The National Research Council has just issued a report that seems to argue against any government effort to house the city poor in the suburbs.

The council urges that HUD's policy be re-directed toward "matching" people of similar social and economic levels. The report says "simultaneous efforts to reduce racial-segregation class stratification may in fact be counterproductive."

Analysis of bias. The council says little is known about whether people of different economic levels, regardless of race, can live together harmoniously. It says evidence does show that members of different races but of like social and economic status can live peacefully in the same areas.

Amos Hawley, a professor from North Carolina Uni-

versity who was chairman of the panel that wrote the report, said that placing black families in more affluent neighborhoods would probably harden prejudices that were actually based not on race but on class.

A HUD report. The council is an arm of the National Academy of Sciences and the National Academy of Engineering, private organizations that are federally chartered to advise the government. The report was prepared for HUD, but the conclusions run counter to the trend in federal housing policy which, most observers contend, has generally been to use subsidy programs to transfer poor families from inner cities into the more prosperous suburbs.

A HUD spokesman said the department is studying the report.

chairman is the liberal Democrat Don Edwards of San Jose, Calif.

Romney told the committee that "building all federally assisted housing in the suburbs will not in itself remedy past discrimination or expand housing choices in metropolitan areas."

In answering questions, Romney pointed out that local housing authorities have to comply with local requirements and federal requirements, but, he said, "We do not undertake to dictate to them the extent to which they must consult with local citizens and groups."

Rule by neighborhood? Republican Congressman William J. Keating of Cincinnati asked, "Is there any way that HUD can develop a policy in which the metropolitan housing authority will consult with the neighborhood in the early stages of planning?"

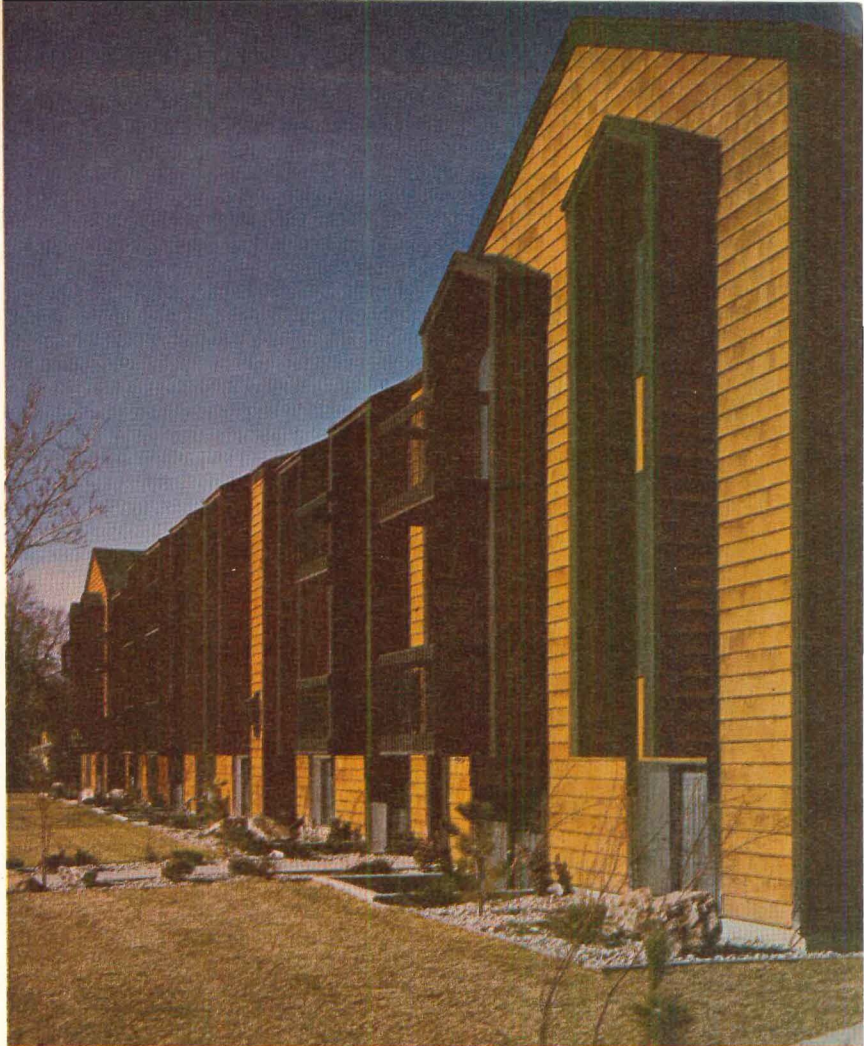
"I think it gets down to the question of the extent to which we have authority to dictate the basis on which local authorities and local governmental agencies shall do certain things in order to meet local needs," Romney said.

Keating cited a housing situation in his district that was far along by the time the neighborhoods got involved: "By the time we found out about it, it was almost an accomplished fact."

Or officialdom? Romney replied that he didn't think that Congress "would want to begin to substitute neighborhood authority for the authority of the local officials elected by all the people of a community . . . If you permit people in a neighborhood to have an involvement that results in an exercise of veto power, obviously you would be substituting their judgment for the judgment of the local officials in an instrument created by the entire community to carry out a particular program."

Romney and Keating agreed that a city council has the authority to direct the local housing authority to "communicate with the neighborhood" but Keating said that he found that the Cincinnati Housing Authority "ignored the city gov-

TO PAGE 16



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Upper Right: Ronald Molen, A.I.A., Salt Lake City, Utah

Lower Right: Harvey Bennett, Lake Tahoe, Calif.

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Is—or isn't—HUD forcing low-cost housing into the suburbs? ... continued

ernment in a lot of ways, and they become autonomous."

New York backlash. Romney replied that in some cities "the city council will insist on reviewing projects," that this is true of New York City, and that the city council had approved the specific Forest Hills project that created headlines.

In the aftermath of Forest Hills, New York City's board of estimate blocked a \$17-million low-income project for 559 families in a neighborhood near Forest Hills—although it had voted for the development in 1966 and again in 1970.

Go-ahead in Columbus. A case with an outcome similar to that in Forest Hills involved an FHA Section 236 (rental subsidy) project for 234 families in Columbus, Ohio. It was described by officials of the National Association for the Advancement of Colored People as its "pilot non-profit housing project for the entire country."

The Ivywood project, backed by builder-developer George Deffet, was fought by the residents of the adjoining village of Minerva Park, who appealed to their congressman, republican Samuel L. Devine. He got a promise from the White House that the project would be reviewed—a *la* Forest Hills—before it was funded.

Residents of the area had been given notice in August 1970 that the site was up for re-zoning for apartments. Hearings were held in October and rezoning approved in December. The controversy arose in mid-1971, when it became known that a Section 236 project was being prepared.

In November, HUD's regional director, Fergus A. Theibert, agreed to insure the \$4.7-million mortgage and provide \$237,000 in rent supplements for the tenants.

New veto for HUD. Approval procedures differ from city to city or county to county. A HUD area official said of Baltimore County, Md., which surrounds Baltimore: "If the property involved is already zoned for apartments, there is no need for any hearing if a Section 236 applicant comes in with a good proposal." If a zoning change is required, however, a zoning hearing has to be held and resi-



SENATOR BUCKLEY
A setback in Forest Hills . . .



BUILDER DEFFET
. . . and a victory in Columbus

dents can have their say. There can be other hangups, he said—not enough schools, or water or sewer facilities.

In fact HUD area officials, through the use of the new project selection criteria made effective Feb. 7, 1972, have a veto over proposed local projects. As the department noted, "HUD's statutory function is to approve proposals submitted, rather than to prescribe area-wide plans,"

The criteria are to be used to eliminate "clearly unacceptable proposals" and to assign priorities to assure "that the best proposals are funded first."

Plans to buy homes show second decline

A Conference Board survey for November-December has found that .3% fewer people plan to buy homes than it found in September-October.

The board's national survey of consumer intentions was the second in a row to document a decline in homebuying plans. Both were compiled after President Nixon's wage-price freeze of August 15.

Only 2.9% of the 10,000 families polled in November-December expected to buy a home in the next six months, down

Puzzle of the rules. No one can say whether the criteria will lead to approval of more subsidized housing in the suburbs as compared to the inner cities. They are couched in such general language that they could be used to approve or disapprove almost any borderline application. As the department said, some of the comments received on the criteria contended that the standards "will result in too few projects being built in the inner cities and others asserted they will result in too many."

The Republican party's liberal Ripon Society suggests that

from 3.2% in September-October, but still considerably higher than the 2.1 percentage of a year ago. The year's high was 3.5% in July-August.

Plans to buy appliances dipped to 37.5% from 38%. The sharpest drop was in air conditioners—2.5% as against 4.0% in the previous survey. Refrigerators were down to 5.4% from 5.6% and washing machines to 5.3% from 5.7%. Ranges were up to 3.8% from 3.1% and clothes driers to 5.2% from 5.0%.

Romney is on the side of the angels by quoting his answer to a critical appraisal of his stewardship at HUD.

"The President's policies will not tolerate racial discrimination in housing, direct or indirect, and they call for the use of housing progress to overcome the effects of past and present discrimination.

Fight in the courts. Complicating the issue are court decisions that tell local authorities and HUD what each must do. A prime example is the court order to the Chicago Housing Authority to prepare plans for building low-income housing in white neighborhoods. Federal Judge Richard B. Austin told the CHA to proceed without the Chicago city council's approval of the sites.

Construction of public housing in Chicago has come to a complete halt since July 1969, when Austin ordered the CHA to build public housing in white areas. Since that order, the city council has approved only 36 sites for 286 housing units, even though HUD is holding \$26-million funds in reserve for Chicago to construct 1,500 units. That money is effectively blocked, for the CHA says it is standing pat.

Chairman Charles Swibel told reporters that the Austin order does not actually require CHA to bypass the council, but he said that even if the judge does specifically order CHA to proceed without council approval, it will not comply. "The CHA has no intention of violating state law, which requires council approval of sites," he said.

Chicago, meanwhile, has lost another \$20 million in urban renewal funds because of its refusal to meet HUD's requirement for scatter-site building.

Whither? What with these interminable disputes over policy, over authority and over legalities, the picture of the national effort to build housing for the poor remains confused. Government policy is unclear at best and confusing at worst, and suburban opposition is strong and probably getting stronger. No quick solution appears likely, particularly in an election year.

—DON LOOMIS
McGraw-Hill World News,
Washington

Quotation of the month

The American experience has proved that slum clearance and urban redevelopment have, if anything, accelerated the decline of the cities . . . The city is living tissue. You cannot raze a ten-block area in the name of redevelopment, let it lie fallow for five years while you hunt for developers, then put up glass and concrete and expect the neighborhood to survive.

Professor James Marston Fitch
Columbia University School of Architecture

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President's panel urges free FHA rate and direct federal subsidies for home buyers

Mortgaging practices and the nation's housing market have come under close scrutiny by the President's Commission on Financial Structure and Regulation.

Assigned to prepare recommendations for bringing the country's financial institutions into accord with the economy of the twentieth century, the Hunt commission (named for its chairman, Reed O. Hunt) has now formally issued its report. The document abounds with ideas for luring still more money into housing.

When its report appeared, the commission gave this warning to both the Nixon Administration and to Congress: while its recommendations are "intended to improve the future performance of the nation's financial institutions, regardless of the economic climate . . . it is unrealistic to expect any financial system to function smoothly in and emerge unscathed from the economic and monetary conditions experienced in the United States in recent years.

"The commission urges the adoption of more responsible fiscal policies and, in the private sector, more responsible price and wage behavior so that moderation will be possible in the conduct of monetary policy."

Attack on controls. Particularly did the commission score the use and effects of the Federal Reserve's Regulation Q, which restricts interest paid on savings by commercial banks and of most other interest rate controls. It told President Nixon that rate control rendered financial institutions helpless to compete for savers' deposits when interest rates rose on competing bonds or credit instruments. The commission urged a phase-out of rate controls.

The panel also recommended broad new powers for savings and loan associations, mutual savings banks, credit unions, commercial banks and life insurance companies, but it urged that Congress enact legislation to tax the thrift institutions at rates comparable to those paid by commercial banks.

The commission proposed nation-wide chartering for mutual savings banks, now restricted to 18 states, and federal charters

for stockholder savings and loan associations as well as stock status for those federal and mutual S&Ls that want it.

Interest rates. The recommended changes for banks and thrift institutions could, if enacted, have a major impact on the flow of funds to housing. But the commission did not stop at recommendations that would affect housing indirectly. It made no less than ten recommendations aimed squarely at housing and mortgage markets, including these five on interest rates:

- Interest rates on FHA and VA mortgages should be determined in the marketplace, without regard to administrative or statutory ceilings, and with the mortgage originator or lender prohibited from collecting any discount.

- The Secretary of Housing and the VA administrator should authorize variable-rate options on FHA-insured and VA-guaran-

teed home mortgage loans.

- Consumer safeguards should be established for variable-rate mortgages, including full explanation of the terms to borrowers, the offer of an alternative fixed rate mortgage, limits on the permissible rate change, a publicly announced index on which rate changes are based and, after an initial period, opportunities for "no penalty" refinancing.

- Congress should consider the adoption of an insurance program against interest-rate risk to mitigate the problems faced by institutions holding one-term debt instruments during periods of high or rising interest rates.

- States should remove statutory ceilings on allowable interest rates on residential mortgages, drop unreasonable restrictions on loan-to-value ratios for all lenders and void the legal impediments to the use of variable-rate mortgages.

Mortgage rate authority extended

Although Congress was unable to enact any comprehensive housing legislation in 1971, it finally did manage to push through the joint resolution needed to keep some home finance programs operating.

The resolution provides for, among other things, an extension to June 30 of Housing Secretary George Romney's power to set the interest rate ceiling on FHA mortgages.

This year's housing legislation, when it emerges from Congress, is expected to deal more definitively with mortgage interest rates, for Congress has been faced with need to extend the present authority at several recent sessions.

Two plans. The Nixon Administration has suggested a dual interest rate approach for FHA-VA mortgages—that is, a free rate without discounts and an alternate fixed rate with discounts. The President's Commission on Financial Structure and Regulation has proposed a variable-rate option for FHA and VA mortgages (*story above*).

Senator John Sparkman, chairman of the Senate Banking, Housing, and Urban Affairs Committee, said after pas-

sage of the joint resolution that he was "hopeful that a more constructive solution (than the present authority) will be found."

Bigger Tandem Plan. The joint resolution also gives the Government National Mortgage Assn. another six months to purchase home mortgages under its unsubsidized Tandem Plan operation. The agency can buy loans whose value ranges up to 150% of the previous \$22,000 limit.

The higher limits, sought by mortgage men and homebuilders in areas where higher house costs made the \$22,000 restriction unworkable, must be determined locally by Secretary Romney, but they can go as high as \$33,000 or to \$36,650 for a four-bedroom home. It had been estimated that 50% of the country had been unable to use the Tandem Plan because house costs exceeded \$22,000.

Several senators and congressmen had introduced legislation that would permanently lift the Tandem Plan's loan ceiling upon a determination by the Housing Secretary that higher construction costs necessitated an increase. —A.M.

Broad policy. The commission also advanced these proposals for broad changes in the mortgage structure or for the fuller development of practices only recently begun.

- Congress should provide direct subsidies to home buyers if mortgage financing is inadequate to the achievement of national housing goals.

- States should simplify and modernize the legal work now necessary in mortgage origination and foreclosure, including the standardization of terms and conditions of conventional mortgages, through the development of a Uniform Land Transaction Code.

- States should abolish "doing business" barriers to out-of-state financial institutions providing mortgage loans or holding or selling properties.

- The Federal National Mortgage Assn. and the Federal Home Loan Corp. should be encouraged to continue to develop the secondary market for mortgages, and that variable rate mortgages should be included in their operations in the secondary market.

- The Government National Mortgage Assn. should continue to guarantee marketable mortgage backed securities, with due regard for the effect of these activities on private financial intermediaries and requirements for complementary municipal services.

Up to Congress. The report, in more than 100 pages of typescript, will be the focal point for congressional action this year.

Much legislation was held up in 1971 while Congress awaited the commission's proposals. So housing observers anticipate a major housing bill this year—and many of the commission's recommendations will probably find their way to the President's desk for signing into law.

But while the commission urged Congress to take its report as a package, noting that piecemeal acceptance would distort the marketplace, it is unlikely that Congress will rubber stamp the study in an election year that is bound to see the legislature attempt to adjourn in late summer.

—A.M.

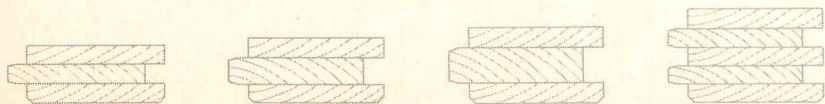


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How to stabilize homebuilding's pace—Fed's Burns proposes investment referee

Congress two years ago asked the new chairman of the Federal Reserve Board—Arthur Burns, who had just moved from his White House post as President Nixon's economic adviser—to do something to smooth the big cyclical swings in housing production.

Burns chose instead to finesse this direct request by giving Congress a report answering the question:

"What's the best way to smooth out housing production cycles—particularly those painful slumps during periods of tight money?"

The referee. The Federal Reserve experts' answer can be paraphrased like this:

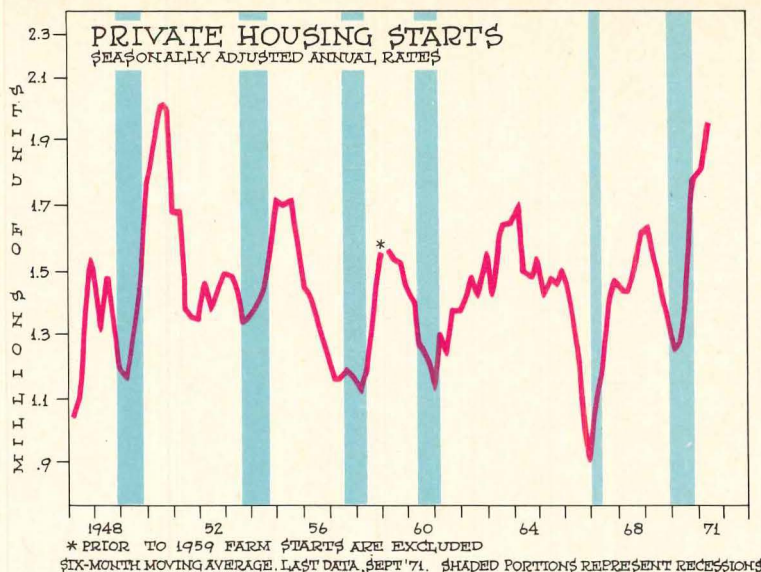
"Let's create a new government agency that would work on business demand for capital equipment. That's the demand that outbids the mortgage market during times of tight money. This new agency would run a money pool that would tax investors in capital equipment when demand runs high (thus raising the price of such equipment) and give them a rebate (thus lowering the price of the equipment) when demand runs low."

The desired result: an ironing out of the boom-and-slump swings in demand for business equipment. This in turn would smooth out the ups and downs in the supply of mortgage money and the big ups and downs—particularly the ups—in mortgage interest rates.

Answer to critics. This concept is the proposal of experts at the Federal Reserve Board who got the assignment from Burns. It constitutes Burns' answer to the assignment given to him by chairman Wright Patman of the House Banking Committee and Senator William Proxmire, ranking Democrat of the Senate Banking Committee. Both are housing experts and outspoken critics of the Federal Reserve Board. The Banking and Currency Committees have jurisdiction over housing legislation and the Federal Reserve.

The outcome is a 150-page report by the Federal Reserve economist Lyle E. Gramley.

Turnabout. The report really represents the views of Burns. The six other members of the



Fed's board of governors chose to play it cagey to avoid a more direct clash with Patman, Proxmire and their allies, who have their own views.

Burns, instead of acting under existing authority, as the congressional Democrats would like, tossed the hot potato back to them. His message was clear: I think you fellows in Congress should take the action and take the heat.

Gramley's report, *Short-Term Cycles in Housing Production: an Overview of the Problem and Possible Solutions*, agrees with what congressional leaders and housing officials have been claiming for years—that the harmful effects of big fluctuations in housing production are costly to the industry and to the public to the point where a serious search for solutions should be mounted.

Gramley says, however, that a close look at the availability of housing shows the effects of short-run gyrations of housing production "have not been large." But the report does agree that the instability of housing production entails "social costs" that might be avoided if a method can be found to "buffer the housing industry from the extreme effects of credit restraint." Clearly, the swings in housing production have "a magnitude that is socially and politically intolerable."

Fund diversions. Gramley says the periodic shortages of mortgage money shouldn't be identified with the diversion of funds from savings and loan associations during periods of high interest rates. The housing

cycle, he says, was a "significant national economic problem before inflows of savings to the associations began to display any appreciable cyclical variability." Gramley starts with what seems to be a truism—that if wide swings in interest rates weren't needed to stabilize the economy generally, then "the supply of mortgage credit and housing production would be more stable."

The report points out that one way to attack the problem is to "insulate" the housing industry from the general credit restraint through government actions of one kind or another as was tried during the last mortgage money crisis, when Congress passed a number of measures to pump more credit into mortgages and to keep a lid on mortgage interest rates.

Budget restraints. The Federal Reserve staff says that instead of using emergency credit measures to help housing, it would be better for several reasons to use government taxing power and spending power. But in real life, Gramley points out, Congress just won't enact income tax changes quickly enough to be used as business-cycle regulators. So what he suggests is a combination tax-and-subsidy mechanism to speed up or slow down "particular kinds of expenditures."

Such subsidies to home buyers or builders have one big handicap—they have "perverse effects on the federal budget." That is, when a business boom is on, housing suffers most—but if you subsidize housing then you "increase

federal spending and add to the pressures on the capital markets."

The refereeing. A better scheme, says Gramley, is to apply "temporary excise taxes and subsidies to other kinds of expenditures"—and the other kinds he recommends as most effective are business expenditures for capital goods.

He would have Congress create a new policy instrument—an agency—operating a put-and-take kind of "business investment fund" such as that which has been used in Sweden. When the economy was sluggish, the fund would pay businessmen a subsidy for buying capital equipment, thus lowering its effective price to them. In boom times the fund would tax such spending, raising the price to the business firm.

Obstacles. The question, of course, is whether Congress would ever agree to turning over such taxing power to any agency outside Congress. Very few people in Washington can visualize the Ways and Means Committee's Wilbur Mills opting for such an arrangement. Yet it's less inconceivable now, perhaps, than two years ago.

Gramley agrees that Congress might balk, but he suggests that Congress would move cautiously by specifically limiting the range of the taxes and subsidies. Also, the effect on the federal budget could be avoided by keeping the fund on deposit at the Federal Reserve and keeping it outside the budget.

This year (1972) may be the year that Congress and the administration will be haggling over these issues, perhaps triggered by the report of the Presidential Commission on Financial Structure.

The President's commission also attacked the feast-or-famine fluctuations in the availability of housing money (News, Jan.) The Commission's proposals were aimed at attracting more money directly to the mortgage market by loosening the network of state and federal interest rate ceilings on mortgages—and, more importantly, by offering a special tax credit to investors in mortgage loans.

—STAN WILSON
McGraw-Hill World News,
Washington

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New Moen Model 7200 is specially designed for use with stainless steel sinks.

B-721

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spray. Your customer will notice a lot of things in your homes. She'll notice a Moen single-handle faucet, too. And she'll remember it. It's stylish. And it's easy to use.

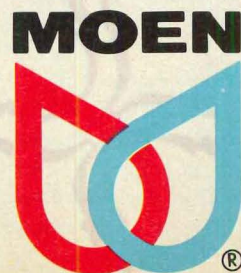
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CIRCLE 65 ON READER SERVICE CARD



Newest proposal in mortgaging: buying today's house with tomorrow's pension

A Cleveland consulting firm is putting the finishing touches to a plan for the Housing and Urban Development Dept. that would let homebuyers use their vested interests in pension funds as collateral for home-purchase down payments.

The economist for the Mortgage Bankers Association of America, John Wetmore, says this is probably the first such program in the mortgage field.

The objective is to turn renters into buyers. Thomas A. Frayne, president of Gitlin & Frayne, the consultants who developed the program, explains:

"We're trying to help the man who spends much of his income renting. He's already paying principal, interest, taxes, maintenance and a profit to the landlord, but he gets none of the tax advantages of an owner. His income is such that he could easily afford mortgage payments but he cannot build up a down payment."

How it works. The proposal for home ownership as a fringe benefit was developed under an \$85,000 HUD grant. It has already been pilot-tested successfully by Cleveland's Forest City Enterprises, one of the nation's largest homebuilders.

Forest City's profit-sharing and pension plan first amended its charter to let employees borrow up to 50% of their vested pension rights for down payments on homes. (As explained below, this privilege could range right up to 100%.)

A woman then borrowed \$4,300 at 5% interest to complete a \$10,000 down payment on a \$31,000 townhouse condominium. A precedent was set when the Internal Revenue Service agreed that the loan would not be considered as early disbursement of income and so was non-taxable.

That \$4,300 loan became the down payment for a conventional mortgage, but the Frayne firm has now won a ruling clearing the way for use of such loans with FHA mortgages.

A variation. Gitlin & Frayne have also arranged with Cleveland's Leader Mortgage Co., a mortgage banking concern, to operate another version of the plan.

The pension fund would pledge the down payment funds by placing a passbook with Leader. The mortgage banker would write a down-payment loan to the home buyer as part of a 100% mortgage. Leader would pay the pension fund the normal return that the fund would get had it used the amount of the downpayment loan for its regular portfolio investments.

The buyer would pay Leader back at market interest rates, with credit applied to the passbook as a part of each mortgage payment was applied to the pension fund's down-payment

loan to the home buyer.

Leader would take the difference between the buyer's interest payment on his down-payment loan and the interest paid to the pension fund at the rate of the fund's prevailing yield on investments (normally 5% to 6%) as its fee for packaging the entire mortgage.

Funds would actually leave the pension fund only when a down payment loan was defaulted. The buyer would lose only that portion of his vesting needed to cover the default.

And refinements. The pension fund could also invest a block of capital in Leader. The

interest paid to the fund on this investment would again be the average yield the fund reaps on regular investments. But the presence of the block of cash in Leader would make coverage of a pension fund member's loan automatic and would speed and simplify paper work.

A final version would earmark all or part of that portion of a pension fund vested after the loan was made and use this to pay off the loan. This money, however, would be considered taxable income. The advantage would be higher disposable income for the buyer while buying the house, but the technique would automatically reduce his vested interest upon retirement or termination of employment.

A pension fund could allow up to 100% of an employee's vested interest to be used as down-payment collateral. By limiting this to 50%, Frayne says, the Forest City experiment severely cut back the number of its employees who could take advantage of the offer.

How big a market? The Mortgage Bankers' expert, John Wetmore, sees advantages to the pension tie-ins but questions how many homes buyers will ever utilize them.

Frayne provides no ready answer. He concedes that the funds are notoriously close handed with data on subscribers, and he admits he would need at least a look at the rolls of several large funds to estimate the potential market for the new technique.

Frayne says, however, that coupling the plan with FHA mortgages will considerably expand the program's appeal. He is negotiating with several pension funds for use of the plan, and he says has had favorable replies from some.

The stumbling block thus far, Frayne explains, is that the plan is virtually unknown and that few pension-fund executives have any idea of how many subscribers might use it. So the consultants have written an explanatory brochure, *Use of Pension-Plan Leverage for Home Purchases by Employees*, and it can be had by writing to their offices at 1545 Leader Building in Cleveland (44114).

—RAY LEWIS
McGraw-Hill News, Cleveland

GAC writes off another \$29 million

GAC Corp., the diversified land and financial holding company based in Miami, has just written off \$28.5 million of its investments, after taxes, for the fourth quarter of 1971. Write-offs for the year now total \$42 million.

GAC Corp. is the parent of GAC Properties, successor to the financially troubled Gulf American Land Corp., and of GAC Realty, a general contractor and developer.

Some \$16 million of the parent's fourth-quarter write-off reflects the failure of GAC Realty to win permission to build 18,000 units in Three Islands, a residential project near Hollywood, Fla. The company has been forced to devise a new plan with fewer units.

Other losses. The fourth-quarter write-offs also include \$2.5 million representing the cost over book value of the parent's investment in a retailing subsidiary, plus a loss of \$4 million and a tax charge of \$6 million relating to actual or planned sales of Equitable Savings & Loan Assn. of Portland, Ore., and GAC Commonwealth and Sherwood & Roberts, mortgage bankers in Portland and Seattle, Wash., respectively.

Decline. The new write-offs cap two years of declining profits for GAC Corp. In the nine months ended September 30, 1971, the company lost \$11.1 million on sales of \$325.6 million. (This takes into account the \$13.5-million first-quarter write-off.) In the same period of 1970, it had earned

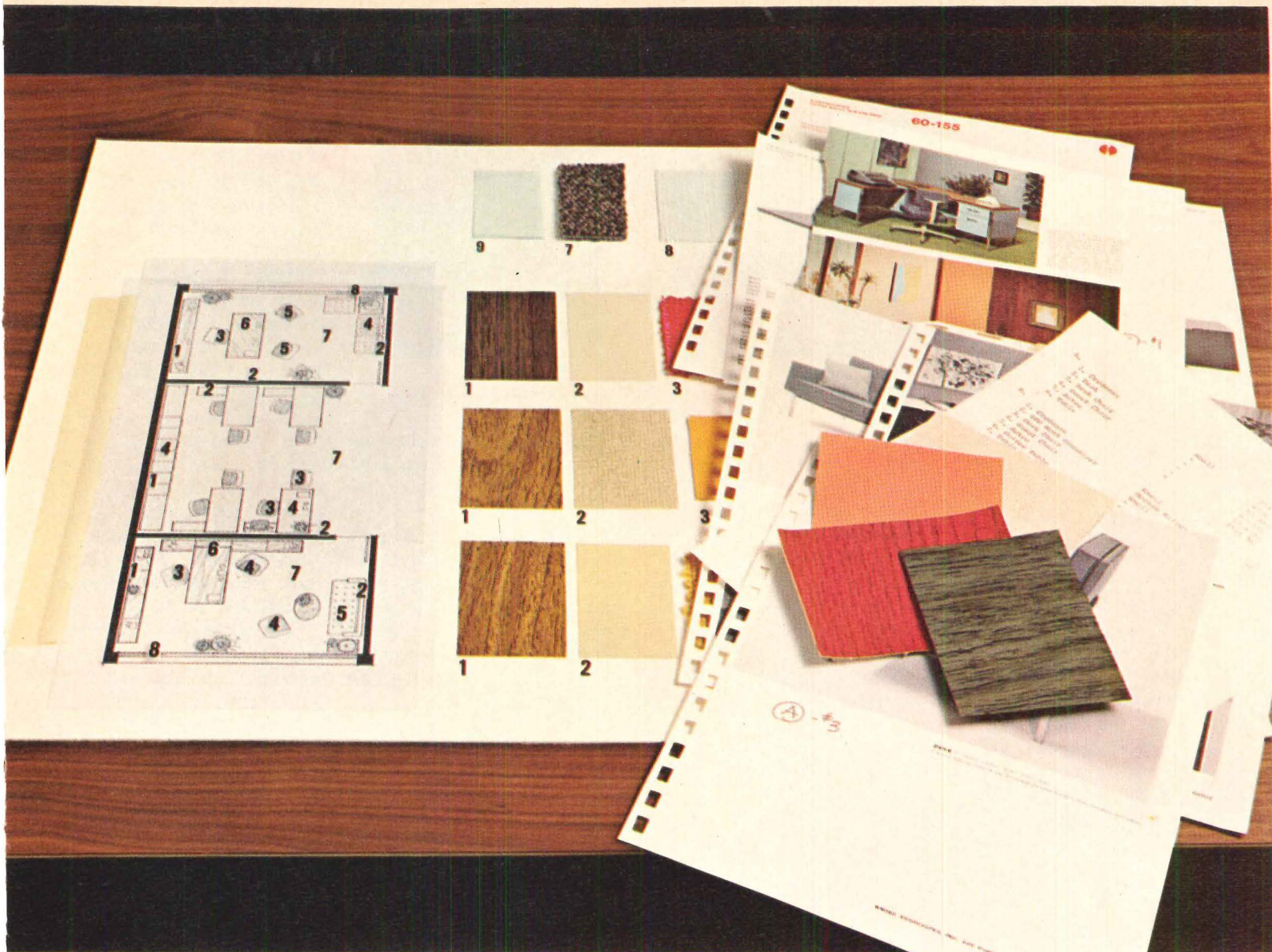
\$15.3 million on sales of \$360.5 million, and in the first nine months of 1969, a record \$23.6 million on \$248.7 million.

GAC blames increased development costs, selling expenses and changes in sales policies instituted in mid-1969.

New sales chief. To shore up sagging sales GAC Properties has rehired its former president, Charles K. Hepner, as executive vice president of sales and marketing. Hepner and nine other top executives had resigned on April 30 after Frank Steffens became president and began changing GAC Properties from a lot seller to a community developer.

Sales suspension. In Rhode Island, meanwhile, the department of business regulation has ordered GAC Properties to suspend sales until the company resolves some 100 complaints from consumers alleging misrepresentation. The company says it has invited its customers to submit complaints.

The incident recalls the stormy years of 1967 and 1968 when the company's predecessor, Gulf American, battled over sales practices with the Florida Land Sales Board. The dispute led to a 30-day suspension of Florida sales, starting in December 1967, and culminated in the resignation of one of the company's founders, Leonard Rosen, as chairman in July 1968. In January 1969 Gulf American was acquired by GAC Corp., formerly General Acceptance Corp.

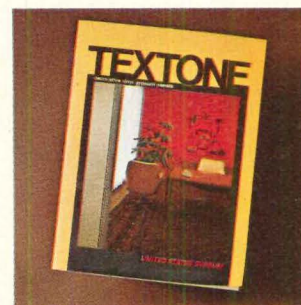


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BUILDING AMERICA

Price board does its best, but its guidelines for fair rents bring cries of foul

About the best that could be said for them was, "When their overriding purpose is to control inflation, the guidelines are something that both tenants and landlords can—should—live with."

This from Robert H. Pease, former president of the Mortgage Bankers Assn. and a member of the Rent Advisory Board.

Tenant and industry spokesmen were considerably less temperate. Rose Wylie, chairman of the National Tenants Organization and likewise a member of the rent board, charged that the nation's new rent regulations amounted to "a boondoggle for landlords and a hoax on tenants."

And Jenard Gross, former president of the National Apartment Assn., described the situation in Texan terms:

"It's the old thing about whose ox is being gored, and I think ours is being gored worse than everybody else's."

Regulations. The new rules will limit average rent increases to 3% or 3.5% a year, according to C. Jackson Grayson Jr., chairman of the Price Commission. Specifically, landlords may increase base rents 2.5% to cover higher operating costs, and this percentage applies even though actual costs may be higher or lower than 2.5%.

Owners may also pass on rises in state or local property taxes, government fees and levies or increases in charges for municipal services other than gas and



RENT BOARD'S MEYERHOFF . . .
Trying to make the best . . .

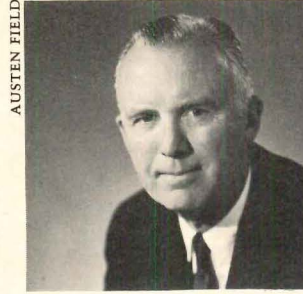
electricity. The commission has also devised a formula for permitting landlords to pass on the cost of capital improvements.

New bases. At the same time the commission defined base rents in a new way. For leases with terms of a month or less, the base rent of any unit is the rent charged for that unit during the freeze period beginning August 15. Increases that may have been made under early Phase II regulations must be rolled back but need not be refunded.

For leases running longer than a month, landlords may use the average rent charged for substantially identical units in the 30 days immediately before the freeze or, if there were no renewals during that time, in the 90 days before the freeze.

If there were no transactions during this 90-day period, the base rent is the rent charged for a particular unit on May 25, 1970, plus 5%.

Where there are rent control laws, local programs will remain in effect pending analysis



. . . AND PEASE
. . . of the new standards

to determine whether they are inflationary. This approach applies primarily to New York City.

Disagreement. The tenants' organization predicts that the provisions for increasing base rents and the pass-throughs of various expenditures "will result in inflationary increases far in excess of anything that has been experienced."

The industry, on the other hand, fears that it is being subjected to more controls and more regulations than others. Pointing to the 7% steel price hike as an example of what a strong voice in Washington can achieve, Gross contended: "We're just too fragmented to have a major say."

Paradoxically, Gross feels that in many places, apartments are overbuilt, creating soft markets that hold rents down anyhow.

"But the places that need the increases won't have them, and this will discourage building where it is needed," he said.

Social stresses. The homebuilding representative on the

Rent Advisory Board, Baltimore builder Harvey M. (Bud) Meyerhoff, said that the board faced a difficult problem in separating economic from social legislation.

While recognizing that rent is an important item in most budgets at a time when wages are also being controlled, the board still had to take into account operating cost increases resulting from Pay Board and Price Commission rulings and also from local environmental legislation decreeing such things as expensive low-sulphur fuels and trash compactors.

Concessions. The industry made some major concessions, according to Meyerhoff:

"We could have been governed by the same rules as other segments of the economy, that is, direct pass-throughs of increased costs.

"We agreed in principle to a fixed percentage method plus a tax pass-through in a sincere effort to minimize the burden of administering the rent control program."

Another concession was made in establishing base prices through use of averages rather than the highest 10% of transactions. Meyerhoff believes that because of this, the industry's starting position will lag somewhat behind that of others, but he summed up the prevailing attitude when he said:

"We can live with it as long as it doesn't last too long."

—NATALIE GERARDI

Centex returns to Dallas market by buying Fox & Jacobs for \$38 million in stock

The two Dallas-based builders have signed an agreement calling for exchange of 1,295,000 Centex shares for all stock of the privately held Fox & Jacobs Construction Co.

Based on Centex's closing price on the New York Stock Exchange on January 14, the day before the agreement, the price is well over \$38 million.

Back in Dallas. "The merger gives us a major entry into the dynamic Dallas market and will enhance our capability for expansion, said Frank M. Crossen, Centex's president.

David G. Fox, president of Fox & Jacobs, added:

"Associating our company

with Centex will open greater opportunities for growth".

The merger will be accounted for on a pooling-of-interests basis and will become final when the Fox & Jacobs year-end audit is completed this month.

New subsidiary. Fox & Jacobs

Klingbeil joins move into New York market

The apartment developer from Columbus, Ohio, is the seventh national builder to venture into the New York area since 1969 (News, Nov. '71).

Klingbeil will build 1,500 garden apartments, single-family homes, townhouses and con-

dominiums in Lakewood, N.J. Work has begun on Tivoli at Woodlake, a 264-unit garden apartment community, and models should be ready next month. A community building has been built, and a pool and tennis courts are planned.

The companies expect no

changes in the operation of Fox & Jacobs, Dallas's largest single-family builder. It earned \$1.8 million on revenues of \$37 million in 1971.

Nationwide. Centex now builds single-family homes, townhouses, and high-rise condominiums in the New York area, Chicago, San Francisco, Miami, Atlanta, Las Vegas and Puerto Rico.

It earned \$7.6 million on revenues of \$149 million in the year ended March 31, 1971. In the six months ended Sept. 30, it earned \$4.7 million on \$101 million.

—LORRAINE SMITH
McGraw-Hill World News,
Dallas



The Caradco Sculptured Door

Elegance.

You get deep-carved panels fashioned from one-piece, wood-grained faces that can't split, check or shrink; a factory prime coat that welcomes paint or toned stain... that lets you suit the final finish to your fancy, be it avantgarde, traditional or in between. Result: it looks like more than it costs. And that's the beauty of it: *it costs less* than conventional panel doors.

We did even more with the door pictured. We

prefinished it with a smooth white factory coating, to bring out the full richness of the wood texture. It's easy to see why this *practical* eye-ful has tremendous buyer appeal. For more facts on Caradco Sculptured Doors, please call us or write.

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CIRCLE 67 ON READER SERVICE CARD

Wasserman and Bernhard, whiz kids of Levitt, are back in the housing business

They've formed The Richards Group Inc., a real estate and development company headquartered in Great Neck, N.Y. And again there's a conglomerate in the picture: Gulf & Western Industries has 50% of the new company.

Will this bring a repetition of the frustrations that led Dick Wasserman to quit the \$150,000 presidency of ITT Levitt Inc. and Dick Bernhard to leave the No. 2 slot? Wasserman says no:

"It's *our* business in which Gulf & Western has invested in this case. We'll have no interference in our company's operations. We're not a wholly owned subsidiary."

Job offers. The two Levitt executives were in an enviable spot when they quit the nation's largest homebuilder a couple of years after it had become part of the nation's eighth largest corporation [NEWS, June '71]. Not only were they deluged with job offers from within the industry, but they could even have had their old jobs back on their own terms. Shortly after their departure, ITT settled an antitrust suit by agreeing to divest itself of several subsidiaries, including Levitt, and more than one prospective purchaser called on Wasserman to head a purchasing group.

Instead, Wasserman and Bernhard decided to strike out on



RICHARD M. WASSERMAN
The two Richards...



RICHARD P. BERNHARD
... strike out on their own

their own.

Money and talent. The two felt that, to be successful, a company needed two ingredients: strong financial support and a special kind of individualistic, entrepreneurial talent. And once a company had attracted that talent, it has to motivate it by giving it a share of the ownership.

"We're a corporation, but we're not even talking titles," Wasserman pointed out. "We view ourselves as associates, as partners."

"We expect to get the best guys who exist in this industry and to give them an equity interest in the business, and I don't just mean stock options."

Management. So far, the management group includes Allan H. Gasner, 45, who has been building homes in New York, Puerto Rico and Washington, D.C., for 20 years; Norman Seidenwurm, 45, who has also spent 20 years in the develop-

ment business and recently headed his own company, building and managing apartment projects; and Stanley D. Heckman, 32, a lawyer who was Wasserman's executive assistant at Levitt.

Third phase. Wasserman views the affiliation with Gulf & Western as representing the third phase of the homebuilding industry's progression. The independent builder represented the first, mergers the second. He explains:

"Everybody said, 'The merger doesn't work. Where do we go from here?' I think this is another approach."

"We'll have to succeed now, or we'll ruin it for everyone else."

Best of both worlds. Wasserman views the relationship as giving him the best of both worlds. He has the freedom to run the company as he pleases, plus solid financial backing from Gulf & Western.

Coast to coast. The Richards Group expects to build all types of houses in all price ranges, starting in the Detroit, Washington, New York and Philadelphia markets, and eventually expanding from coast to coast and abroad. About half a dozen land contracts are being drawn, and the company expects to have its first houses on market within six months.

Hindsight. Wasserman thinks he would have left Levitt even if he had known it was going to be split off from ITT.

"I did my thing there," he said.

He pointed out that during the 12 years he spent with Levitt, sales rose from \$15 million a year to over \$300 million.

"I think a lot of the juice is out of it at this point," he said. "With a \$300 million company, you've got to add \$70 million or \$80 million a year in volume. You start getting into so much paperwork, so many layers of people, so many other problems, that it isn't the kind of exciting situation that the Richards Group is."

Wasserman expects his new company's sales to reach \$100 million by the fourth year. And he adds:

"It's a hell of a lot more exciting and could be a lot more profitable when we take the thing public a few years down the road."

HUD's plastic pipers roll to victory over the iron men of San Francisco

For a while it looked as though San Francisco's craft unions had won the plastic pipe and plastic-coated wiring dispute—and lost the city \$38 million in renewal and rehabilitation funds [NEWS, Dec. '71].

A four-hour debate in which union spokesmen opposed HUD's James Jaquet and other supporters of the new materials ended with the board of supervisors voting 7-to-4 against the use of plastic pipe and wiring in home construction. The unions are generally dedicated to cast iron or copper pipe and wrapped wire.

Workable program. The U.S. Department of Housing and Urban Renewal (HUD) had warned that it would turn down all new requests for money

from cities that did not comply with HUD's workable program standards. In essence this means that building codes must permit the use of all nationally recognized building materials and techniques. Plastic pipe and wiring are recognized by national code groups, and supporters contend that the newer materials reduce costs and so permit builders to erect more shelter for the poor.

Mayor's friends. The union spokesmen opposing the code change included Joseph P. Mazzola, business manager of Plumbers' Local 38, and William Reedy, head of the electricians. Both crafts had contributed heavily to Mayor Joseph Alioto's recently successful reelection campaign and

to the election efforts of some of the supervisors. Mazzola and Reedy are also Alioto appointees, Mazzola as commissioner of airports and Reedy as a transit district member.

As the battle shifted, Alioto traveled to Washington two days after the negative vote to argue against the cut-off of funds. Secretary George W. Romney himself told the mayor that there would be no change.

Turnabout. The supervisors did an about-face.

They approved a new plumbing code that allows the use of plastic pipe if permission is granted by the chief building inspector, Alfred Goldberg. That long-time opponent of the material has already indicated that he will not grant per-

mission until the plastic pipers provide more test data.

But the new code also allows applicants to appeal Goldberg's decision to a board of examiners, a move not open under the old code.

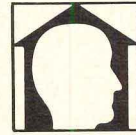
Plastic-sheathed wire can now be used in most jobs, including high-rise, even without Goldberg's approval.

More to come. Several other large cities face a freeze of new HUD funds because they have not complied with the workable program standards. Among them are Tampa, Philadelphia, Tucson, St. Louis, Richmond, Chicago, New Orleans and Los Angeles.

—RON E. WARTHEN
McGraw-Hill World News,
San Francisco

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Above left: The Wayfarer as built by Purnell, Inc., Berlin, Md.

Below left: The Hatteras as built by Carolina Caribbean Corp., Beech Mountain, Banner Elk, N.C.



Boise Cascade Manufactured Housing Group

61 Perimeter Park, Atlanta, Georgia 30341

Frank D. Carter, Director-Marketing, Boise Cascade Manufactured Housing Group, Dept.HH-2, 61 Perimeter Park, Atlanta, Georgia 30341, (404) 458-9411

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Of these, _____ have been vacation homes.

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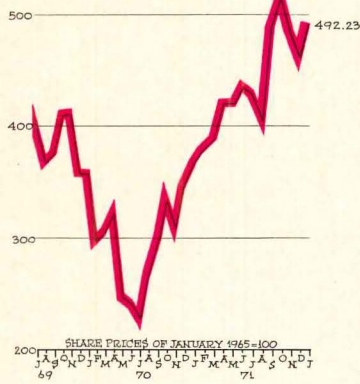
Housing stocks up

Housing shares staged a strong year-end recovery along with most other stocks.

HOUSE & HOME's index of 25 key housing issues rose to 492.23 from 461.13 in the month ended January 4.

Share values of January 1965 represent 100 on the index. The 25 issues are indicated by bullets (•) in the following tables and are overprinted in color.

Here's the composite index.



How top 5 did in each group:

	Jan. '71	Dec. '71	Jan. '72
Builders	438	526	574
Land develop.	502	519	524
Mortgage cos.	619	812	915
Mobile homes	772	1,280	1,367
S&Ls	163	190	195

Company	Jan. 4 Bid/Close	Chng. Prev. Month
BUILDING		
Alodex	8 1/4	+ 1/2
AVCO Community Devel. ^b	5 1/2	+ 1/2
American Urban Corp.	4 1/2	+ 1/2
Behring Corp. ^b	8 1/4	+ 1/2
Bramalea Cons. (Can.)	4 1/4	+ 1/2
Building Systems Inc.	24 3/4	+ 3/2
Capital Divers. (Can.) ^a	51	- .03
Centex Corp. ^c	32 1/4	+ 4 1/2
Christiana Cos. ^b	7	+ 1/2
Cons. Bldg. (Can.)	1.65	+ .10
Dev. Corp. Amer. ^b	31 3/4	+ 3/4
Dev. Int. Corp.	7	- 2 1/2
Edwards Indus.	7 1/2	+ 1/4
First Nat. Rty. ^b	1 1/4	+ 1/2
FPA Corp.	8 3/4	+ 3/2
Frouge Corp.	3	.....
*General Builders^b	5 1/2	+ 1/4
Gil Development	1	+ 1/2
Hallcraft Homes	23 1/4	- 1 1/4
Hoffman Rosner Corp.	11 1/4	+ 1/4
Hunt Building Mats	9 1/4	+ 1/2
*Kaufman & Broad^d	42 1/2	+ 3 1/4
Key Co. ^b	11 1/4	- 1/2
Leisure Technology ^b	21 1/4	- 1 1/4
McCarthy Co. ^b	5	- 1/4
McGrath Corp. ^d	7	+ 1
McKeon Const.	22 1/2	- 1/2
H. Miller & Sons	11 1/2	- 1 1/4
National Environment (Sproul Homes)	1 1/4	- 1
*Presidential Realty A^{md}	11 1/4	- 1/4
Presley Development ^b	43 1/2	- 10 1/2
Pulte Home Corp.	12 1/2	- 1 1/4
Robino-Ladd Co.	17	+ 1 1/2
Ryan Homes ^b	85	+ 9 1/2
Shappell Industries ^c	26 1/2	- 1 1/2
Sheller Corp. of America	23 3/4	+ 4 1/2
Standard Pacific ^b	6	+ 2 1/2
3-H Building Corp.	11	- 1/2
Universal House & Devel. ^{ab}	2 1/2	- 1/2
U.S. Financial ^c	35	- 3 1/4
U.S. Home Corp. ^c	25 1/2	- 7 1/2
*Jim Walter^c	37 1/2	+ 2 1/2
Washington Homes	20 1/2	- 1 1/2
*Del E. Webb^c	8 1/2	- 1 1/4
Western Orbis ^b	4 1/4	+ 1/4
Wyandotte Indus. ^b (First Hartford)	4 3/4	+ 1/2
SAVINGS & LOAN ASSNS.		
American Fin.	30 1/2	+ 3 1/2
Calif. Fin. ^c	7 1/2	+ 1/4
Empire Fin. ^b	13 1/2	+ 1 1/2
*Far West Fin.^c	11 1/2	+ 1 1/4
Fin. Corp. of Santa Barb. ^b	24 1/2	- 3

Company	Jan. 4 Bid/Close	Chng. Prev. Month
*Fin. Fed.^c	17 1/4	+ 1/4
*First Char. Fin.^c	27 1/2	- 1/2
First Lincoln Fin.	6 3/4	- 1/2
First S&L Shares ^b	20	+ 1/4
First Surety	4	+ 1/2
First West Fin.	1 1/2	.....
Gibraltar Fin. ^c	22	- 1 1/2
*Great West Fin.^c	28 1/2	+ 3 1/4
Hawthorne Fin.	15 1/2	+ 7/8
*Imperial Corp.^c	15 1/2	- 1 1/2
Trans-Coast Inv.	47 1/2	+ 1/2
Trans World Fin. ^c	11 1/2	- 1/2
Union Fin. Ind. ^{md}	11 1/2	+ 1/2
United Fin. Cal. ^c	10	+ 1/4
Wesco Fin. ^c	16 1/2	+ 1 1/2

MORTGAGE INV. TRUSTS		
Alison Mtg. ^b	26 1/4	- 3/8
American Century ^b	26 1/2	- 1/2
Arlon Property Invest. ^a	14 1/2	+ 3/4
Atico Mtg. ^b	22 1/2	+ 1/2
BankAmerica Rty.	27 1/4	+ 1 1/2
Bernett Mtg. Tr.	27 1/4	+ 1/4
Beneficial Standard Mtg. ^b	24 1/2	+ 1 1/2
Cameron Brown	32 1/2	+ 1 1/2
Capital Mortgage SBI	30 1/4	+ 1/2
Chase Manhattan ^c	53 1/2	+ 3/8
CI Mortgage Group ^c	23 1/4	+ 1/2
Citizens Mtg. ^b	13 1/4	+ 1/2
Citizens & So. Rty.	33	- 1 1/4
Cleve Trust Rty. Investors	20 1/2	+ 1
Colwell Mtg. Trust ^b	29 1/4	+ 1 1/4
Conn. General ^c	29 1/4	- 3/4
*Cont. Mtg. Investors^c	14 1/4	+ 3/4
Cousins Mtg. & Eq. Inv. ^b	24	- 3/4
Diversified Mtg. Inv. ^c	28 1/4	- 1/4
Equitable Life ^c	28 1/4	+ 1/4
Fidelco Growth Inv. ^b	37	+ 3 1/2
Fidelity Mtg. ^b	24	+ 1 1/2
First Memphis Realty	22 1/2	- 7/8
*First Mtg. Investors^c	26	+ 3/4
First of Denver ^b	18 1/4	+ 1/2
First Pennsylvania	27 1/2	+ 1 1/4
Franklin Realty ^b	9 1/2	+ 1/2
Fraser Mtg.	29	+ 3
Galbreath Mtg.	28 1/2	+ 2
Great Amer. Mtg.	30	+ 7/8
Guardian Mtg. ^b	41 1/2	- 1/2
Gulf Mtg. & Rty. ^b	18 1/4	- 3/8
Heitman Mtg. Investors	13 1/4	- 3/4
Hubbard R. E. Investments ^c	21 1/2	- 1/2
Larwin Mtg. ^b	28 1/4	- 3/8
Lincoln Mtg.	9	+ 1/2
Mass Mutual Mtg. & Realty ^c	29 1/2	+ 1 1/2
Median Mtg. Investors	14 1/4	- 1/2
Medical Mtg.	27 1/4	- 1 1/4
Mony Mtg. Inv. ^c	13 1/4	.....
Mortgage Trust of Amer. ^c	24 1/4	- 3/8
North Amer. Mtg. Inv. ^c	32 1/2	+ 1 1/2
Northwestern Mutual Life Mtg. & Rty. ^c	25 1/4	+ 1/2
PNB Mtg. & Rty. Investors ^b	24 1/2	- 1 1/4
Palomar Mtg. Inv. ^b	16 1/2	+ 3/4
Penn. R. E. Inv. Tr. ^{md}	12 1/4	+ 1 1/2
Realty Income Tr. ^b	15 1/4	- 1/2
Republic Mtg. ^b	19 1/4	+ 7/8
B. F. Saul, R.E.I.T.	21 1/2	+ 2 1/4
Security Mtg. Investors ^b	16 1/2	- 1 1/2
Stadium Realty Tr.	10 1/2	.....
State Mutual SBI ^b	23 1/2	+ 1/2
Sutro Mtg. ^b	20 1/2	+ 1/2
Unionamerica Mtg. & Eq. ^b	28 1/2	- 1 1/2
U.S. Realty Invest. ^b	19	+ 1 1/4
Wachovia Realty Inc. ^c	32 1/4	+ 1/2
Wells Fargo Mtg.	21 1/2	.....

MORTGAGE BANKERS		
Charler Co. ^b	32	+ 2 1/2
CMI Investment Corp. ^b	48 1/2	+ 3 1/2
*Colwell^c	22	+ 2 1/2
Cont. Illinois Rty. ^c	33 1/4	+ 1/2
Excel Investment	13 1/4	+ 1/2
Fed. Nat. Mtg. Assn. ^c	103 1/2	+ 26 1/2
First Mtg. Ins. Co.	15	+ 2 1/2
*Lomas & Net. Fin.^c	21	+ 2 1/2
*MGIC Inves. Corp.^c	89 1/2	+ 12 1/2
Midwestern Fin. ^b	22 1/2	+ 4 1/2
Mtg. Associates	38 1/4	+ 8 1/4
Palomar Fin. ^b	11	+ 3/4
UPI Corp. ^b (United Imp. & Inv.)	23 1/4	+ 7/8
LAND DEVELOPERS		
All-State Properties	1 1/2	+ 1/2
American Land	.02	.....
*AMREP Corp.^b	19 1/4	- 3 1/2
Arvida Corp.	11 1/4	+ 2 1/4
Atlantic Imp.	4 1/4	+ 3/4
Canaverl Int. ^b	4 1/4	- 3/8
Cavanagh Communities	6 1/2	+ 7/8
Crawford Corp.	4 1/2	+ 1/4
*Deltona Corp.^b	27 1/4	+ 1 1/2
Disc. Inc.	2 1/2	+ 1/2
Don the Beachcomber Ent. (Stanley Land)	4 1/4	- 1/4
*Gen. Developer^c	26	+ 1
Gulf State Land and Ind. ^b	3 1/2	+ 3/8
*Holly Corp.^b	1 1/4	.....
Horizon Corp. ^c	44 1/2	- 2 1/2
Land Resources	3 1/2	+ 1/4
Major Realty	10 1/4	+ 7/8
*McCulloch Oil^b	28 1/4	+ 3 1/2
Southern Rty. & Util. ^{md}	4 1/2	- 1/2

MOBILE HOMES & MODULES		
Conchemco ^b	17 1/2	+ 1/2
*Champion Home Bldrs.^b	41	+ 3 1/4
Commodore Corp. ^b	13 1/2	+ 1/4
De Rose Industries ^b	9 1/2	+ 1 1/4
*Fleetwood^b	35 1/2	+ 4 1/2
Golden West Mobile Homes ^b	15 1/2	+ 1/2

Company	Jan. 4 Bid/Close	Chng. Prev. Month
*Guerdon^b	28 1/4	- 1 1/2
Mobile Americana	9 1/2	+ 1 1/2
Mobile Home Ind. ^b	35 1/4	+ 7 1/2
Monarch Ind.	5 1/2	.....
*Redman Indus.^c	25 1/4	+ 1 1/2
Rex-Noreco ^b	18 1/4	+ 4 1/2
*Skyline^c	53 1/4	+ 3 1/4
Town & Country Mobile ^b	9 1/2	- 1/2
Triangle Mobile	8 1/4	- 1 1/2
Zimmer Homes ^b	15 1/2	+ 1/4

DIVERSIFIED COMPANIES		
Amer. Cyanamid ^c	33 1/4	+ 3 1/2
Amer. Standard (Wm. Lyon)	15 1/4	+ 2 1/2
Arlon Realty & Develop. ^{ra}	16 1/4	+ 3 1/4
AVCO Corp. ^c	17 1/4	+ 2 1/2
Bethlehem Steel ^c	29 1/2	+ 3 1/4
Boise Cascade ^c	18 1/2	+ 1 1/2
CNA Financial (Larwin) ^c (Oceanic Prop.)	24 1/2	+ 1/2
Castle & Cooke ^c	16 1/2	+ 2 1/4
CBS (Klingbell) ^c	46 1/4	+ 1
Christiana Securities	122	- 6 1/2
Citizens Financial ^b	13 1/2	+ 2 1/2
City Investing ^c (Sterling Forest)	19 1/4	+ 1 1/2
Corning Glass ^c	184 1/4	- 3 1/2
Cousins Properties	25 1/2	+ 1 1/2
Dreyfus Corp. ^c (Bert Smokler)	26	+ 1 1/4
Evans Products ^c	25 1/2	- 3/8
Ferro Corp. ^c	31 1/2	+ 1 1/2
First Gen. Resources	3 1/2	.....
Fischback & More ^c	43 1/2	+ 5 1/2
Forest City Ent. ^b	24 1/4	+ 2
Fruehauf Corp. ^c	39 1/2	+ 4 1/2
Fuqua Indus. ^c	22 1/2	+ 3 1/4
Georgia Pacific ^c	44	- 1
Glasrock Products ^b	6 1/2	+ 1/2
Great Southwest Corp.	1 1/2	- 1/4
Gulf Oil (Gulf Reston) ^c	28 1/2	+ 2 1/2
INA Corp. (M. J. Brock) ^c	48 1/4	- 2 1/2
Inland Steel ^c (Scholz)	33 1/4	+ 6 1/2
International Basic Econ.	6 1/2	+ 3/4
International Paper ^c	34 1/4	+ 2 1/2
Internat. Tel. & Tel. ^c (Levitt)	57 1/2	+ 2 1/2
Investors Funding ^b	9 1/2	+ 1/2
Killearn Properties ^b	12 1/4	- 1/2
Leroy Corp. ^c	2 1/2	+ 1/2
Ludlow Corp. ^c	30	+ 3 1/4
Monogram Industries ^c	12 1/2	+ 1
Occidental Petroleum ^c (Occ. Pet. Land & Dev.)	12 1/2	+ 1 1/2
Pacific Coast Prop. ^b	3 1/4	+ 1/2
Perini Corp. ^c	5 1/2	+ 1/2
Philip Morris ^c	71	+ 9 1/2
Prosher Corp. ^c	3	+ 1/4
Rouse Co.	28 1/2	+ 2 1/2
Santa Anita Consol. (Robt. H. Grant Corp.)	28 1/4	+ 3 1/2
Sayre & Fisher ^{md}	2 1/2	.....
Tishman Realty ^c	21 1/4	+ 3 1/2
Titan Group Inc.	3 1/2	+ 1/2
UGI Corp. ^c	23 1/4	+ 3 1/4
Uris Bldg. ^c	16 1/2	+ 1
U.S. Ply-Champion ^c (Lewers & Cooke)	30	+ 3/4
Weil McLain ^b	26	+ 2 1/4
Westinghouse ^{cp} (Coral Ridge Prop.)	45 1/4	+ 2 1/2
Weyerhaeuser ^c	44 1/2	- 7/8
(Weyer. Real Est. Co.)	.....	.....
Whittaker (Vector Corp.) ^c	10 1/2	+ 1 1/2
Wicks Corp. ^c	50 1/2	+ 4 1/2

BUILDING PRODUCTS		
Alcan Aluminum ^c	19 1/2	+ 2 1/4
(Alcan Design Homes)	.....	.....
Ameron ^c	15 1/2	+ 2 1/4
Automated Bldg. Comp. ^b	13	+ 7/8
Bird & Son	83 1/2	+ 6
Brooks Scanlon	20 1/4	+ 2 1/2
Ceco Corp. ^c	29 1/2	+ 1 1/4
Certain-teed ^c	46 1/2	+ 3 1/4
Clow	22	+ 1 1/2
Colonial Sand ^b	9 1/2	+ 1 1/2
Consolidated Rock	26 1/2	+ 1 1/2
Flintkote Co. ^c	31 1/2	+ 2 1/2
Florida Steel ^c	26 1/2	- 1/2
GAF Corp. ^c	23 1/2	+ 1 1/2
Glen Gery Corp. ^b	8 1/4	+ 1 1/4
Interpace ^c	29 1/4	- 1 1/2
Johns Manville ^c	40	+ 2 1/2
Keene Corp.	11 1/4	+ 3 1/2
Kirsch Co. ^c	43 1/2	+ 7 1/2
Knappe & Vogt	58	+ 1 1/2
LCA Corp. ^{md}	66 1/4	+ 9 1/2
Leigh Products ^b	21 1/2	+ 4 1/2
Lowe's Companies	63 1/4	+ 1 1/2
Masonite Corp. ^c	62 1/2	+ 1/4
Mouldings Inc. ^c	7	+ 1/2
National Gypsum ^c	19 1/2	+ 7/8

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ANOTHER NORRIS INDUSTRIES BUILDING PRODUCT

Swords into plowshares: Lefrak would turn aerospace industry to homebuilding

Remember World War II, when defense plants hummed twenty-four hours a day, and mother tied her hair in a bandanna and marched to the airplane factory's assembly line?

The apartment magnate Samuel J. Lefrak thinks that scene should be repeated—but with a difference. Instead of airplanes, the assembly lines should turn out houses—28-million units over the next ten years—and women, unskilled workers and unemployed aerospace personnel should be trained to build them.

Natural alliance. "I want to propose a wedding between aerospace and housing," the forthright New Yorker declared. "Let's ask President Nixon to perform the ceremony at the White House. Maybe we could persuade George Meany, that sweet-tempered pillar of American Labor, to be best man. And may I suggest that a fitting dowry would be a massive transfusion of funds for existing federal housing programs."

Lefrak sees the alliance as a natural trade-off: aerospace would teach housing about systems, new materials, procurement and how to get research and development appropriations from Congress; housing would help aerospace develop new jobs for its idle workmen and production facilities.

Rebuilding cities. Recalling the Manhattan Project, which marshalled the nation's scientific power and resources to create the atomic bomb, Lefrak called for a Manhattan Project II to rebuild the cities. He also called for a federal building code.

Lefrak made the project sound easy:

The aerospace factories are scattered all over the country, near major urban areas, and they have production space and capability, staging areas, access to transportation and the ability to produce vast structures quickly. These factories should be utilized 24 hours a day, rain or shine, to do 80% of the construction work at the same time as the site is being prepared.

Costs would be cut through massive purchasing, greater productivity and sub-assembling components and whole



BUILDER LEFRAK
'I... propose a wedding'

rooms so that the main assembly lines could move quickly. And employees would enjoy something new in the building trades—a guaranteed annual wage.

G.M. of housing. But aerospace would need strong partners in the housing industry—with national builders or groups of strong regional builders—and with financial institutions that have capital and vision.

"Out of this may well come that General Motors of housing that everyone has been looking for for so long," said Lefrak, adding, "I want to serve notice right now that Lefrak organization aims to reach for that title."

To Washington. Lefrak announced his plan in a speech at Pratt Institute in Brooklyn, N.Y., and a copy of the speech, together with signatures and comments of Pratt students and professors, was then sent to President Nixon. Lefrak has also presented his plan to Senators Henry Jackson, Edmund Muskie, William Proxmire and Jacob Javits, to Commerce Secretary Maurice Stans and to Arthur Burns, chairman of the Federal Reserve Board.

Already in housing. A number of aerospace companies, such as Boeing, Grumman, TRW and G.E., have already built some test housing under HUD's Operation Breakthrough.

Boeing has gone one step farther; it has sent crews throughout the country to look for areas that might lend themselves to community development programs.

Boeing is also developing 100,000 acres near Bordman, Ore. The company estimates that the community will have a population of 5,000 to 10,000 in 10 to 15 years.

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Tappan offers you innovative products that capture a prospect's imagination. Products like the electronic oven. The wall vac. The trash compactor.

Tappan offers choice. From one source, you can get just about anything you need for a great kitchen. Just look at our latest national consumer ad (at right) and you'll see what we mean.

Plus, national advertising. Tappan promotes to consumers with a strong campaign that builds enthusiastic acceptance of Tappan products in the homes you build.

Give your prospects a choice—between Tappan and any other brand. And take advantage of the Tappan competitive edge.

For the name of your nearest Tappan Distributor, dial toll-free 800-243-6000 (in Conn. 800-882-6500) or write Tappan.

TAPPAN

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TAPPAN

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Chances are you didn't have too much to say about the appliances you're using now. They came with the house or apartment . . . they were the only brand offered by the store that had your account . . . they were all the budget could afford . . . or your choice was limited by any number of other reasons.

Life styles change. Now you have an opportunity to buy the appliances you've always wanted. *Now you have a choice.*

Look at many different brands. Get all the facts. Ask questions. If the store you're in handles only one brand, go to a retailer who offers you a choice of brands. If the salesman you're talking to wants to talk about only one brand, go to another salesman.

The important thing is that this time the decision is completely up to you. We hope your choice is Tappan. But even more importantly, we want you to have the opportunity to make a choice.

For the name of your nearest Tappan dealer, dial **800-243-6000** (in Conn. 800-882-6500) or write Tappan, 250 Wayne St., Mansfield, O. 44902

If it's something for the kitchen, your Tappan dealer probably sells it. Tappan offers 1. gas ranges, electric ranges 2. electronic ranges 3. dishwashers 4. compactors 5. refrigerators 6. disposers 7. home climate control products 8. central vacuuming systems and 9. cabinets. Check them for appearance, features, performance, and price.

And remember that when you buy any new Tappan product, you receive a one year warranty from Tappan that guarantees free replacement of defective parts including the cost of labor by **Tappan's National Certified Service Organization.**

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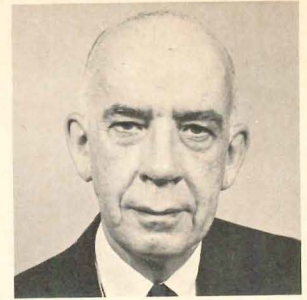
Dervan retiring as VA loan chief

John M. Dervan, director of the Veterans Administration's loan guaranty service for the last ten years, has retired, and no successor has been named.

Career. Dervan, who rose from Army private to lieutenant colonel on the War Department's general staff in World War II, joined the VA in 1945 as a legal advisor. He became director in 1961.

He is a graduate of Boston University and the Boston University law school and a member of the Massachusetts Bar. He is building a retirement summer home in Penobscot Bay, Me., but will spend winters in Washington.

Program's success. Dervan recalls that critics predicted catastrophic results when Congress made the 100% no-down-



VA'S DERVAN
A record of success

payment mortgage available to veterans after World War II. He is particularly proud of the fact that in the program's 26 years, 49% of the mortgages have been paid off and only 3.4% have been foreclosed.

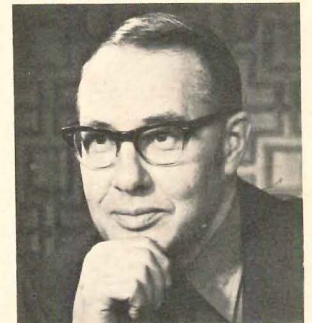
On October 31, 1971, the VA had 7.9 million mortgages outstanding with a value of \$84.7 billion.

Former grid pro heads Toronto realty board

Len Cassidy, 52, has succeeded Joseph P. Abela as president of the 6,000-member Toronto Real Estate Board.

Cassidy, a former end for the Toronto Argonaut pro football team, is a broker in residential property.

The Toronto board set a record in 1971 on sales of \$496 million compared with \$394 million in 1970. The average price of homes sold through the board's listings, which account for 50% to 55% of Toronto's realty transactions, has risen



EX-ARGONAUT CASSIDY
Heads 6,000 Realtors

from \$21,360 in 1966 to \$30,426 in 1971.

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and brokers
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Women builders—950 gather in Atlanta

Elected at the 16th annual convention of the National Association of Women in Construction were: (front, l. to r.) Betty M. Lawson, Durham, N.C., first vice president; Janith J. Gould, Seattle, Wash., president-elect; Bonnie M. Granger, Kansas City, Mo., president; (back, l. to r.) Martha J. Heath, Atlanta,

Ga., third vice president; Lura W. Bates, Jackson, Miss., secretary; Kathryn L. Clay, Santa Ana, Calif., second vice president; and Marie Oeltjen, Colorado Springs, Colo., treasurer. Marie Marshall of Chattanooga, Tenn. is the outgoing president of the 5,600-member association.

massive study of 184,122 sales leads from House & Home readers confirms that sales action in housing & light construction comes from every segment of the industry

To identify all the important people in housing and light construction who are active in the selection of building products, materials, and equipment, House & Home followed up 184,122 advertising inquiries from its reader service cards and received a 31% return involving 57,327 inquiries.

Survey questions were designed to determine what, if any, "sales actions" were taken as a result of readers having seen advertisements in several issues of House & Home.

For the purpose of this study, "sales actions"—that is, those actions bringing products and

prospects closer to a sale—have been defined as *specifying, recommending, approving, purchasing, and still investigating further.*

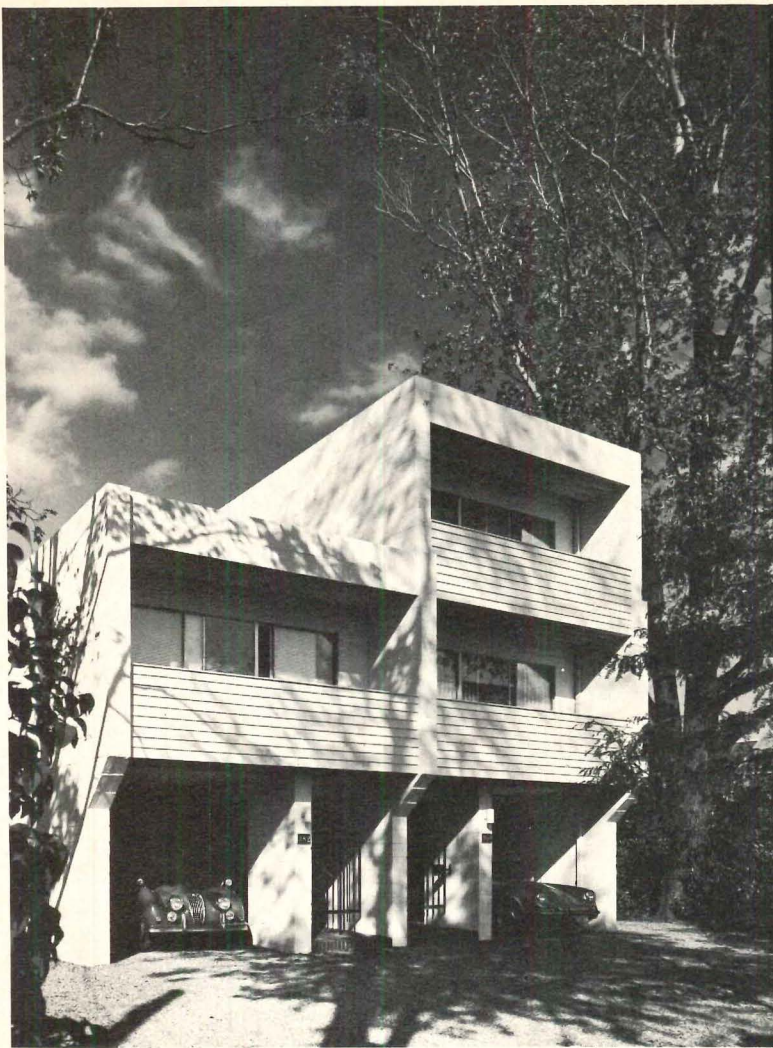
For each sales action, of course, the unknown multiplier is the number of residential or other units for which the sales action was taken. For example, a single *purchase* mention could involve a 10 house development, a 280-unit apartment complex, or anything in-between.

Results indicate in the clearest possible manner that sales action comes from every segment of the industry, as shown in the table below.

Industry Classification	Literature Requested by Readers Surveyed	Literature Requested by Survey Respondents	Literature Received by Survey Respondents	SALES ACTIONS TRIGGERED BY ADVERTISING					Total Sales Actions	Sales Actions as % of Literature Received
				Specified Product	Recommended Product	Approved Product	Purchased Product	Still Investigating Product		
Architects & Designers	37,609	13,073	11,584	1,940	1,917	1,321	397	3,039	8,614	74.4%
Builders & Contractors	78,279	23,001	19,939	1,781	2,251	2,069	2,518	6,604	15,223	76.3%
Commercial/Industrial	3,269	1,071	934	74	105	54	57	334	624	66.8%
Engineers	5,908	2,254	1,959	151	237	118	105	627	1,238	63.2%
Financial	2,976	1,165	1,051	57	115	48	57	364	641	61.0%
Government	3,643	1,645	1,432	69	146	87	60	411	773	54.0%
Realty	7,616	2,514	2,262	152	249	207	147	850	1,605	71.0%
Retail Dealers	3,689	889	752	80	92	64	97	221	554	73.7%
Subcontractors	6,520	1,811	1,574	132	178	141	203	490	1,144	72.7%
Wholesale Distributors	2,071	658	564	32	64	40	40	189	365	64.7%
Others not identifying self	32,542	9,246	8,013	555	870	560	434	2,536	4,955	61.8%
TOTAL	184,122	57,327	50,064	5,023	6,224	4,709	4,115	15,665	35,736	71.4%

McGraw-Hill's marketing and management publication
of housing and light construction **House & Home**
330 West 42nd Street, New York, N.Y. 10036

PHOTOS: BALTHAZAR KORAB



Solid railings on balconies (photo, above) permitted the use of glass to the floor—opening up the bedrooms, while screening them from the street.

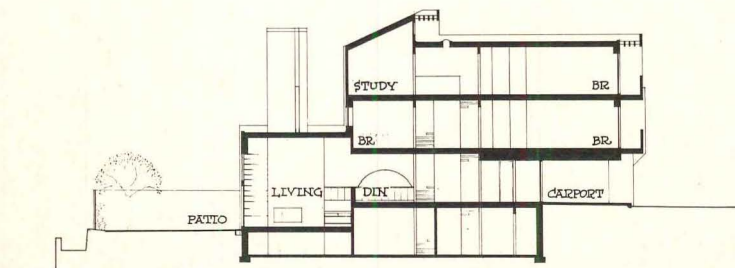
A two-family retreat in a hodge-podge urban neighborhood

Zoning in the area is mixed—commercial, institutional and single-family. So two problems faced the architect/builder: first, the Birmingham, Mich. lot was too expensive (\$20,000) to make a single-family home feasible; second, interior and exterior living areas had to be isolated from their busy surroundings.

The land-cost problem was solved by putting a pair of row-

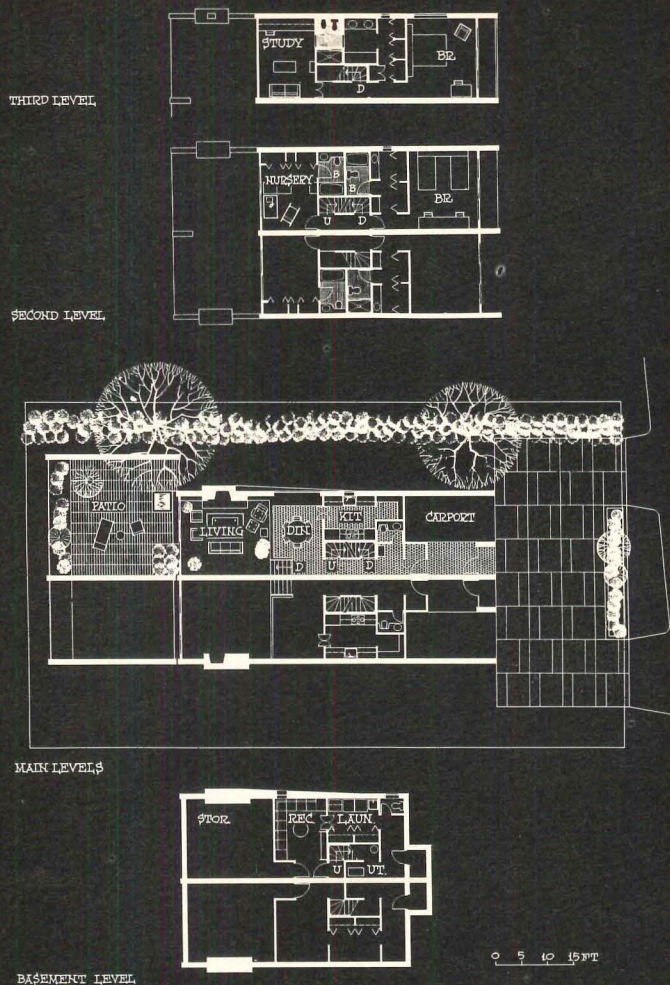
type units—three stories for the owner, two stories for a tenant—on the 60'x120' lot. What about privacy? At the front upper stories are cantilevered so they are 20' closer to the street than the ground floor. At the back top levels are recessed to cut off views of rear yards. Owner-architect-builder: Carl Luckenbach of O'Dell, Hewlett & Luckenbach.

TO PAGE 42



Upper stories are cantilevered to provide privacy from street and to form carports (section and photo, above).

Step-down living room (right), seen here from rear yard, leads up to dining room and kitchen (plans, above).



New Heavy Duty Builders' Sawcats are all muscle and bite

Announcing a new trio of rugged Builders' Sawcats, packed with the kind of Black & Decker power that gives top performance on the toughest jobs. Whether you choose the 6½", 7¼" or 8" Sawcat, you'll find it's lighter in weight and more compact. Pick up one of these well-balanced Sawcats and see how easy it is to

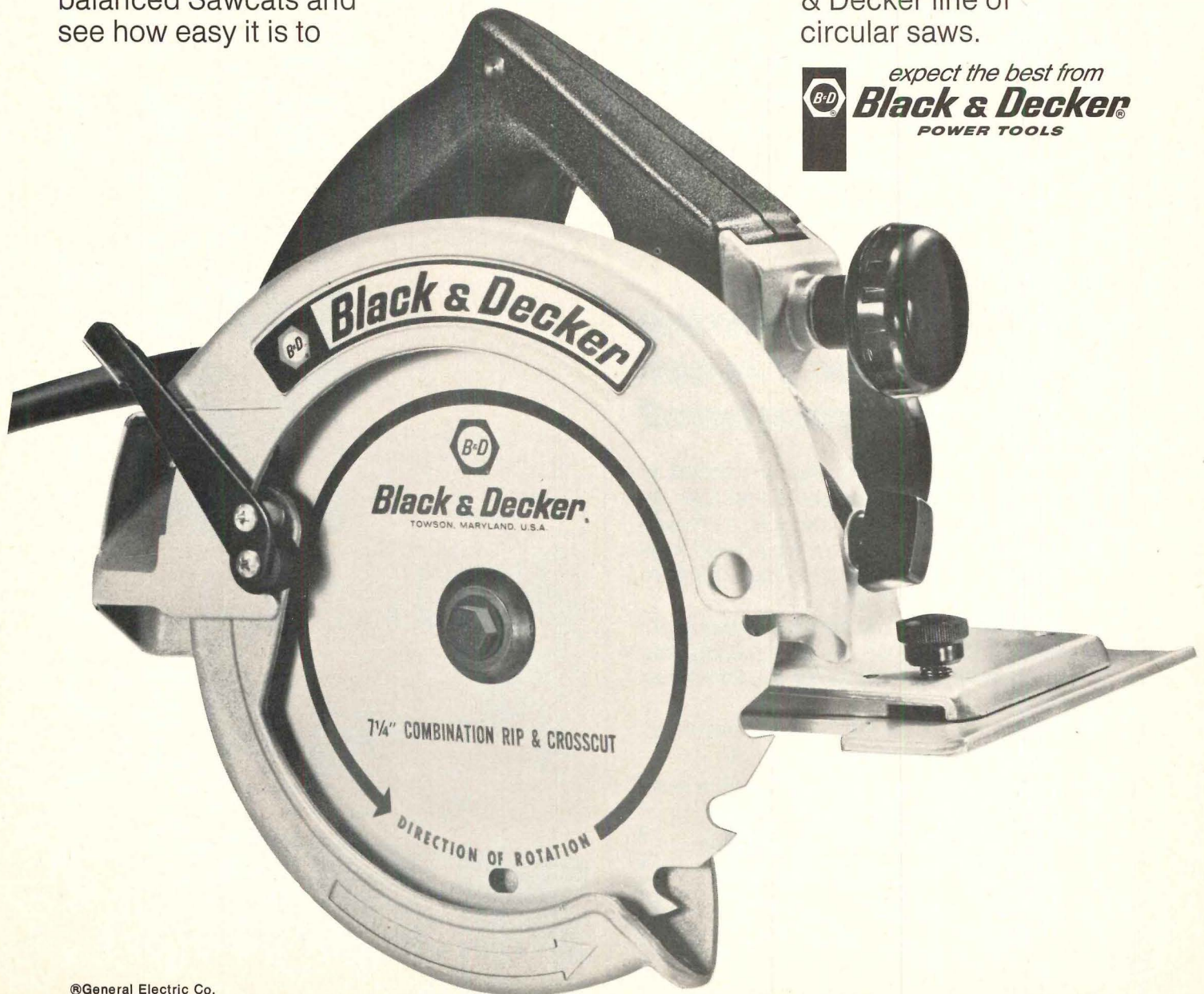
handle; how much more you can cut without tiring. Note the vertical adjusting shoe; the comfortable LEXAN® handle that stays in the same upright position whatever the depth of cut. Each double-insulated Builders' Sawcat is also equipped

with a Black & Decker SUPERSHARP combination blade. It's Black & Decker's way of giving you more bite per buck.

Don't make another cut until you've talked with your distributor about his special Spring values on Heavy Duty Builders' Sawcats and the complete Black & Decker line of circular saws.



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Modular housing is already one of the fastest growing industries in America. By 1980 it will be a \$20 billion industry, one of the largest in the economy in terms of dollar sales and aggregate profits. Its growth will have a profound effect on all participants in the housing industry including conventional builders and material suppliers as well as the investing and consuming public.

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H-1

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CIRCLE 42 ON READER SERVICE CARD

PHOTOS: BALTHAZAR KORAB



Two-level living room (above), seen here from dining area, receives plenty of natural light from window wall. Storage unit above record player in right corner is extension of built-in dining-room storage cabinet.



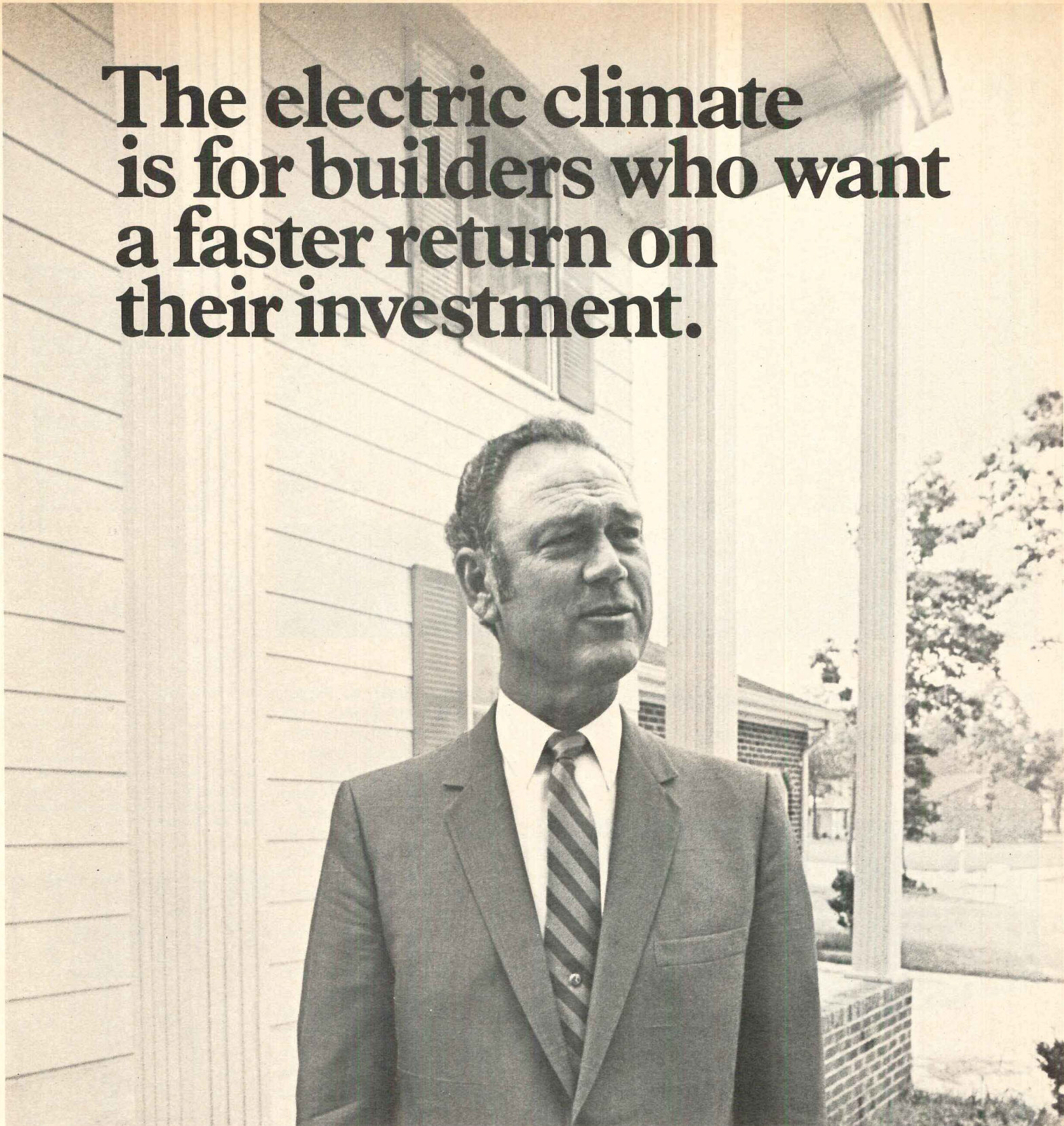
Dining area (above right) and kitchen (below right) are tied together by built-in storage in same cabinetry design and by a slate floor. A further tie-in: the dining table top has been matched with the kitchen butcher block counter tops.



Master bedroom suite (below) in owner's unit has low slit window at bed-level. Most light is available from a full window wall that opens to the third-level deck (see plans, page 40).



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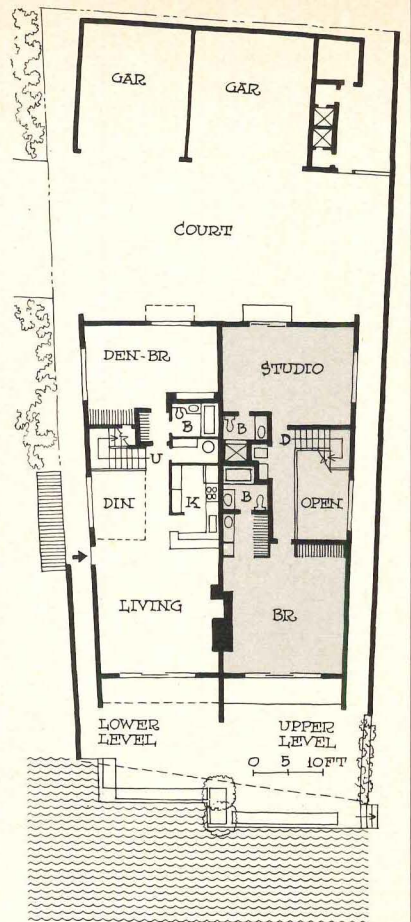
Remodeled duplex has two-story units with balconies that take advantage of the waterfront views.

A high-cost renovation capitalizes on a high-priced waterfront site

PHOTOS: JULIUS SHULMAN



Living room, seen from two-level dining area, opens to patio and waterfront. Original fireplaces, slabs, footings, heating and plumbing systems were retained.

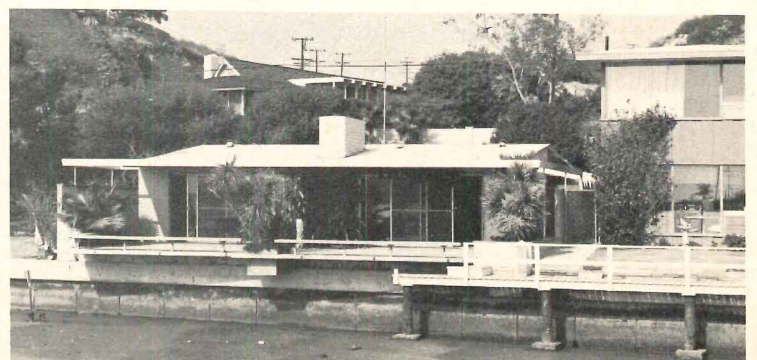
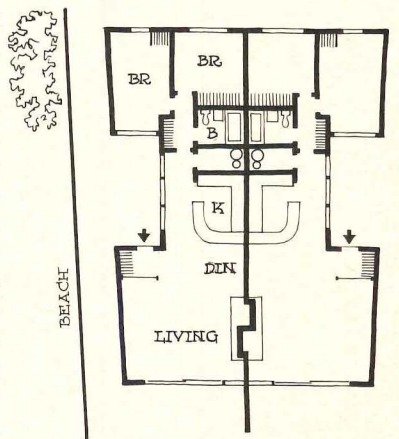


New units (plans above) provide 2,140 sq. ft. of living space for each owner. (Plans show only one of the two mirror units; unshaded plan is first floor, shaded plan, second floor.) Original plan (below) wasted valuable space on recessed entrance patios; and a solid property line wall ran the length of the house on the left, blocking views.

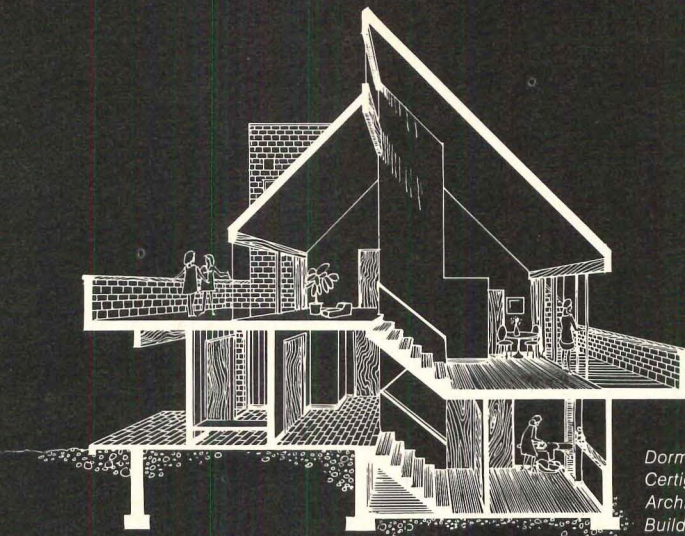
Spending \$56,000 to upgrade this 18-year-old duplex made economic sense because its site, in Newport Beach, Calif., is valued at roughly \$140,000.

The original units were small—only 1,000 sq. ft. And a property-line wall blocked one view of Newport Harbor and cut the house off from a utility easement that's used as a beach (plan, below, right).

Square footage was more than doubled by adding a second story and turning old entry patios into new dining areas with two-story glass walls. And the unit at the left was opened to the side view by removing part of the property-line wall. The remodeling was designed by the owner of one unit—architect Herbert E. Riley/Bissell/Associates; Glenn C. Brockman was the contractor.



Original duplex, a one-story house built in 1954, provided only minimal living space and failed to make the most of views of water and landscaped areas.



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CIRCLE 45 ON READER SERVICE CARD



NAHB's new president looks beyond 1972—and sees a strong market for the next decade

Stanley Waranch used to be a disc jockey. Radio listeners knew him as Stan-the-record-man. But in December 1948 his new father-in-law persuaded him to try home building for a year—and he's been at it ever since.

In fact he was so intrigued by the business that it wasn't long before he became active in industry association service. During 1952-53 he was the first president of the Tidewater Association of Home Builders. Other posts during the past years include the presidency of both the Virginia State Assn. and the Builders and Contractors Exchange. In 1970 he was appointed to Federal Home Loan Bank Advisory Board and he also is a member of an advisory committee to Federal National Mortgage Assn. Last month he became president of NAHB.

Through the last 23 years the firm of Bauxbaum & Waranch has expanded from home building and land development in the Norfolk-Virginia Beach area into insurance and general contracting. And Waranch and his partners, brother Seeman and brother-in-law Stuart H. Buxbaum, have tried their hands at a variety of projects. For example they built the Air Force's first high-rise family units in the continental United States—at Langley Air Force Base. As to his most unusual endeavor, Stanley Waranch looks to four sewage treatment plants which the company built and operates as a public utility at Virginia Beach.

NAHB's new president is married to the former Carol Buxbaum. They have four daughters.

At any period in history the state of the nation's economy has a unique and primary impact on the ability of American families to purchase or rent the housing they need. The ease with which families and builders can obtain financing at reasonable cost largely determines whether the housing industry can meet the nation's needs and goals.

Last year, the savings rate in thrift institutions was high, mortgage money was readily available and pressure on interest rates eased. One result was a record-breaking year—more than 2-million units.

As we begin 1972, housing momentum is strong, the savings flow, healthy and the outlook is for a further decline in mortgage rates.

So, most prognosticators look for an even better year—in the way of the numbers—than in 1971. We agree with this forecast; 1972 should be a good year for home and apartment building.

Nevertheless, the problems encountered in 1971 are still with us, with no instant magical solution on the horizon. We're still fighting the battles of codes, zoning, labor costs and no-growth movements among communities. We're still trying to get sense and reasonableness into safety regulations for the light residential construction industry, and we're still making a big effort to improve the quality of life.

So perhaps for purpose of this discussion it would be pertinent to look beyond the immediate horizon and, since the legs of time won't be broken, look towards our market in the years ahead.

For the remainder of this decade time and population growth seem to be working in favor of the housing market so far as customers are concerned.

The bulk of the population increase in the seventies will be in two age groups: those between 20 and 30—prime rental prospects—and those between 30 and 40—first home buyers. The first group should increase by about 9.2 million; the second, by about 8.9 million. Growth in the latter group marks a decided shift from the sixties when there was a net loss of almost 2-million persons in the 30- to 40-year bracket.

During that same period there was an increase of about 9-million people in the 20- to 30-year old group, one of the biggest reasons for the soaring rise in apartment construction in the decade.

Now, in this forthcoming ten-year period, we find a growing market for both rental units and single-family homes.

Of those entering the period in their lives when they are most likely to purchase homes, and usually for the first time, the biggest increase (about 50%) will occur in the 30 to 34 age group. They are likely targets for \$25,000 to \$30,000 homes.

The more mature group (those between 35 and 40 who will be seeking more expensive homes, say of \$30,000 to \$40,000) will increase by about 20%.

Although population numbers will be working for the housing industry, attitudes among these age groups will determine in large measure the extent of the industry's success during 1972 and in coming years.

The problems of environmental pollution, of the quality of life and of the quality of products weigh heavily on the minds of these consumers. Our industry must demonstrate unmistakably that it is as concerned as any single consumer or group and is doing something about these problems.

While satisfying consumer requirements is a continuing requisite for the industry,

there are other more immediate concerns. Not the least of these are the regulations prescribed under the Occupational Safety and Health Act of 1970 which became effective last September 27, for "light residential construction."

These extensive regulations were primarily written with heavy construction in mind. But they have been applied to light residential construction with little practical consideration being given to the different work practices in our industry.

Here are a few representative examples:

- Each employer is responsible for the development of a fire protection program and must provide equipment which we consider excessive.

- Regulations for scaffolding are extensive; all scaffolds more than 6' above ground or floor, must have 42"-high guard rails with median rail and toe boards on all open sides. In many cases this rule would apply to scaffolding over 4' high. The use of shore pump jacks or lean-to scaffolding is prohibited.

- Where the eave of a roof is more than 10' above the ground and the roof slope greater than 3:12, a catch platform must be installed below the work area of the roof. It should extend 2' beyond the roof and have standard 42"-high railing. An alternate requirement is for workers to wear safety belts attached to life lines.

The industry naturally is concerned with the protection of its workers on any jobs. But the regulations, as now promulgated, certainly need a more reasonable application in the light residential area.

Educating employees to their responsibilities under these rules is a real problem. So, NAHB has distributed "Construction Safety Guidelines" to assist members in responding to the requirements.

NAHB also has prepared an extensive educational program consisting of a series of slide-sound tape programs and illustrated home manuals, which are available to HBAs and their members.

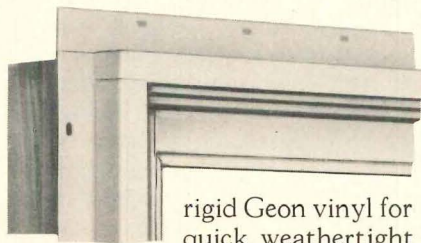
Because the Department of Labor has not recognized the different work practices and lesser hazards of the light residential construction industry, NAHB has funded a program for the development of consensus standards for residential construction safety. Upon completion by the American National Standards Institute, they will be submitted to the Department of Labor as a consensus standard provided for under the 1970 act. At that time we would fully expect that they would be accepted in lieu of the present regulations.



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JOE CLARK

The whole mortgage game will be easier and simpler for builders—and perhaps as early as next year

Both new secondary markets for conventional mortgages programs are about to begin trading. One is sponsored by the Federal Home Loan Mortgage Corp. (FHLMC or Freddy Mac), one by the Federal National Mortgage Assn. (FNMA, or Fanny May).

These programs won't make a great difference this year because the supply of deposits in savings institutions, private industry's providers of mortgage money, is still so very abundant.

But in the long run, and perhaps as early as 1973, the quasi-government exchanges should have a major impact on housing.

Here are some of the changes they'll bring:

- Builder financing will become more competitive, nationally and locally.
- The money market for builders will become less fragmented, more homogenous. There will be more one-stop sources for all builder's financing requirements.
- Loan rates and terms, for both interim and end loans, will be more nearly uniform across the country.
- Restrictive state usury laws will be repealed in many, perhaps most states.
- There will be fewer localized tight-money situations.
- Year-to-year fluctuations in local housing activity should be lessened.
- The impact on housing of a nationwide credit crunch should be at least slightly ameliorated.
- And finally, FHA's role is likely to be greatly diminished except in the financing of subsidized or social-purpose housing.

Markets at work. We see all these consequences growing out of a few simple provisions. The most important are:

Savings institutions that are members of the FHLMC—and this includes some savings and commercial banks as well as nearly all savings & loans—may now originate conventional loans for resale to FHLMC, to FNMA or to other member institutions. The S&Ls are being encouraged to establish servicing corporations as subsidiaries to service loans sold out-of state.

FNMA will purchase conventional loans from mortgage bankers or other originators in the same manner, and with the same type of auction proceeding, as it now purchases FHA and VA loans.

- FHLMC will also purchase conventional apartment loans.
- The uniform pattern will be introduced to the conventional loan market. All conventional loans sold to FNMA will have

uniform provisions and appraisal procedures. All conventional loans sold to FHLMC will have uniform provisions—although not the same as FNMA's—and essentially uniform appraisal procedures with some local flexibility. The importance of this development should not be underrated. It was the uniform mortgage instrument as much as the insurance feature that made possible the national market in FHA and VA loans. In time, we should see a substantial *private* secondary market in conventional loans, perhaps larger than FNMA and FHLMC together.

The FHLMC will buy conventional mortgages up to 95% of value and FNMA, up to 90% (with insurance above 75%). For both agencies the limit for such low downpayment mortgages is \$33,000. The FHLMC will buy apartment loans up to 80% of value, with insurance for the top 5%.

An exit for FHA? One obvious effect of all these changes is that the differences between FHA financing and conventional financing will narrow, until eventually the question may be raised: why have FHA altogether except for subsidized or social-purpose housing?

The new programs (in combination with FHLMC's recent program for supporting FHA loan originations by S&L's) will wipe out the differentiations in local markets.

In the past, builders knew that their primary source for an FHA loan was probably a local mortgage banker; for a conventional loan, a local S&L. At any given time some S&Ls might be tight for cash while others had cash piling up and were pricing loans accordingly. Some S&Ls were large enough to handle the entire volume of a large builder; some were not.

Now both S&Ls and mortgage bankers will be sources for both kinds of loans.

In the construction loan market it will now be possible, at least in theory, for S&Ls to commit their entire savings flow to construction lending and to sell all their end loans to FHLMC. Mortgage bankers will be forced to stay competitive.

At last—rate uniformity. Regional differences in conventional mortgage rates have been shrinking in recent years. Currently the spread in rates between the cheapest and the dearest local market is about half a percentage point. Only a few years ago that would have been a full percentage point. Now the secondary market for conventional loans will iron out most of what differences remain. The rate

for all local markets will be set by the national investors, whether FNMA, FHLMC or the insurance companies. It will be difficult to obtain a premium above this in even the hottest local market and the most cash-burdened lender in the dullest market will not be satisfied with less.

The same pressures of the national market will make it difficult for states to retain unrealistic usury law ceilings, just as today there are only three or four states which have ceilings which apply to FHA-VA loans. (In turn, this should make it more acceptable to consider variable-interest mortgages, which are probably the final answer to the costly spasms of tight and loose in the mortgage market.)

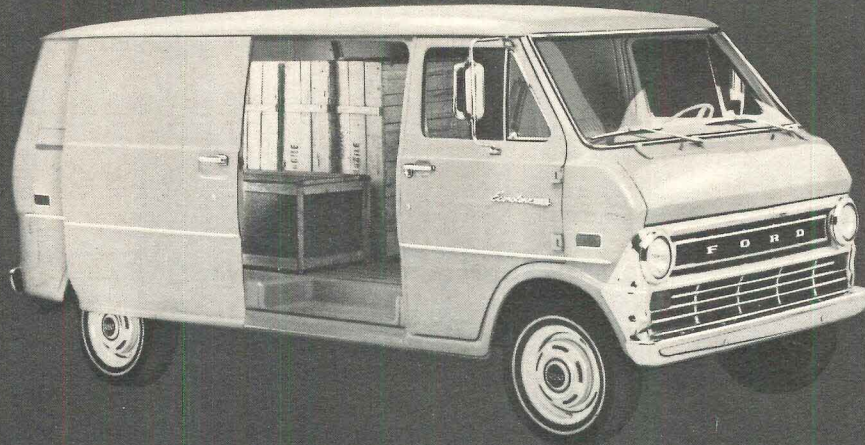
We learned in 1966 and 1969 that a tight-money crisis does not impinge uniformly throughout the country. Lenders in some markets run dry sooner or more completely or recover more slowly than those in other markets. A national secondary market should help to even the impact.

But differences in local lending patterns aren't limited to tight-money periods. In ordinary times (not counting this past year, when every market was flush with money), of two markets 100 miles apart and with comparable economies, one may be building up to the limits of demand and beyond, the other may be marking time—depending on their local lending patterns. A national secondary market in which local institutions may be either sellers or buyers should, on the one hand, reduce the temptation to the cash-rich to overlend and, on the other hand, encourage the cash-poor lender.

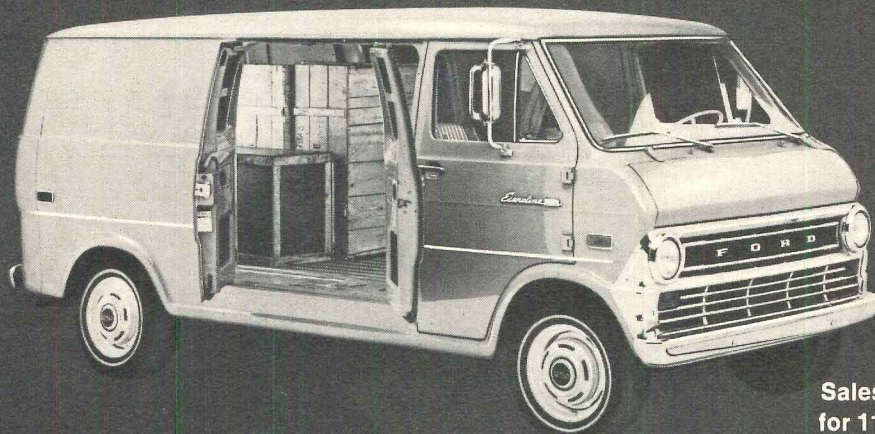
In the event of another nationwide credit crunch, how will the new secondary markets function? In principle, at least, they should be able to funnel money into local markets when local savers cannot. The ability of a government sponsored secondary market to supply money for housing is limited only by its ability to raise funds in the open markets and its willingness to accept temporary losses, as FNMA demonstrated in 1969 and 1970. I don't argue that such fund-raising in competition with private lenders is, all things considered, good for the housing industry; in fact I have serious doubts that it is. But there is no questioning that it can be made to work. FHA-VA homebuilders sailed through the 1969-70 crisis with much less disruption of normal activities, if any, than conventional builders, who had no such friend in high places.

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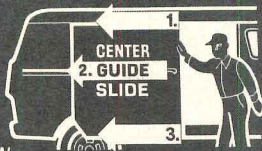


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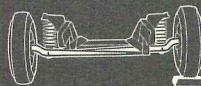
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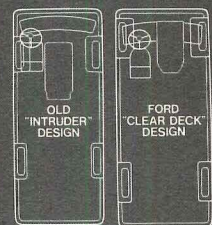
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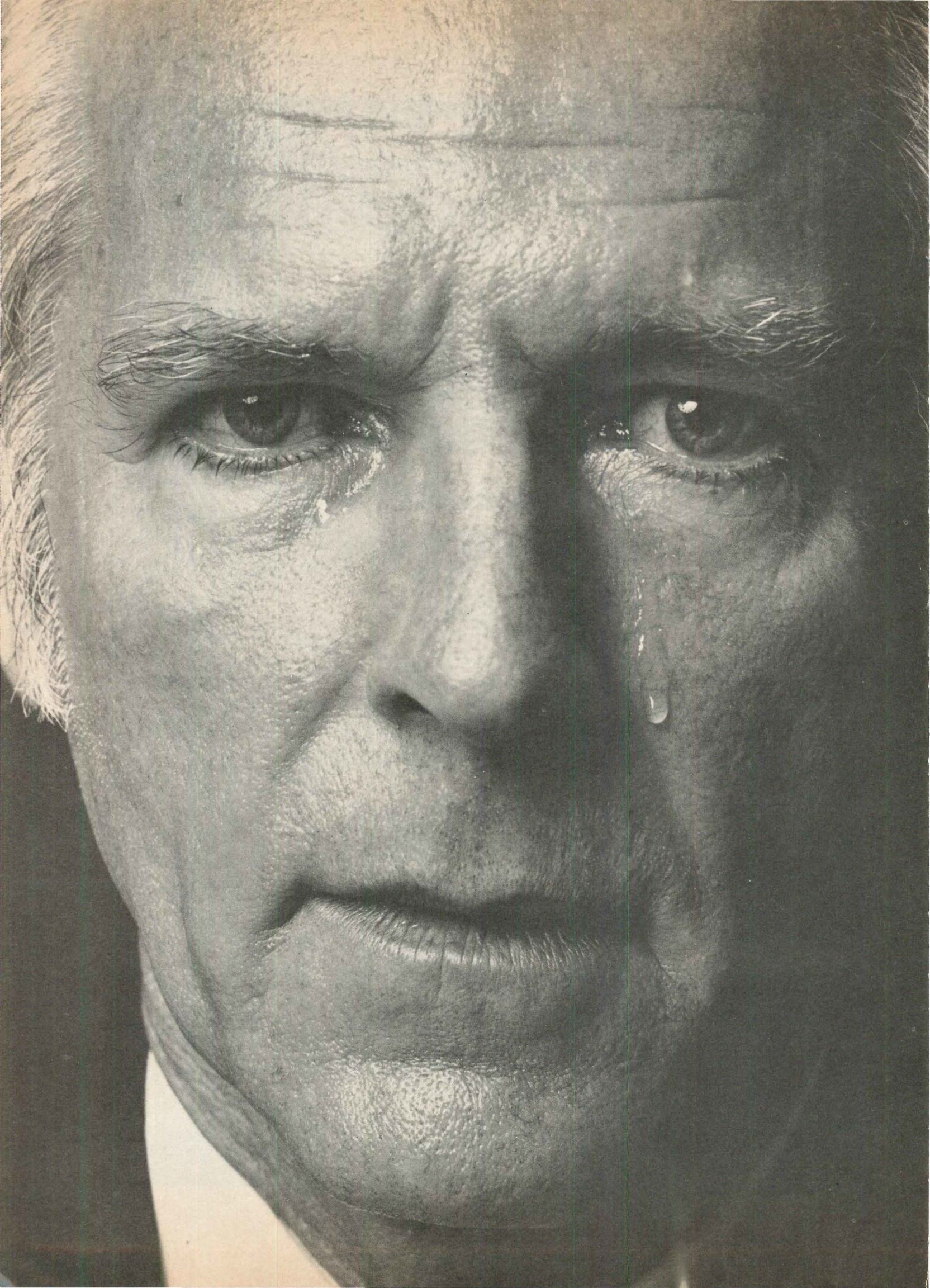
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"Our courts are giving zoning ordinances another going-over. Some recent decisions could portend a whole new ballgame"

Three recent decisions by enlightened, far-seeing state courts are of special significance to home builders and municipal officials concerned with housing. They have changed the rules of the zoning game so that it favors people rather than statistics. Each has been the product of a courageous judge with a real vision of the future, supported apparently by very able counsel. The decisions are of interest to builders, certainly, because of the economic questions involved. They are more important to Americans generally. Unfortunately, space limits preclude an extended discussion of these cases, but the highlights are enough to show the very important implications.

In a case known as *Molino*, Judge W. Orvyl Schalick of the Superior Court of New Jersey had before him a challenge to a rezoning ordinance enacted by the Borough of Glassboro, N.J. To anyone knowledgeable about building, it was obvious that the rezoning ordinance was passed for the purpose of running up the price of an apartment development which was partially completed at the time the ordinance was enacted. The Borough of Glassboro dictated that at least 70% of the units had to be one-bedroom, that no more than 25% have two bedrooms and that no more than 5% have three bedrooms. Other provisions called for at least eight sq. ft. of swimming pool or tennis court space for every 1,000 sq. ft. of living space, central air conditioning, a master TV antenna and a garbage disposal in each unit. (How they justified this as being related to the "health, safety and welfare" is difficult to see.) There were other requirements considerably altering the original plan.

The town attempted to justify its action on the basis of the fact that it was exercising its right to upgrade the zoning ordinance. As the court framed the question, "they [the town] are urging judicial sanction to be given to their efforts to avoid an increase of tax burden."

The court struck down the argument in well-phrased language. It said that there was a right to live as a family and not be subject

to limitation on the number of members of the family by a zoning ordinance. The court said that such barriers would offend the equal protection clause of the Constitution. It branded such types of ordinances as "exclusionary" and further said that "zoning is not a boundless license to structure a municipality." The court went on to say that "Mr. Average Man" who is employed in the town and who spends his money in the business district should not be barred from living there by the creation of zoning ordinances that run the rental figures up so high that he cannot afford to live there with his family.

In another New Jersey case involving the Township of Madison and the State of New Jersey as defendants (the *Oakwood* case), Judge Furman of the Superior Court (Middlesex County) struck down a new zoning ordinance enacted by Madison Township. Like the Glassboro ordinance, Madison's restricted apartments to two-bedroom units, and even those were limited to 20% of the total number of units in any apartment development. The ordinance went even further, restricting the number to 200 in any given year. The Township wanted to put a moratorium on all kinds of residential construction in order to "catch its breath"—a common syndrome among small-town officials.

While the court went out of its way not to strike down "fiscal zoning" which permits towns to zone for better ratables, it did put a severe dent in the concept. The court said that while pursuing a valid zoning purpose, the town could not ignore local and regional housing needs. It alluded to the fact that the town should accept its fair share of the obligation to meet the housing needs of the greater region; and it held that the prime purpose of zoning was to promote a reasonably balanced community in accordance with the general welfare. It found that the ordinance—the typical one-to-an-acre minimum—was not defensible on any one of the grounds advanced by the town. In so holding, the court struck down the entire zoning ordinance of the Township of Madison and declared it constitutionally indefensible. The lesson here is that the municipalities ought to learn to take in their fair share of the burden.

One of the most significant opinions to come down from a state court in recent years (and ranking with the *Girsh* and *Kit Mar* opinions written by Justice Samuel J.

Roberts of the Pennsylvania Supreme Court (H&H, Jan., '71) was written by Justice Sullivan of the Supreme Court of California and is known as *Serrano*. The opinion contains so much that it is almost impossible to review it in all of the detail it deserves.

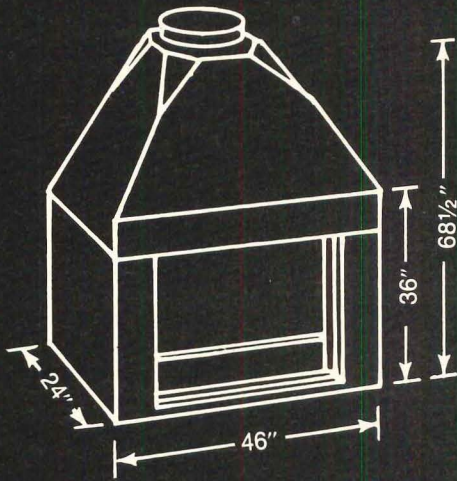
Basically, the matter was brought before the California Supreme Court by a group of taxpayers who stated that the entire system of school financing in California was constitutionally defective.

By way of background, it is important to note that California finances its school taxes in much the same way as other jurisdictions in the United States; that is, by local and real estate taxation. Because of the zoning practices in the various communities, there are highly differing tax ratables from which to draw the school tax.

The court examined the entire system of school taxation and, inferentially, its land and zoning practices. It found that the manner in which school taxes were collected—which depended in turn upon land-use practices—tended to produce a system where wildly different amounts of money were obtained from certain school districts and spent on school children in those districts as compared to other school districts. The court went through a painstaking analysis of these sources of school revenue and the manner in which that money was disbursed. It noted that in Baldwin Park, the assessed valuation for a school child was only \$4,706, while in Pasadena it was \$13,706, and in Beverly Hills it ran to a high of \$50,885.

The court looked into the California equalization program, which makes grants in aid to the various school districts along a per capita and flat basis, and analyzed its effect. Even taking those figures into account, it found the entire system produced a grossly and unequal amount of money spent in certain school districts as compared to others. The court then took a very "facts of life" approach to the entire problem, holding that the net effect of all of this did

TO PAGE 54



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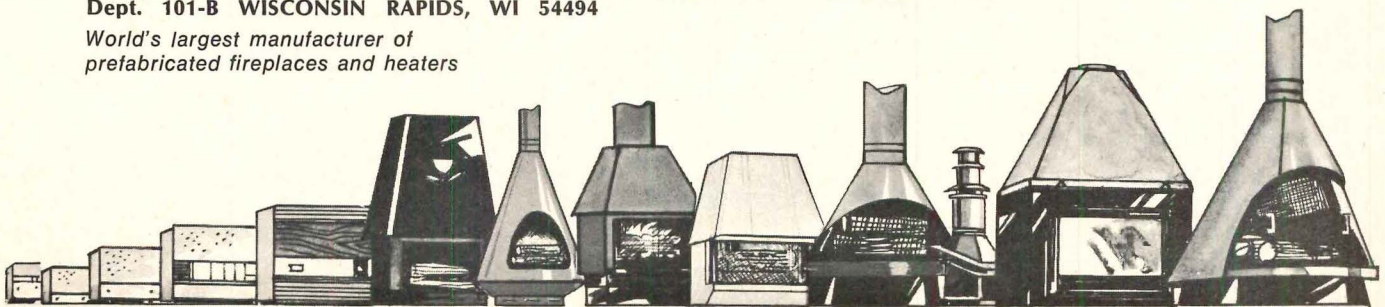
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December 17, 1971

U. S. Home Corporation

729,662 Shares

Common Stock
(Par Value \$.10 Per Share)

Price \$25.375 Per Share

\$20,000,000

5½% Convertible Subordinated Debentures due 1996

Price 100%

(Plus accrued interest from December 1, 1971 to date of delivery and payment.)

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Incorporated

THE LEGAL SCENE

FROM PAGE 52

violence to the concept of equal education and that the system may well be offensive to the 14th Amendment of the Constitution and the parallel clause in the California Constitution.

The rationale of the decision was that education is the means for upward social mobility in America, and that where a scheme of taxation was so broadly discriminatory to people living in certain districts it might well violate those constitutional provisions. On this basis, the court sent the entire matter back for trial to determine whether or not this was true. It is impossible to know what was in the court's mind at this juncture, but it may well be that the court considered the case in this manner because it would have to go back down to the trial court and come up again. This would take about a year-and-a-half and thus give everybody time to make the necessary adjustments.

All of this is extremely relevant to zoning and planning practices of communities across the country because they have consistently looked to the school tax base as an excuse to either encourage or discourage certain types of residential building. It is well-known that communities have not discriminated against single-family housing on large lots even though it generates almost as much of a net tax loss as multi-family dwellings do.

Nevertheless, they have consistently used the school tax base as an argument against moderate- and low-income housing. The *Serrano* case may compel the complete rethinking of the process and the result may be that this type of tax problem is lifted from the local level to the state level and thus the major excuse used by the snob-zoned communities will be struck down.

The author's experience with this type of thing leads him to believe that the school tax base is more of an excuse than a fact. But it is consistently used because of its political appeal. More frequently, towns simply want to zone out undesirables and they would zone out everyone if they could. The *Serrano* case stands for the proposition that in the future towns may not be able to get away with it. Frankly, it is about time. ■



The best dressed homes wear Bird Solid Vinyl Siding.

Low maintenance is a powerful selling point to the second-time home buyer.

Who wants to paint every few years? Who wants to spend all that money? Or waste all that time doing it himself? That's why Bird Solid Vinyl Siding is so appealing - especially to the second-time and third-time buyers who've had it with costly, laborious upkeep.

Bird solid vinyl never needs paint. Never peels, blisters, flakes, or rots like wood. Can't dent, corrode, pit or make noise like metal. Insulates beautifully, deadens street noises and can't attract electricity or support fire

And Bird has it all - the one complete vinyl product line:

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House & Home - Feb.

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Company _____

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Available
in all standard
heights plus new
42" model.



Substrate panels,
full $\frac{5}{8}$ " thick.
Covered both sides
with tough, good
looking polyester
laminates.

15" deep units
have handy door
storage plus add-
ed shelf depth.
Store more!



Self-closing
drawers, larger
than any others
on the market.

Handsome
hardware with open
back plate. Want
color? Add accents!

$\frac{5}{8}$ " thick doors
have self-closing
adjustable hinges.

Single door base cabinets have easy
gliding slide-out shelves.

Our new Spacemakers do what they're named for, and more.

Our new Spacemaker cabinet line can make extra space in any kitchen. The trick is in the new 15"-deep wall cabinets included in the standard line and available in a complete range of sizes. And in the new 42"-high wall cabinet available in both 12" and 15" depths. All extra-deep cabinets have 12" shelves. Optional door-mounted shelves are also available. The large bottom storage area holds over-size serving dishes. And single-door wall cabinets have adjustable shelves.

Even the Spacemaker drawers make extra space because of center-mounted slides and the absence of cabinet front frames. They're the largest in the cabinet industry.

The "more" in Spacemakers

Spacemakers also feature a unique con-



struction. Wall cabinets (including doors) are made completely of $\frac{5}{8}$ " panels, joined by glued dowels. Base cabinets are the same except for a hardboard back that reduces weight.

Spacemakers are finished inside and out. *Both* sides of every panel and shelf are permanently laminated with warm pecan wood-grain polyester sheets. So, Spacemakers are beautiful and easy to clean, inside and out.

Because tops *and* bottoms are finished, Spacemaker wall cabinets can be inverted . . . there are no rights or lefts.

All these features add up to a cabinet as revolutionary as the Shrink

Pack that protects it. This unique shipping package is waterproof, corner-cushioned with Polystyrene blocks, see-through and easy to discard. So it's sure to save you time and money.

See the new Spacemakers at your Yorktowne distributor. Or write for more information. You could become a better space-maker. Colonial Products Co., Red Lion, Pennsylvania 17356, manufacturers of better kitchen cabinets since 1936.

Yorktowne
KITCHENS

Ceramic tile. Or how buyers walk right into a trade-up.



Terra Vitra® foyer



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Murray quarry tile kitchen



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Write and we'll flood you with ceramic tile ideas. On how to stop a buyer in his tracks with American Olean's new designs. Shapes. Textures. And the new colored problem-free grouts.

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And be sure to say it's American Olean. Our full color ads have been pre-selling your buyers. So they'll know it's a quality product when you mention our name.

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Anywhere, everywhere - ceramic tile. It's the natural thing to use.™

JOB MARKET—a new service from House & Home may be the answer to your problem if you are looking for a marketing VP, construction superintendent, estimator, president, project manager, designer, purchasing agent, architect, sales manager or even a new job for yourself.

JOB MARKET

Positions Available

SALES MANAGER: Unusual growth opportunity with major condominium developer in Florida. Salary plus incentive. Send detailed resume in confidence to Box 135 JOB MARKET House & Home.

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PURCHASING AGENT: Contract negotiator needed by leading single-family builder. Salary open with good benefits and top growth potential for right individual. Resume to Box 136 JOB MARKET House & Home.

CONTROLLER: Executive level position available for outstanding individual whose background includes familiarity with construction and development financing. Knowledge of equipment leasing is desirable. Please send resume and salary requirements to Box 137 JOB MARKET House & Home.

People Available

ARCHITECT: Family health problem forces relocation to dry, warm climate, preferably Arizona. Background includes extensive low-rise apartment design experience. Greatest strength is balancing good design and cost control. References available Box 138 JOB MARKET House & Home.

MARKETING V.P.: Professional with 12 years experience in both single family and apartment new ch

CONSTRUCTION SUPERINTENDENT: 17 years experience. Currently responsible for complete construction and development of \$80 million 400-unit garden apartment. Available in 3 months. Box 140 JOB MARKET House & Home

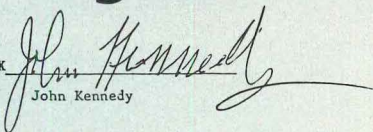
With over 400,000 readers active in every phase of housing and light construction, House & Home now offers employers low cost access to a unique pool of management, supervisory and creative talent to fill job openings.

For the man looking for a new position himself, Job Market offers low cost access to those builder firms accounting for over 90% of the single-family and apartment starts as well as access to thousands of architectural, engineering, commercial, financial,

realty, subcontracting and distributing firms with an important stake in housing.

The cost is \$2.00 per word with a minimum of 25 words. Your complete address or use of a private box number counts as 5 words. Typewritten text is needed the first of the month preceding the date of the desired issue. Payment in full must accompany your order. Send to JOB MARKET, House & Home, 330 West 42nd Street, New York, N.Y. 10036.

"Leisure World wanted a quality faucet that needed a minimum of maintenance. So I got them 50,000 Delta faucets!"

x 
John Kennedy

Kennedy Mechanical Contractors

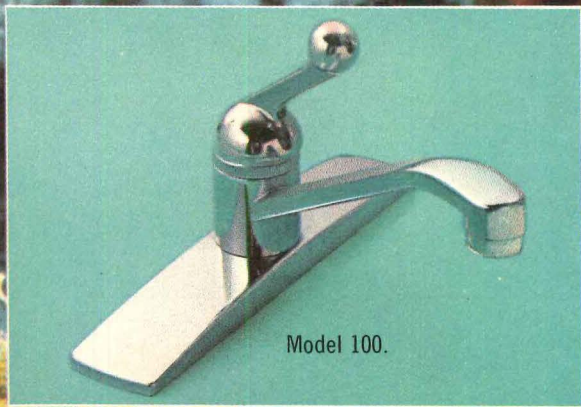
Leisure World is just that. A beautiful retirement community in California that's become a new living concept in America. And for the maintenance crew and the plumbing contractor, it's even more of a leisure world. Because during the 7-year history of Leisure World, they've hardly had to repair or replace any of the community's 50,000 Delta faucets.

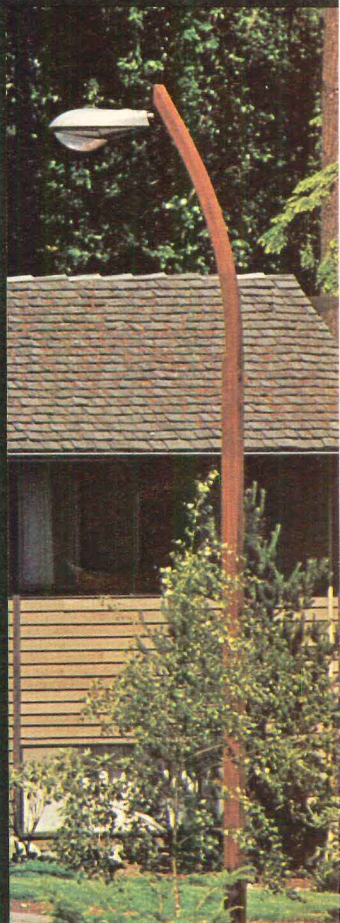
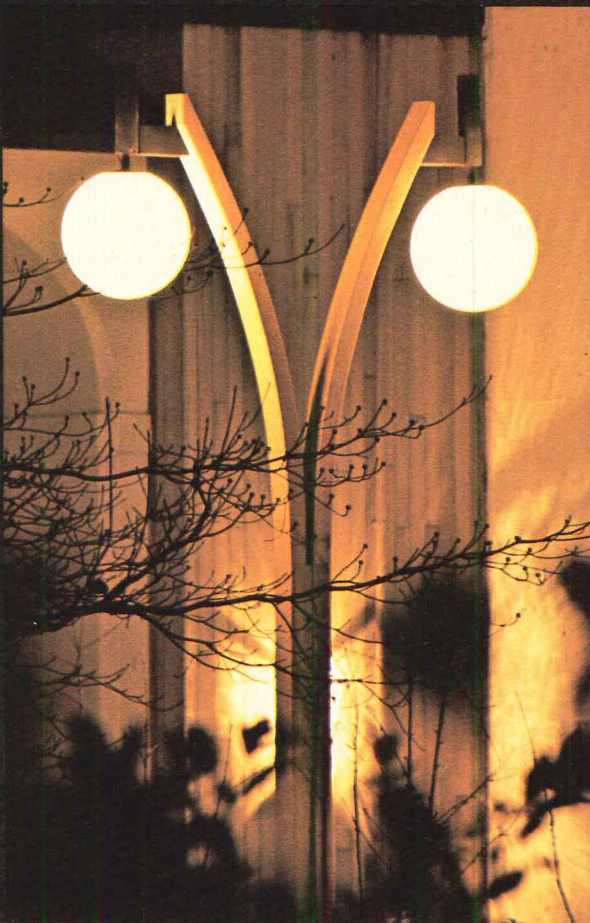
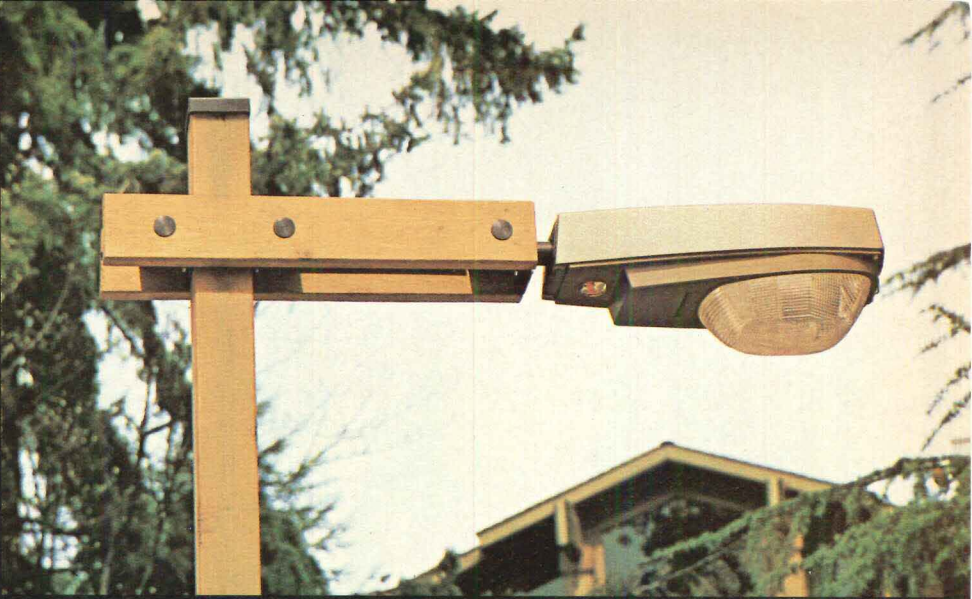
But beside its great maintenance record, Delta single handle faucets were chosen because of their ease of operation. And because they look as good as they work.

As John Kennedy said, "Seven years ago when Ross Cortese, the developer of Leisure World, awarded me the project, he said he wanted a Class A job. And with Delta faucets that's just what he got."

We can tell you even more about the full line of trouble-free Delta faucets. Just write Delta Faucet Co., a Division of Masco Corporation, Greensburg, Indiana 47240.

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Simply beautiful.**





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It's a very historic bathroom—**Mount Vernon** by Williams.

An excellent example of the sales-influencing beauty of Williams bathroom furniture.

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Mount Vernon is just one of many Williams styles in stock at your distributor for immediate delivery.

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Ends and means

Just because there's a lot of criticism of the major subsidized-housing programs, let's not lose sight of the ultimate goal

More than a year ago we pointed out the long-range opportunities for builders in the two chief mortgage subsidy programs, FHA Sections 235 and 236. But we also raised a couple of very basic questions:

First of all, what will happen when the first inevitable scandals break?

Second, how long will Congress tolerate the cumulative subsidy bill?

Well, the first scandals have broken—notably in Detroit but also in other cities (*see p. 9*), and congressional investigators are digging into the mess. For the most part the Detroit scandals involve rehabbed housing. But elsewhere, there have also been charges of substandard construction and bad design.

The upshot: corner cutting by a few builders, loose practices by a few lenders and lax procedures by a few FHA offices have given the whole subsidy effort a black eye.

Mushrooming subsidy costs are another matter. Interest subsidies continue for the life of each mortgage, and costs pile on top of costs as more and more housing is built. At some point the bill may become unbearable to Congress—perhaps as early as this year.

Nor are abuse of the government programs and the mushrooming subsidy bill the only problems. Critics also point out that HUD seems to be more interested in using subsidies to fuel up overall housing production than to provide housing for the low-income families who need it most. As a result, some subsidized housing is going to people who don't really need it—upwardly mobile young couples, for example.

There is certainly considerable validity to all this criticism of the subsidy programs and the way they are run. But we don't think that's the important question.

Basically, the idea of housing subsidies is sound. The plain fact is that more and more Americans can't afford something as fundamental to human welfare as adequate shelter. So they must be subsidized in some form.

And let's not get hung up on the idea that there's something un-American or immoral about federal subsidies. For years the government has subsidized other industries, and some rich ones at that—oil, trucking and agriculture, for example. If the government can afford to bail out a Lockheed Aircraft, it can certainly put decent roofs over the heads of ill-housed families.

Furthermore, this is one case where discharging a moral obligation is also good business. Housing led the national economy in 1971, and roughly 25% of that year's housing starts—more than 500,000 units—were government subsidized. Without those 500,000 units, it would have been just another so-so year for builders.

The present programs may need major revamping. Maybe, as some cities are saying, they should even be junked. But subsidies in some form or another are absolutely necessary.

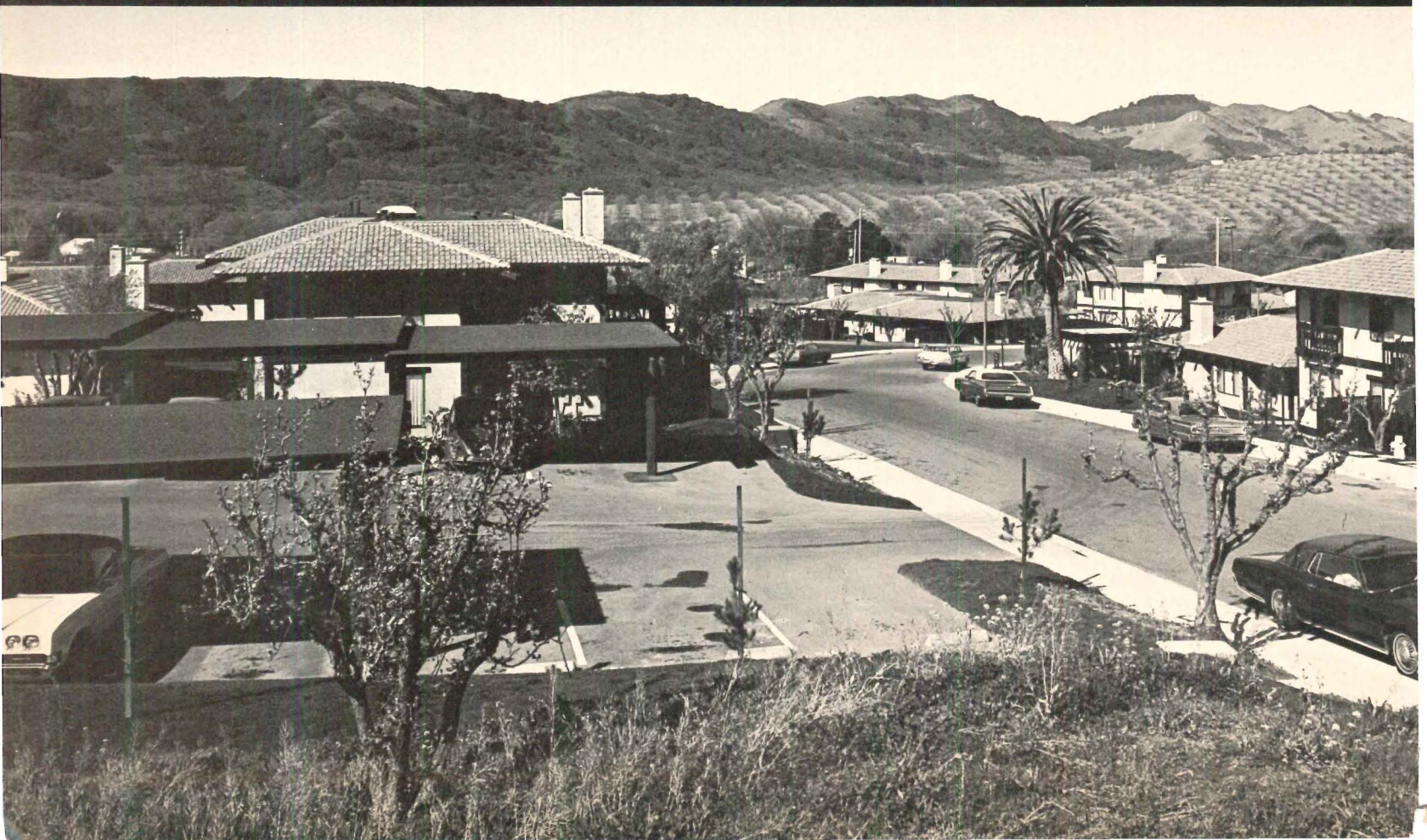
One possible form, now being tested by HUD, is a cash allowance which would let families shop for housing in the free market (*see p. 4*). Builders probably won't like the idea because it takes them out of the direct line of subsidies. But if it works, it will stimulate sales and rentals all through the free market. What's more, it could cut out a lot of red tape and bypass local resistance to concentrations of low-income housing.

In a word then, there's plenty of room for argument over the means to the end. But we can see no logical argument against the end itself.

JOHN F. GOLDSMITH

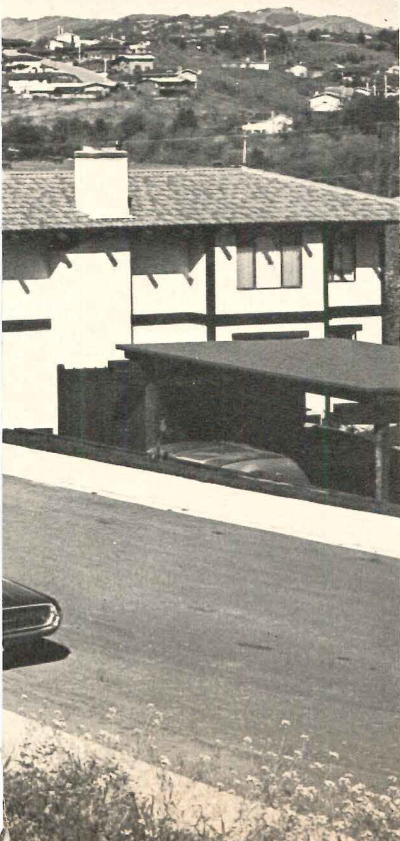


Here's something new for the mom-and-pop



Site plan of first section at Villa Moraga delineates five distinct neighborhood clusters. Shaded areas indicate two-story buildings; unshaded areas, one-story buildings. Initials denote types of units (see floor plans, overleaf). Covered parking areas on perimeter of neighborhoods are reached by landscaped paths that run across individual property lines.

investor



RICCO-MAZZUCHI-KAPLER PHOTOGRAPHY

The mom-and-pop investor has always represented a small, but solid market—buying anything from a duplex to a small apartment building, living in one part and realizing income from the rest.

This project in Moraga, Calif. lets mom and pop go a couple of steps further. They have a choice of investing in two-, three- or four-unit buildings. They invest in not just a building, but a planned community with a wide range of amenities. And thanks to these amenities they get a package that is unusually attractive to prospective tenants—most of them empty nesters.

The package has proven highly successful. Each of its 18 buildings was sold long before completion.

The typical investor-buyer is himself an empty nester with a small amount to invest and some very special requirements. He wants to invest in something he can feel and touch, rather than become part of a syndicate. He wants income and the tax advantages of owning income-producing property.

As for his way of life, he wants to escape from the burden of a large house. But he still wants to own his own home and, significantly, the land under it.

To tap this market, a partnership made up of architect Robert Goetz (of Goetz, Hallenbeck & Goetze Inc.), builder Stephen E. Block and real estate broker Clark Wallace, created Villa Moraga. It's best described as a cross between townhouses and apartments, with a touch of condominium thrown in.

Investor-buyers take title to the land under their buildings, just as they would if this were a conventional townhouse or single-family project. But public areas—gardens, pools, laundry facilities, etc.—are jointly owned through a building owners' association to which each of the 18 building owners belong. Each owner has $\frac{1}{18}$ interest in the public areas. Common parking lots are also jointly owned, but space is assigned with building titles.

The Villa Moraga Assn., a non-profit corporation, was set up under California's planned development law to manage and maintain the projects. Owners have one vote for each of their units (e.g., triplex owners have three votes).

The association has established gardening and maintenance responsibilities for

individual buildings as well as common areas. It pays property taxes on commonly-owned areas and insures them against damage and liability. A resident manager is employed by the association.

Despite its hybrid nature, the project encountered few problems. For one thing the developers knew they had a waiting market. They knew that a lot of would-be investors had wanted to buy small buildings in other large rental projects in the area. But these projects were being sold to large investment groups, and the small investors didn't want to be swallowed up in such groups where they wouldn't know who was running the operation.

Also, financing was no problem. Because buyers were ready and waiting for the buildings to be completed, only construction loans were needed. And since there were no take-outs, there was no interim-financing-point problem—a big break because the project came in when money was very tight.

Having a waiting list of buyers helped in another way. The developers got a big plug from newspapers when the project was announced, so there were no large advertising or promotion expenses. In fact, there were more prospects than buildings—important since tight money knocked out some early prospects.

Despite the project's success there are caveats for anyone contemplating a similar development. The main one is that this type of project probably will only work in an upper middle-class area that has predominantly large single-family homes owned by couples of middle years whose children have grown and left home. These couples—be they investor-buyers or their tenants—want to stay where they've lived most of their lives, near family and friends.

The units have to be large enough to accommodate the furnishings buyers bring from previous homes, allow them to maintain their usual living pattern and attract permanent rather than transient tenants, to minimize turnovers.

Prices should be in a range that permits investor-buyers to close with a moderate amount of cash. At Villa Moraga the average was \$15,000 to \$20,000.

Further, the project has to be planned so that it reflects the status of the owners. That's what the next two pages are about.

BUDGET FOR CALENDAR 1971 VILLA MORAGA ASSOCIATION

COMMON AREA PHASE I

Gardening Services	\$ 6,000.00	Taxes (Common Area)	1,200.00
Water (Landscape Areas & Swimming Pool)	1,400.00	Trash Removal (Twice a Week Pickup)	1,300.00
Laundry Utilities & Landscape and common area lighting	3,600.00	Resident Manager & Payroll Taxes	3,600.00
Pool Service, Supplies & Repairs	900.00	Telephone—Management Business	120.00
Parking Area Repair & Maintenance	500.00	Office & Janitorial Supplies	240.00
Insurance (PL and PO)	300.00	Association Administration & Bookkeeping	1,200.00
		California State Franchise Tax	100.00
		Total 1971 Budget	\$20,460.00

ASSESSMENT

BUILDINGS	MONTHLY ASSESSMENT PER BUILDING	ANNUAL ASSESSMENT PER BUILDING
9 Duplexes	\$ 73.65	\$ 883.80
4 Triplexes	\$107.55	\$1,290.60
5 Fourplexes	\$122.39	\$1,468.68

TOTAL ANNUAL ASSESSMENT \$20,460.00

Villa Moraga is a series of neighborhoods

And no two are alike, even though there are only five different plans for the 53 units.

Duplex, triplex and fourplex buildings, in various combinations of one and two stories, are sited to take best advantage of the sloping land and to provide each unit with a view of surrounding hillsides. Thus the configuration of each cluster is different, giving the project a custom feeling—very important to this kind of market.

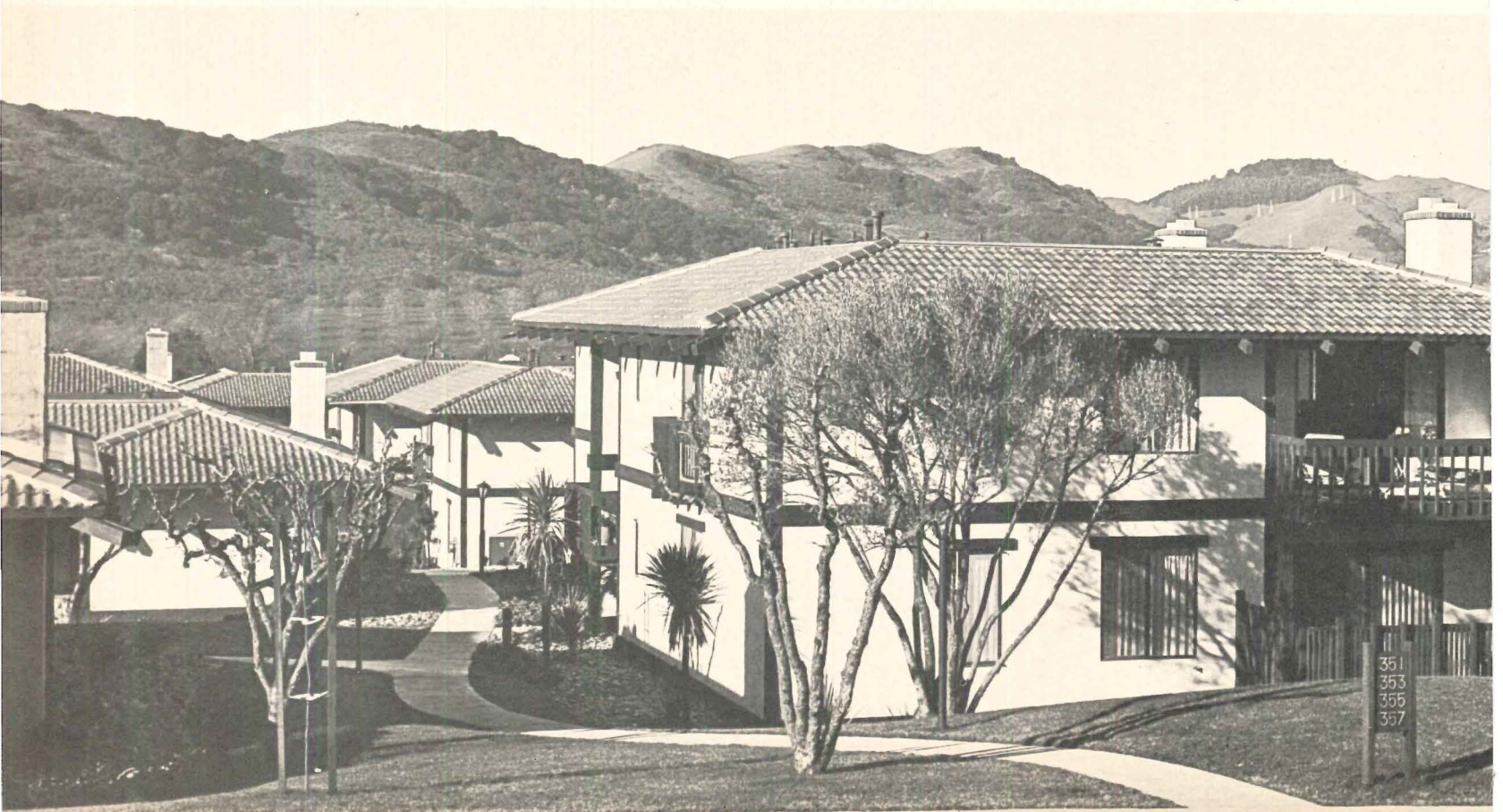
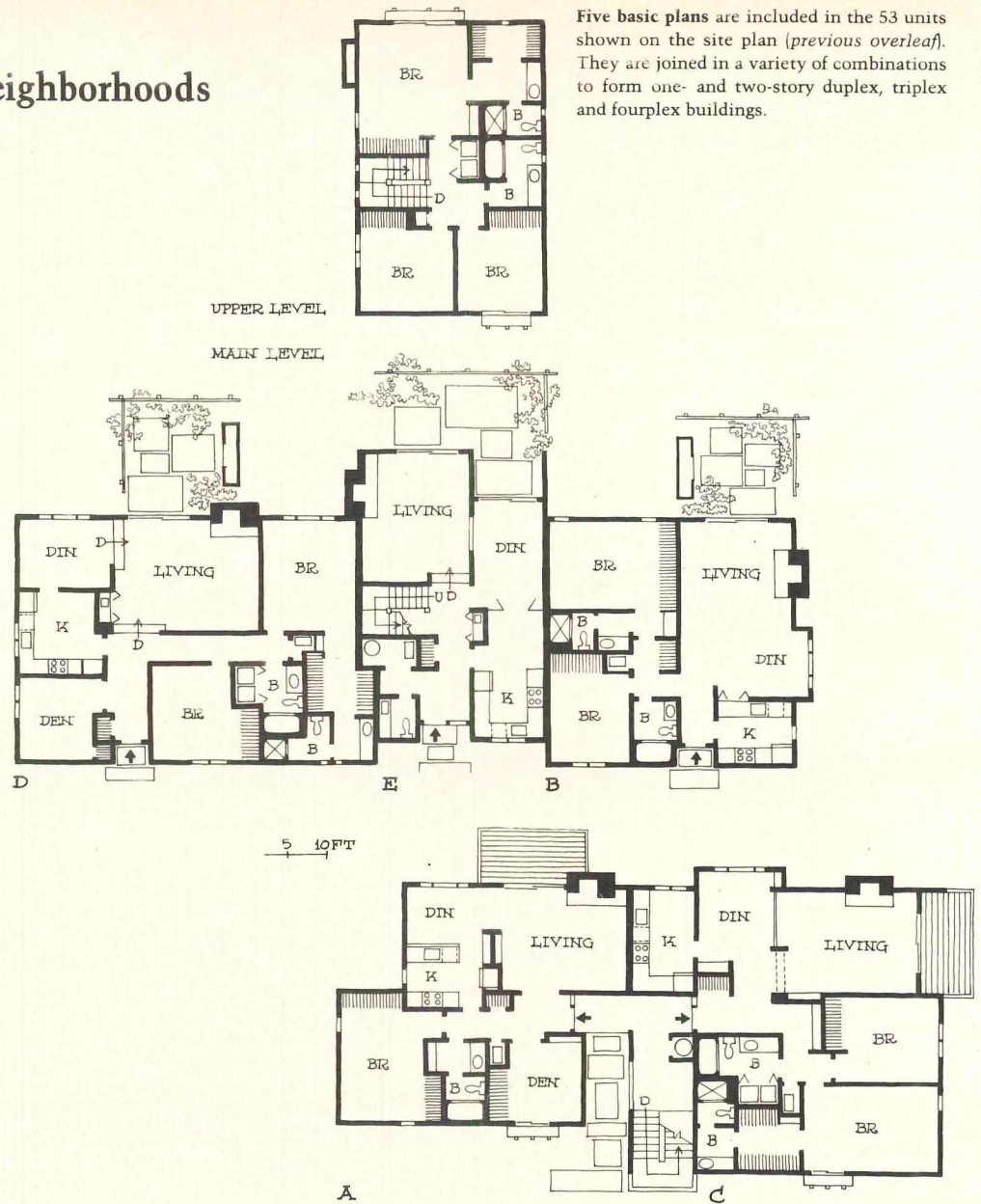
Quality also is reflected in the size of the units (935 to 1,650 sq. ft.) and in the relatively high rents which range from \$260 for the smallest units to \$415 for the two-level units.

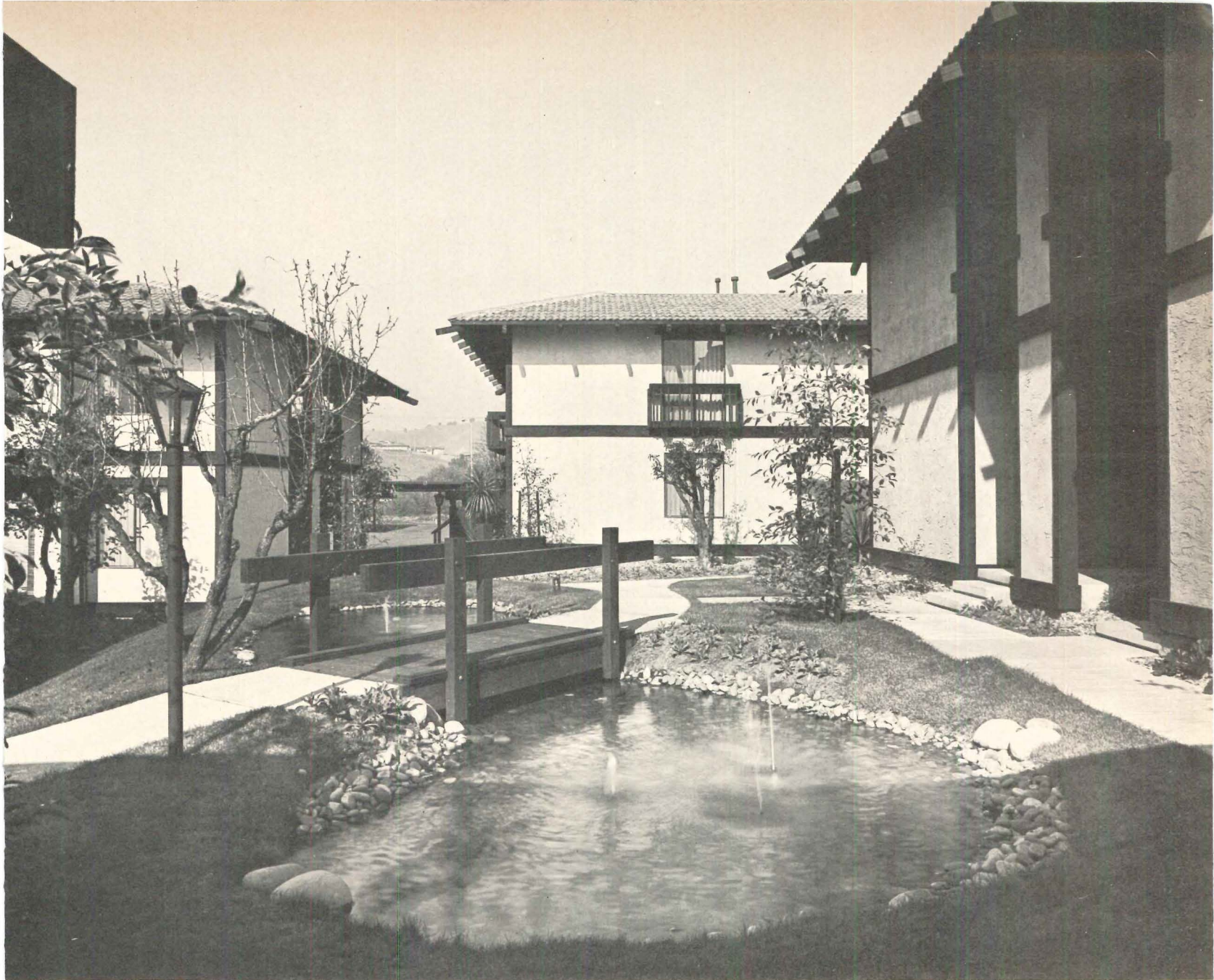
But despite the project's rather exclusive nature, building prices—\$61,000 to \$110,000—are not overly high when balanced against ownership advantages for this kind of income-producing property. Buyers can expect a higher-than-usual equity buildup since property values in the area are increasing rapidly: the current rate is 7% per year, and it is expected to go higher as the new Bay Area Rapid Transit system providing access to San Francisco/Oakland/Berkeley, is completed.

Interestingly, the yet-unbuilt two-thirds of the project will not be completed by the same developers. The project was so impressive to a local townhouse builder that he made an offer that was too attractive to be turned down.

But the mom-and-pop investor concept has proved so successful that it is being copied in many other local projects.

Five basic plans are included in the 53 units shown on the site plan (previous overleaf). They are joined in a variety of combinations to form one- and two-story duplex, triplex and fourplex buildings.





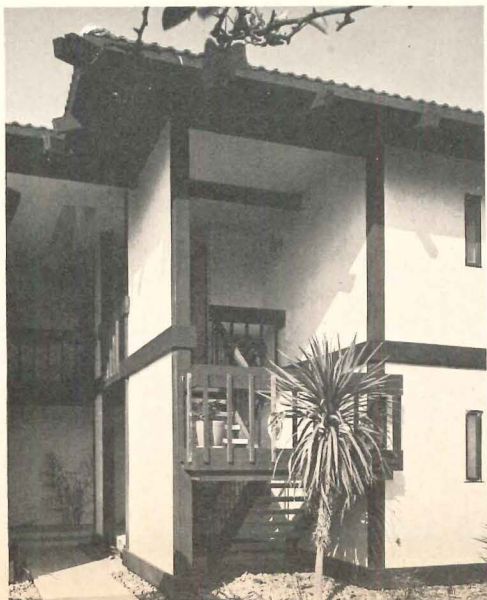
RICCO-MAZZUCHI-KAPLER PHOTOGRAPHY

Neighborhood focal point is a pool (above) or tree-lined sitting area. Owners have title to areas around buildings, but maintenance is up to the association.

Step-down siting, (left), conforming with the natural slope of the land gives each unit in the one- and two-story buildings a view of surrounding hillsides.

Raised dining room in C unit (right) looks across living room to private patio. When C-over-C-plans form two-story buildings, upper living room opens to deck.

California design is apparent in entrance closeup (below). Heavily-textured plaster walls are trimmed in dark wood. Roofs are spanish red tile.





PROJECT PORTFOLIO

5

PROJECT: The Oak Brook Club
LOCATION: Oak Brook, Ill.
DEVELOPER: American Growth Development Corp.
ARCHITECT: Richard Leitch/Sam Kiyotoki & Associates
LANDSCAPE ARCHITECT: Theodore Brickman Co.
SITE SIZE: 25 acres
NUMBER OF UNITS: 324 condominiums
PRICE OF UNITS: \$63,000 to \$88,000



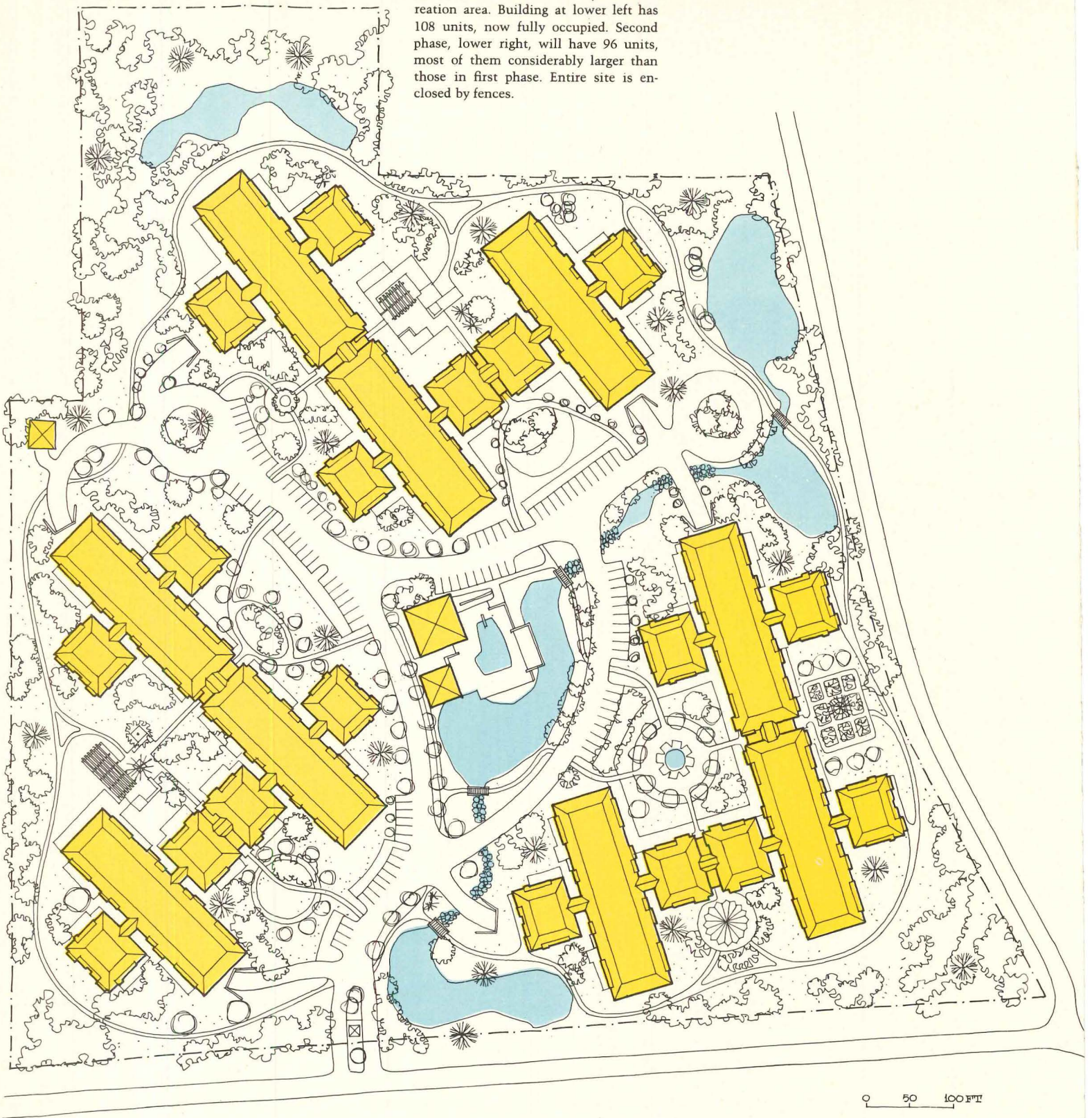
PHOTO: HARR, HEDRICH-BLESSING

The Oak Brook Club is designed for the upper-income buyer who no longer wants the bother of maintaining a large home but still needs much more living space than the typical apartment provides.

The one-story condominium units range from 1,750 to 2,600 sq. ft.—the equivalent of a good-sized house; community facilities provide additional entertaining areas; and the project's park-line environment epitomizes luxury and elegance.

TO NEXT PAGE

Site plan shows three building groups around a central community and recreation area. Building at lower left has 108 units, now fully occupied. Second phase, lower right, will have 96 units, most of them considerably larger than those in first phase. Entire site is enclosed by fences.



PHOTOS: HARR, HEDRICH-BLESSING

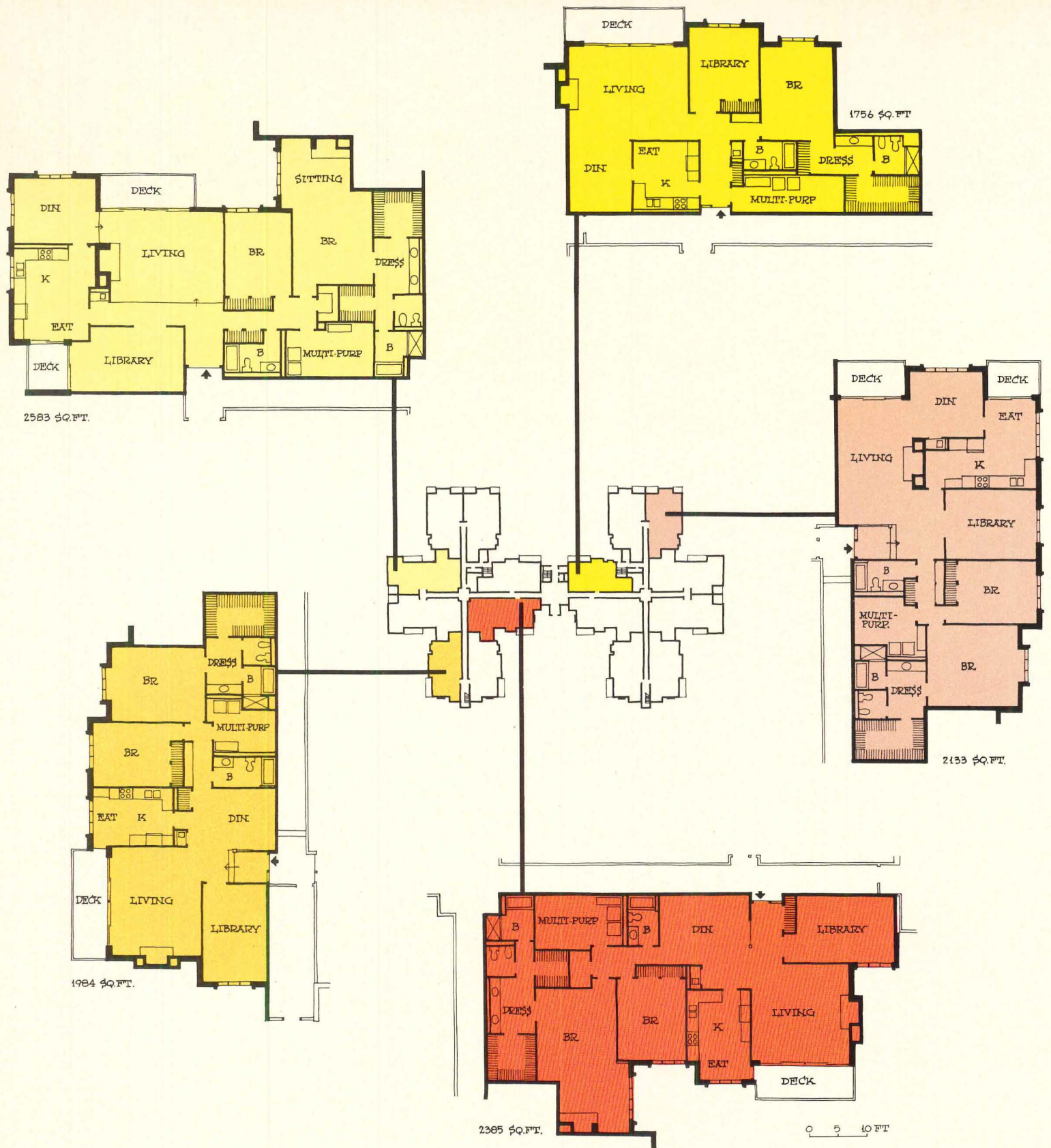




Gatehouse (*far left on facing page*) helps provide security that is all-important to high-income empty nesters. They can travel without fear of vandalism or burglary. Community center (*right on facing page*) contains saunas, shower rooms, a bar and dressing rooms for pool. Residents can reserve it for large parties.

Brook (*above*) and rolling terrain are man-made improvements on a site that was originally flat, treeless and totally without personality. Sprinkler water is taken from lakes (*site plan, facing page*). Make-up water is provided by wells. Some hills were created to hide less-than-ideal views of adjacent property.

TO NEXT PAGE



Five models are available in the second phase of The Oak Brook Club. One has a single bedroom plus library, other four have two bedrooms plus library. All have separate dining rooms, lots of closets, luxurious master bedroom appointments. These models have the same number of rooms as those in the project's first phase, but the rooms are roughly 25% larger. Reason: the biggest models sold fastest in the first phase. Sales have justified the increase: more than half of the 48 units now under construction have reservations. Buyers have shown no clear preference for different floors.

Parking space (top photo, facing page) for residents is all underground, there are more than two spaces per unit. Three-story design (bottom photo, facing page) helps maximize open land. All trees had to be brought in, and boulders were imported from as far away as 100 miles to get the proper colors.



PHOTOS: HARR, HEDRICH-BLESSING



Here's a totally new method of

Developed by a Hercules Inc. subsidiary, it may well be an answer to the growing host of financial and ecological problems that plague the building industry.

Nor is it a blue-sky concept. The first operational plant is now under construction for a Levitt & Sons project in Freehold, N.J. And the manufacturer, AWT (Advanced Waste Treatment) Systems Inc., says it is geared up to fabricate as many plants as the market demands.

AWT says its new system will offer these advantages:

Lower-than-usual construction cost—approximately \$1.50 per gal. of capacity

Considerably reduced operating costs—29¢ per 1,000 gal. of sewage.

Easy disposal of the end waste—a fine, dry, sterile ash which has only $\frac{1}{10}$ the volume of the dewatered sludge produced by conventional secondary treatment plants.

Ability to handle most wastes from such things as light industrial plants, laundromats, etc., which could hurt operation of biological treatment plants. This means the builder could split the costs of a system with local industries and shopping centers.

Compactness and quiet, odor-free operation. The plant can be installed in a conventional house as close as 100 ft. to adjacent homes without creating any problems whatsoever.

Unattended operation. A single employee could service as many as five plants located within a reasonable driving distance of each other.

Unlike conventional systems, the AWT method uses a variety of mechanical and magnetic waste separators, through which the waste is piped to a combustion chamber. There it's burned to an ash that can be disposed of as easily as that from a furnace. It can be used as landfill or simply carted away.

The only other byproducts of the system are a wisp of steam, a belch of odorless carbon dioxide and clear water. The water can be immediately piped into swimming pools, irrigation systems (farm or country-club), recreational lakes, etc. It also meets the U.S. Public Health Service potability standards, although AWT is understandably cautious about this since not enough is known about possible long-term health hazards of drinking treated water.

The treatment plant is available in a wide range of sizes to handle anywhere from 200 to 4,000 dwelling units, and multiple plants could meet any capacity beyond that. Construction costs, including the house that encloses the plant,

range from about \$50,000 for the smallest plant to \$1.5 million for the 4,000-home, million-gallon size.

Moreover, the builder has the option of eliminating any number of stages of the system if pure effluent is not needed. The full system will eliminate 99% of suspended solids, 98% of phosphates and 95% of BOD (biochemical oxygen demand), a considerable improvement on the efficiency of conventional plants.

Or if the effluent from, say, a small industrial plant needs increased magnetic-separating capacity, additional separators can be hooked up in parallel with the rest of the system at far less cost than increasing the total system capacity.

The system has been under development and testing for five years by Hercules Inc. After it became apparent that the system not only would work but would have a vast market potential, Hercules got together with Procedyne Corp. to form AWT Systems as a jointly owned subsidiary.

The system was also developed in cooperation with the Federal Environment Protection Agency, which has evidenced keen interest in the new process.

What got the system off the ground initially was Hercules' development of a polymeric flocculant which drastically reduces the time—and therefore the system capacity—needed for the purification process. In fact the total time from input to clean water can be as little as eight hours, compared to days or weeks necessary for biological agents to work. This makes possible the extreme compactness of the plant as well as the considerable reduction in construction costs.

The system is also relocatable. If, for instance, a municipal sewage system eventually reaches the site, the plant can be knocked down in about five days into components easily transported by truck—and rebuilt on a new site in about the same time.

What can go wrong with the system? According to AWT, much less than can happen with a conventional system, where a shot of bacteria-killing waste can drastically reduce effluent quality until the bacteria can be regrown.

The AWT system has few moving parts, and most of these are pumps and motors that are readily repaired. Duplicate pumps are provided at critical areas, and a spare pump that can be installed in any of the chemical treatment lines will be always at hand. The surge tank should be capable of holding the sewage until repairs can be made. A standby power plant will cut in automatically in case of power failure,

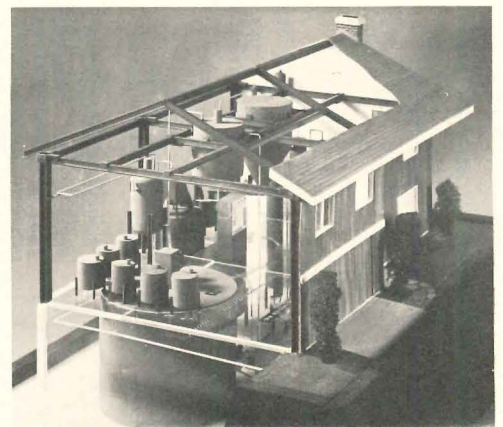
and alarms at all key points will alert the maintenance man, police or both to any system failure.

According to AWT, 98% of any problems that can occur in the plant can be repaired on the spot. If the failure occurs in, for instance, the magnetic filter, the chances are the faulty component can be replaced from stock in 24 to 48 hours. During this time, the rest of the system can be adjusted so that only minimal degradation of the effluent will take place.

There does remain the problem of convincing code authorities, and it may take some time for specification-type codes to be changed to permit the use of the new system. That problem, of course, won't occur where performance codes are in effect.

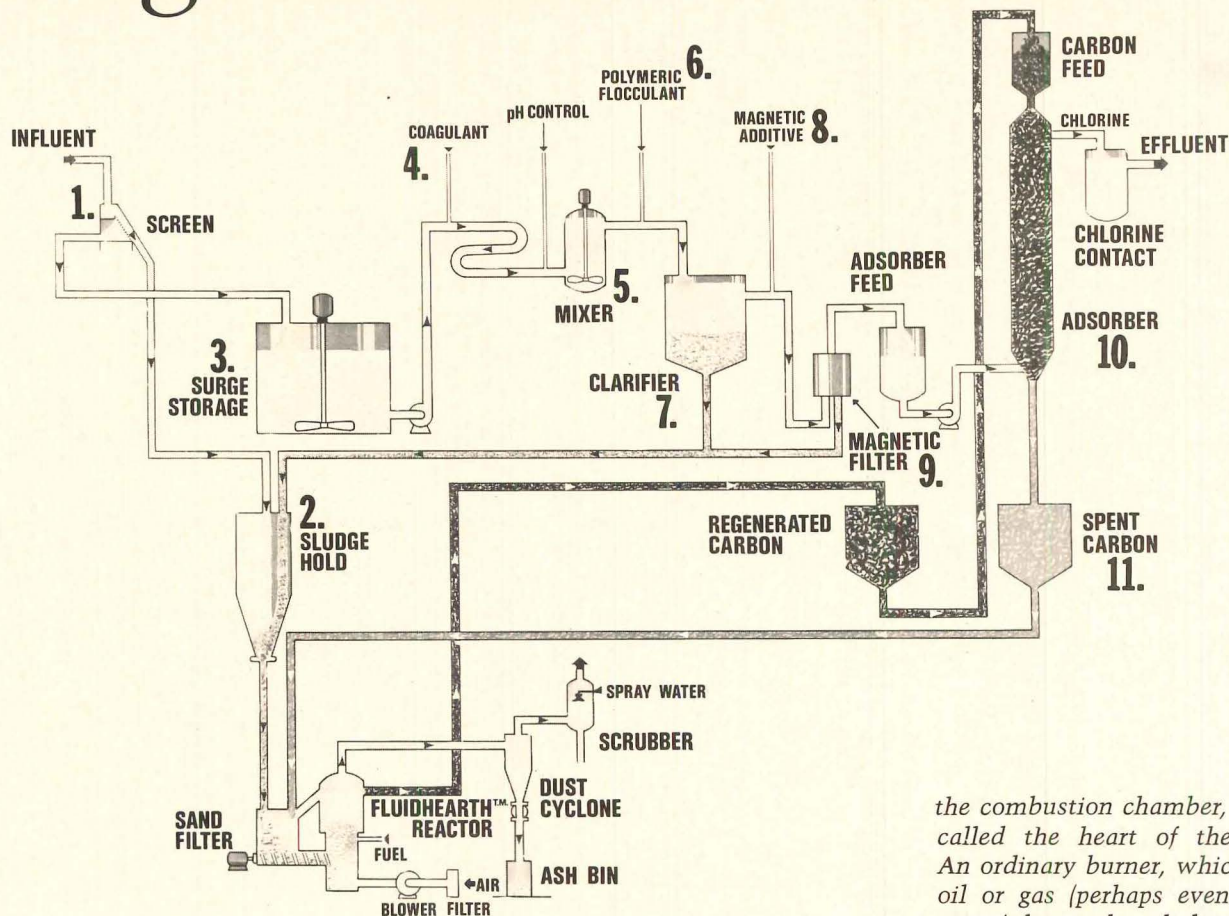
AWT's thinking is that they can persuade anybody that the system works, and they're ready—in fact eager—to let anyone inspect the Freehold plant once it goes into operation this spring.

In fact, the company is so confident of the merits of the system that it expects that the not-too-distant future will see the introduction of mini-plants—with price tags to match—that could serve single-family homes or even boats!



Cutaway model shows how the entire plant fits into an ordinary two-story house: the only major modifications are extra-deep excavations to accommodate the surge-holding tank and the length of the carbon adsorber column.

sewage treatment



HERE'S HOW THE NEW SYSTEM WORKS

The influent first passes through a wedge-wire screen (1) which separates large and medium-sized solids; these are dropped to a sludge-holding tank (2). The water then goes into a surge storage tank (3). Since the remainder of the process requires close control of flow and chemical feed, the tank accumulates sewage produced at peak periods such as the early morning, and maintains a constant flow of waste to the remainder of the system.

The water is then pumped through a coagulant feeder (4), and next to a pH control feeder and mixer (5) which ensure that the most efficient alkalinity level is produced for the action of the flocculant.

The flocculant introduced at point 6 is a dense polymeric chemical whose extra-heavy weight quickly settles—with its chemically-bound particles—to the bottom of the clarifying tank (7). (The polymer requires 1/30 the settling time required by conventional flocculant: tests on latex-paint-laden waste indicate the job is done in less than 2½ minutes.)

At this point 95% of the solids have been removed. The waste-laden flocculant is piped from the bottom of the clarifier to the sludge-holding tank.

The water is then drawn from the top of the clarifier and a magnetic additive is

introduced at point 8. This additive is a finely-divided iron oxide which physically unites with the extremely fine suspended solids which have so far evaded the treatment process, including what is left of those phosphates which are the prime target of ecological experts.

The next-to-last stage of the process is the magnetic filter (9), which removes the iron oxide and the wastes bonded to it and delivers them to the sludge-holding tank. At this point fully 99% of the original waste has been removed. All that remains is dissolved organic material, and its removal is accomplished in a carbon adsorber column (10). The water trickles upward through this column and the activated carbon removes virtually all of what remains of the original waste.

At the top of this column chlorine is added to the water, and the almost-pure water is ready for recycling.

Meanwhile, back at the sludge-holding tank (2) which has accumulated the solids from all of the purification processes, the waste material is mixed with sand and air to provide the most efficient combustion of the sludge. (The function of the sand is to separate the waste molecules: this minimizes the amount of fuel needed to produce the eventual sterile ash.)

The waste-sand-air mixture is blown into

the combustion chamber, which could be called the heart of the entire system. An ordinary burner, which may be fed by oil or gas (perhaps eventually by waste paper), burns the whole mixture at a temperature of 1,500°F., hot enough to break down odorous organic gasses into molecular form. Those particles which are heavier than air are cycloned into an ash bin; lighter-than-air molecules rise into a scrubber and, by now completely odorless, are vented into the atmosphere. The scrubbing water goes back to the beginning of the cycle.

There's just one remaining problem: activated carbon is a relatively expensive commodity, and it wouldn't do to throw away the carbon that has adsorbed all the organic material it can hold. So the plant reactivates it in this manner:

At point 10 the water is trickled upward through the carbon column. This means that the carbon nearest the bottom of the column will have adsorbed the bulk of the organic material and is therefore nearest the exhaustion point. This spent carbon is dropped from the bottom of the column into a holding tank (11), where it is stored until the influent stream is at an ebb (perhaps midafternoon or night) and the surge-storage tank has ample holding capacity.

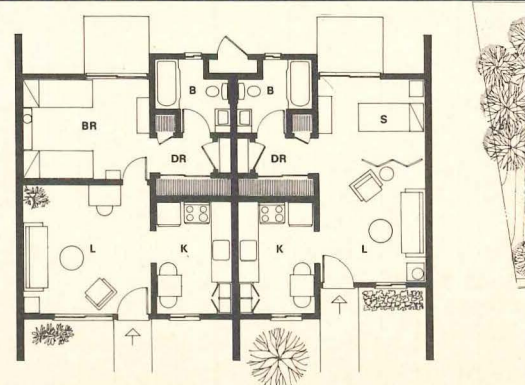
At this point the system is shut down at the surge-storage tank outlet and the water-treating process comes to a halt. The spent carbon is then fed into the combustion chamber and its adsorbed organic material is burned off in the same way as the solids. The result is good-as-new regenerated carbon which is recycled to the top of the column.

Five projects show that the best of today's subsidized housing is very good indeed

Anyone who keeps abreast of housing news is well aware of the troubles afflicting the government subsidy programs. You can read about scandals, for example, on page 9 and about one of the major problems—suburban resistance to low-income housing—on page 12. But none of this alters the fact that some excellent projects are being built for public housing authorities and under two mortgage-subsidy programs—FHA Sec. 236 (rental housing) and FHA Sec. 235 (for-sale housing). That's what you'll see here and on the next ten pages.



Public housing: vest-pocket



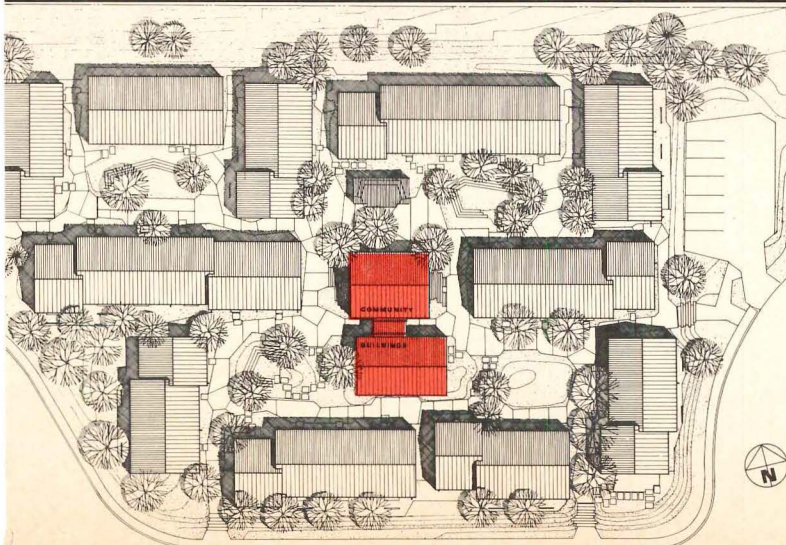
Two apartment types, a 524-sq.-ft. one-bedroom unit and a 424-sq.-ft. studio, are provided.

Low profile of small, one-story building is in keeping with neighboring single-family houses.



PHOTOS: JOSHUA FREIWALD

plan puts 40 one-story units plus a community center on 2.2 acres



And yet there's more than enough room for outdoor living—a small private patio behind each apartment and four communal courtyards with paved walks and seating facilities.

This turnkey project for the elderly was designed with two goals in mind: first, to meet the special needs of older persons; second, to blend into an established residential neighborhood. One-story construction makes stair climbing unnecessary. And outwardly at least, the buildings are small

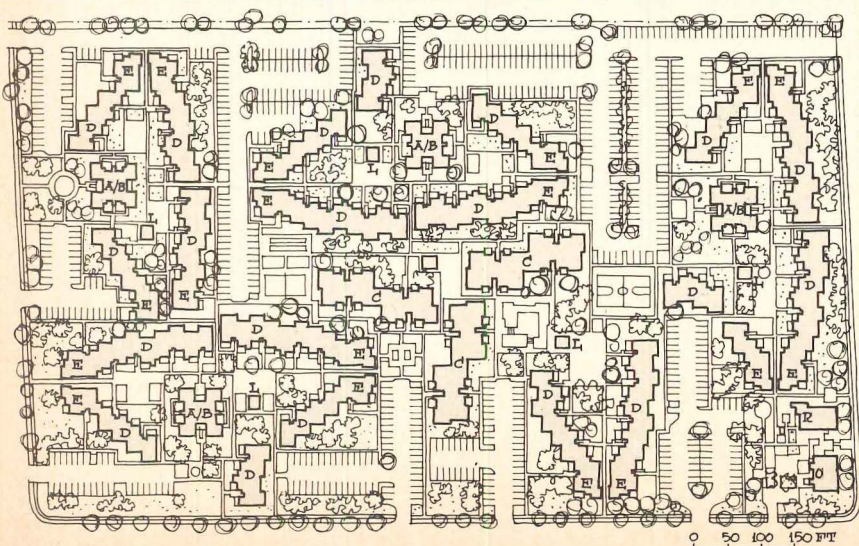
enough to resemble single-family houses.

At the core of the project is the community center (*above right*), which houses a recreation room, medical room, offices, a laundry and a maintenance area. And at opposite ends are two off-street parking areas.

The project, in Novato, Calif., was designed by the Compla Corp. and built by Smith & Haley Construction Co. for the Marin County Housing Authority.



FHA 236: free-form clusters break a big project into small neighborhoods



Despite its size—400 units on 21 acres—this complex in San Jose, Calif., is neither overwhelming nor monotonous.

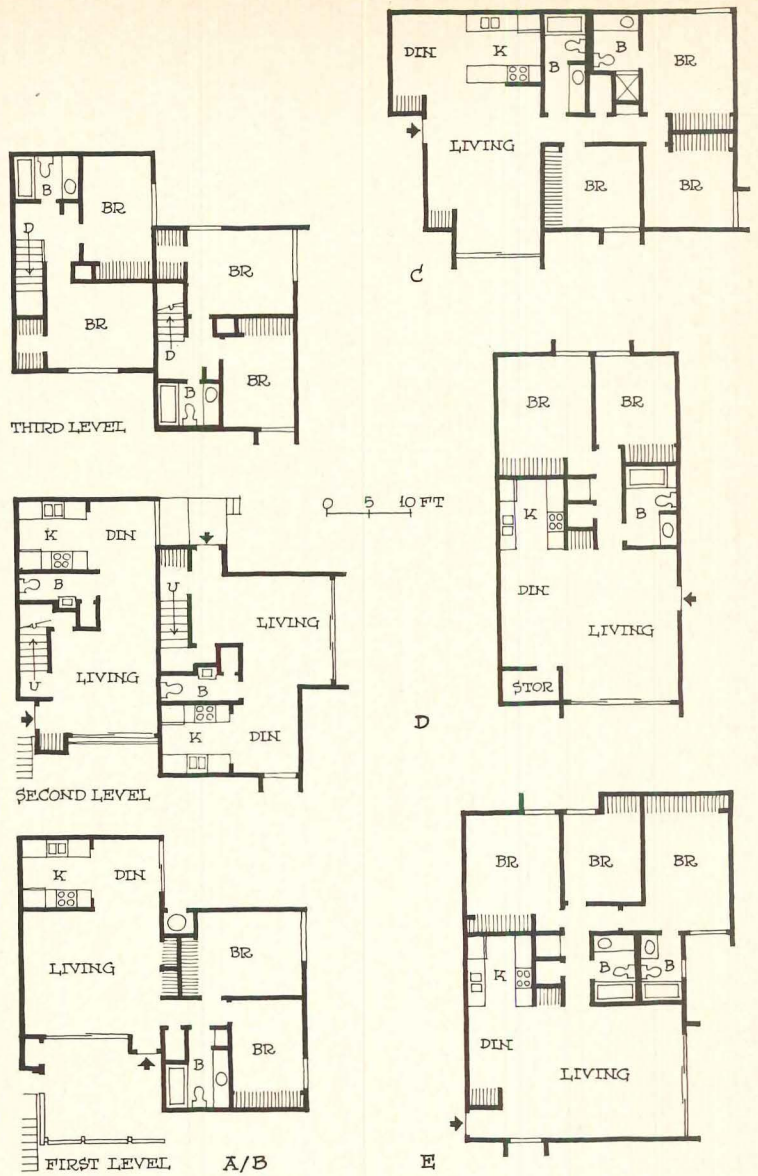
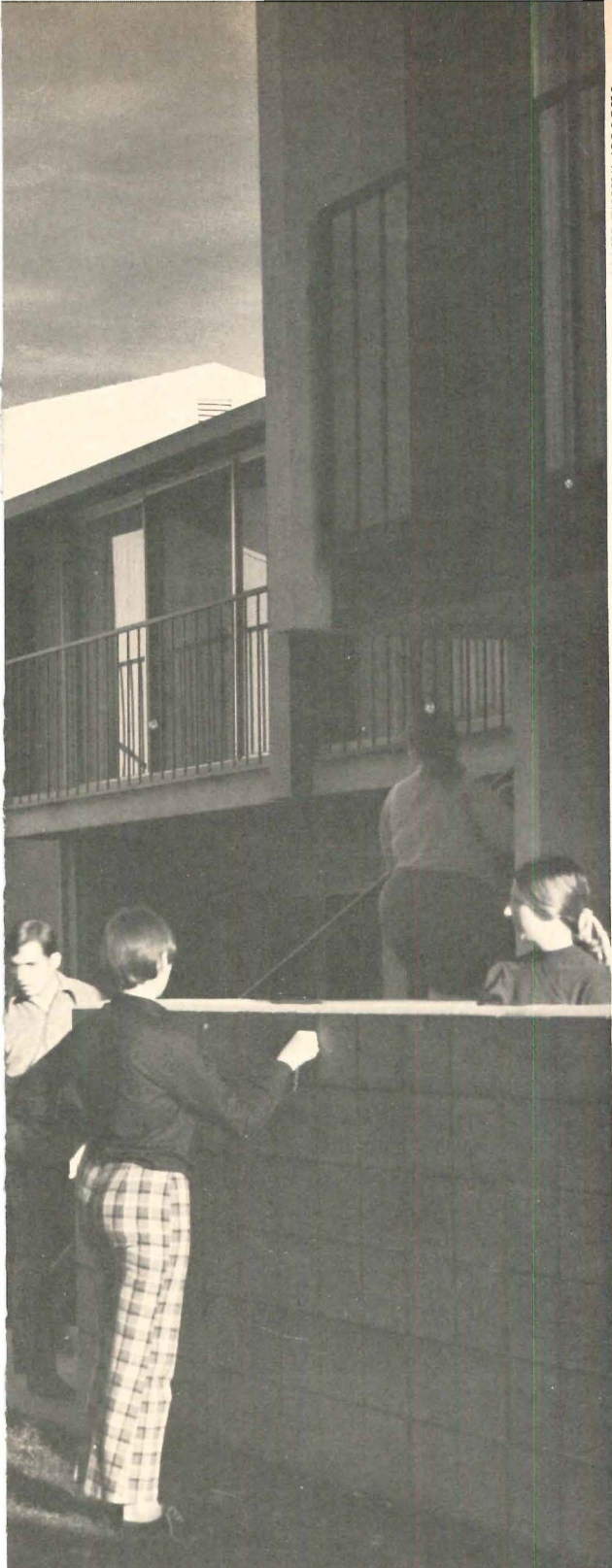
To kill the curse of bigness, architect Stephen G. Oppenheim and builder Albert Gersten divided most of the site into four neighborhood clusters.

Each cluster is an oval formed by staggered two-story buildings (*D and E in site plan*); each is separated from other clusters by parking areas and/or green

space; each has its own courtyard, play area and laundry building (*L in plan*); and at the center of each is a three-story building (*AB in plan*)—a visual change of pace in the predominantly two-story project.

Rentals range from \$130 to \$155, apartment sizes from 860 to 1,230 sq. ft. Of the 400 units 320 have two bedrooms, and 80 have three. Facilities include a recreation building (*R in plan*) and rental office (*O*).

PHOTOS: WAYNE THOM

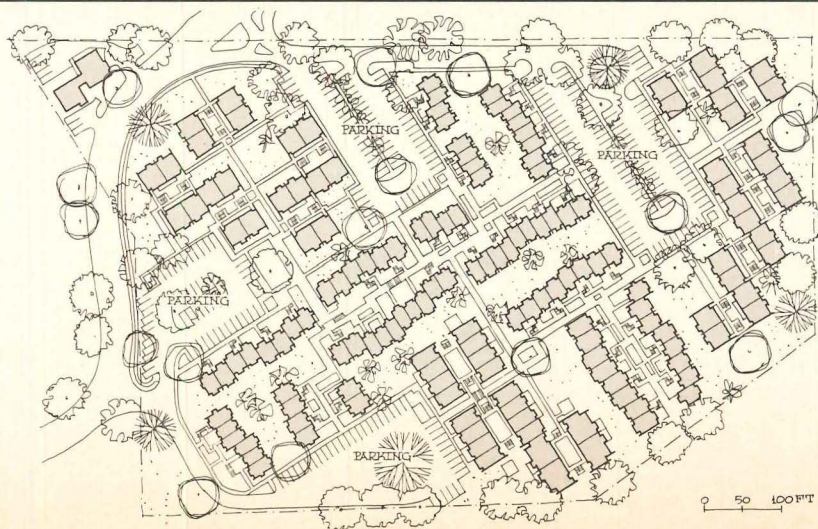


Combination plan (A and B) for three-story buildings puts a pair of two-level townhouse-type units above each one-level apartment. Other one-level apartments (C, D, E) are in two-story buildings (below), which are staggered for visual interest and privacy and are faced into courtyard for easy supervision of children at play.





Public housing: townhouse-type units ride piggyback on apartments

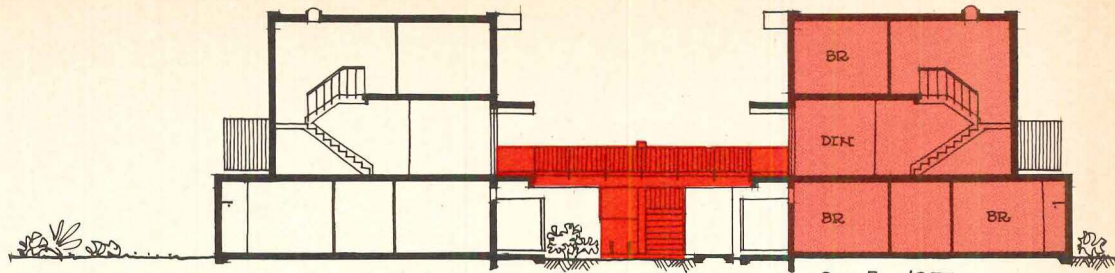


Combinations of floor plans vary because so many different units are offered—two, three and four bedrooms and anywhere from 515 to 1,250 sq. ft. But for the most part this is a three-story project with conventional apartments on the ground floor and two-level units on the second and third.

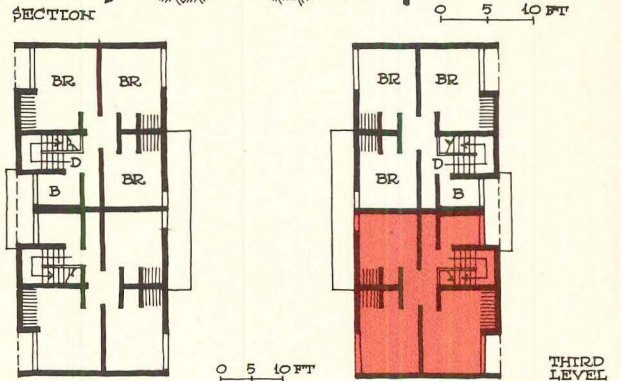
All second levels are reached by outdoor stairways, and some are connected by bridges. Profiles were varied by including a few two-story structures and by



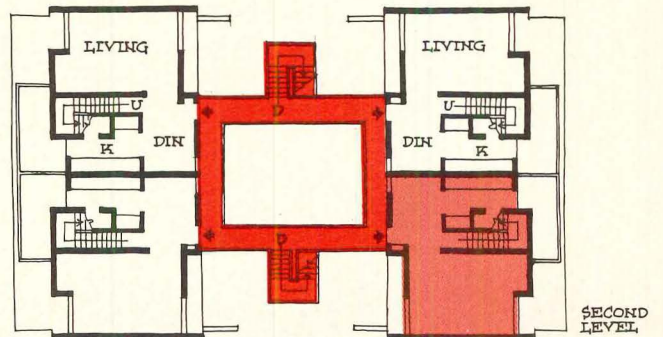
PHOTOS: PALMER/REINHARDT



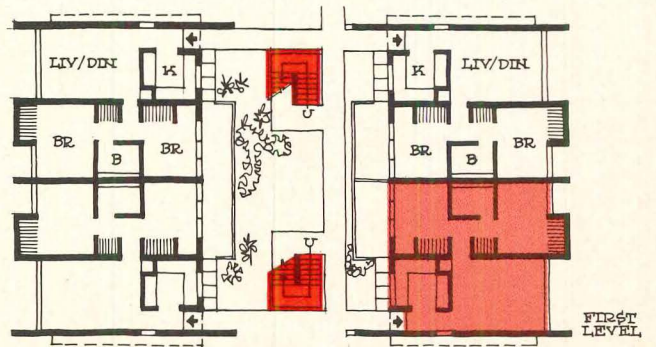
Open-air bridge—shown in section above, plan at right and photo below—connects the second levels of two similar three-story buildings.



Typical plan, one of several piggy-back combinations used in project, puts a three-bedroom townhouse over each two-bedroom apartment.



Outdoor stairways lead to townhouse entries at the middle levels of buildings (left) and to pedestrian bridge between buildings (below).



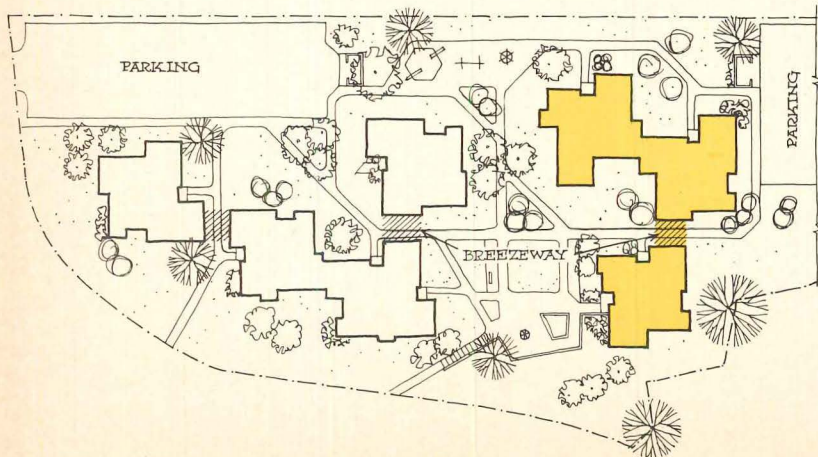
stepping buildings down a slope at the southeast side of the site—a move that also minimized cuts and fills. And although space was used for parking fingers, much of the land was preserved for walks and courtyards.

The 260-unit project occupies 11.8 acres on the Hawaiian island of Oahu. Designed by Akiyama/Kekoolani & Associates, it was built by Reed & Martin Inc. for the Hawaii Housing Authority.





FHA 236: even at 20 units per acre, there's plenty of open space



It was mostly a matter of keeping the auto in its place. Primarily because parking for 90 cars was confined to two corners of the three-acre site, this 60-unit project has a large central courtyard (*above and right*) plus other usable open areas.

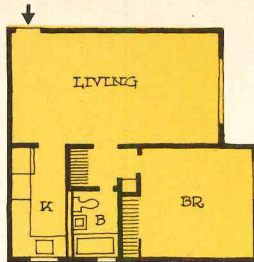
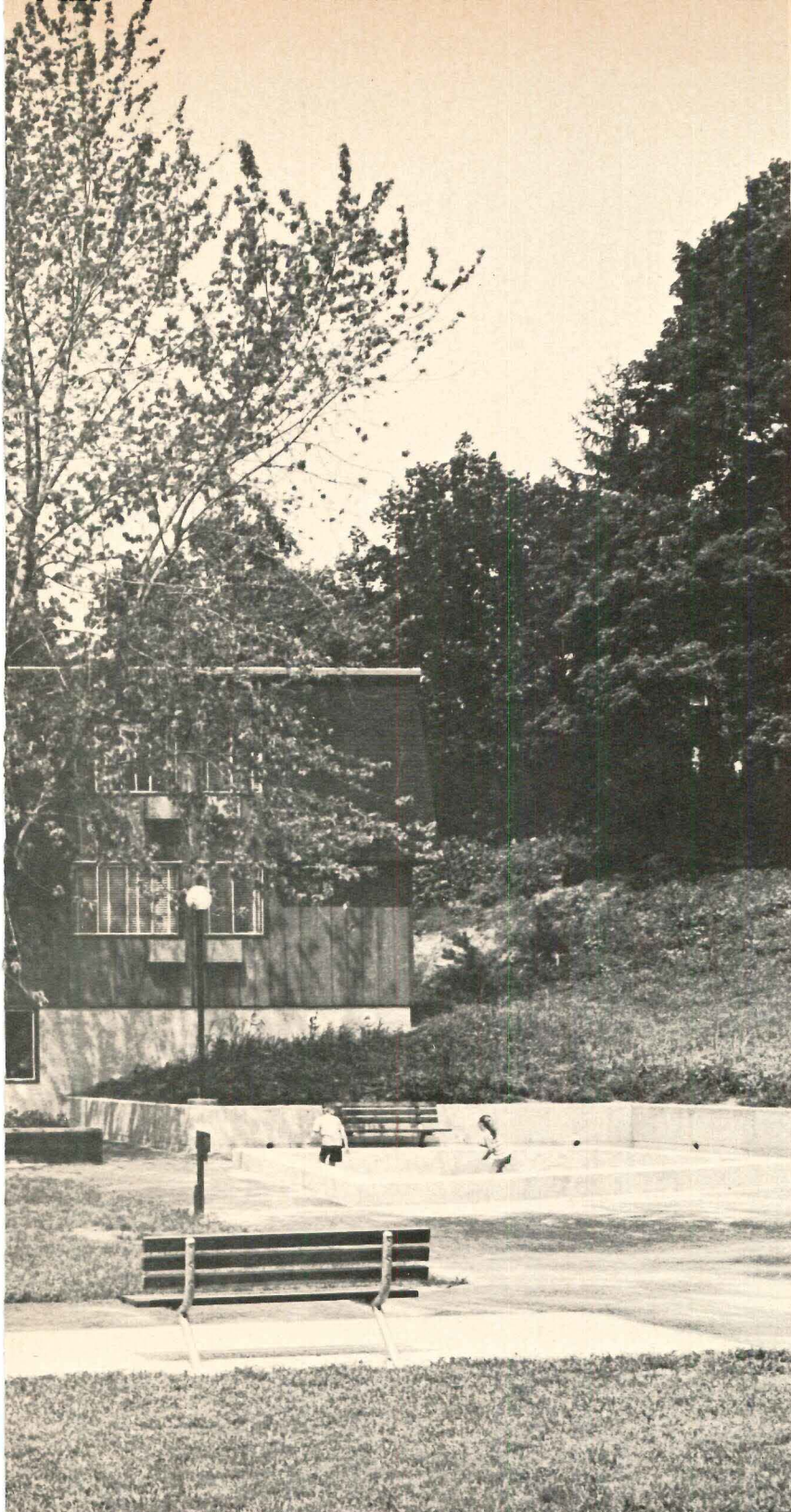
To shorten the tenants' routes from the parking lots to their apartments, breezeways (*above and left*) were cut through the first floors of the two- and three-story buildings.

Usable outdoor space was also saved by concentrating the

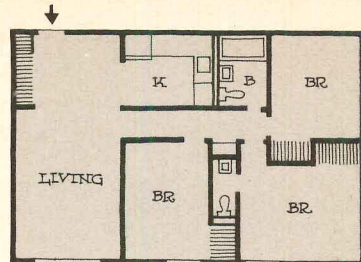
apartments in a pair of clusters—one composed of three buildings (*plan on facing page*), the other with four buildings.

The project is the first phase—and the major housing effort—in a modest (33-acre) urban renewal program. Designed by Horace Ginsbern & Associates, it was built by David Bogdanoff in Yorktown Heights, a small community (1970 pop. 6,800) in New York's Westchester County. The first tenants were 29 families displaced by the renewal program.

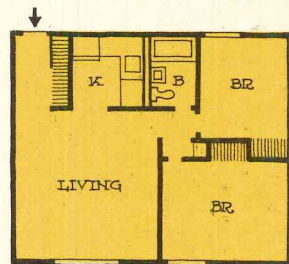
PHOTOS: BILL ROTHSCHILD



1-BEDROOM

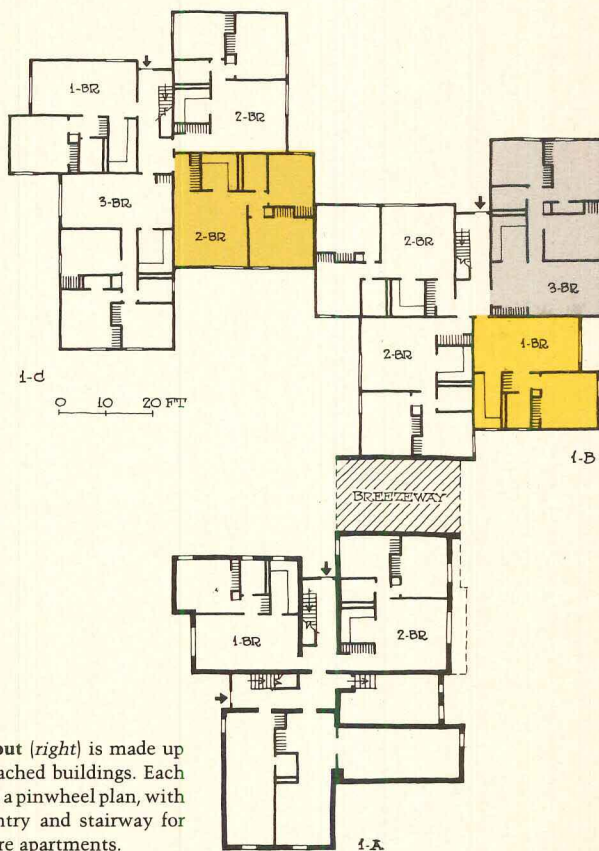


3-BEDROOM

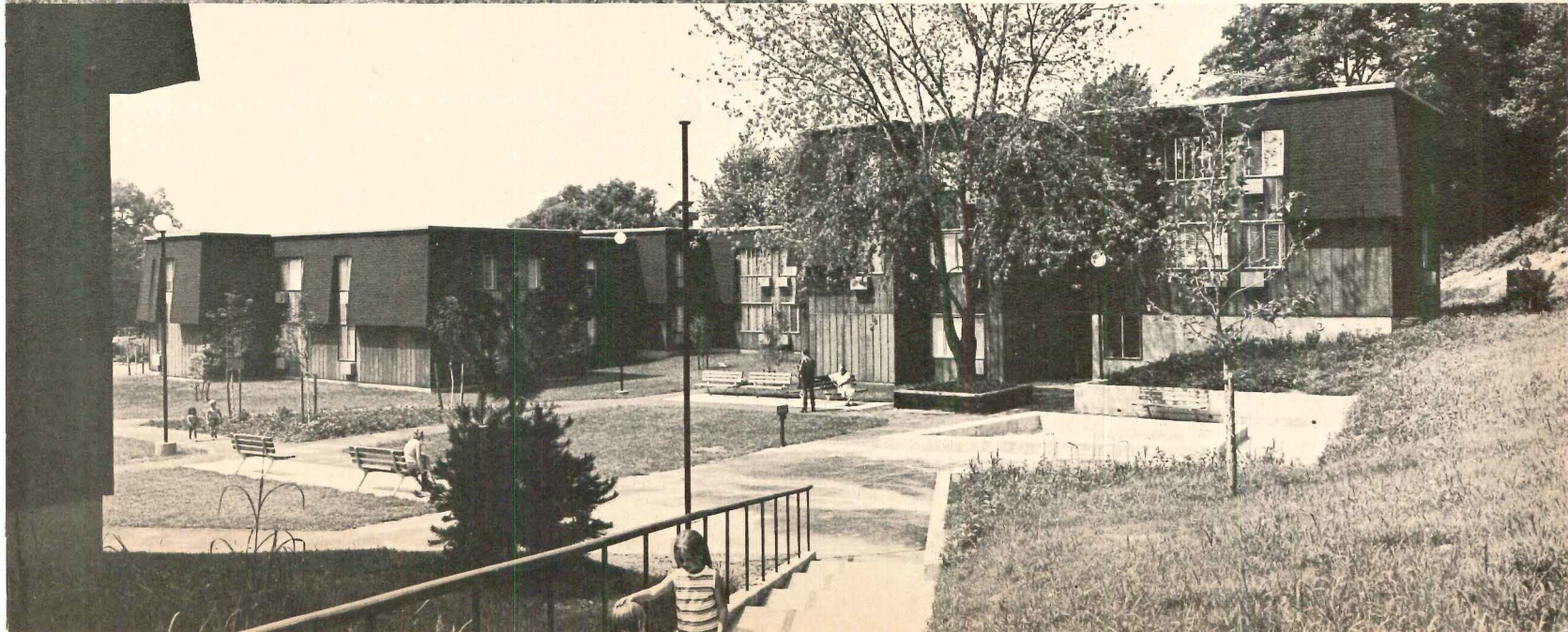


2-BEDROOM

Choice of apartments includes one-, two- and three-bedroom units, which are shown at right and color-keyed to the building plan below. There's also a four-bedroom unit.

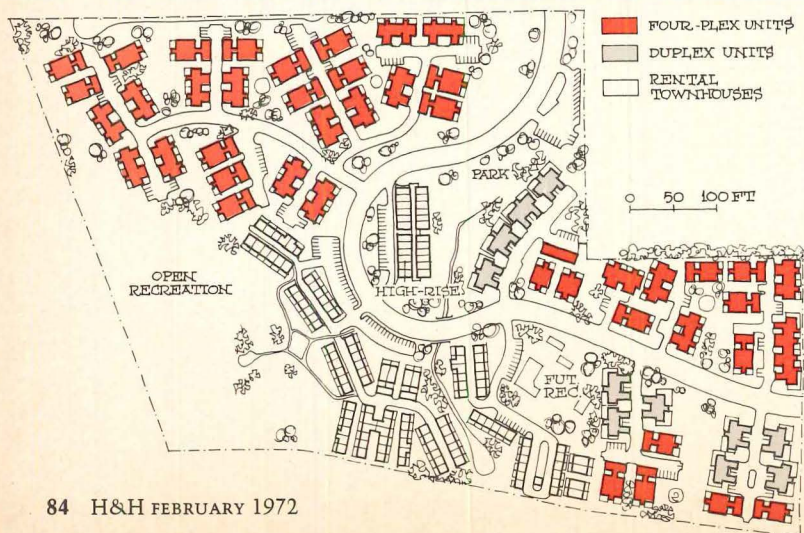


Cluster layout (right) is made up of three attached buildings. Each building has a pinwheel plan, with a central entry and stairway for eight or more apartments.





FHA 235: fourplexes are the basic built-for-sale housing in this P.U.D.



When finished, the planned unit development in Salinas, Calif., will have 418 units on 32 acres, and 172 of them will be in two-story fourplexes like those shown here.

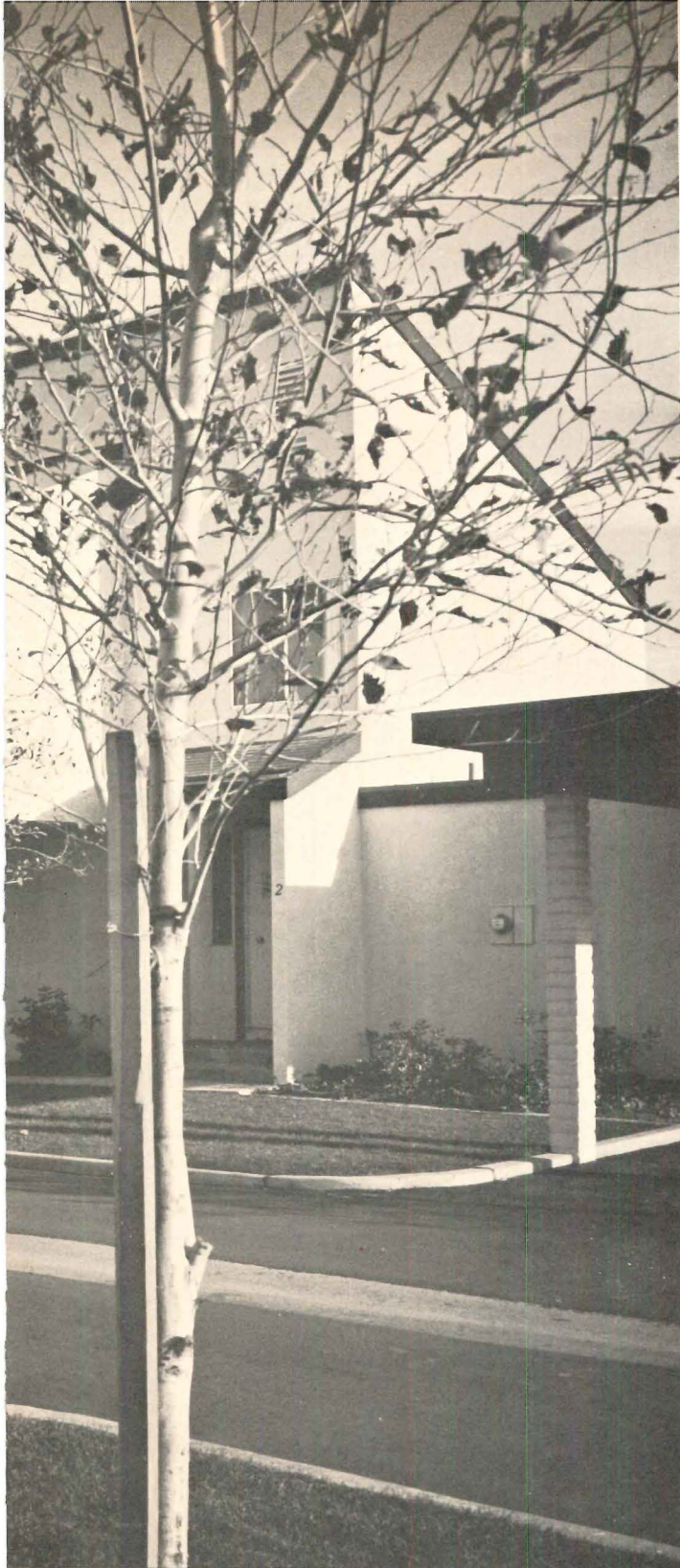
The rest of the complex will consist of one-story duplexes, also built for sale, rental townhouses and a 100-unit high rise for the elderly.

For variety two fourplex arrangements were used—in-line and back-to-back. In-line units (above), priced at \$19,400, have

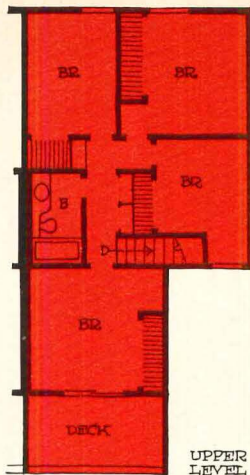
four bedrooms and 1,262 sq. ft. of living area. Back-to-back units (center building in photo at right) are priced at \$17,400 and have three bedrooms and 1,055 sq. ft.

The project, designed by architects Robert E. Jones and Edwin K. Hom, is a joint venture by Salinas Valley Construction Co., Western Finance & Development Co. and Builders' Resources Corp. (H&H, Mar. '71).

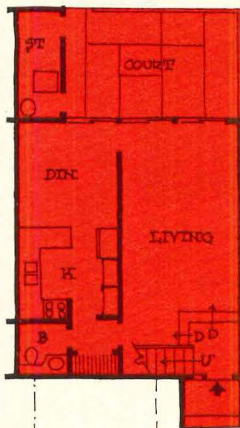
For interiors, turn the page.



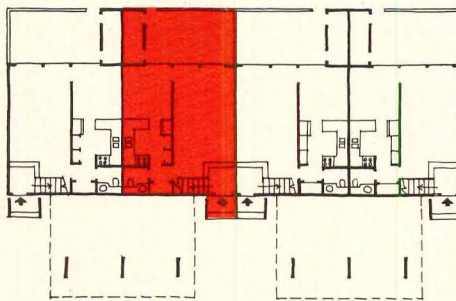
PHOTOS: JEREMIAH O. BRACSTAD



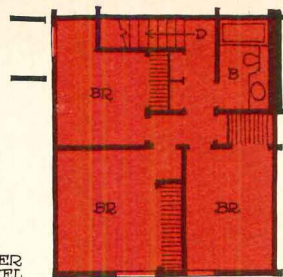
UPPER LEVEL



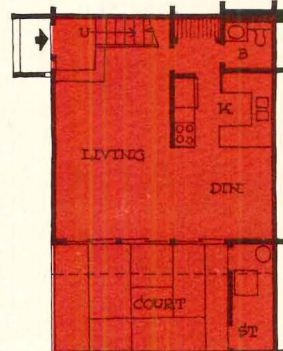
LOWER LEVEL



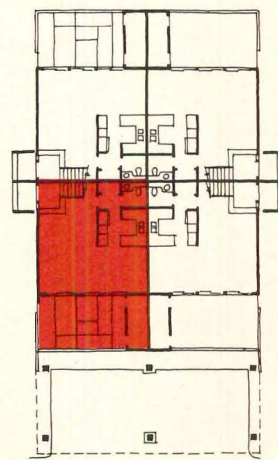
4-BEDROOM UNIT



UPPER LEVEL



LOWER LEVEL



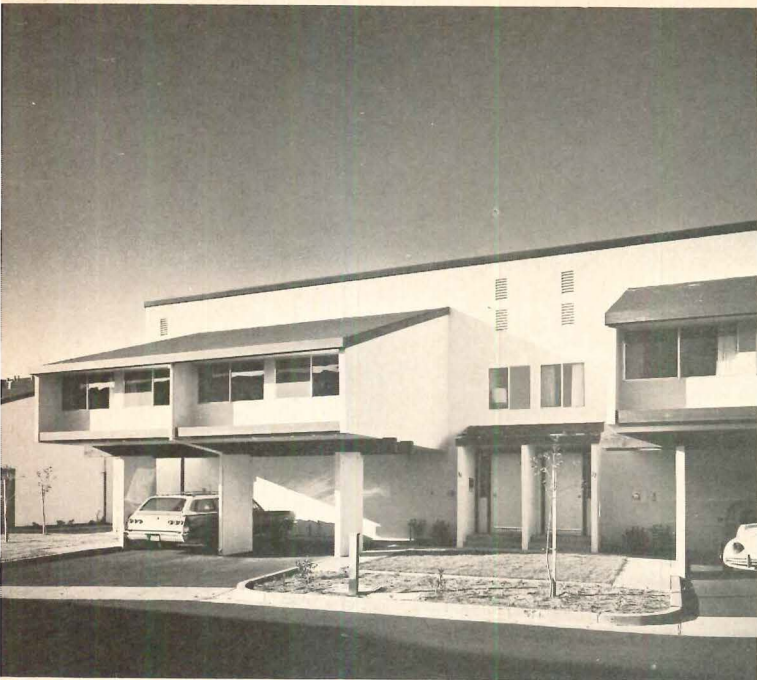
3-BEDROOM UNIT

0 5 10 FT

In-line fourplex has rear patios with outdoor storage and front carports beneath master bedrooms and balconies.

Back-to-back fourplex has carport at one side, where it is separated from the building by two private patios.





Carports of in-line units are conveniently close to front entries. Exterior materials are stucco and stained wood.

Patios, enclosed by 7½' fences, open off all living rooms. Room below is in three-bedroom, back-to-back unit.



Fourplexes/continued



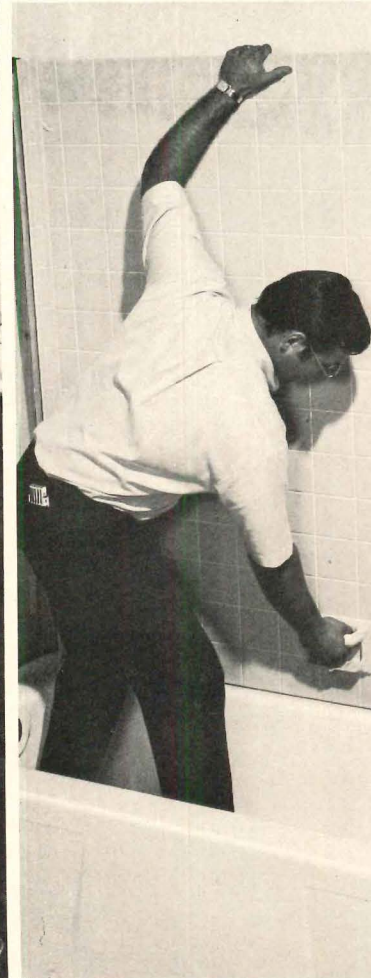
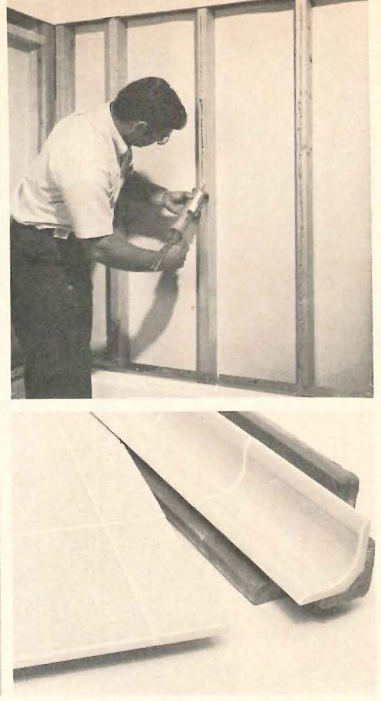
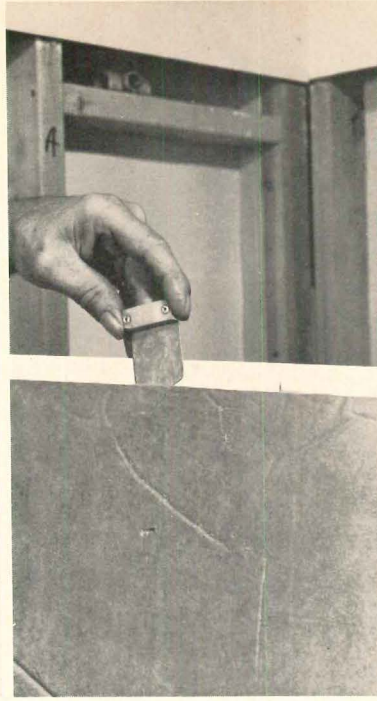
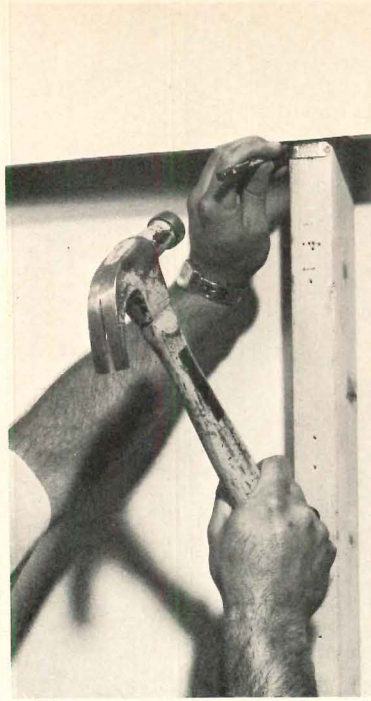
PHOTOS: JEREMIAH O. BRAGSTAD



Typical bedroom has sloping ceiling, sliding windows and sliding doors (not shown) for 4'-long to 8'-long closets.

Typical kitchen has U-shaped work space and is open to dining area, which in most units opens to rear or side patio.





Ceramic tile panels cut installation time to less than 40 minutes

In fact, one man can put in a wainscot-height tub surround in just 30 minutes or a little more.

There are three systems of tile panels: one has three tub surround panels 5' high; another has six panels for a 6'-high tub surround and a drop ceiling; and a third is 4' x 4' tile panels for kitchen, laundry, shower room or corridor walls.

Tiles are joined by a flexible white

silicone grout that can't crack or fall out, won't yellow or stain and is waterproof and resistant to mildew. Panels are bonded to 1/2"-thick dense polyurethane foam that adds rigidity, provides thermal insulation and forms a moisture barrier.

Installation, as the photos show, is simple. Metal strips are nailed to studs as a base for panels. Metal clips are attached, one half to a stud

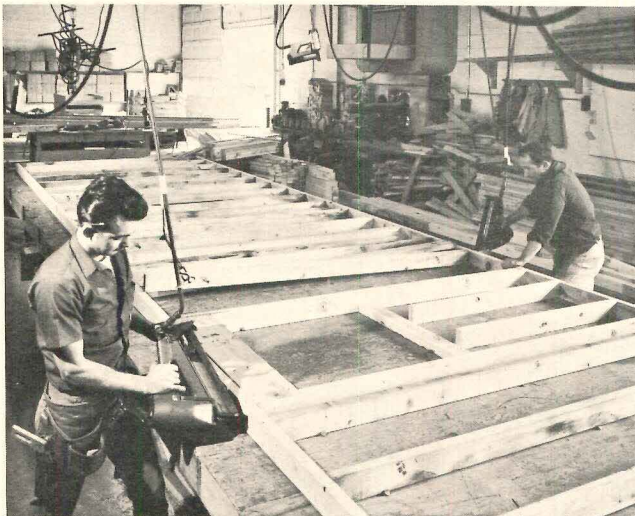
and the other half to a panel. And construction adhesive is applied to studs. Then the entire back wall panel, weighing 58 lbs., is lifted into place by its soap dish/grab bar and attached to metal clips that hold it securely until adhesive cures. Curved ceramic trim strips are slipped over the edges and secured in slots in the foam backing that permit up to 3/8" variation in panel-to-wall size. Next, the two

end wall panels, pre-drilled for plumbing connections and weighing 27 1/2 lbs. each, are lifted into place and attached. Finally, the corner seams are sealed by silicone grout applied with a caulking gun.

The result is a wall of perfectly aligned tiles in one of ten colors with bright, matte or crystalline glazes. American Olean, Lansdale, Pa.

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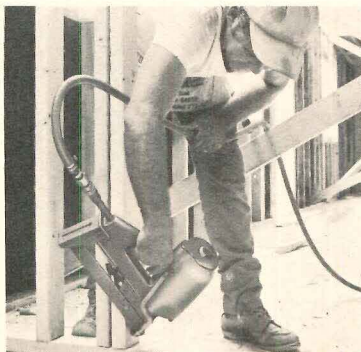
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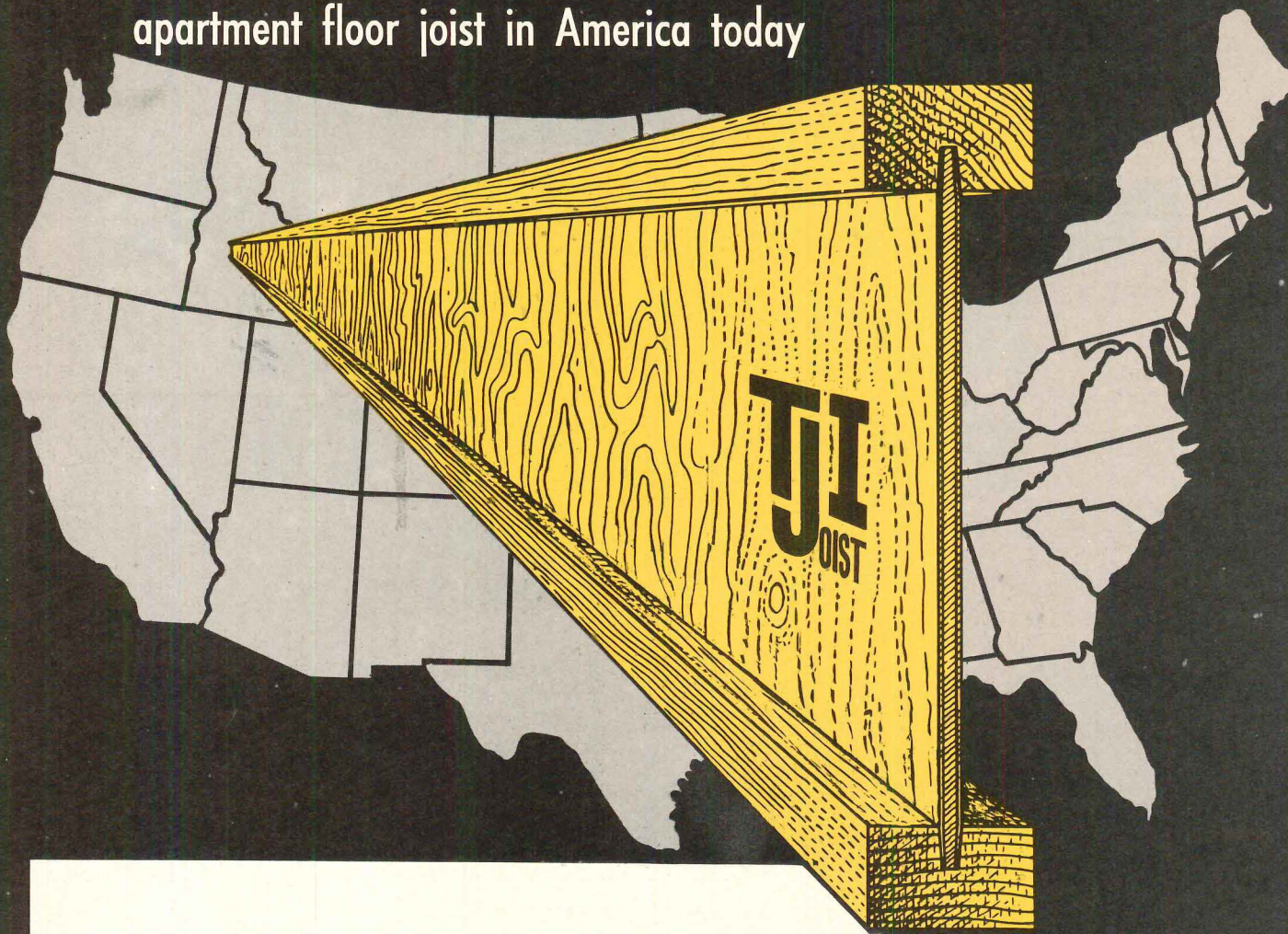
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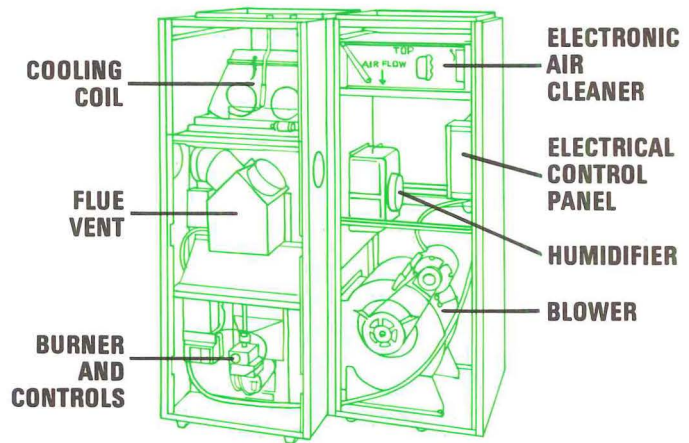


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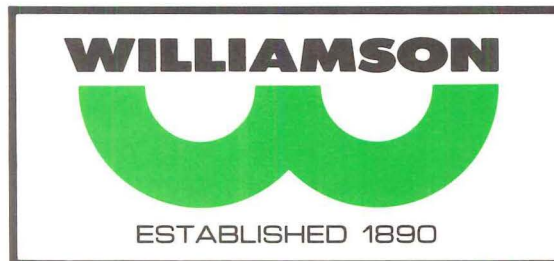
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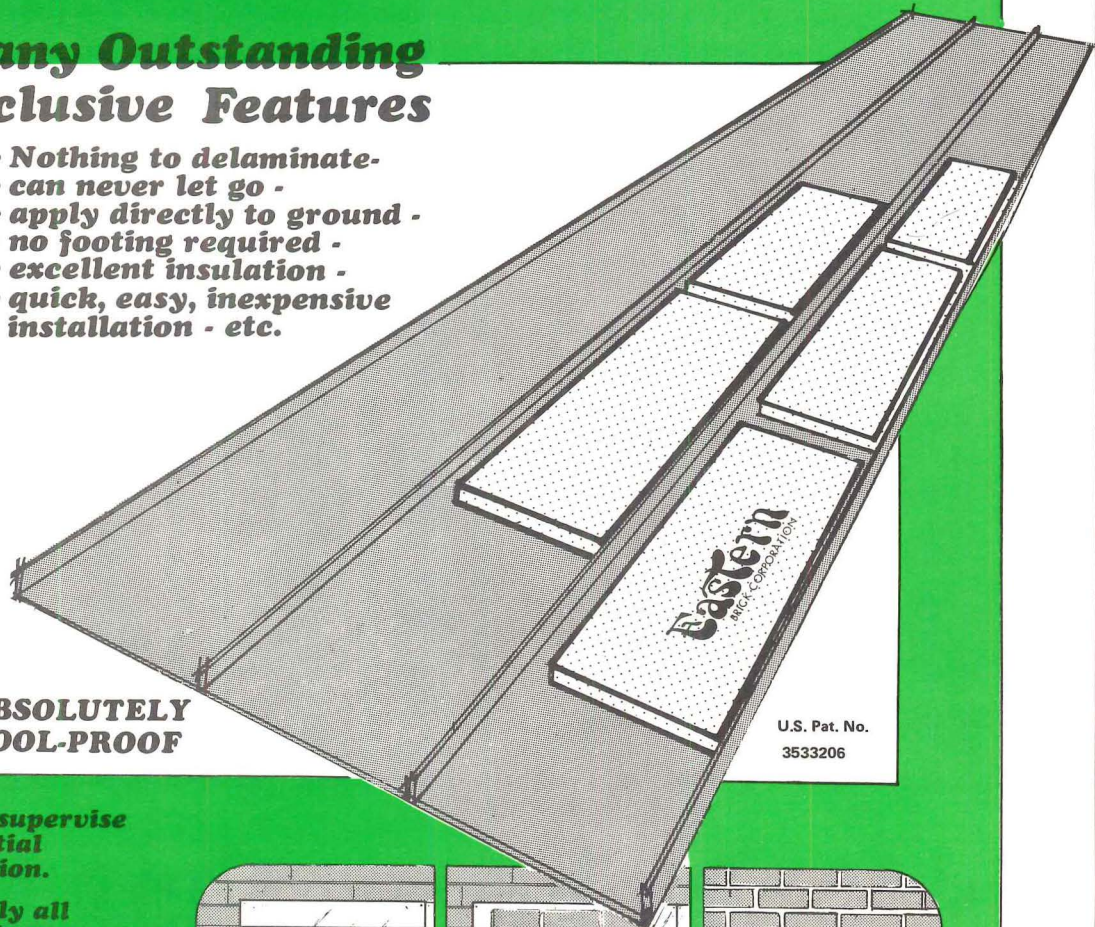
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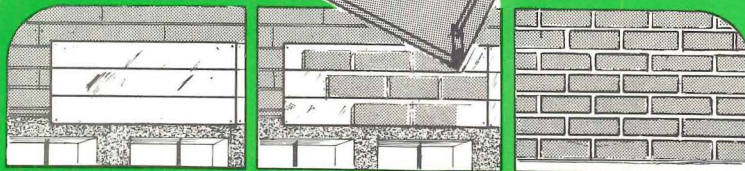
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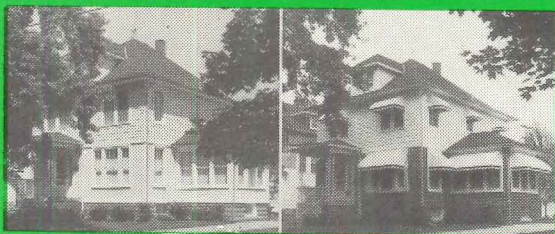
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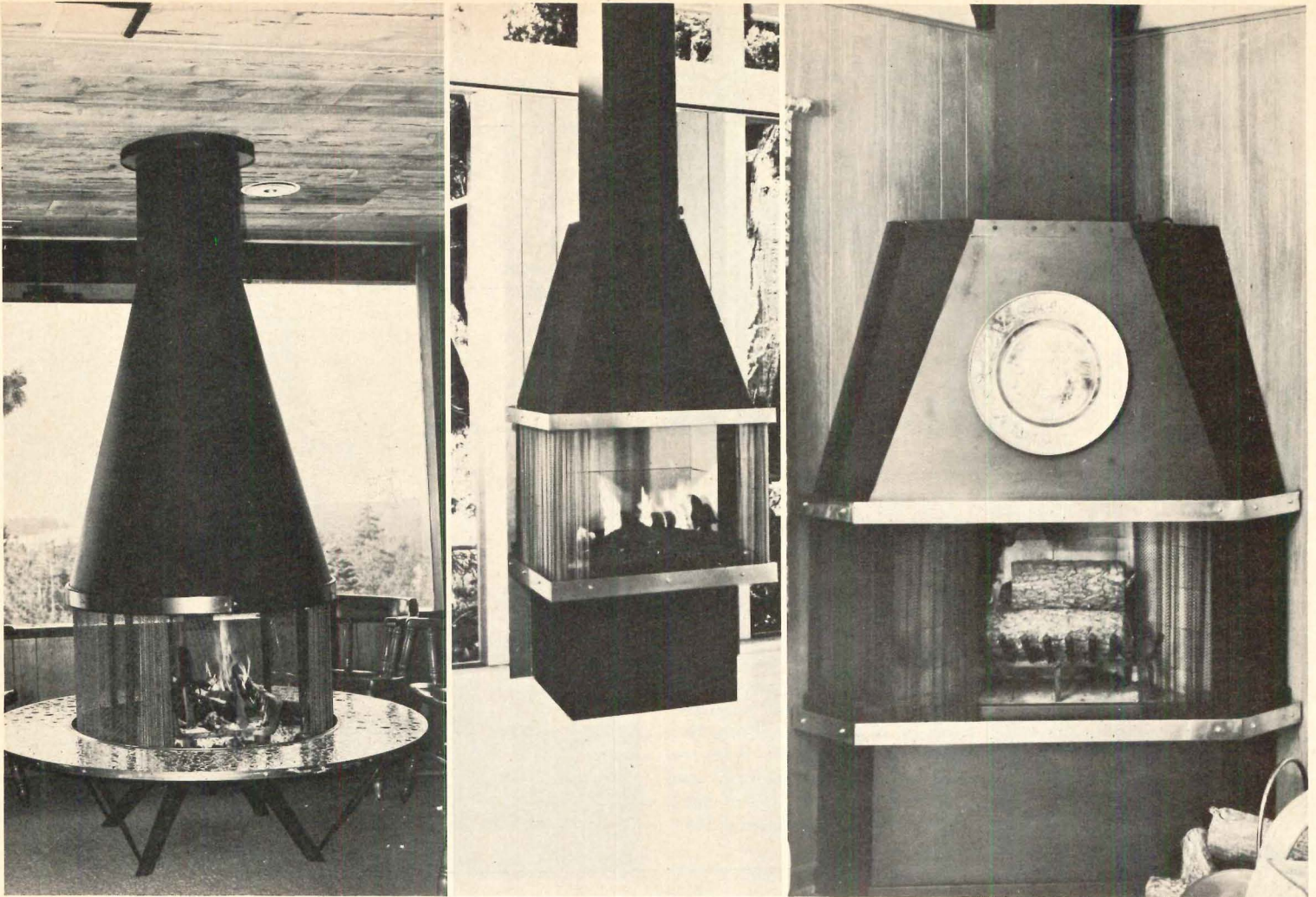
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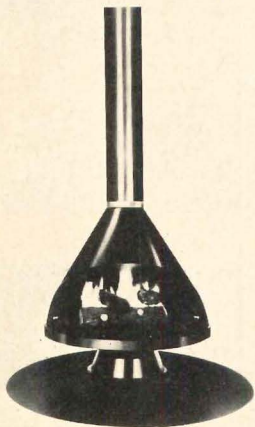
Three fireplace designs for three room arrangements

One hangs in the center of room, another sits on a woodbox base against a wall and the third is set into a corner, flush against two walls. All three wood-burning units share such features as flue caps that

eliminate drafts and smoke, black or brass mesh firescreens, black satin finish, brass trim, damper and ceiling plate. "Western" line has 13 freestanding models, all pre-assembled. Wall and corner

models have 2" refractory firebricks and built-in insulation layer for zero clearance against combustible materials. A.R. Wood, Luverne, Minn.

CIRCLE 251 ON READER SERVICE CARD



Pedestal unit for burning wood is freestanding, can be used in the center of a room or closer to a wall or corner. Circular design looks somewhat Scandinavian, comes in the now-traditional prefab fireplace colors of burnt orange, burnt red or black. Dyna, Div. Familian, Los Angeles.

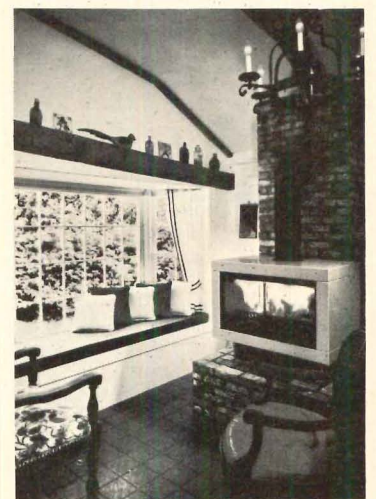
CIRCLE 252 ON READER SERVICE CARD



Compact firehood is a smaller 30" version of manufacturer's conical model, designed for apartments, modulars and smaller homes. "Capri" is ready to install on noncom-

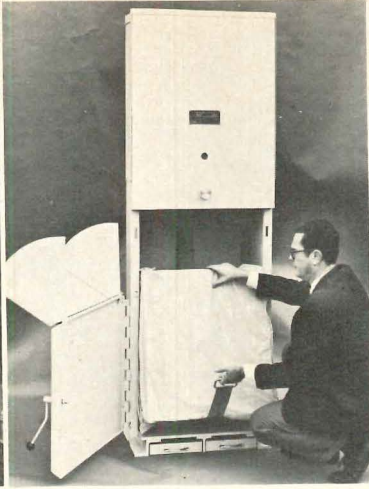
combustible base of crushed stone, bricks, tiles, etc. Red, burnt orange, olive green or black. Preway, Wisconsin Rapids, Wis.

CIRCLE 253 ON READER SERVICE CARD



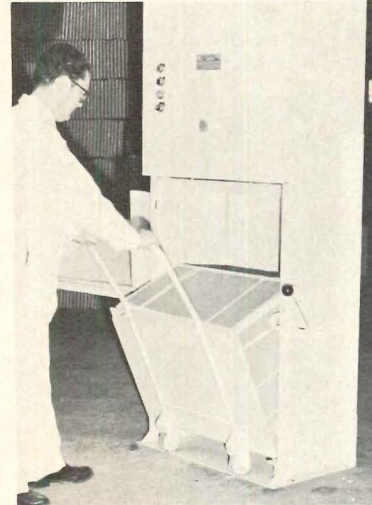
Versatile firebox can be set on a raised brick hearth as shown, used as a freestanding unit or—with a rear vent—mounted against a wall. "Manchester-Pierce" design has a 28" hearth opening and black firescreen. Gold, white, green, copper-tone, and red enamel, plus matte black. Majestic, Huntington, Ind.

CIRCLE 254 ON READER SERVICE CARD



Heavy duty compactors for apartment projects compress refuse down to as little as $\frac{1}{20}$ of original volume, thereby saving storage space and eliminating trash cans and their accompanying vermin, odors, noise, etc. A smaller model produces packages 16"x24"x26" that weigh from 50 to 150 lbs. A larger unit for up to 400 apartments compacts trash to 16 $\frac{3}{4}$ "x30"x24" packages, weighing 50 to 175 lbs. Packages—plastic bags, wax-lined boxes or bales tied with wire or rope—can be carted away on built-in hand trucks. Union Environmental, Philadelphia.

CIRCLE 255 ON READER SERVICE CARD



Shingles from recycled wastes are not new. The manufacturer, in fact, has produced them since the beginning of the century, now has site plants, \$30 million in recycling equipment. Since wastes amount to 4.5 lbs. of trash per day, will rise to 8 lbs. by 1980, every increase in recycling counts. At right waste paper is dumped into a hydropulper that mashes it up in water before it is mixed with rags, wood chips and wood flour to make dry felt, the base for felt-asphalt-granules product shown below. GAF, New York City.

CIRCLE 258 ON READER SERVICE CARD

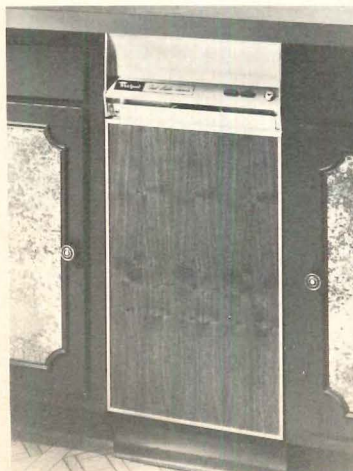


Wastewater grinder pump handles the normal discharge from four single-family houses, from six apartments or from eight motel units. It has two pumps and a holding tank twice the size of the manufacturer's earlier model for just one single-family home. It grinds solids down to a fine slurry, then pumps the slurry as far away as 7,000 ft. or as high as 81 ft. in 1 $\frac{1}{2}$ " or 2" discharge pipes. Even such hard-to-grind materials as plastic, rubber, cloth, wood and metal go through without clogging the grinder. Environment/One, Schenectady, N.Y.

CIRCLE 256 ON READER SERVICE CARD

Watersaving valve can reduce an average family's water usage by 25,000 gals. per year. Valve stops discharge during flushing, prevents bowl overflow and permits flushing with less than three gal. of water. Its one moving part won't bind or stick, it won't corrode and it eliminates noisy leaks and handle jiggling. Now in its ninth year of production with three-million unit sales, "Watersaver" is standard equipment on manufacturers' closets, can be used for replacement on other manufacturers' tanks. Mansfield, Perryville, Ohio.

CIRCLE 259 ON READER SERVICE CARD



Decorator front compactor has a standard textured steel front panel that can be removed easily and replaced with a $\frac{1}{4}$ "-thick wood panel. New "Trash Masher" has a longer, single panel, recessed controls and a higher, easy-to-reach handle. A free-standing model has a woodgrain laminated surface and in-the-top storage space for twelve trash bags. Both models compress bottles, cans and paper at 2,000 lbs. pressure in 60 seconds. Trash that normally fills three cans then fits into one small bag. Whirlpool, Benton Harbor, Mich.

CIRCLE 257 ON READER SERVICE CARD

Watersaving toilet has a siphon jet for positive flushing action with a minimum amount of water. It also has a smaller tank: 2" narrower and 2 $\frac{1}{2}$ " lower than the manufacturer's standard model. Together the two features help reduce water waste by using one third less water than conventional models, up to 50% less than older models. Its rim-fed elongated bowl, for better sanitation, has a whirlpool action and a self-draining jet. "Radcliffe" comes in blue, pink, jade, avocado, yellow, gold and tan. Crane, New York City.

CIRCLE 260 ON READER SERVICE CARD



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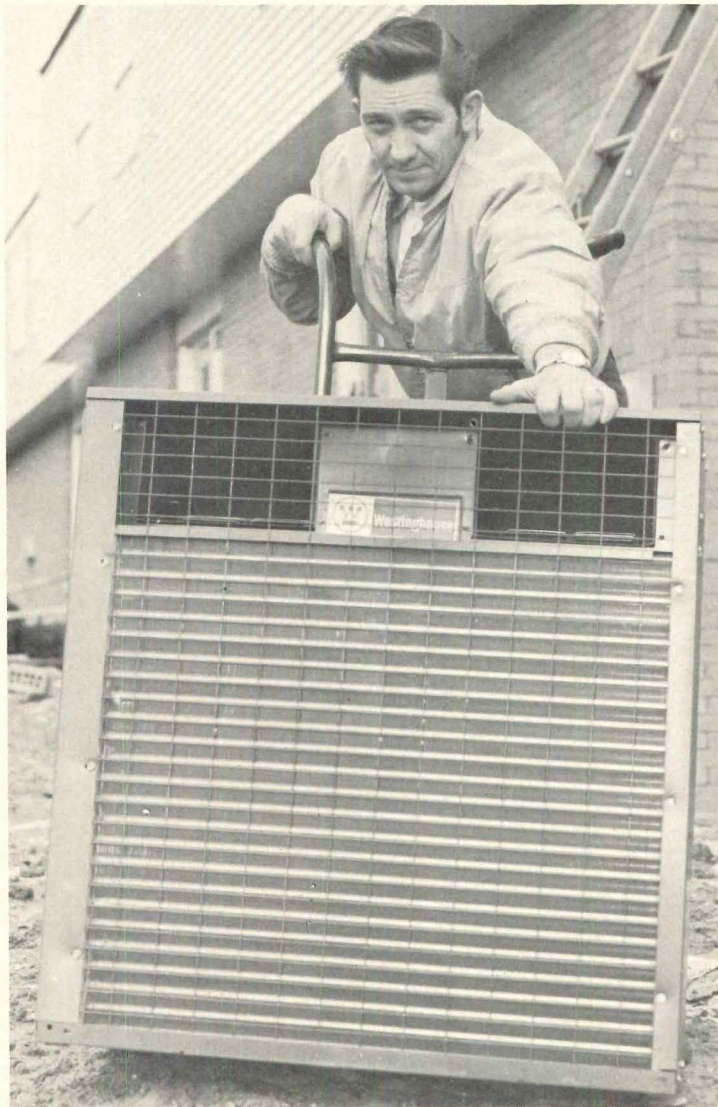
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New 24-inch wood system

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Side by side construction comparisons prove that the new 24-inch lumber and plywood modular framing system can reduce labor and material costs by more than \$200 for a 1600 sq. ft. house. Tests were conducted in Pleasanton, California, by the NAHB Research Bureau with the



help of Morrison Homes, Inc. Two identical houses were constructed by the same construction crew, on similar sites. The only difference: one home used 24-inch floor and wall framing, the other 16-inch. The results are in, and they're worth studying.

Comparative Cost Summary, 16" o.c. vs. 24" o.c.

OPERATION	Labor Cost		Material Cost		Total Cost		Difference	
	16" o.c.	24" o.c.	16" o.c.	24" o.c.	16" o.c.	24" o.c.	Cost	%
WALLS								
1. Frame & Erect Walls	\$ 451.58	\$ 373.59	\$ 794.15	\$ 688.65	\$1,245.73	\$1,062.24	\$183.49	14.7
2. Siding	383.17	341.22	386.32	471.76	769.49	812.98	-43.49	-5.6
Total Walls (545 lin. feet)	834.75	714.81	1,180.47	1,160.41	2,015.22	1,875.22	140.00	6.9
FLOORS								
1. Frame Floors	84.91	66.60	315.78	265.10	400.69	331.70	68.99	17.2
2. Subfloors	64.22	57.94	174.30	225.32	238.52	283.26	-44.74	-18.7
Total Floors (900 sq. ft. floor surface)	149.13	124.54	490.08	490.42	639.21	614.96	24.25	3.8
TOTAL WALLS AND FLOORS	983.88	839.35	1,670.55	1,650.83	2,654.43	2,490.18	164.25	6.2
Estimated Dry Wall	346.67	300.00	358.33	357.33	705.00	657.33	47.67	7.7
Estimated Electrical	32.00	25.07	—	—	32.00	27.07	6.93	2.2
GRAND TOTALS					\$3,391.43	\$3,174.58	\$218.85	6.45%

saves more than \$200 per house

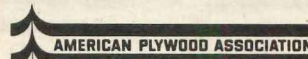
In comparative studies, the NAHB learned that 24-inch spacing netted a 15.2% labor savings on walls, and a 12.3% savings on floors. This adds up to 19 man hours overall labor time reduction, which really makes sense with today's labor costs.

In terms of dollars and cents this adds up to a healthy \$165 total savings on wall and floor construction. Combine that with the additional savings you enjoy on drywall and electrical installation, and the total comes out to more than \$200 for a 1600 square foot house. And could add up to over \$300 per house, depending on local labor and material costs.

The new Mod 24 lumber and plywood framing system assures better profits in today's building market. For complete details on the test and the Mod 24 system, send for a comprehensive 16-page booklet. Mail the coupon.



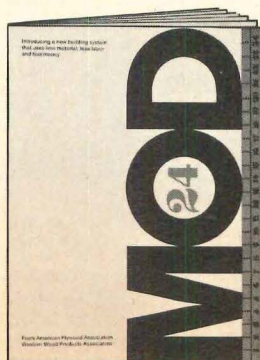
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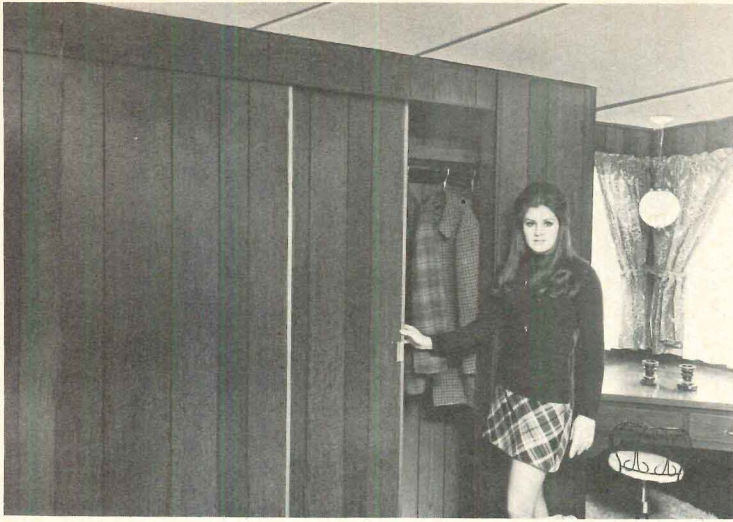
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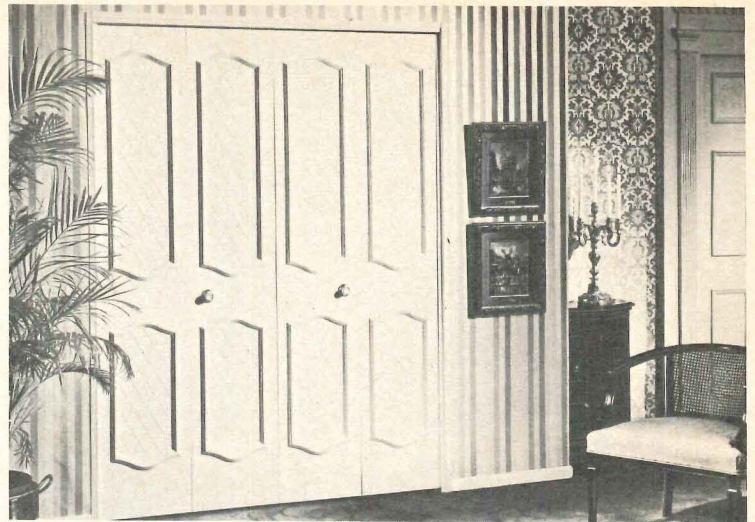
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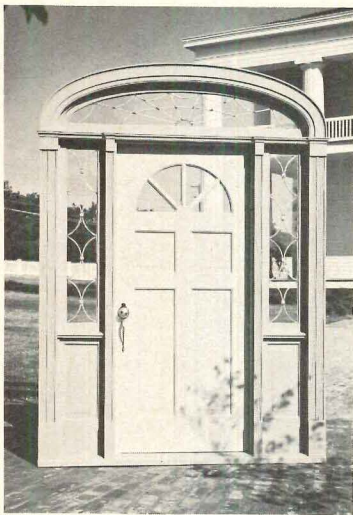
Sliding door package includes rigid steel frame, top and bottom rails, hanger, unbreakable floating guides and nylon wheels. "Panel Jacket" encases a plywood panel and insert-

ing $\frac{3}{16}$ " or $\frac{1}{4}$ " paneling makes a $1\frac{1}{8}$ " prefinished door with gold finished trim. Package is pre-assembled. L.E. Johnson, Elkhart, Ind. CIRCLE 261 ON READER SERVICE CARD



Injection-molded bifolds are each one piece of impact- and scuff-resistant polystyrene, complete with molded-in hinges to be joined by self-lubricating nylon hinge pins.

"Ultimatic" doors reproduce wood-grain texture, are finished in white that never needs painting. Brass or white pulls. M&R, Richmond, Ind. CIRCLE 265 ON READER SERVICE CARD



Pre-hung door in a colonial style has all the weatherproof features of manufacturer's exterior doors: insulated core, thermal breaks, magnetic weatherstripping, adjustable sill, etc. "Hartford" also includes cap piece, fluted pilasters, mullions and elegant leaded sidelights. Ideal, Waco, Tex.

CIRCLE 262 ON READER SERVICE CARD



Automatic door opener converts most doors. Visible "Monopack" installs over transom; concealed unit replaces transom. Both run on $\frac{1}{4}$ -hp. electric motor. Floor carpet (or pull cord, pushbutton, push or kick plate, or floor button) opens door 90°. Hydraulic spring closes. Stanley, Farmington, Conn.

CIRCLE 263 ON READER SERVICE CARD



Hand-carved doors, called "Old World", are made of solid rosewood and are carved on both sides of each door. Priced at about \$500 a pair, the heavy doors are for the luxury market or for distinctive entrances to offices, churches, restaurants or apartment lobbies. Elegant Entries, Worcester, Mass.

CIRCLE 266 ON READER SERVICE CARD



Decorative panels reproduce wood carvings called "Granada" in high-density urethane. Plastic panels are then incorporated into both sides of a solid wood door which is finished in hand-rubbed wood tones and shipped pre-hung and ready for installation. Entol, Miami, Fla.

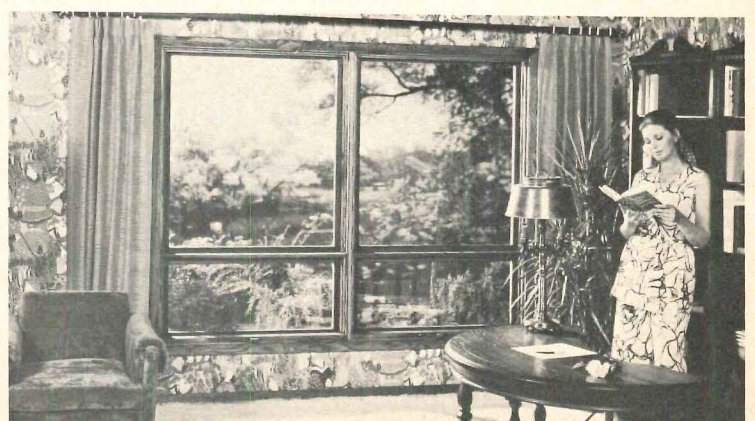
CIRCLE 267 ON READER SERVICE CARD



Folding closet door has panels, from 4" to 12" wide, that take up less room than bifolds, stack neatly to either side or in middle, run on wheels set in overhead tracks.

"ClosetWal" is finished in vinyl laminate with printed-on wood grains of oak, teak, walnut or birch. Panelfold, Miami, Fla.

CIRCLE 264 ON READER SERVICE CARD



Pre-finished windows cut installation time and costs. Exteriors are coated in white polyurea plastic that is chemically bonded to wood window, resists sun and moisture.

Interiors are finished in two coats of semi-gloss white or in three-coat walnut or fruitwood system. Marvin, Warroad, Minn.


CIRCLE 268 ON READER SERVICE CARD

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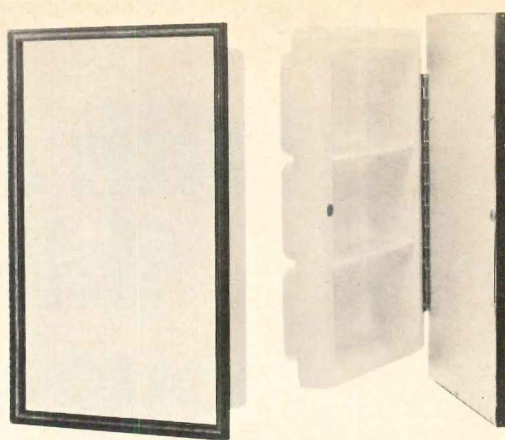
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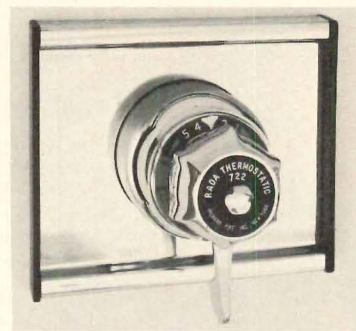
Drive your Jeep vehicle with care and keep America the beautiful.



Decorator cabinets with raised panels, called "Heritage", come in white with gold or in walnut or pecan tones with a protective plastic coating. Drawer bases are 12" or 15" wide, sink bases, 24", 30", 36", 42" or 48" wide, and all are 21 $\frac{3}{8}$ " deep and 29" high. Raygold, div. Boise Cascade, Winchester, Va. CIRCLE 273 ON READER SERVICE CARD



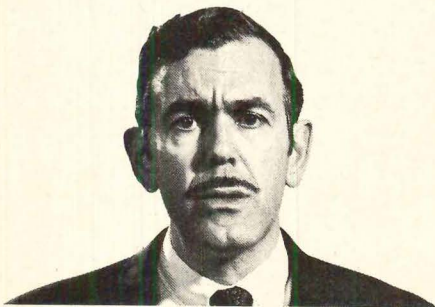
Molded plastic cabinet, made from one seamless piece of material, has no corners to catch dirt. Door is reversible for left- or righthand opening, has a finished mirror back, piano hinge and magnetic catch. Frame comes in 50 styles of molding in a variety of colors. VSI, Bristol, Ind. CIRCLE 279 ON READER SERVICE CARD



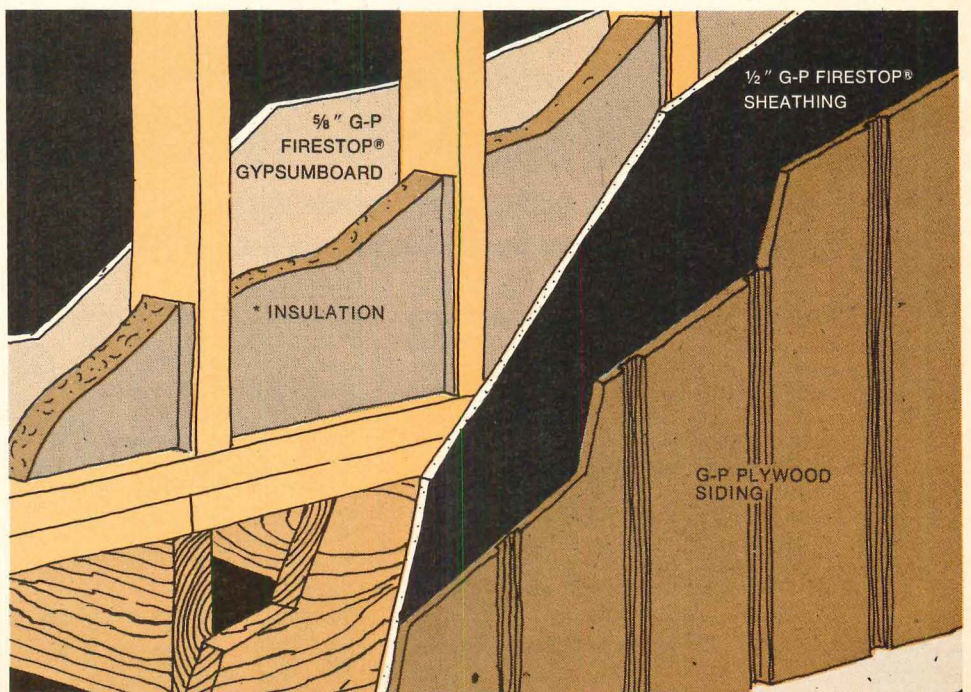
Thermostatic shower control for motels, schools and hospitals—as well as residences—has a sturdy stainless steel cover plate and is made of a newly developed copper alloy that offers better resistance to corrosion. "RADA 722" includes separate and independent control of temperature and flow. Richard Fife, New York City. CIRCLE 278 ON READER SERVICE CARD

G-P has the answer sound control in

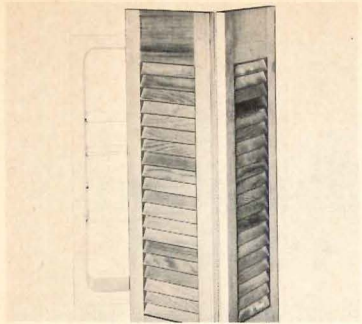
"Why does my fire control system in exterior walls cost so much?"



Fire control doesn't have to be expensive. Not when you use G-P's FIRESTOP®. It gives you a one-hour fire rating in exterior walls. 5/8" FIRESTOP® gypsumboard is applied over wood studs with insulation. And then on the outside wall, 1/2" FIRESTOP® sheathing is attached and covered with 3/8" (or 5/8") G-P plywood siding.



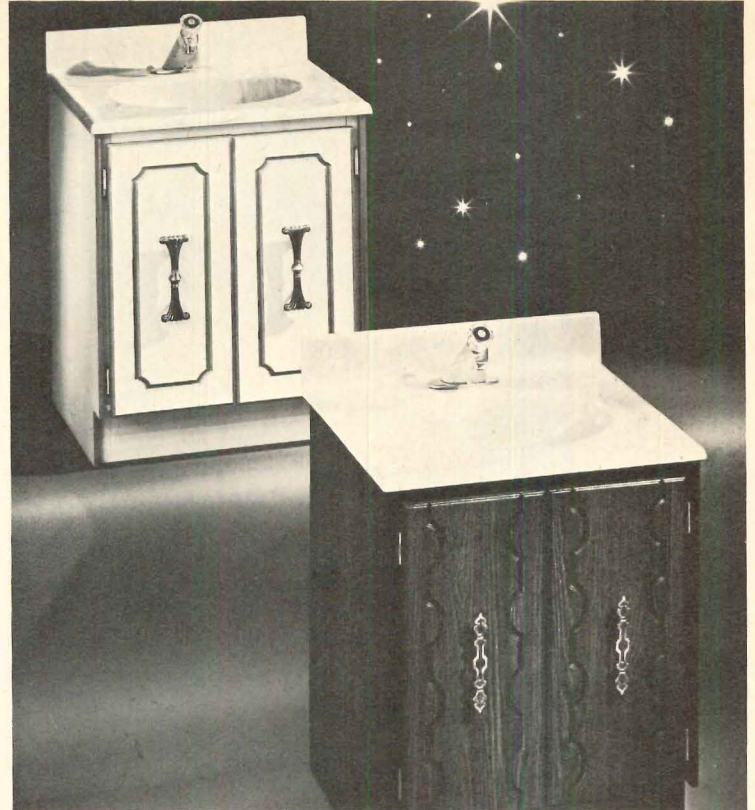
* INSULATION NOT REQUIRED TO MEET FIRE RATINGS



Louvered bifold takes up less swing space in small baths. Center-hinged door is ¾" white pine, may be stained or painted. Recessed cabinet is steel finished in baked enamel and equipped with three adjustable glass shelves, toothbrush holder, magnetic catches and blade disposal. Jensen, Los Angeles.
CIRCLE 275 ON READER SERVICE CARD

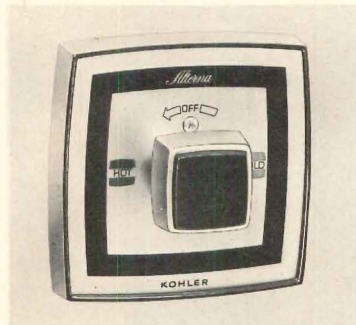


Hand shower includes an aerator like those in kitchen faucets that produces 16 separate bubbly streams of water. Aerated spray clings to skin, is good for shampooing, reduces splashing. "Champagne Shower", of white unbreakable "Noryl", for wall or hand use. Speakman, Wilmington, Del.
CIRCLE 276 ON READER SERVICE CARD



Knock-down vanities need no glue, no clips, no tools for assembly, go together in minutes. Two "Space Pak" styles—white-and-gold and oak with pewter—come 24", 30" or 36" wide and 21½" deep. Shallower models, 16½" deep, come 22", 30" or 36" wide. White-Meyer, Orland Park, Ill.
CIRCLE 227 ON READER SERVICE CARD

Single control shower valve, once set to the desired mix of hot and cold water, maintains that temperature despite pressure changes in either supply line, insuring both comfort and safety. "Rite-Temp" has an easy-to-read color-coded control panel, an easy-to-replace single working valve, comes in gold or chrome. Kohler, Kohler, Wis.
CIRCLE 274 ON READER SERVICE CARD

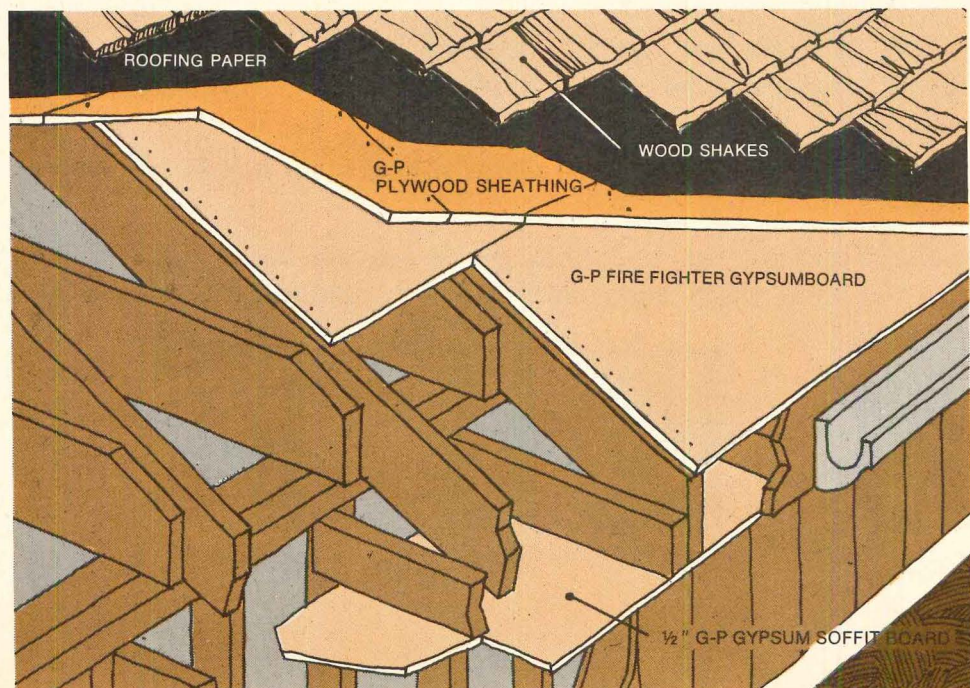


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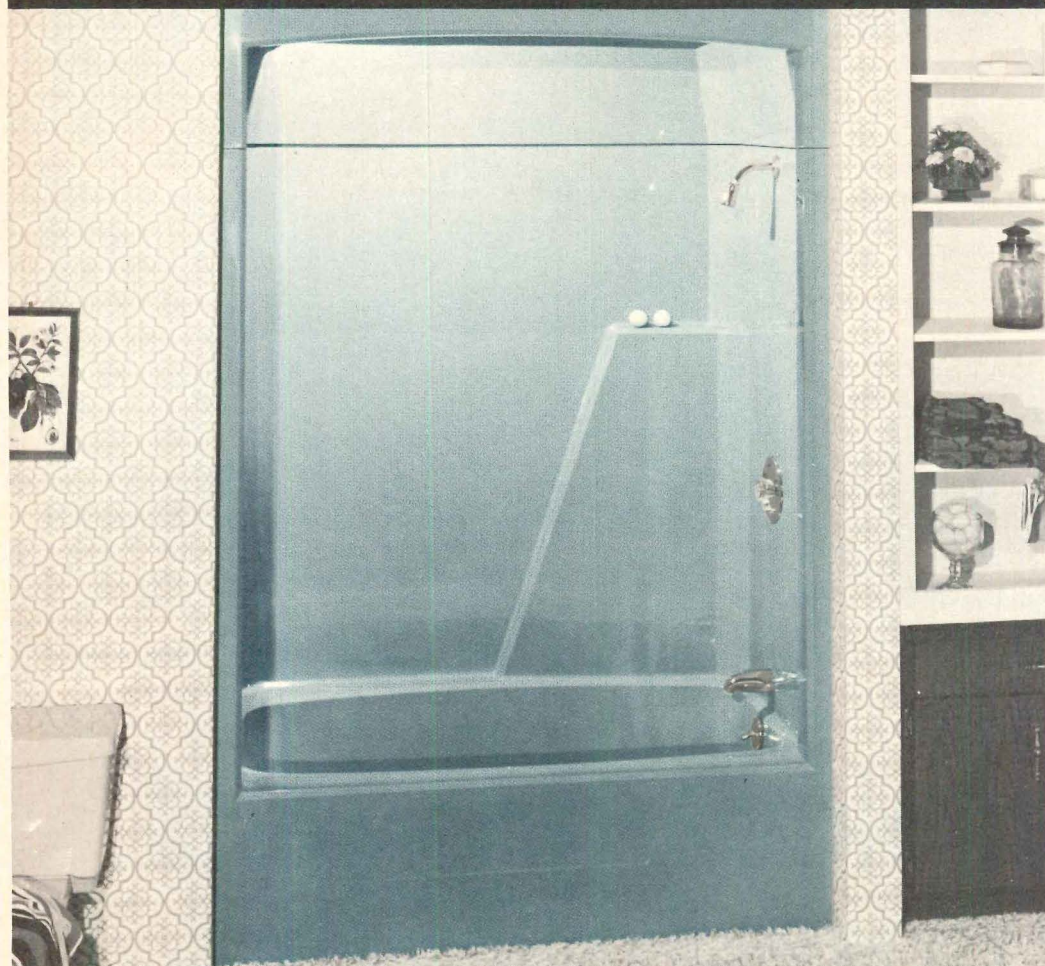
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GYPSUM DIVISION, Portland, Ore. 97204



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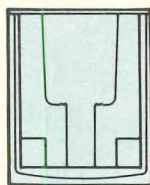
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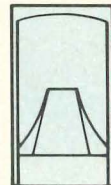
C/shell baths 3 models



showers 4 models



tubs 8 models



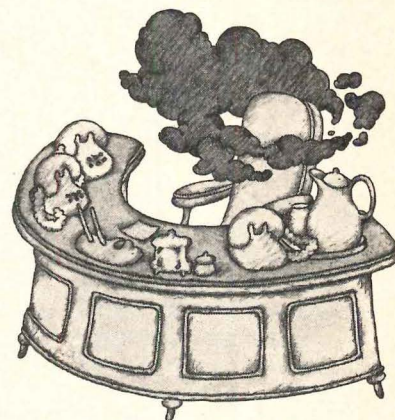
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Pollution control: A corporate responsibility



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Pollution is a now problem that is receiving now attention from astute businessmen. Water treatment plants, fume scrubbers and filtration systems, land reclamation, plant beautification, litter prevention, employee education programs, are all types of things industry is doing to help in the pollution fight.

But regardless what a businessman is doing today he must be considering pollution control efforts for tomorrow.

One thing he can do is write for a free booklet entitled "71 Things You Can Do To Stop Pollution." It doesn't have all the answers on pollution. But it might give a businessman a few ideas for both today and tomorrow.

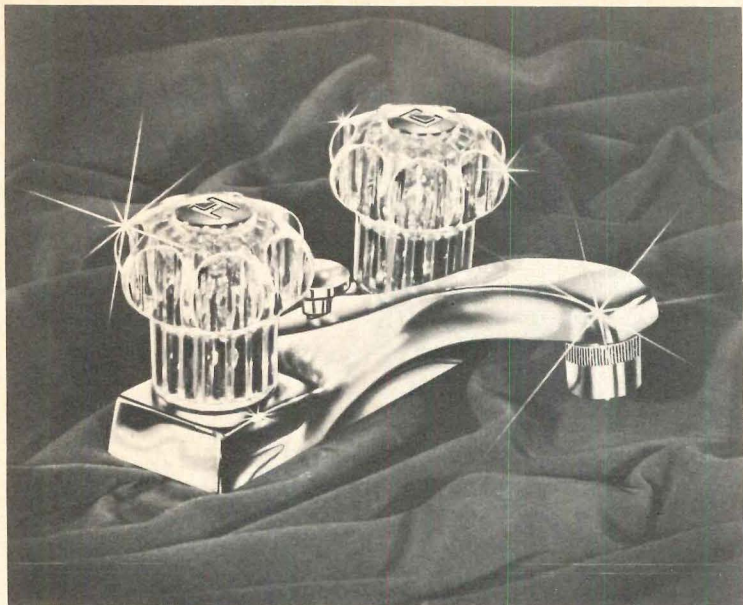
**People start pollution.
 People can stop it.**



Keep America Beautiful



Advertising contributed for the public good.



Clear acrylic handles enhance a centerset lavatory fitting. The same handles appear on the other fittings in "Strathmore Brilliant" line which also includes two- and three-valve

tub/shower combinations, shower fittings and tub fillers. All have chrome-plated cast brass bodies. Borg-Warner, Mansfield, Ohio. CIRCLE 269 ON READER SERVICE CARD



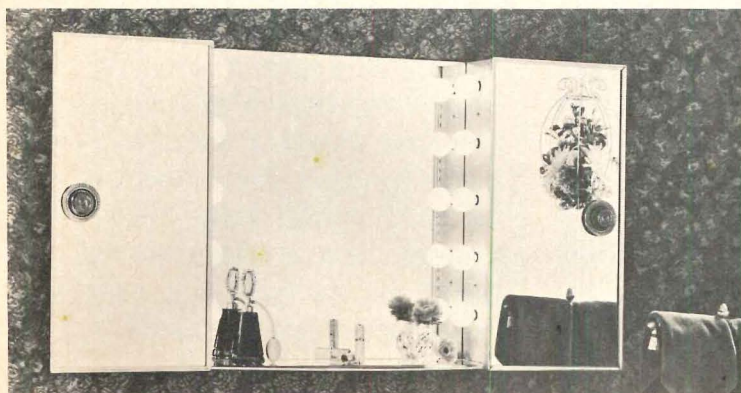
China washstand harks back at least half a century with its fluted pedestal, carved bowl and conveniently wide side ledges. The gold-trimmed white china luxury model is shown with manufacturer's semi-precious jeweled faucet handles of rose quartz set in 24-karat-gold-plated bases. Sherle Wagner, New York City.

CIRCLE 270 ON READER SERVICE CARD



Pedestal bowl sits on a fluted column with flared base. The shell-like bowl, for lavatory use, has a narrow rim, set off here by manufacturer's crystal-handled faucets. Made of cultured marble, the washstand comes in white and gold, white and black or white with white. General Bathroom Products, Elk Grove Village, Ill.

CIRCLE 271 ON READER SERVICE CARD



Mirrored cabinets flank a central mirror with a grooming shelf and ten 25-W round candelabra base makeup lights. The 12"x24" doors swing from the outside for three-

way viewing. The whole cabinet measures 24"x47½"x53⅞" deep and is finished in gold. Thomas, Louisville, Ky.

CIRCLE 272 ON READER SERVICE CARD

Another Senco Breakthrough!



The SN-III! First 3½" nailer light enough for true, single handed operation

Lighter yet powerful! Weighs approx. 7½ lbs. Finely balanced for one-hand, fatigue-free operation. No auxiliary handles or counter-balances. Tilted magazine gets into tight places.

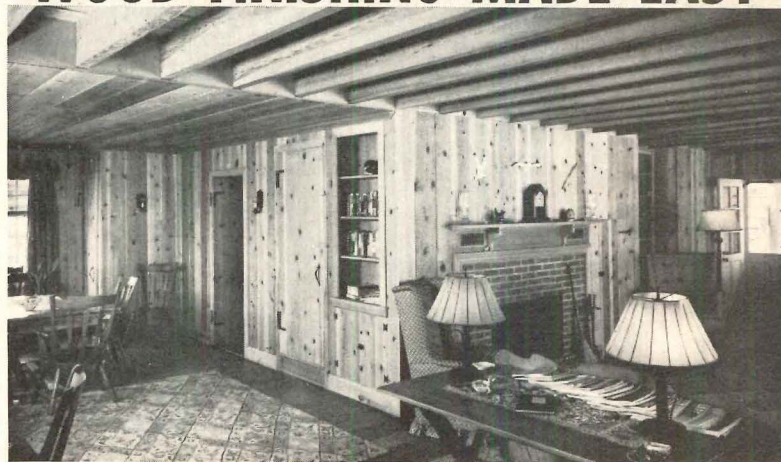
The SN-III nailer drives the 3½" Senco-Nail(TM) which is engineered specifically for power nailing. Since bending is not a factor, the Senco-Nail is more slender than a common nail — for minimized splitting

and sure holding power. Exclusive factory Sencote® gives more grip than plain fasteners. For more data, write Senco Products Inc., Cincinnati, Ohio 45244 Dept. 109.

senco

CIRCLE 73 ON READER SERVICE CARD

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Home in Beach Haven, N.J.; Architect: Savery, Scheetz & Gilmore, Philadelphia, Pa.; Cabot's Stain Wax on paneling.

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Time was when wood finishing was a long, arduous task. Today, Cabot's Stain Wax does the job in a single application. This unique "three-in-one" finish, suitable for all wood paneling, brings out the best in wood, enhancing the grain and producing a soft, satin finish in your choice of twelve colors plus black, white, and natural. When a flat finish is desired, use Cabot's Interior Stains.



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GENERAL  ELECTRIC

LITERATURE

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CIRCLE 301 ON READER SERVICE CARD

Industrial floors. A new color brochure describes typical installation areas and lists industries most likely to use an epoxy-based industrial floor surfacer. Other information included: specifications, corrosion resistance figures and application directions. Stonhard, Maple Shade, N.J.

CIRCLE 302 ON READER SERVICE CARD

Market research. "Creating Apartment Profits through Local Market Research" is an authoritative pro-

cedural manual designed to give every builder/developer the inhouse capability of gauging his own particular market. It provides a step-by-step system for gathering information necessary for effective decision-making. Outlined are the required data, where it is available and how it should be interpreted. Send \$10 per copy to the National Apartment Assn., 5050 Westheimer, Houston, Tex. 77027.

Tile. A full color, 16-page catalog illustrates over 160 color and almost 100 patterns and color combinations of ceramic floor and wall tile for residential, commercial and institutional use. The booklet contains closeup photographs of tiles as well as full views of actual room applications. United States Ceramic Tile, Canton, Ohio.

CIRCLE 304 ON READER SERVICE CARD

Concrete forming. Cost cutting information is offered in "Plywood for Concrete Forming." Six illustrations in a case history section illustrate new developments in concrete forming. Techniques for achieving unusual architectural effects with textured plywood while controlling costs with reusable form material are also included. In addition there is

information on plywood types and grades, a discussion of dusting and staining techniques, tips on form maintenance, span tables for joists, studs and walls and engineering data covering other loading conditions and spans. American Plywood, Tacoma, Wash.

CIRCLE 305 ON READER SERVICE CARD

Roofing. To show rot resistant fiber glass roof shingles, mineral fiber slates, asphalt roof shingles, and fiber glass roll roofing, this new booklet uses full color photos of applications and illustrations of construction, as well as closeups of roofing varieties. Johns-Manville, Denver, Colo.

CIRCLE 306 ON READER SERVICE CARD

Drywall finishing. "Quality Dry-wall Finishing in All Kinds of Weather" explains the unique reactions in joint treatment created by hot and dry conditions, wet and humid weather and winter cold. Common sense application tips, recommended water proportions and drying times for joint compound under tape are also included. In addition the brochure lists general practices for applying joint compounds which will get the best results, inside and out, in a variety of weather conditions. United States

Gypsum, Chicago.

CIRCLE 307 ON READER SERVICE CARD

Vinyl wall paneling. Six styles shown in room settings are included in a booklet called "AFCO Beauty Patterns." The heavy-duty vinyl coverings come with cover, cap and panel divider mouldings which match for uninterrupted wall design. AFCO, Houston, Tex.


CIRCLE 308 ON READER SERVICE CARD

Paint cost analyzer. A cost analyzer that presents in slide-rule format the comparative costs of applying and maintaining 14 different paint systems over a service life span of five to ten years on three typical industrial applications includes the following: 1. comparative costs of maintaining alkyd, latex, phenolic spar, moisture-cured urethane, urethane oil and two-component urethane on a wood or plastic flooring for five years, 2. costs of alkyd, modified alkyd, latex and urethane oil finishes for exterior steel or wood in a non-corrosive atmosphere, 3. costs of modified alkyd, two-component epoxy, vinyl and two-component urethane finishes for exterior steel surface in a corrosive atmosphere. Mobay Chemical, Pittsburgh, Pa.

CIRCLE 309 ON READER SERVICE CARD

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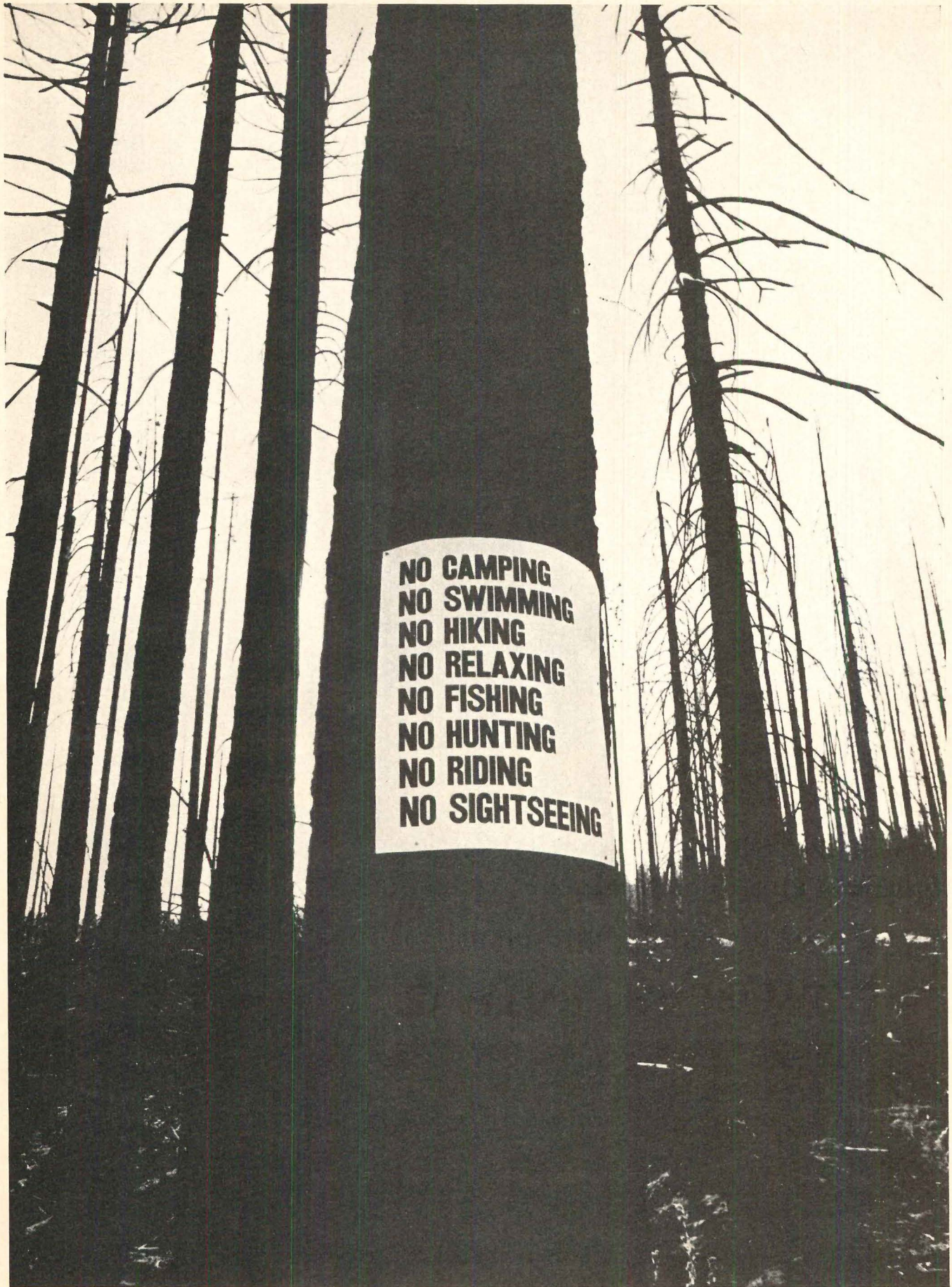
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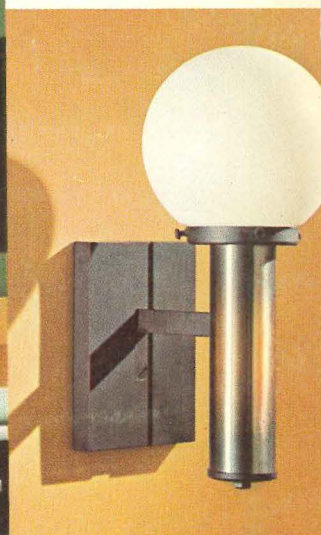
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