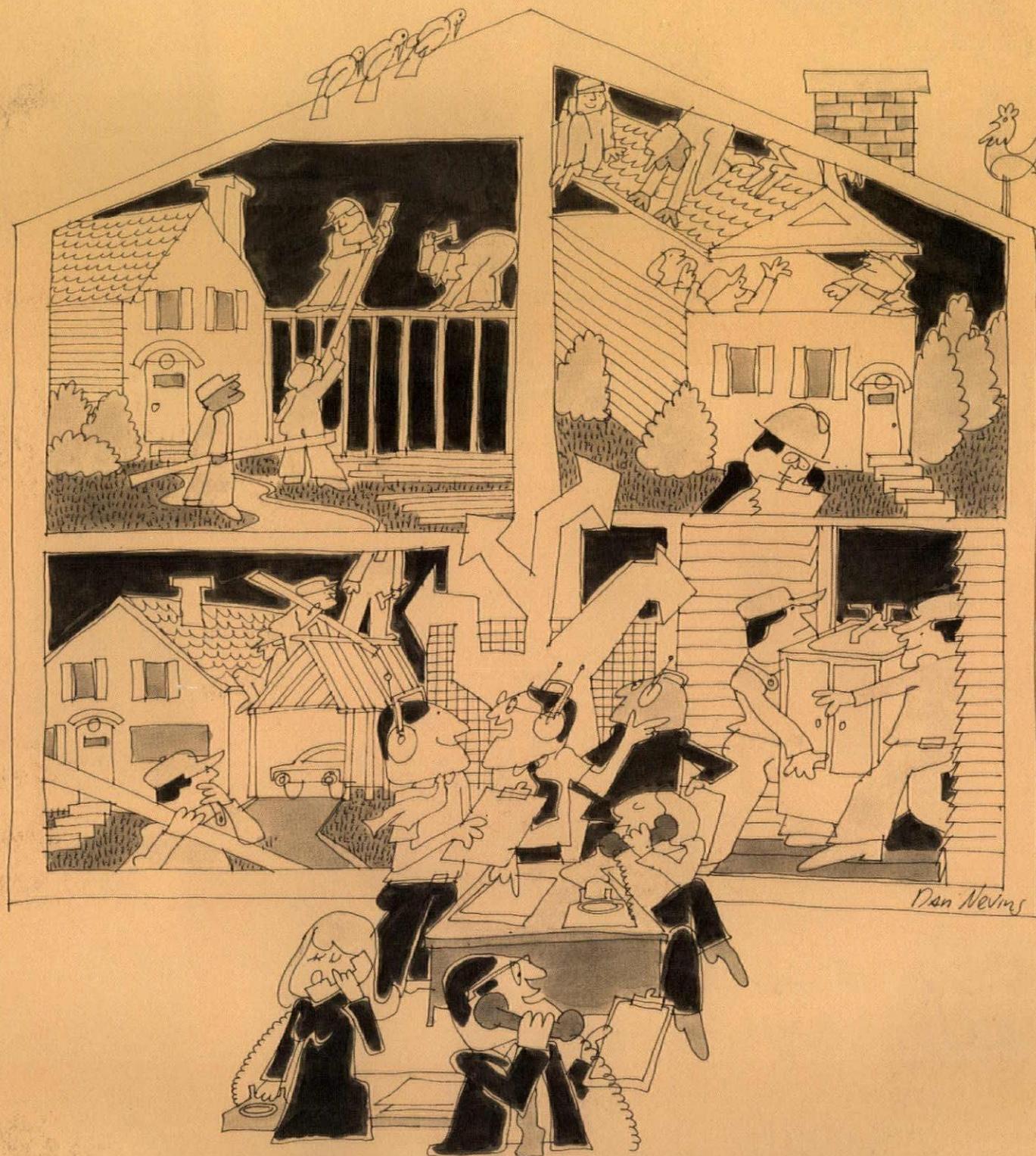


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December 1973

House & Home



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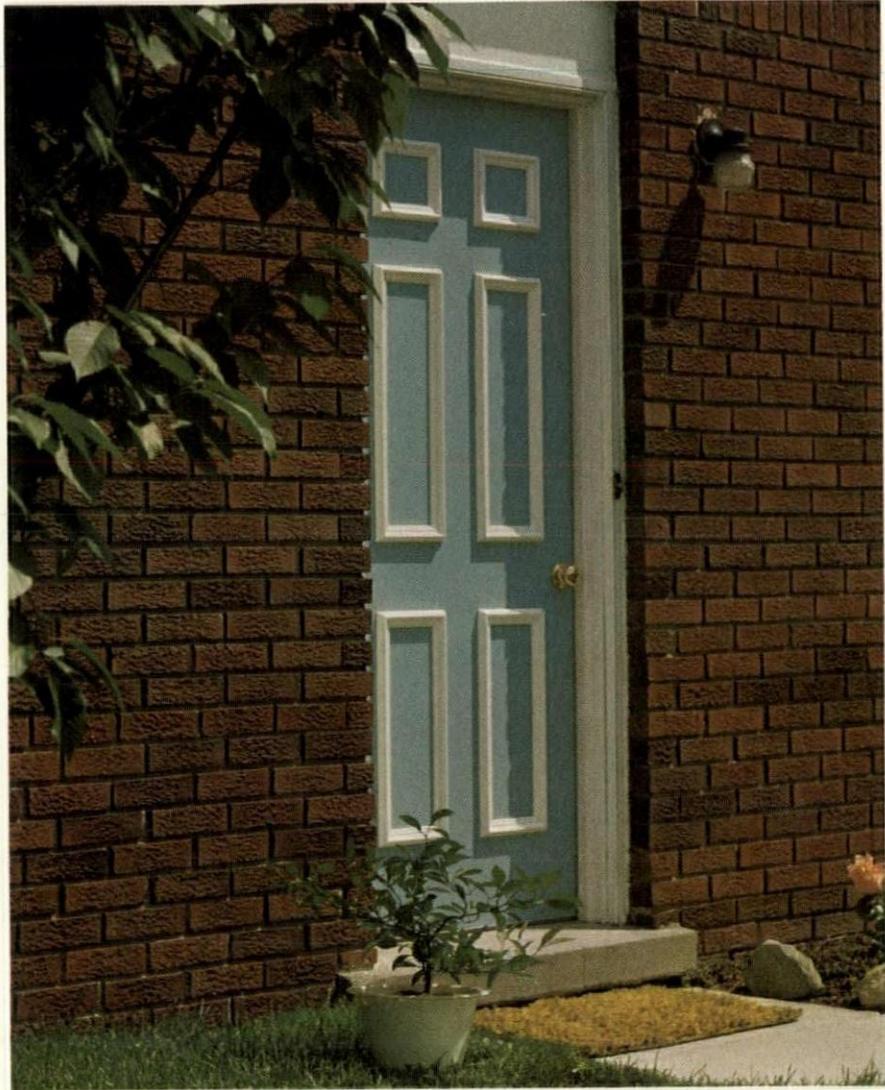
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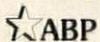
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Cover/Illustrated by Dan Nevins

Some mortgage rebels make this point: Those other points have got to go

A restrained revolt is now rippling through the mortgage business and reaching into the hallowed halls of the austere old Mortgage Bankers Association itself.

The rebellion's target is the discount, or the points, charged on FHA mortgages. The aim is to abolish them: not reduce or restrict them but, at long last, to be rid of them once and for all.

A whole legion of partisans insists that no one reform could do more to help the homebuilder promote low-cost housing, lure the buyer back into the house market and restore the moribund FHA to all-but-forgotten status as a dynamic mortgage agency.

New recruits. The rebels have traditionally been builders and consumers, but they now count among their consociation some highly distinguished mortgage leaders. These reformers view the abolition of the accursed point system as probably the most desirable of all the revisions now being urged upon the mortgage structure [NEWS, Sept.].

President Nixon has gotten the message, and he and HUD Secretary James Lynn* have asked Congress to legislate a truly free rate for FHA mortgages: no interest ceilings—and no points.**

Lid on a kettle. The establishment leadership sought to bottle up the mortgage revolt when the MBA rallied 6,000 strong for its gala convention in New York.

The outgoing president, Everett Mattson, waxed vehement in defense of the point system when questioned at a press conference:

"There isn't a capital instrument of any kind that does not have a discount. That takes care

*Lynn had harsh words for the mortgage bankers at their New York meeting. "The housing market is not in the greatest shape today for a good many reasons," he said, "and among those reasons are shoddy practices by some mortgage lenders." He outlined a long series of rule violations and illegal activities found by the HUD inspector general in an audit of 250 mortgage companies in connection with the FHA scandals. "I think you get the flavor from that little rundown," said Lynn, "and it doesn't taste very good to me."

**The President's housing program, fully detailed in H&H in November, has now been presented to Congress in HR 10688 and S 2507.



Change of command finds Everett Mattson (left) leaving and Walter Williams taking over the presidency of the Mortgage Bankers Association at convention in New York.

of the fine tuning necessary in the market. We feel the mortgage should trade the same way."

And the incoming president, Walter Williams, made much of the fact that Sheldon Lubar, a mortgage banker who now reigns over the industry as FHA commissioner, has been persuaded to soften his convention speech. Instead of insisting on no points, Lubar had pledged a drive against "excessive" points.

(If the MBA leaders thought they had outpointed Lubar, they might have been mistaken. One day earlier, asked by telephone if mortgage bankers themselves wouldn't be better off without discounts, he had replied:

"Of course they would, if they only knew it.")

Resistance. The MBA leaders' starchy stance failed to effect anything like unanimity, and Williams himself was to concede later that "a minority" of his membership was indeed disposed toward a no-discount operation.

Considerable protest against points was heard in the convention corridors, and the revolt spilled over into the MBA's sequential Caribbean mortgage

conference in Puerto Rico.

Points of history. The dispute over points is as old as the FHA mortgage, which traces from 1934.

The interest that any lender could exact on this government-insured mortgage was limited by the government itself. The FHA rate was, therefore, launched upon a controversial career as an administered rather than a free rate.†

The FHA was a political entity, of course, and it was ever reluctant to raise the FHA rate when other credit market rates climbed. So the FHA rate was often lower than the yield that the big institutional investors demanded if they were to risk their money in mortgages.

Getting the point. The mortgage dealers retaliated with the discount.

†The two major rate categories are short and long term, and each of these has three sub-categories: open-market or free rates, which fluctuate constantly in market trading in response to supply and demand, administered rates, set unilaterally by government and private bodies, and negotiated rates, determined directly between borrower and lender. Conventional mortgage rates are considered to be negotiated long-term rates.



NEW YORK LIFE'S LUTZ
'I can't stomach a discount'



COAST MORTGAGE'S CADY
'Can't have cake and eat it'

When a homebuyer (mortgagor) took a \$20,000 mortgage, the mortgage dealer would discount the loan by perhaps 4 points, or 4%. He would pay to the buyer's builder not \$20,000 but \$19,200. The buyer would pay interest on the full \$20,000, however, and since only \$19,200 had actually been lent, he was paying a higher rate than the FHA ceiling that had been set for the \$20,000 loan.

Inside stuff. Four points of discount translate into ½% of yield in the national secondary market, so the mortgage dealer could now sell to his investor a mortgage yielding ½% more than the FHA rate.

The dealer could frequently make a profit on the sale, too. He had bought the original mortgage at a 4% discount, or a price of 96¢ on the dollar. He could often sell the \$20,000 mortgage to his investor at 97¢, for a clear profit of \$200. The discount mechanism permitted a nice degree of negotiation on pricing.

Victims. Builders have always hated discounts because it is they who pay them (although in actuality they pass much of the discount on to the buyer by raising the house price.)

Most buyers had never understood discounts, and they were acquiescent until the credit crisis of 1966 educated the public to the intricacies of mortgage wheeling and dealing. The buyers' outcry rose sharply thereafter and became a nationwide clamor with the advent of Ralph Nader. For the buyers had an irrefutable argument:

They were paying interest on money that had not been lent.

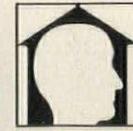
The club. Most mortgage men defend discounts with a fervor verging on fanaticism. Simply put, the system lets them manipulate prices.

A sort of inertia also contributes to their obduracy. The mortgage men are an old and rigidly conservative coterie, and they now share a kind of mystic devotion to the abracadabra of the point process. The initiates love to converse in their own abstruse jargon of yield, price, fee, coverage, spread, premium and penalty. They can—and do—spend agreeable hours discussing niceties of point shaving or split yield. They have just had two years of unparalleled pros-

TO PAGE 8

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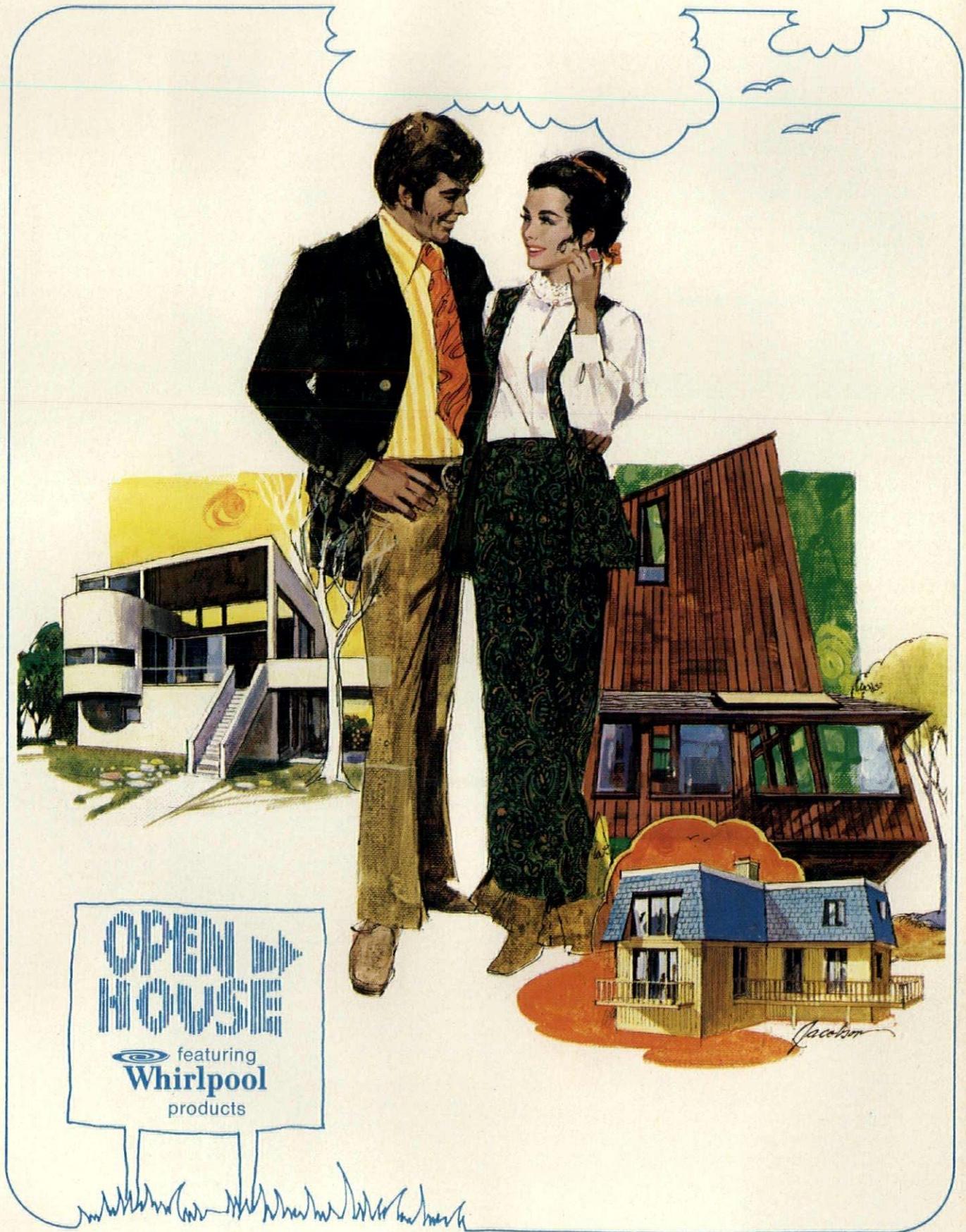
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Mortgage rebels make a point: The points have got to go . . . continued

FROM PAGE 4

perity, and most of them are snugly comfortable within the point system and want it kept.

Defense. The mortgage men have paid loud lip service to a free rate, but their actions suggest a numbing lack of enthusiasm. Reformers thought they had the mortgage fraternity's support when the omnibus housing bill of 1972 was in draft, and a free rate was actually proposed in committee.

Congress was startled to discover at that juncture, however, that what the MBA wanted was a free rate—with full discount privileges.

A kind of dual-rate scheme was then patched together, allowing a free rate without discounts or an administered rate with points. That too disappeared—and to nobody's great discomfiture—with defeat of the House version of the bill [News, Nov. '72].

In extenuation. The mortgage establishment maintains that a fully free rate will not work.

They need points, the mortgage men say, to offset the cost of originating mortgages and to allow leeway in trading mortgages in the secondary market.

To make any money on a mortgage they buy at par, charging no discount, the mortgage men would have to sell the loan to an investor at more than par.

"Our investors won't pay a premium," said Mattson in New York. "Our biggest investor, Fannie Mae (the Federal National Mortgage Association), has told us it just won't pay premiums."

And rebuttal. What the mortgage men don't say is that there is no reason they could not force investors to pay par plus by withholding mortgages. As for Fannie Mae, a modicum of persuasion from a few consumer-oriented congressmen would quite probably prompt that agency to back off, and fast. The corporation has an innate horror of poor public relations. Critics contend that the caveat that "investors won't pay a premium" is a shibboleth being used as a self-fulfilling prophecy by the MBA.

Some investors, in fact, were already paying premiums as Mattson spoke.

Wall Street houses had found themselves without mortgages



HUD'S LYNN
Harsh words for lenders



FHA'S LUBAR
Was he outpointed?

to back some \$1 billion in mortgage certificates they planned to issue through Ginny Mae. A scramble for FHA loans had resulted, and the price soared to par as the MBA met.

A par market operated on a bid-and-asked spread of 99 to 101, and investors were reportedly bidding up to 101¢ on the dollar during the meeting. Ted Volckhausen, who publishes the newsletter *Bankers Research*, told of sales at 100¼ in his issue of October 27.

New climate. There are signs of change in pro-point thinking, not the least of which are appearing in the mortgage men's own bailiwick. The mortgage men saw discounts deepen to the extent of driving investors right out of the market in 1966 and 1968-9. No self-respecting investor cares to be associated with discounts of 10 or 12 points; they are too cruel to builder and buyer and used-home seller. So the price the mortgage bankers pay for their prized points is sometimes the loss of all investment. The discount becomes the golden egg that kills the goose.

Discounts have readily lent themselves to abuses that triggered the FHA scandals of yesterday (see page 10), and they have been a not inconsiderable factor in driving most white-collar borrowing out of FHA and into the conventional mortgage market. The mortgage men's cherished FHA programs have fallen to 6% of new-house starts.

Those are all practical market arguments being made against the point system, but there is now something extra: a new awareness that common decency demands a fair shake for the borrower. The consumer movement has convinced a number of the most stubborn of mortgage men that they have no right to charge interest on money

that has not been lent.

Changing times. The new spirit was much in evidence when the mortgage leaders adjourned their New York meeting to the sunny sands of San Juan. The pointless question arose at a spirited session there, and William C. Lutz, vice president of New York Life, framed his considered observation this way:

"I hate the god-damned discount program. I have always hated it. I just can't stomach a discount, and I don't see why anyone in mortgage banking should fight about that. The buyer is paying interest on something he doesn't get."

A piece of cake. The mortgage establishment could invoke the retort courteous:

Bill Lutz is an investor, not a mortgage seller, and so he can afford to talk that way. They could say, too, that Bill Lutz is a maverick.

But Bill Lutz has a reputation for knowing what he's talking about. And as for his being a maverick, listen to one of the mortgage men's own. He is Richard E. Cady, president of Coast Mortgage in Seattle. When the MBA's executive vice president, Oliver Jones, bent a lance in defense of a "free" rate with points attached, Dick Cady replied:

"You can't have your cake and eat it. The discount to the house buyer is unfair."

One man's conflict. Walter Williams, the new president of the mortgage bankers, is a man of moderation. He is a former member of both House and Senate in Washington state, and he gives evidence of a high regard for opposing points of view.

Williams is sorely concerned with the points question, for he is now caught between the sharply contending forces of morality and practicality. He de-

plores deep discounts, and he is perfectly willing to concede that the builder's and buyers' arguments have considerable validity. But—there is always the MBA's Old Guard.

Williams still clings to the basic concept of discounts. He says the MBA asked Congress to authorize discounts up to four points if it went to a free rate, but he says too that he would settle for two.

"We need two points," he insists, "to cope with the market." Here too, however, it is what Williams does not say that may be more important to the builder and the home buyer. What he did not say was that, if the mortgage bankers got the two points, the next credit crisis would bring them back to Congress to ask for four points—or six—or a free rein. The reformers had already spoken to the Williams theme with the reminder that the way to get rid of points is to get rid of them.

Conclusion. The Williams compromise has wide support, but the clear evidence from both the New York and San Juan meetings suggests that the quiet little rebellion is spreading.

Congress may summon the courage to authorize a free FHA rate with no points, or it may take the MBA's compromise proposal for a limit of two points. Or it may do nothing.

Whatever the approach, though, one conclusion is now inescapable: The point system is under heavy attack—and it is quite probably on the way out.

Should Congress duck the issue, it will simply drive the FHA into inactivity and accelerate the shift into conventional mortgaging. (One private insurer, Mortgage Guaranty of Milwaukee, is already insuring more single-family new-house loans than the beleaguered old FHA.)

Should Congress take the Williams plan, it will at least signal its displeasure with discounts.

Should it eliminate points entirely, it may render the homebuilding industry and the homebuying public the greatest service of a decade.

For the drift of opinion is now crystal clear:

The point discount system is an idea whose time has gone.

—EDWIN W. ROCHON

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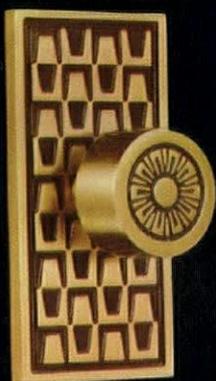
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The FHA scandals: An angry reporter tries to show the whole picture

Brian Boyer, a former editor on the *Detroit Free Press* and once an investigative reporter, has brought the depressing stories of the nationwide FHA scandals together in one readable and passionate volume. The title, "Cities Destroyed for Cash," is not exaggerated; the scale of what happened is sufficiently vast to accommodate it.

George Romney, who presided over HUD during the scandals' emergence into the light, has spoken of 240,000 units eventually falling into default—and having little or no resale value.

Congressman Wright Patman has spoken of 250,000.

Up to \$5 billion. According to Boyer, the two men are not necessarily talking about the same houses. He believes the total will finally be something like 390,000 units, with the startling price tag of some \$5 billion.

Boyer also believes the total cost to the government—that is, to us taxpayers—in interest, principal and expenses, will eventually be many times that figure.

Another reporter who chronicled the Detroit scandal believes Boyer overstates the loss. Don Ball of the *Detroit News*, one of the country's most widely respected housing writers, believes the defaults may stop at only 100,000 to 125,000.

Worst case. By far the worst damage that has come to light



Desolation like this goes on for miles in some places. Detroit suffered the worst but by no means the only damage; these "FHA'd" homes are among many in St. Louis.

has been to Detroit. It was there that Boyer says he first became aware of the national disaster. His book tells of an auto tour of a kind of deserted moonscape—thousands of houses boarded up, abandoned, gutted or bulldozed into vacant lots. The view of this devastation was so startling that Boyer set out to find out why it happened.

Research occupied Boyer's nonworking hours for a year and a half, as he explored a seamy underworld of crooked builders, blockbusters, real estate speculators, slum landlords, thieves, corrupt and/or incompetent FHA officials and mortgage interests that included some of the most respectable institutions in the industry. These mortgage combines, he found, were only too willing to finance the rest of

the crowd's illegal activity.

Boyer estimates that this combination perpetrated what may be the most massive and costly fraud in the country's history.

Whole story. Boyer's dissection of the fraud is drawn from various sources and retold from several angles in his book, until the reader has acquired a rounded, or three-dimensional view of what happened.

The culprits. The story is well worth the retelling—and rereading. It involves the FHA itself, mismanaged from the top, suddenly injected into the central city with an inadequate and ill-equipped staff and instructed to provide housing for the poor.

The cast includes the appraisers and inspectors at the bottom of the FHA hierarchy,

badly supervised and all too vulnerable to bribery and manipulation by some of the sharpest denizens of the central city, who knew a good thing when they saw it coming. It also includes the denizens.

Builders. Dishonest builders also did very well. Shoddy new housing was grossly overvalued by FHA appraisers. The FHA programs most favored for attack were those known as section 221-d-2 (with 40-year mortgages and no "economic soundness" rule), section 235 (mortgage interest subsidy for home purchase by poor families) and section 236 (same for multi-family renting).

Angry man. Boyer was outraged by what he uncovered, and his outrage crackles through the polemic he has written.

At its end (after giving George Romney a guest chapter in which to defend himself and HUD), Boyer proposes a long list of radical measures to better the nation's housing.

He may not find many takers for some of his ideas. But his book, just out (Follett Publishing Co., \$7.95), should accomplish its author's main purpose: "to open up the door (to the FHA scandal) so other Americans can walk in and see what's inside."

For anyone inclined to walk through, we include below and on page 12 some samples of what they will find.

—HAROLD SENEKER

Overview

'Deliberate program of ruin for profit, under cover of government housing law'

There is a part of Detroit called the Lower East Side which visitors, in awed voices, compare with the bombed-out cities of Europe after World War II and, later, of Vietnam.

Half and more of the houses on any given block are boarded up with plywood squares. The gutters hang, rain washes in through the holes in the roofs. Ruined by the elements and gutted by thieves, the houses seem to be disintegrating like the stumps of rotted trees. Fires at night cremate the remains . . .

One equivalent of this area in New York City is known as the South Bronx; another is Brooklyn; a third, Harlem. The weary miles of abandoned houses in

Chicago are in Woodlawn on the South Side, and in Austin on the West Side, next to Oak Park. Then, like a series of dismal color slides of what could be the same blighted blocks and wrecked hovels over and over again, the ruin is repeated in North Philadelphia, St. Louis, Seattle, Los Angeles and Lubbock, Tex.

Government owned. What makes these vistas of urban ruin so compelling are neat little signs nailed on the doors. The signs tell you that the property is protected by the FBI and that it belongs to the Secretary of the U.S. Department of Housing and Urban Development. The slums, in other words, belong to us.

To make the point, one of these signs reads:

"A theft from your government is a theft from YOU."

. . . There is a kind of macabre humor to the idea that the majesty of the federal government sits behind these ruins, and the little children who play in the grassless yards . . . seem to appreciate it.

"Is *you* the FBI?" they jeer at strangers. "You gonna arrest this house?"

The adults smile, with the bittersweet cool of people who have nothing left to lose. "That man ain't no FBI," they say, "He's a speculator, gonna buy this house and trick some poor mother again."

As they say in almost every big city in the United States, "The neighborhoods have been FHA'd."

To be FHA'd is to be ruined.

Not widely known. Most people have had no idea of what has been going on in the government's housing programs. Especially people who are supposed to be experts.

The director of the Ford Foundation's urban and metropolitan program, for example, told me the disaster was caused by ignorant buyers. Universities teach that urban blight is caused by social factors that nobody understands and only statisticians can chart, like distant scientists

TO PAGE 12



PRICE PFISTER



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Underview

'I hate the word FHA. I hate the FHA worse than I hate a rattlesnake.'

Robert Lindsay was a self-made professional buyer who acquired property for speculators and others in Detroit. His involvement in the grand-scale defrauding of the FHA seems to have weighed heavily on him—he had apparently been a preacher once—and brought him to Author Boyer with this story, which appears in the book.

"... I bought for all the investors. I bought for Detroit teachers who financed the property through the teacher's union. I bought for FHA appraisers who then appraised it for resale after they put it in other people's names. I bought for welfare case-workers who sold the house to their own clients. And there were some top-notch citizens loaning out money to the top speculators. I got \$150 for every house I bought ..."

Enter the FHA. "The FHA came into the inner city in 1968 after the riot (of 1967). The FHA was just a sitting duck, if you know what I mean. They were thrown right in the middle after the riot. They loosened the requirement for FHA and would insure houses by expressways, airports, in front of a factory entrance, or in an area considered commercial.

"Before then, from 1963 to 1968, we wouldn't get (FHA) insurance on the East Side. It was all red-lined [blacklisted]. No investor would buy in that area. You couldn't even give away that property.

"But what happened, sir, was this. When the riot happened, the FHA thought to give them a place in the community. So they loosened the requirements.

"I started buying these properties, cash."

Worthless appraisals. "... Now you've got to understand, a lot of these houses were bought 'subject to.' That is, subject to a FHA appraisal. Because without the appraisal, these houses were no good no matter what you bought them for.

"That was some crew the FHA had—regular and fee appraisers. They were ignorant. The FHA appraisers and the fee appraisers was the most ignorant people that ever was. The speculator didn't put the price on the house. The FHA did. Naturally, I don't say that some of the appraisers

wasn't friendly (on the take) ..."

Fraudulent valuations. "Let me show you some of the houses I bought and what happened to them.

"... Here on Preston, well ... it's deserted now. The walls are covered with tar paper. The lady who lived here was sick. Her son in New York came and got her. It sold for \$3,500. The new owner (a real-estate speculation company) sold it for \$12,800, and ... never did any work on it.

"This double on McClellan is deserted now. A man walked into the office one day and he wanted to sell it. It had so many violations on it, and two tenants not paying rent, I told the man, 'I don't want it.' He said, 'You are here and can take care of it.' I bought the house for \$2,000 [for the same company, which then sold it to another]. They sold it FHA for \$14,700 after a cosmetic job.

"It was lived in for one month.

"This house on McClellan was condemned at one time and was stripped. It belonged to the estate of a slumlord. It was fixed up and sold FHA, when it needed to be torn down.

"Finally, lookie here at this one on Chene. I bought it for \$1,800. It's got tar paper walls and the walls are not straight. The speculator tried to get FHA on it and it was rejected as unlivable. They ran it through another mortgage company and sold it (FHA) for \$10,800 with a cosmetic job.

"When I bought a house for \$1,800 I was buying right. Now these houses, without a FHA appraisal on them, wasn't worth anything but what I paid for

them. It was the appraisal that made it all work.

"Say that we would buy a place for \$4,000 and ... get a commitment on it for \$10,000. Then (we'd) sell the house and commitment for \$5,000 or \$6,000. They sold the commitments on the street, just like you'd sell stock."

The mortgage men. "Now the speculators didn't use their own money for this. They had interim financing on it. All of it. But to get the interim financing on the property they had to pay 2% a month, between 18% and 24% a year.

"Because of all the money, the mortgage companies were running PR men up and down Mack Avenue like pool hustlers. The big ones and the small ones.

"When the easy money came you found all the suburban guys come into the city. You had all the out-of-state mortgage companies come in. They came out of New York, Ohio, Wisconsin. They came into this city like a swarm of bees.

"Some of the mortgage companies owned the speculators. Then they made money on both ends of the deal. The people who were selling, well, they didn't know what was happening ... What the speculators did was get the FHA appraisal first, before I bought the house. You'd get a \$10,000 appraisal. Then I'd buy it for \$2,500. The owners, they couldn't get the appraisals. They couldn't sell FHA themselves. Only the speculators could. You figure it out for yourself."

'Fixing' houses. "Before they started the easy FHA money, we really had to fix a house up to sell

it ... (now) sometimes we didn't do anything at all—just sold them FHA. The buyers, those welfare mothers and poor people, didn't know anything about houses.

"There wasn't any city certification then. But the city inspectors would come around, and ask for donations—for 'church' or something. They wanted cash. They wouldn't take a check to the church, you understand."

Theft. "Now, even if you fixed a house up it didn't do any good. A lotta times we got appraisals on property and then it was vandalized. Theft was so prominent that you could fix up a house today and tonight it'd be stripped. What caused that was these repairmen. They'd steal one property and put the stuff into another property.

"There was people, that was workers, who was vandalizing one place, and naturally the stuff would end up in somebody else's property. We'd have to have armed guards sit in a place all night long before we could ever close a deal the next day. They steal bathroom fixtures, doors, radiators, paneling, furnaces, everything. And of course contractors would buy the stuff through the grapevine. Oh, they robbed us blind. Everybody was getting something out of the FHA."

Getting out. "Finally, I quit because there was so much of this stuff going on. I called the Government Accounting Office. I talked to the main man. I told him the FHA oughta get out of the business. They don't know the first principle about investments. They don't know value and they don't have the personnel. I sent telegrams to the FHA in Washington. They said they'd look into it. But they haven't.

"Now what's happened to the people in these houses? Where did they all go? Well, 90% of the people I bought from, they left the city. The people that bought the houses FHA (at inflated prices and got foreclosed on), they are doubling up with one another.

"... As fast as I would buy, they'd leave town.

"... Now the city is dead. The neighborhood is ruined. I hate the FHA. I hate the word FHA. I hate the FHA worse than I hate a rattlesnake."

Deliberate program of ruin ... continued

FROM PAGE 10

marking the destruction of a star by the radio waves being ejected.

Most investigators see problems in terms of individual cases, but never as an overall problem. Liberals always blame the conservatives—the conservatives blame the programs.

Deliberate conspiracy. Let me say ... that the disaster known as the FHA scandal was not caused by ignorance or unsophistication. Instead, it was a deliberate program of urban ruin

for profit, under the cover of government housing law and with an endless flow of federal money.

... All you need are land tract index books and FHA case files, if you can pry them from the hands of the secretive and careless government agency and its often corrupt personnel. The overall pattern in almost every major city points to widespread conspiracy between mortgage and real estate interests, with the help (sometimes for a price) of government officials.

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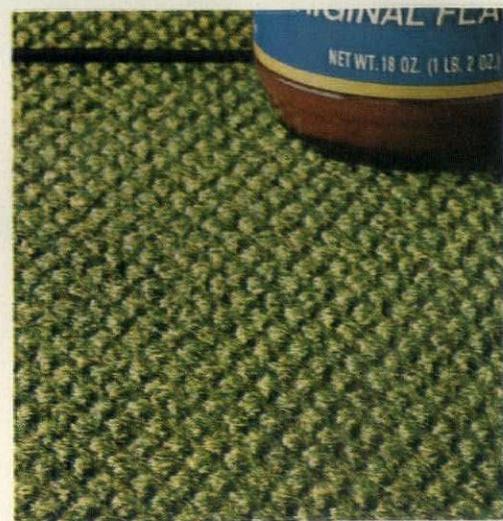
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Northern California builders take limited-growth advocates to federal court

Petaluma, Calif., which longtime "Peanuts" fans will recall as the locale of the World Arm-Wrestling Championships, has become the focus of another mano-a-mano conflict.

A group consisting of building associations, builders and a landowner has squared off with local forces bent on slowing the town's growth rate.

The issue has gotten as far as federal court, with the builders pressing the fight on constitutional grounds.

Restrictions. The principal bone of contention is the city's residential development control system and related policies. The system, introduced in 1972, holds new housing to an average of 500 units a year through 1977. The housing would be strictly controlled in design, purpose and placement.

This is a sharp drop from the rate of preceding years and from projections of what the uncontrolled growth rate would be.

Petaluma plan. The system, also known as the Petaluma Plan, establishes a greenbelt park, to be contributed by developers. It is intended as a limit to expansion on the town's northern and eastern sides. Numerous other restrictions and specifications, including an involved point system for rationing new starts among the local builders, add complexity and bite to the package.

The stated goals of the controlled-growth program:

- Preserve small-town character and open space.
- Tie development to school and utility capacity.
- Limit building to 2,500 new units from 1973 through 1977.
- Establish a greenbelt park.
- Encourage balanced development of the different parts of the city.
- Require townhouses and clustered houses as well as single-family houses in the traditional subdivision pattern.
- Revitalize the downtown section.
- Encourage new multifamily units.
- Seek good site and architectural design.
- Preserve agricultural and industrial land from suburban sprawl.
- Require 8% to 12% of the new housing to be built as low

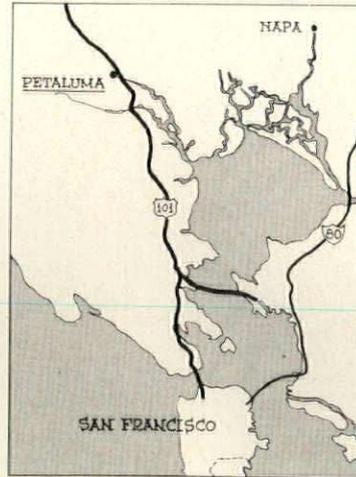
and moderate-income units.

- Limit mobile-home parks.

Two views. The plan is popular in Petaluma. The voters, who have seen the city's population soar from 24,500 in 1970 to 31,000 this year, overwhelmingly approved adoption in an election last year.

The builders, however, argue that the terms and purposes of the package are unconstitutional, and they are seeking to take the dispute beyond the level of zoning regulations.

The builder group consists of the Construction Industry Association of Sonoma County; the San Francisco, Peninsula & Redwood Empire Building Industry Association; a developer and



landholder known as Petaluma Partners; and landowner William Lawrence.

Kaufman & Broad fined in bribe case

Kaufman & Broad's Chicago operation, which has had its troubles before [News, Sept. '72 *et. seq.*], is having them again. The California-based building company has just been fined \$50,000 in Chicago's U. S. District Court.

The company pleaded no contest to an indictment charging that from 1967 to 1973 former officers of K&B paid \$50,000 in bribes to local officials in the suburb of Hoffman Estates to buy votes on zoning applications and ordinances.

Payment. The grand jury charged that the company funneled the money through one Bernard M. Peskin, a Chicago attorney and former state representative who represented K&B.

Peskin and six former officials of Hoffman Estates, three of whom have pleaded guilty, were also charged with bribery and conspiracy. No present employees of K&B were indicted.

Reply. When the indictment was returned, a spokesman at the company's Los Angeles headquarters said that K&B fully supported efforts by James R. Thompson, the U. S. attorney for Chicago, to stop housing-related corruption.

The spokesman also said that the company supplied a considerable amount of the evidence used by the government, that K&B was cooperating fully with the investigation and that two officers who approved the payments were no longer with the

company.

She added: "The company's embarrassment is a small price to pay for the benefits received" in cleaning up corruption in the Chicago building industry.

Two employees of a K&B subsidiary were indicted along with 11 other persons and companies in 1972 on bribery and other charges growing out of FHA tract building irregularities. The company says those employees, who also are no longer with K&B, received suspended sentences.

Standards institute for builders blocked

A bill to create a National Institute of Buildings Standards operating eventually as an independent organization has been killed in the House of Representatives.

The institute was intended by its sponsor, William S. Moorhead (D., Pa.) as a testing center for building methods and technology. It was also meant to recommend non-binding building code policies to untangle the nation's mass of complex and conflicting codes. Code confusion, it is widely felt, hinders technological advances in house and apartment building and in much of the commercial construction sector.

The vote was 258 to 102, killing the measure for this session. Moorhead's office still hopes to win enactment next year.

The group has filed an action against the Petaluma plan in San Francisco District Court.

Here's how the two sides saw the considerations that brought them to court.

Builders' argument. The builders complain, in their suit, that the Petaluma Plan, by restricting starts, harms landholders and others who planned to build in Petaluma.

Worse, they say, the allocation system denies applicants "due process" and operates in a "quixotic and inconsistent" manner that thereby denies the "equal protection" guaranteed by the Constitution. Lawrence, in particular, complains he holds land on which no residential development will be allowed for at least five years, but which is assessed and taxed as subdivision property.

They also say that the growth-limitation movement attempts to stem the onrush of expanding metropolitan San Francisco, and interferes with the right of people to migrate and settle freely—directly, by limiting the ability to settle in Petaluma, and indirectly, by establishing a precedent for other communities.

Supporters' view. The town government sees matters differently.

Robert Anderson, an attorney representing Petaluma, says "the plan does not violate the Constitution and is a reasonable exercise of the city's power with respect to zoning."

Anderson sees the situation as comparable to the case of *Golden vs. the town of Ramapo, N.Y.*, which ended in victory for the widely known Ramapo growth-limitation plan. In that landmark case, the Supreme Court ruled in November 1972 that no federal question was involved, and it denied a hearing to opponents of that plan.

Anderson argues that Petaluma's policy is visibly less stringent than the Ramapo plan. He explains:

"Petaluma has tried to accommodate the opposing forces—the developers and land owners, who want to use their land, and the conservationists and environmentalists, some of whom don't want to do anything."

—JENNESS KEENE
McGraw-Hill World News,
San Francisco



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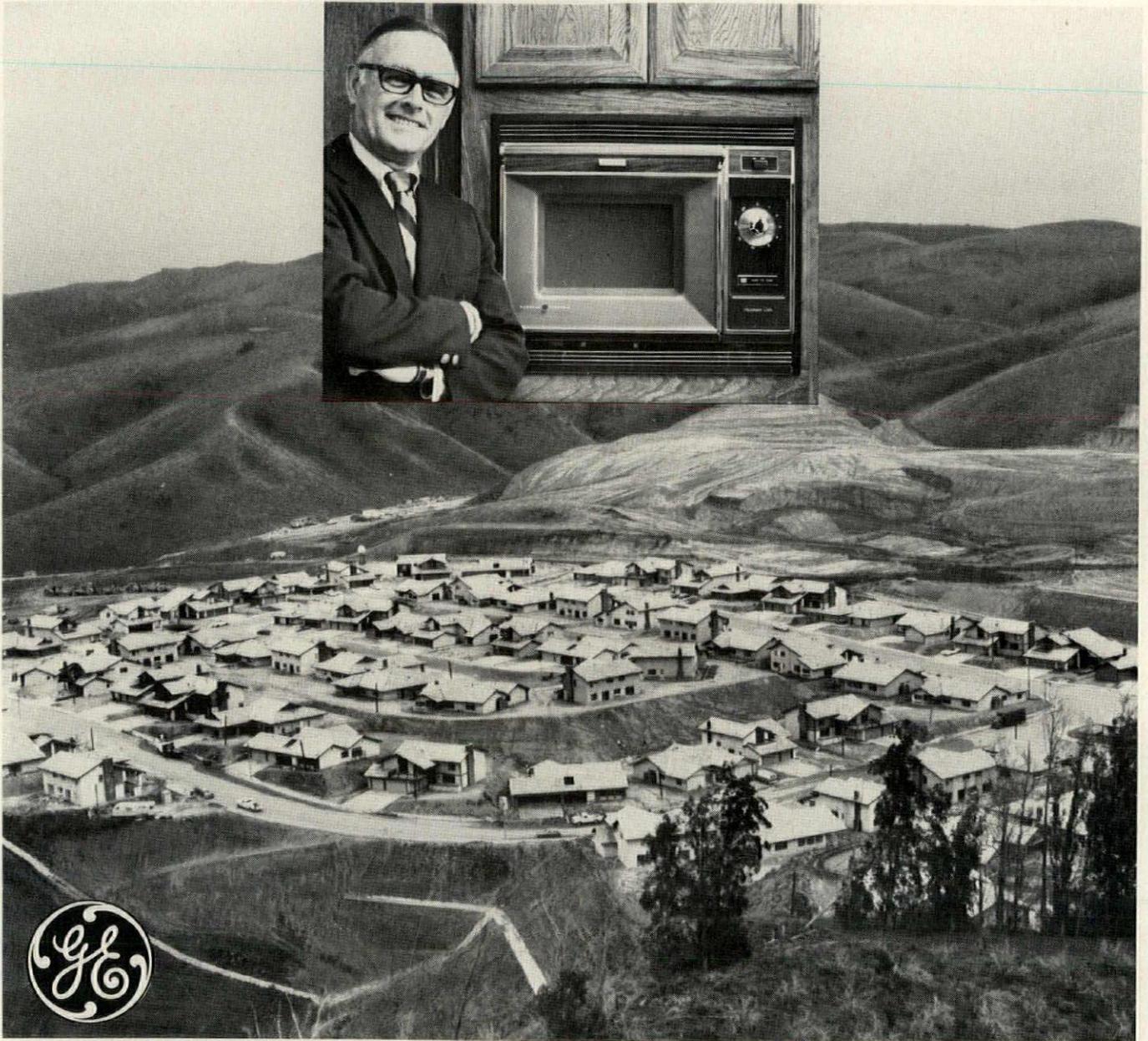
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CIRCLE 19 ON READER SERVICE CARD



It's election time: Apartment men and builders choose new leaders

The National Apartment Association (NAA) elects **Joseph F. Sanson** as president for 1973-74. He heads the Joseph F. Sanson Investment Co. of Las Vegas, Nev., which has built 10,000 single-family homes and owns or controls 13,000 apartment units around the country.

Sanson, an innovator in real estate investments, has interests running the gamut from low and moderate-income government housing to luxury apartments. He's developing condos to sell for less than \$10,000.

Other newly elected officials of the association, which represents 30,000 multi-unit owners, operators and developers, are **Larry Mizel** of Denver, first vice

president; **Charles Cosse** of Seattle, secretary; **Rolf Duggar** of St. Petersburg, Fla., treasurer; and **Donald Clark** of Houston, vice president.

Builders. The Long Island Builders Institute (LIBI) elects **Ivan H. Wohlworth** of Massapequa, whose corporate offices are in Hicksville, as its 19th president. He's a veteran builder of single-family and multifamily units and housing for the elderly. He succeeds **Mario A. Bummara** of Huntington.

The institute is also installing five other new officers and a dozen directors.

Producers. The new president of the Producers' Council, an association of building products



NAA'S SANSON
An innovator steps in



PRODUCERS' RICE
Financial expert takes over

manufacturers, is **James V. Rice**, who administers the credit department of the Pease Co., Hamilton, Ohio. Rice is also vice president and director of Thomas & Hill Inc., of Charleston, W. Va., a mortgage banking firm.

Lenders. The National Association of Real Estate Investment Trusts taps **B. Francis Saul II** as president. He's chairman of the B.F. Saul Real Estate Investment Trust in Chevy Chase, Md.; president of the advisory company to the trust; president and director of Chevy Chase S&L; a director of the American Security Corp., the First Fund of Virginia, the DANAC Real Estate Investment Corp., and Gar-

finckel, Brooks Brothers and Miller & Rhoads Inc. In his spare time he is a trustee of the Federal City Council and the Corcoran Gallery of Art and president of the D.C. Society for Crippled Children and a director of the Suburban Hospital.

Bankers. The American Bankers Association (ABA) names **Paul J. O'Brien** as chairman of its housing and real estate finance division and **Eugene L. Thomas** as chairman of the division's construction lending committee.

O'Brien is senior vice president of Security Pacific National in Los Angeles, Thomas senior vice president of the Arizona Bank of Phoenix.



NAREIT'S SAUL
Adding to a long list of posts



ABA'S O'BRIEN
A builders' banker

L.B. Nelson heeds voices of experience

Nothing like an infusion of old blood to maintain the pace of a fast-growing company such as L.B. Nelson Corp., the apartment and single-family builder with headquarters in Menlo Park, Calif.

Not that the blood is all that old, but **Herbert Hindin**, 54, and **Jack Ford**, 56, are a distinct departure from this outfit's established pattern of hire 'em young (**Les Nelson** himself is an oldtimer around his office at 47).

Hindin comes on as senior executive vice president, a new post and part of a reorganization of executives' responsibilities. He will oversee all operations as No. 2 man, a position he held for eight of his 14 years at Leisure Technology Inc. before coming to Nelson.

Ford's spot, vice president of production, is also new. His responsibilities will be nationwide, keeping tabs on Nelson

subsidiaries in Virginia, Florida, Tennessee, Texas, California, and Oregon. His background includes assignments as vice president at Boise Cascade, Hallcraft Homes in Phoenix, and Del E. Webb Corp. He was also president of Del E. Webb International for a time.

Underlining the shift to maturity is the departure of two of Nelson's Young Guard: **Michael Humphreys**, who was executive vice president for the western divisions, and **Joseph Seiger**, former secretary and general counsel. The two left to form their own company, although Humphreys was originally being groomed for Hindin's spot.

A spokesman remarked that the company had "hired executives young, to stand the gaff of seven-day weeks, but we found a certain lack of maturity. If the new approach works out, it might be the start of a trend."

Jim Price leaving National Homes Corp.

One of the housing industry's leading figures is stepping down after a third of a century.

James R. Price, 62, retires from the chairmanship of National Homes Corp., the company he co-founded in 1940 with his brother **George E. Price** and developed into the largest producer of factory-built houses in the U.S. A successor to the chairmanship has not been announced. Jim has also vacated the chief executive spot [News, Nov.] in favor of **Frank Flynn**, long-time head of the company's mortgaging subsidiary.

Into the red. Jim's retirement comes at an inauspicious time in the company's affairs, hard on the heels of nine months of heavy losses.

The largest splash of red ink came in the third quarter as National closed some money-losing operations, most notably its modular home manufacturing business. The overall loss for the September quarter, restated to \$5.64 million to account for the shutdowns, broke down this

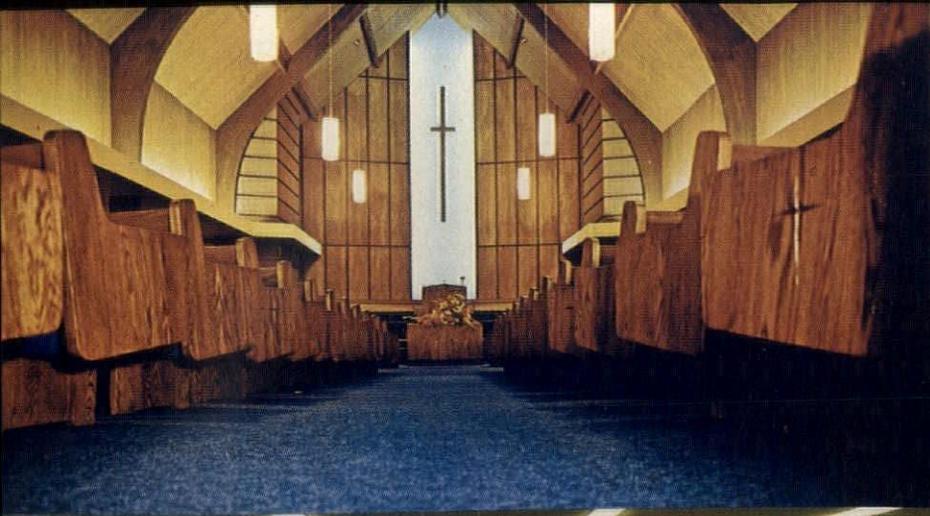


NATIONAL'S JIM PRICE
Ave atque vale

way: net loss from continuing operations, \$1.45 million; net loss from discontinued long-term, fixed-price contracts: \$1.10 million; net loss from modular home operations, \$3.09 million.

Warning note. These figures bring the net loss for the first nine months to \$9.98 million, or \$1.43 per share. That contrasts sharply with the profit of \$5.16 million or \$0.74 per share in the first nine months of 1972.

And Flynn, in discussing the cutbacks, warns of further losses in the fourth quarter.



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First American Innkeepers, Inc., licensee of Days Inns of America, Inc., is in business to provide quality lodging service within a family's or businessman's budget. Early occupancy of its new motels and high occupancy rates are essential to providing the cash flow necessary to support this rapidly growing chain.

Aluminum framing increased cash flow for First American, as Herman Clark, director of construction and engineering, explains: "The Alumiframe system helped cut construction time on this 122-room motel by nearly three weeks. "What that meant to our cash flow is

obvious. Just multiply the number of rooms by an average room rate of \$10 a night, then by 20-nights. Cutting construction time also reduced interest payments on our construction loans."

First American's success at achieving early occupancy of this motel in Manchester, Tenn., is attributed largely to the benefits of using the Alumiframe system.

Unlike some building materials, the price of the Alumiframe system is guaranteed by Alcoa to remain the same for a full calendar year. This enabled the general contractor to project costs more accurately, purchase more economically. For the work crews, the Alumiframe

system was lightweight and easy to handle. Compared with wood framing, the system required fewer parts and pieces allowing fast assembly.

Bob Hummer, Days Inns of America, Inc.
Herman Clark, First American Innkeepers, Inc.
Larry Joyner, Brand Development Co.





Architect: James Dower, A.I.A. General Contractor: Brand Development Co.

the Alcoa Alumiframe building First American Innkeepers, Inc.

Well suited to industrialized techniques, Alumiframe wall panels were shop built by Atlanta Aluminum Co., Atlanta, Ga., and were easily shipped, tilted up and fastened on site. No special tools or techniques. Jobsite experience showed that work crews put up more feet of Alumiframe panels per day than had been done with wood framing on comparable projects.

"We proved to our satisfaction that the Alumiframe system increased cash flow," reports Mr. Clark. "It saved construction time, which we turned into operating revenues."

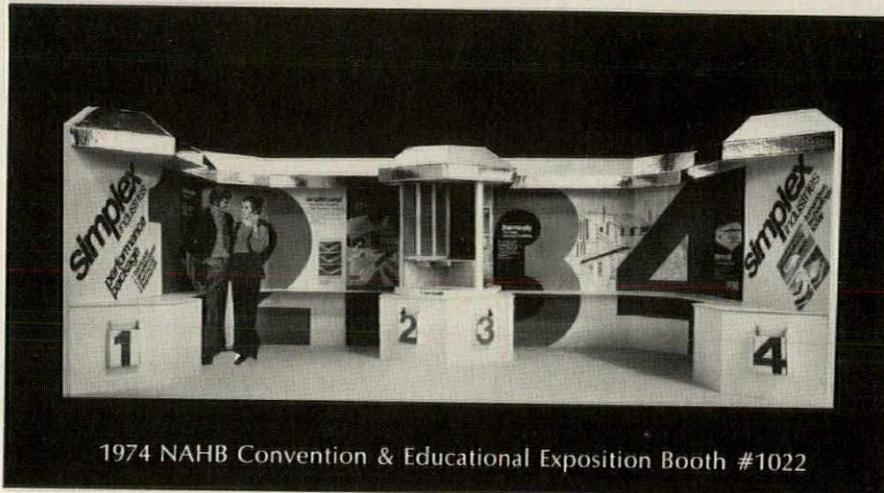
Days Inns of America, Inc., the nation's fastest growing budget-luxury motel chain, operates 100 motels in the Southeast and Southwest with over 13,000

rooms. An additional 83 motels with 11,600 rooms are under construction. Though you may not top First American's success with the Alumiframe system, you can realize significant time saving on similar projects with good construction management and a willingness by contractors and crews to learn something new and apply it effectively.

See this Days Inn at Manchester, Tenn. Or call Ken Lally, national sales manager, (412) 553-2853; or write to **Alcoa Building Industries Division**, 1092-M Alcoa Building, Pittsburgh, Pa. 15219.

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HOW WE CAN HELP YOU MAKE MONEY EVEN IF THERE'S NOT MUCH AROUND TO BE MADE.



No matter how uncertain things are in the housing industry this year, there's one thing that is certain.

Some people are going to make money and you might as well be one of them.

Together we can make it happen.

Through a simple thing called good business planning. The kind that took Triangle Pacific from being just another cabinet company to being the industry leader in just 3 years.

If you're a builder, we can offer you the kind of dependability you need now more than ever. Because, for one thing, we're big enough to deliver when we say we will. And to honor our commitment, so you can honor yours.

Also, we're the only cabinet company with nationwide manufacturing facilities. Which means we can usually offer you not just more dependable deliveries, but deliveries that cost less too.

If you're a distributor, we'll share business practices with you that can decrease your costs and

increase your sales.

Our Risk Elimination Program, for example, can help you go after jobs that otherwise might be too big for you to

finance. This program, made possible by our size, can open up brand new areas of profit for you.

Even more important, is the Triangle Pacific sales force, the largest and most professional sales force in the business and one whose goal is not just to sell you, but to help you sell.

They'll help you increase profits by showing you ways to decrease inventory costs. And help you increase your sales by giving you merchandising aids to help your customers increase theirs.

Add to all this the fact that our wide variety of kitchen and bathroom cabinets may well be the easiest in the industry to sell, and you'll see why we think there's reason to be optimistic.

And why this year, more than ever, being big makes us better to do business with.



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2 builders who found steel makes



In Wake-Pratt's *Royal Coachman* Apartments, Troy, Michigan, (below), 28-foot Super-C Joists are used with $\frac{3}{4}$ " plywood decking, adhesives and self-drilling screws. These long lengths are much easier to handle than wood, and come with pre-punched holes for wiring.



In their *Indian Valley Townhouse* project in Kent, Ohio (bottom), Irving Botnick and Associates are using Super-C Joists in 34-foot lengths, and saving \$180 per unit.



better joists.

This booklet has the facts.

In the middle of a 545-unit apartment complex in Michigan, Wake-Pratt switched from wood joists to Super-C Steel Joists. Why? Their analysis showed steel joists *install faster and easier than wood*, and give them a better floor system.



Irving Botnick and Associates, in Kent, Ohio, made the same switch. They're now saving 25% of the cost of a wood joist system, using Super-C joists and a concrete deck.

Developed by U.S. Steel, these joists are hot dipped galvanized steel. They don't shrink or warp. So floors don't squeak. Nails don't pop. A growing list of builders around the country are now using Super-C joists . . . in applications from single family houses to apartments.

This experience is summarized in a highly factual 10-page booklet, which shows typical applications, load span tables, and prices. You also get the name of the nearest manufacturer of Super-C joists serving your area . . . who can help you buy them for your current and future projects.



United States Steel

United States Steel (USS 7516)
600 Grant St.
Pittsburgh, Pa. 15230

Dear Sirs: Please send me your booklet on Super-C Steel Joists.

Name _____

Title _____

Company Name _____

Address _____

City _____

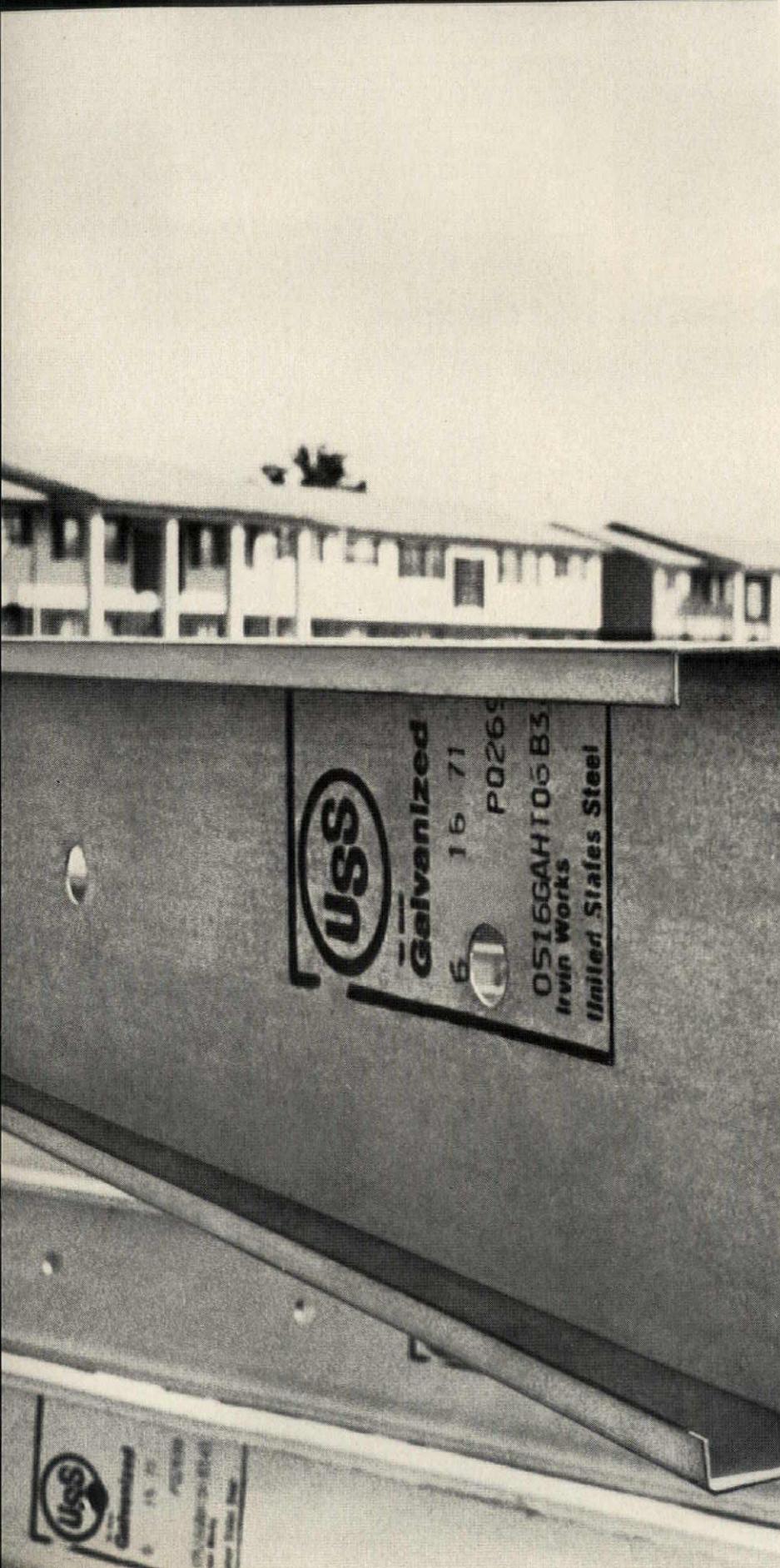
State _____ Zip _____

Type of units planned _____

Number of units planned _____

CIRCLE 27 ON READER SERVICE CARD

H&H DECEMBER 1973 27



"When it came to choosing a dishwasher and disposer for our condominium conversion, there was just one choice--KitchenAid."

"The secret of successful conversion is upgrading. You're competing with brand new condominium projects. So you'd better pile on the saleable features. And lots of them."

Those words of advice come from S. J. Rapier, Jr., Property Manager for Paul Semonin Company, the first in the state of Kentucky to undertake a condominium conversion. Since then, Rolling Fields, in northeast Louisville, has shown a lot of others the right way to do a conversion.

"A big part of your selling job is done in the kitchen. When people see quality appliances there, they figure they're seeing just a small part of the quality that's built into the rest of the home," says Rapier.



"We feel that KitchenAid has been a tremendous selling tool here at Rolling Fields. Not one buyer has ever requested a change from KitchenAid to a different brand of dishwasher or disposer. But then, why would they? After all, the name KitchenAid says quality to an awful lot of people."

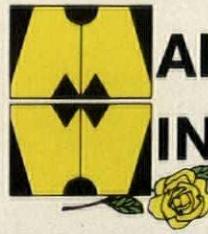
KitchenAid can be one of your best salesmen, too. Check our catalog in Sweet's Light Construction File. Or call your KitchenAid distributor about his builder plan. KitchenAid Division, Dept. 3DS-12, The Hobart **KitchenAid** Manufacturing Co., Dishwashers • Trash Compactors Troy, Ohio 45374. Disposers • Hot-water Dispensers

KitchenAid. Built better. Not cheaper. CIRCLE 28 ON READER SERVICE CARD



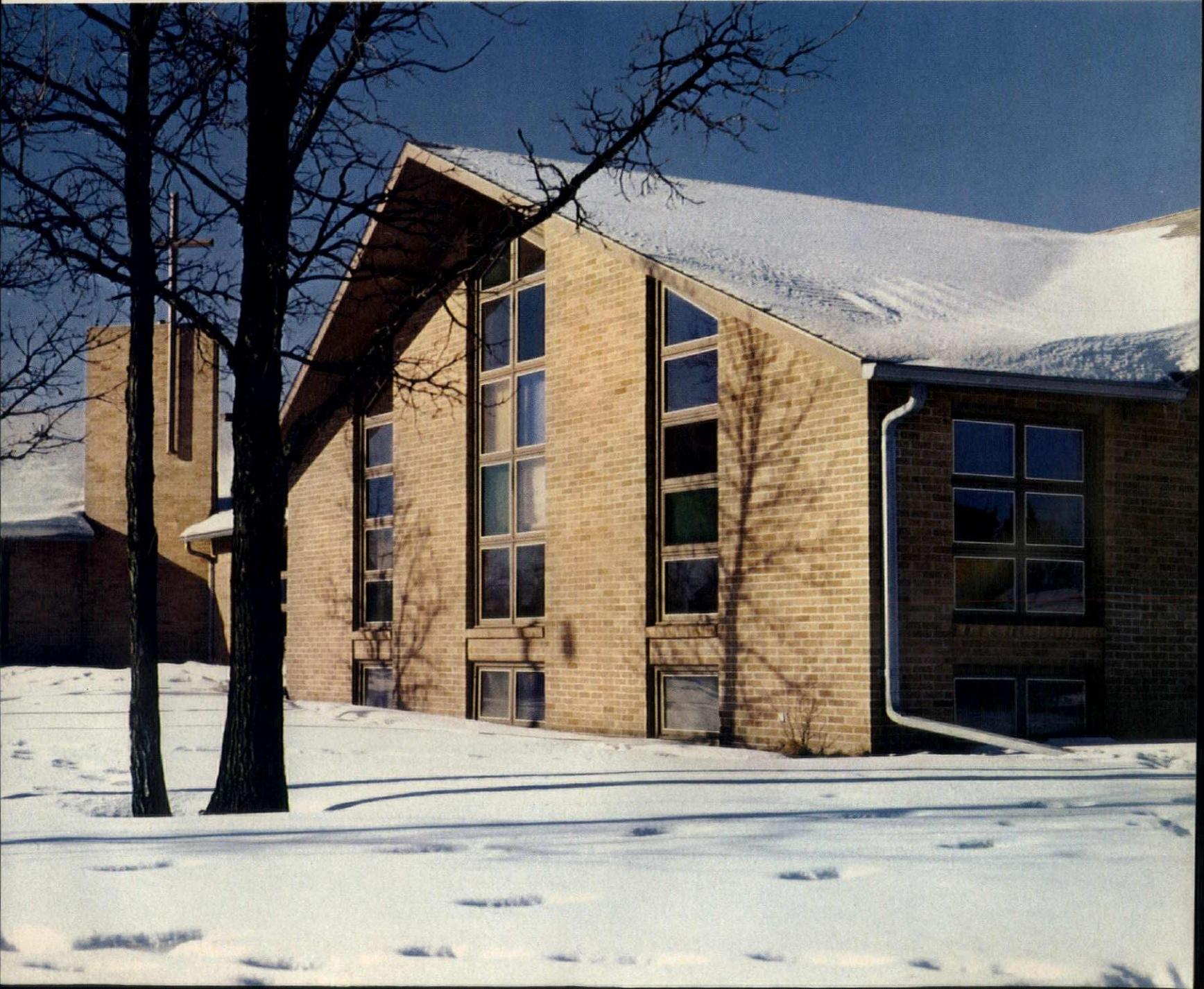
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WALL: N03 FLOOR: 246 ANTIBES & 246 ESTEREL

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NEWS/FINANCE

Housing stock prices fall hard

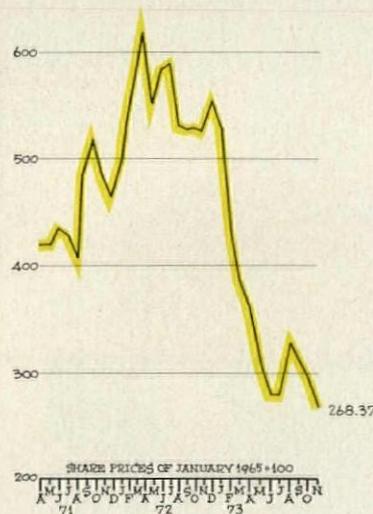
Most of the housing industry's stocks got caught up in Wall Street's neo-Watergate market in the month ended Nov. 5 and the result was a washout in share values.

The HOUSE & HOME value index of 25 representative industry issues plunged to 268.37 from 296.71.

Kaufman & Broad, the international housing builder with headquarters in Los Angeles, was one of the list's biggest losers. After working back up to 25 1/4 from a May low of 14 1/2, the stock hit the skids all over again. It was off 8 3/4, to 17, in the month ended Nov. 5. The year's high was 45 7/8.

(For an account of Kaufman & Broad's other difficulties, see page 16.)

Here is the composite graph.



Here's how the five stocks in each category performed.

	Nov. '72	Oct. '73	Nov. '73
Builders	451	317	241
Land develop.	370	147	149
Mortgage cos.	1,318	840	812
Mobile homes	1,380	482	455
S&Ls	241	146	132

Company	Nov. 5 Bid/Close	Chng. Prev. Month
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BUILDING

Alodex.....	OT	1 1/4	+ 1/8
AVCO Comm. Dev.—d.....	PC	1 1/4	—
American Cont. Homes.....	OT	4 3/8	- 1 1/8
American Housing Sys.....	OT	1 1/2	+ 1/8
American Urban Corp.....	OT	1 1/4	- 3/8
Bramalea Con. (Can)—d.....	OT	6	+ 1
Building Systems Inc.—d.....	OT	.05	—
Campanelli Ind.....	OT	7 1/4	+ 2 1/4
(New America Ind.)			
Capital Divers (Can)—d.....	OT	.39	+ .03
Centex Corp.....	NY	15 1/4	- 3 1/2
Cenvill Communities.....	AM	10 3/4	- 2
Cheezem Dev. Corp.....	OT	2	- 3/4
Christiana Cos.....	AM	2 1/2	- 3/8
Cons. Bldg. (Can.).....	TR	2.90	- .30
Dev. Corp. Amer.....	AM	15	- 4 1/2
Dev. Int. Corp.—d.....	OT	3 1/2	- 1/4
Edwards Indus.....	OT	5	+ 1/2
First Builders Bancorp.....	OT	2	- 1/4
First Hartford Corp.—d.....	AM	3 1/4	- 3/4
FPA Corp.—d.....	AM	7 1/2	- 1/8
Carl Freeman Assoc.....	OT	4 1/4	- 1 1/4

Company	Nov. 5 Bid/Close	Chng. Prev. Month	
Frouge Corp.—d.....	OT	6 1/2	+ 1
General Builders.....	AM	1 1/4	—
Gil Development—d.....	OT	1 1/4	—
Hallcraft Homes.....	OT	2 1/8	- 1/8
Hoffman Rosner Corp.....	OT	3	—
Homewood Corp.....	OT	5	- 2
Hunt Building Corp.....	OT	3	+ 1/8
Kaufman & Broad.....	NY	17	- 8 3/4
Key Co.—d.....	AM	3 1/2	- 3/8
Leadership Housing.....	OT	4 1/8	- 5/8
(includes Behring Corp.)			
Leisure Technology.....	AM	6	- 1 1/4
Lennar Corp.....	AM	7	- 1 1/2
McCarthy Co.....	PC	3 3/4	+ 3/4
McKeen Const.....	AM	2 1/2	- 3/4
H. Miller & Sons.....	AM	8 1/4	- 1
Mitchell Energy & Dev.....	AM	28 1/2	+ 1 3/4
National Environment.....	OT	1 1/4	- 3/4
(Sprout Homes)			
L. B. Nelson Corp.....	AM	4	+ 1/8
Oriole Homes Corp.....	AM	11 1/4	- 1/8
Prel. Corp.....	AM	4 1/2	- 1/4
Presidential Realty.....	AM	10 1/2	- 1/2
Presley Development.....	AM	4 1/4	- 3/4
Pulte Home Corp.....	AM	3 1/4	- 1/8
F. D. Rich Housing Corp.....	OT	1 1/4	- 1/4
Robino-Ladd Co.....	AM	7	- 1/2
Rossmoor Corp.....	AM	6 1/4	+ 1/8
Ryan Homes.....	AM	22	- 3
Ryland Group.....	OT	6 1/2	- 1
Shapel Industries.....	NY	12 1/2	- 2 3/4
Shelter Corp. of America.....	OT	1 1/4	- 1/2
Standard Pacific.....	AM	2 1/4	+ 1/8
Universal House & Dev.....	PC	1 3/4	- 1/8
U.S. Home Corp.....	NY	7 1/4	- 2 1/8
Valley Forge Corp.....	OT	3 1/4	- 3/4
Washington Homes.....	OT	1 3/4	+ 1/4
Del. E. Webb.....	NY	5	- 7/8
Western Orbis.....	AM	1	+ 1/8
Westchester Corp.....	OT	2 1/4	- 1/4

SAVINGS & LOAN ASSNS.

American Fin. Corp.....	OT	12 1/4	- 2 1/8
Calif. Fin.....	NY	3 1/8	- 3/4
Empire Fin.....	AM	8 3/4	- 1 1/8
Far West Fin.....	NY	7 1/4	- 3/4
Fin. Corp. of Santa Barb.....	AM	12 1/2	- 3 1/8
Fin. Fed.....	NY	13 1/4	- 3 1/4
First Charter Fin.....	NY	17 3/4	- 2 3/4
First Lincoln Fin.....	OT	2 1/4	- 3/4
First S&L Shares.....	AM	15 1/4	+ 3/4
First Surety.....	OT	3 3/4	- 7/8
First West Fin.....	OT	1 1/4	—
Gibraltar Fin.....	NY	15 1/4	- 2
Golden West Fin.....	NY	13	- 2 1/4
Great West Fin.....	NY	20 1/4	- 1 1/2
Hawthorne Fin.....	OT	7 3/4	- 7/8
Imperial Corp.....	NY	9 1/4	- 1 3/4
Trans World Fin.....	NY	7 1/4	- 3/4
Union Fin.—d.....	AM	9 1/2	+ 3/4
United Fin. Cal.....	NY	7 1/4	- 1 3/4
Wesco Fin.....	NY	14 1/2	- 1 1/8

MORTGAGING

Charter Co.....	NY	22 1/2	+ 1 1/2
CM Investment Corp.....	NY	21 1/4	- 8
Colwell.....	AM	10 1/2	- 3 1/2
Cont. Illinois Realty.....	NY	18 1/4	- 5/8
Excel Investment.....	AM	12 1/2	- 2 3/4
Fed. Nat. Mtg. Assn.....	NY	20 1/4	- 1 1/8
Financial Resources Gp.....	OT	2	—
(Globe Mortgage)			
FMIC Corp. (formerly			
First Mtg. Ins. Co.).....	OT	11 1/4	- 2 1/4
Lomas & Net. Fin.....	NY	14 1/4	- 1 1/2
MGIC Inv. Corp.....	NY	46 3/4	+ 1 1/4
Midwestern Fin.....	AM	10 1/2	- 1 1/4
Mtg. Associates.....	OT	12 1/2	- 1 1/8
Palomar Fin.....	AM	3 1/4	- 1
Western Pac. Fin. Corp.			
—d (formerly So. Cal.			
Mort. & Loan Corp.).....	OT	3 1/2	+ 1
UPI Corp.....	AM	2 1/4	- 1 1/2
(United Imp. & Inv.)			

MORTGAGE INV. TRUSTS

Alison Mtg.....	NY	28	+ 1 1/2
American Century.....	AM	15 1/2	- 2
Arlen Property Invest.....	OT	13 1/4	- 1 1/4
Atico Mtg.....	NY	17 3/4	- 1 1/8
Baird & Warner.....	OT	18 1/2	+ 7/8
Bank America Rlty.....	OT	26 1/4	- 1
Barnett Mtg. Tr.....	NY	26 1/4	- 1 1/4
Beneficial Standard Mtg.....	AM	22 3/4	- 2 1/4
BT Mort. Investors.....	NY	27 1/4	- 2 1/2
Builders Investment Gp.....	NY	30 3/4	- 2
Cameron Brown.....	NY	19	- 4 1/2
Capitol Mortgage SBI.....	NY	23 1/2	- 1 1/2
Chase Manhattan.....	NY	52 1/2	- 7
CI Mortgage Group.....	NY	17 1/4	- 1
Citizens Mtg.....	AM	16 1/4	- 7/8
Citizens & So. Rlty.....	NY	36	- 1 1/8
Cleve. Trust Rlty. Inv.....	OT	18 1/4	- 2 1/2
Colwell Mtg. Trust.....	AM	28	- 2
Conn. General.....	NY	22 1/4	- 1 1/4
Cont. Mtg. Investors.....	NY	10 1/4	- 1 1/2
Cousins Mtg. & Eq. Inv.....	NY	27 1/4	- 1 1/2
Diversified Mtg. Inv.....	NY	23 1/4	- 3/8
Equitable Life.....	NY	25 1/4	+ 5/8
Fidelco Growth Inv.....	AM	31 1/4	- 3 3/4
Fidelity Mtg.....	NY	15 1/4	- 13 1/2
First Memphis Realty.....	OT	20 1/2	+ 1 1/8
First Mtg. Investors.....	NY	15 1/4	- 2 3/4
First of Denver.....	AM	21 1/4	- 1 1/8
First Pennsylvania.....	NY	20 1/4	- 3

Housing stocks tumble ... continued

Company	Nov. 5 Bid/Close	Chng. Prev. Month	Company	Nov. 5 Bid/Close	Chng. Prev. Month
Franklin Realty	AM 5 1/4	- 1	Evans Products	NY 15 1/2	- 3 1/4
Fraser Mtg.	OT 16 1/4	+ 1	Ferro Corp.	NY 32 1/2	- 8 1/4
Galbreath Mtg.	OT 14 1/2	- 7 1/2	First Gen. Resources-d	OT 1 1/4	- 1 1/4
Gould Investors	AM 8 3/4	+ 1/4	First Rty. Inv. Corp.	AM 5 1/4	+ 7/8
Guard Amer. Mtg. Inv.	AM 36 1/4	- 1/4	Fischback & Moore	NY 6 1 1/2	+ 1 1/4
Guardian Mtg.	AM 35 1/2	- 2	Forest City Ent.	AM 8 1/4	- 3/4
Gulf Mtg. & Rty.	AM 17 1/4	- 3/8	Flagg Industries	AM 3 1/2	- 3/8
Hamilton Inv.	OT 17 1/4	- 35 1/2	Frank Paxton Corp.	OT 9 1/2	- 1/4
Heitman Mtg. Investors	AM 13	- 1/2	(Builder Assistance Corp.)		
Hubbard R. E. Inv.	NY 18 1/4	- 5/8	Fruehauf Corp.	NY 25	- 2 1/4
ICM Realty	AM 21 1/4	+ 7/8	Fuqua Corp.	NY 11 1/4	- 3 1/4
Lincoln Mtg.	OT 23	- 2	Georgia Pacific	NY 41	+ 1
Lincoln Mtg. & Rty.	OT 5 1/2	- 1 1/2	Glassrock Products	AM 4 1/4	+ 3/8
Mass Mutual Mtg. & Rty.	NY 19 1/4	- 1	Great Southwest Corp.	OT 1 1/2	- 1/4
Mony Mtg. Inv.	NY 10 1/4	- 1/2	Gulf Oil (Gulf Reston)	NY 22 1/2	- 2 1/4
Mortgage Trust of Amer.	NY 13	- 1	INA Corp. (M. J. Brock)	NY 36	- 4 1/4
National Mortgage Fund	OT 10 1/4	- 2 1/4	Inland Steel (Scholz)	NY 30 1/4	- 1
North Amer. Mtg. Inv.	NY 28 1/4	- 3/4	International Basic Econ.	OT 3 1/4	+ 1/8
Northwest Mut. Life Mtg. & Rty.	NY 24 3/4	- 1/4	International Paper	NY 49 1/4	- 1
PNB Mtg. & Rty. Inv.	NY 21	- 3/4	Inter. Tel. & Tel. (Levitt)	NY 32	- 6 1/4
Palomar Mtg. Inv.	AM 12 1/2	- 1 1/4	Investors Funding	AM 3 1/4	- 1
Penn. R. E. Inv. Tr.	AM 13 1/2	+ 1 1/4	Killearn Properties	AM 3 1/2	- 1/2
Property Capital	AM 15 1/4	- 1	Leroy Corp.	OT 3	- 1/4
Realty Income Tr.	AM 15 1/4	- 1/8	Ludlow Corp.	NY 12 3/4	- 1 1/4
Republic Mtg. Inv.	NY 15 1/4	- 3/4	Monogram Industries	NY 6 1/4	- 1 1/4
B. F. Saul R.E.I.T.	NY 16	- 3/4	Monumental Corp.	OT 19 1/4	- 5
Security Mtg. Investors	AM 8 1/2	- 5/8	(Jos. Meyerhoff Org.)		
Stadium Realty Tr.	OT 5 1/4	- 1/4	Mountain States Fin. Corp.	OT 6 1/2	- 3/4
State Mutual SBI	NY 20 1/4	- 1 1/2	National Homes	NY 3 1/4	- 7/8
Sutro Mtg.	AM 14 1/2	- 1	Occidental Petroleum	NY 10 1/2	- 1/4
Unionamerica Mtg. & Eq.	AM 21 1/4	- 1 1/4	(Occ. Pet. Land & Dev.)		
U.S. Realty Inv.	AM 12 1/4	- 1 1/4	Pacific Coast Prop.	AM 1 1/2	- 1/8
Wachovia Realty Inc.	NY 22 1/4	- 3	Perini Corp.	AM 6 1/2	+ 1 3/4
Wells Fargo Mtg.	NY 20 1/4	- 2 1/4	Philip Morris	NY 11 3/4	+ 1 1/2

LAND DEVELOPERS

All-State Properties-d	OT 1/4	- 1/8
American Land-d	OT 1 1/4	- 1 1/4
AMREP Corp.	NY 5 1/4	- 1 3/4
Arvida Corp.	OT 7 1/4	- 1 1/4
Atlantic Imp-d	OT 4	- 1/4
Canaverl Int-d	AM 2	- 3/8
Cavanagh Communities	NY 3 1/4	- 3/8
Crawford Corp.	OT 5 1/4	- 1/2
Deltora Corp.	AM 10	- 1
Disc. Inc. of Amer.-d	OT 1 1/2	- 3/8
Evans & Mitch. Ind.	OT 4 1/4	- 1/2
Fairfield Communities-d	OT 5 1/4	- 1/2
Gen. Development	NY 6 1/4	- 1 1/4
Getty Financial Corp.-d	OT 3 1/2	+ 1/4
(Don the Beachcomber)		
Holly Corp.	AM 2 1/4	+ 1/8
Horizon Corp.	NY 8 1/2	- 1 1/2
Landmark Land Co.	AM 3	+ 1/4
(Gulf State Land)		
Land Resources	OT 2 1/4	- 1/2
Major Realty	OT 4 1/2	- 1/4
McCulloch Oil	AM 6 1/4	+ 1 1/4
South. Rty. & Util.	AM 5	- 1/4

MOBILE HOMES & MODULES

Champion Home Bldrs.	AM 5 1/4	+ 3/8
Commodore Corp.	AM 2 1/4	- 1/8
Conchemco-d	AM 11 1/4	+ 3/8
De Rose Industries	AM 2 1/2	- 1/2
Fleetwood	NY 7 1/4	- 1 1/4
Golden West	OT 3 1/4	- 5/8
Moamco Corp.	AM 2 1/4	+ 1/8
(Formerly Mobil Americana)		
Mobile Home Ind.	AM 7 3/4	- 3 1/4
Monarch Inc.	OT 1 1/4	- 1/8
Redman Ind.	NY 7 1/4	- 3/8
Rex-Noreco	NY 2 1/4	- 7/8
Skyline	NY 15 1/2	- 2
Town & Country Mobile	AM 4 1/4	+ 1/4
Triangle Mobile	OT 1 1/2	- 1/2
Zimmer Homes	AM 5 1/4	+ 3/4

DIVERSIFIED COMPANIES

Amer. Cyanamid	NY 23 1/4	- 2 1/4
Amer. Standard	NY 15 1/4	- 5/8
Arlen Realty & Develop.	NY 4 1/4	- 5/8
AVCO Corp.	NY 9 1/2	- 1 1/4
Bethlehem Steel	NY 31 1/4	- 2 1/4
Boise Cascade	NY 15	- 2 1/4
Building & Land Tech.	OT 6 1/4	+ 1/4
CNA Financial (Larwin)	NY 10 1/4	- 3 1/2
Castle & Cooke	NY 16	- 1 3/4
(Oceanic Prop.)		
CBS (Klingbeil)	NY 32 1/4	- 2 3/4
Champion Int. Corp.	NY 17 1/2	- 3 1/4
(U.S. Plywood-Champion)		
Christiana Securities	OT 17 1/2	- 2 1/2
Citizens Financial	AM 3 1/4	- 1/4
City Investing	NY 12 1/4	- 2 1/4
(Sterling Forest)		
Corning Glass	NY 100	- 17 1/4
Cousins Properties	OT 22 1/4	- 1 1/2
Davos Inc.-d	OT 3 1/4	+ 1/4
Dreyfus Corp.	NY 8	- 2
(Bert Smokier)		
Environmental Systems	OT 1 3/4	- 1/8

Armstrong Cork	NY 26 1/4	- 5
Automated Bldg. Comp.	AM 4 1/2	- 1/4
Bird & Son	AM 25 1/4	+ 3/4
Black & Decker	NY 119 1/2	+ 1 1/4
Carrier Corp.	NY 20 3/4	+ 4 1/4
Certain-teed	NY 14	- 1 1/4
Crane	NY 18 1/4	- 5/8
Dexter	NY 18 1/4	- 7/8
Dover Corp.	NY 42 1/2	- 5 1/4
Emerson Electric	NY 49 1/4	- 7/8
Emhart Corp.	NY 19 1/4	- 4 1/4
Fedders	NY 16 1/4	- 5 1/4
Flintkote	NY 19 1/4	- 3/4
GAF Corp.	NY 11 1/4	- 3 1/4
General Electric	NY 63 1/4	- 3/4
Goodrich	NY 20 3/4	- 4 1/4
Hercules	NY 33 1/4	- 5 1/4
Hobart Manufacturing	NY 30 1/4	- 1/4
Int. Harvester	NY 30 1/4	- 3 1/4
Johns Manville	NY 21 1/4	- 3 1/2
Kaiser Aluminum	NY 21 1/4	- 3
Keene Corp.	NY 4 1/4	- 1 1/4
Leigh Products	AM 7	- 2
Masco Corp.	NY 56 1/4	- 1 1/4
Masonite Corp.	NY 38 1/4	+ 2 1/4
Maytag	NY 30 1/4	- 1 1/4
National Gypsum	NY 13 1/4	- 1 1/4
Norris Industries	NY 27	+ 1/4
Overhead Door	NY 14 1/4	- 1/4
Owens Corning Fibrgl.	NY 53 1/4	+ 4 3/4
Pottlatch Corp.	NY 29 1/4	+ 1 1/4
PPG Industries	NY 30 1/4	- 3 1/4
Reynolds Metals	NY 18 1/4	- 1/2
Rohm & Haas	NY 79	- 16 1/2
Ronson	NY 6 1/4	- 1
Roper Corp.	NY 18 1/4	- 2 1/4
St. Regis Paper	NY 47	- 2 1/4
Scovill Mtg.	NY 17 1/2	- 4
Sherwin Williams	NY 35 1/4	- 2 1/2
Skil Corp.	NY 13 1/4	- 7 1/4
Slater Electric	OT 10 1/4	+ 1/2
Stanley Works	NY 38	- 3/4
Tappan	NY 9 1/4	- 2 1/4
Thomas Industries	NY 12 1/2	- 3/4
Triangle Pacific	NY 13 1/4	- 2 1/4
U.S. Gypsum	NY 21 1/2	- 1 1/4
U.S. Steel	NY 34 1/4	+ 1 1/4
Wallace Murray	NY 11 1/4	- 2 1/4
Jim Walter	NY 18	- 3 1/4
Whirlpool Corp.	NY 30 1/2	- 1

SUPPLIERS

Armstrong Cork	NY 26 1/4	- 5
Automated Bldg. Comp.	AM 4 1/2	- 1/4
Bird & Son	AM 25 1/4	+ 3/4
Black & Decker	NY 119 1/2	+ 1 1/4
Carrier Corp.	NY 20 3/4	+ 4 1/4
Certain-teed	NY 14	- 1 1/4
Crane	NY 18 1/4	- 5/8
Dexter	NY 18 1/4	- 7/8
Dover Corp.	NY 42 1/2	- 5 1/4
Emerson Electric	NY 49 1/4	- 7/8
Emhart Corp.	NY 19 1/4	- 4 1/4
Fedders	NY 16 1/4	- 5 1/4
Flintkote	NY 19 1/4	- 3/4
GAF Corp.	NY 11 1/4	- 3 1/4
General Electric	NY 63 1/4	- 3/4
Goodrich	NY 20 3/4	- 4 1/4
Hercules	NY 33 1/4	- 5 1/4
Hobart Manufacturing	NY 30 1/4	- 1/4
Int. Harvester	NY 30 1/4	- 3 1/4
Johns Manville	NY 21 1/4	- 3 1/2
Kaiser Aluminum	NY 21 1/4	- 3
Keene Corp.	NY 4 1/4	- 1 1/4
Leigh Products	AM 7	- 2
Masco Corp.	NY 56 1/4	- 1 1/4
Masonite Corp.	NY 38 1/4	+ 2 1/4
Maytag	NY 30 1/4	- 1 1/4
National Gypsum	NY 13 1/4	- 1 1/4
Norris Industries	NY 27	+ 1/4
Overhead Door	NY 14 1/4	- 1/4
Owens Corning Fibrgl.	NY 53 1/4	+ 4 3/4
Pottlatch Corp.	NY 29 1/4	+ 1 1/4
PPG Industries	NY 30 1/4	- 3 1/4
Reynolds Metals	NY 18 1/4	- 1/2
Rohm & Haas	NY 79	- 16 1/2
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Wallace Murray	NY 11 1/4	- 2 1/4
Jim Walter	NY 18	- 3 1/4
Whirlpool Corp.	NY 30 1/2	- 1

AM—closing price American Stock Exchange. NY—New York Stock Exchange. OT—over-the-counter bid price. PC—Pacific Coast Exchange. TR—Toronto Stock Exchange. a—stock newly added to table. d—not traded on date quoted. *—Computed in HOUSE & HOME's 25-stock value index. Source: Standard & Poor's, New York City.



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Housing industry executive changes: A handful of new presidents—

Emanuel M. Brotman takes over as president and chief executive officer of J.I. Kislak Mortgage Corp., the mortgage-banking division of The Kislak Organization, the financial, real estate and insurance congeneric with headquarters in Miami. He continues to hold several other important posts in the Kislak companies and also serves on the advisory committee of FNMA. Manny's predecessor, **Hugh C. Ross**, resigns to pursue private interests.

Chairman **Jack Hoffman** takes office as president of Hoffman Rosner Corp., the big Chicago house builder, replacing **Robert Rosner**, who held the job on a temporary basis since March.

Harold Gootrad founds and heads European Homes B.V., which will build abroad. It is 48.75% owned by Gulf & Western Industries through the conglomerate's homebuilding and development subsidiary, the Richards Group of Great Neck, N.Y. Gootrad had been president



NLISA'S CARRINGTON
Brought from FHLBB

of the French subsidiary of Kaufman & Broad Inc.

Marvin R. Meit moves up to president from executive vice president of Shelter Resources Corp., a mobile-home manufacturer based in Cleveland. He replaces **Carl D. Glickman**, who remains chairman and chief exec.

—And a clutch of vice presidents—

Henry A. Carrington, formerly secretary to the Federal Home Loan Bank Board, becomes exec-



KISLAK'S BROTMAN
To a president's chair

utive vice president and managing officer of the National League of Insured Savings Associations.

Henry C. Jones jumps over to vice president for the south Florida region of The Gale Organization Inc. from group vice president for First Realty Investment Corp. of Miami Beach.

Frank C. Carr is elected a vice president and **James R. Hedges** and **Thomas E. Dunavant** assistant vice presidents at MGIC Investment Corp. in Milwaukee. All three move from posts within the MGIC complex.

The first Wisconsin Mortgage Trust adds **Richard H. Holscher** and **Louis B. Giese** as executive veeps, **Thomas P. Joswick** and **John J. Poehlmann** as vice presidents.

—And some other comers emerging

Two men who are already vice presidents at Valley Forge Corp., a diversified housing company, also assume directorships. They are **William J. McLaughlin**, executive v.p.-construction and manufacturing, and **Barry C. Burkholder**, v.p.-finance and administration.

MGIC promotes **James W. Reichert** to manager of the company's national builder-realtor programs. Reichert joined MGIC in 1971.

William L. Earl takes over as secretary of Deltona Corp., succeeding **L. Grant Peeples**, chief corporate counsel. Peeples retains his post as vice president-legal affairs.



Benchmark

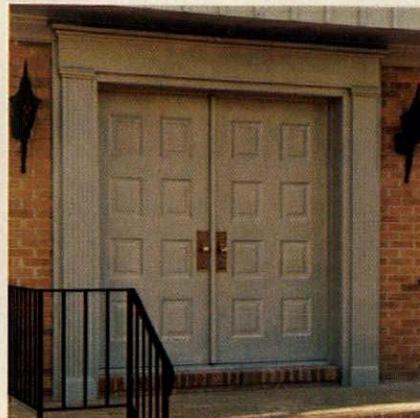
Beautiful cost cutters that give you a sharp sales edge.

Fast installing—in minutes! Cut labor costs with time-saving engineered features, like snap-apart tracks, quick final adjusting.

Full 1 1/4" thick. 100% more rigid, outperforms all other doors. Top quality at every price level.

Exclusive deep-molded beauty. Authentic look of wood panel details, shaped in steel under tremendous pressure. Traditional, louvered and flush models.

Show and sell. Nylon-quiet action of these handsome bi-folds adds the finishing touch to your sales message.



Benchmark Insulated Steel Doors—Deep-Embossed Beauty on Both Sides
Exclusive deep-molding process produces sculptured-steel elegance, coming and going. Prefinished and prehung, Benchmark Doors are complete and engineered for fast installing.

All the advantages of trouble-free steel. Special insulating "sandwich" has twice the heat-blocking value of wood door/storm door combinations. Choice of six deep-embossed designs (four with lights) plus flush door.

Write for money-saving details, or call Benchmark Sales Office (703) 373-8877.

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“No doubt in my mind.
MGIC-insured loans have
helped us grow.”



The Mayer Corporation, Forked River, N.J., is one of the fastest-growing builders in the state. Begun in 1958, the firm is now a subsidiary of Development Corporation of America, Hollywood, Fla. Mayer Corporation vice president and treasurer Bob Kling highlights his company's growth:

"Up to 1971 we used conventional financing without insurance. Then in February, 1972, we were one of the first in the state to use MGIC insurance on a large scale. There's no question that one of the most significant factors in our growth has been 90% and 95% loans insured by MGIC.

"Last year we had about 750 starts and \$16 million volume. For

1973 we're projecting 1000 starts and volume near \$22 million. Our homes are \$24,000 to \$50,000, and we started our first condo project this summer. The area is growing rapidly, and we're growing with it.

"MGIC has been very helpful, in encouraging New Jersey savings and loan associations to handle loans that exceed 80% of the loan to value ratio. Most of our customers couldn't get loans without MGIC insurance. And we appreciate the extra protection this insurance provides."

Want the same kind of help? Talk to your MGIC representative. Or call Jim Reichert toll-free, at 800-558-9900; in Wisconsin the toll-free number is 800-242-9275.

HH 12

Money Protection. MGIC

Please send me your new brochure on high-ratio conventional mortgage financing.

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Hotpoint Hustle: It's appliances that make a lady's life easier. Yours, too.



The convenience features we build into Hotpoint appliances help you offer the kind of kitchens women are looking for. And when a lady sees what she wants, the job of selling or renting can be an easier one for you.

Refrigerators, ovens, ranges, dishwashers, air conditioners, hoods, disposers, compactors, washers and dryers. We make them in every size and style your plans can call for.

Take Hotpoint self-clean ovens.

They all use pyrolytic cleaning: the only system that cleans every part of the oven interior automatically. You'll find it in Hotpoint hi-lows, drop-ins, slide-ins, wall ovens, and 30 and 40 inch free-standing ranges.

Hotpoint refrigerators come in capacities for just about every family size.

Our top mounts offer prospects plenty of storage space—especially in the freezer section.

Most Hotpoint refrigerators are No-Frost, too, eliminating a job no woman likes. And features like deluxe appearance and the Exterior Ice Service on most of our side-by-sides (anybody can get cubes without opening the freezer door) are still more ways we help you sell or rent.

Hotpoint dishwashers do dishes without making a big noise about it. Most feature Whisper-Clean™ operation. That means they have extra sound-deadening insulation.

Models with Soak 'n Scrub put dishes through an extended cycle for more thorough washing. And ColorPack—2 reversible front panels—lets a prospect coordinate the appliance with any decor in many different ways.

The Hotpoint Trash Compactor is another way we help you offer kitchens that save work. It ends daily trips to the trash cans and also comes with ColorPack. Our sound-shielded disposers offer still more convenience.

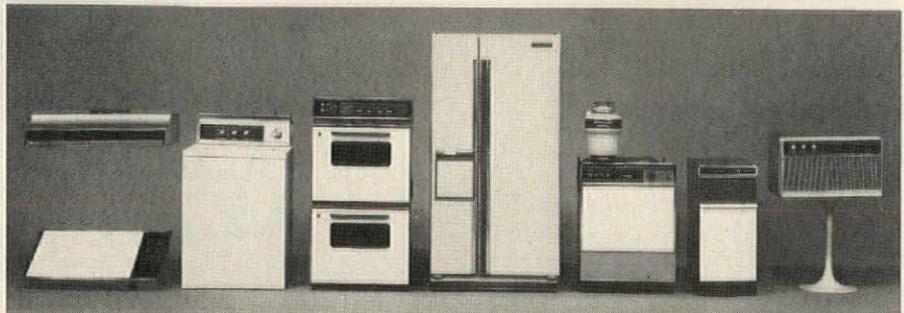
We make a full line of appliances—all with features that can make a woman's life an easier one. They're backed by the largest company-owned and trained service organization of any manufacturer in the business.

And because you can get them all from one source, you save yourself time and trouble.

Call your Hotpoint representative and let him tell you more.

He has lots of ways to help make your life easier.

Hotpoint. The difference is hustle.



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COMPANY _____
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CITY _____ STATE _____
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This coupon may be your most valuable building tool.

What you see here is only a sample of the broad range of home remodeling and building products Norandex offers you. *And you can get them from one single source!* That means less shopping around, less paper work, less worry about delivery.

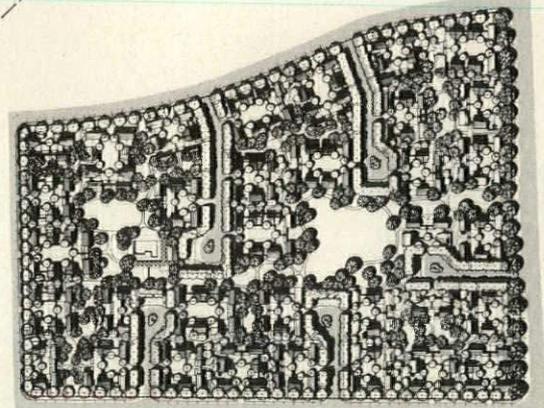
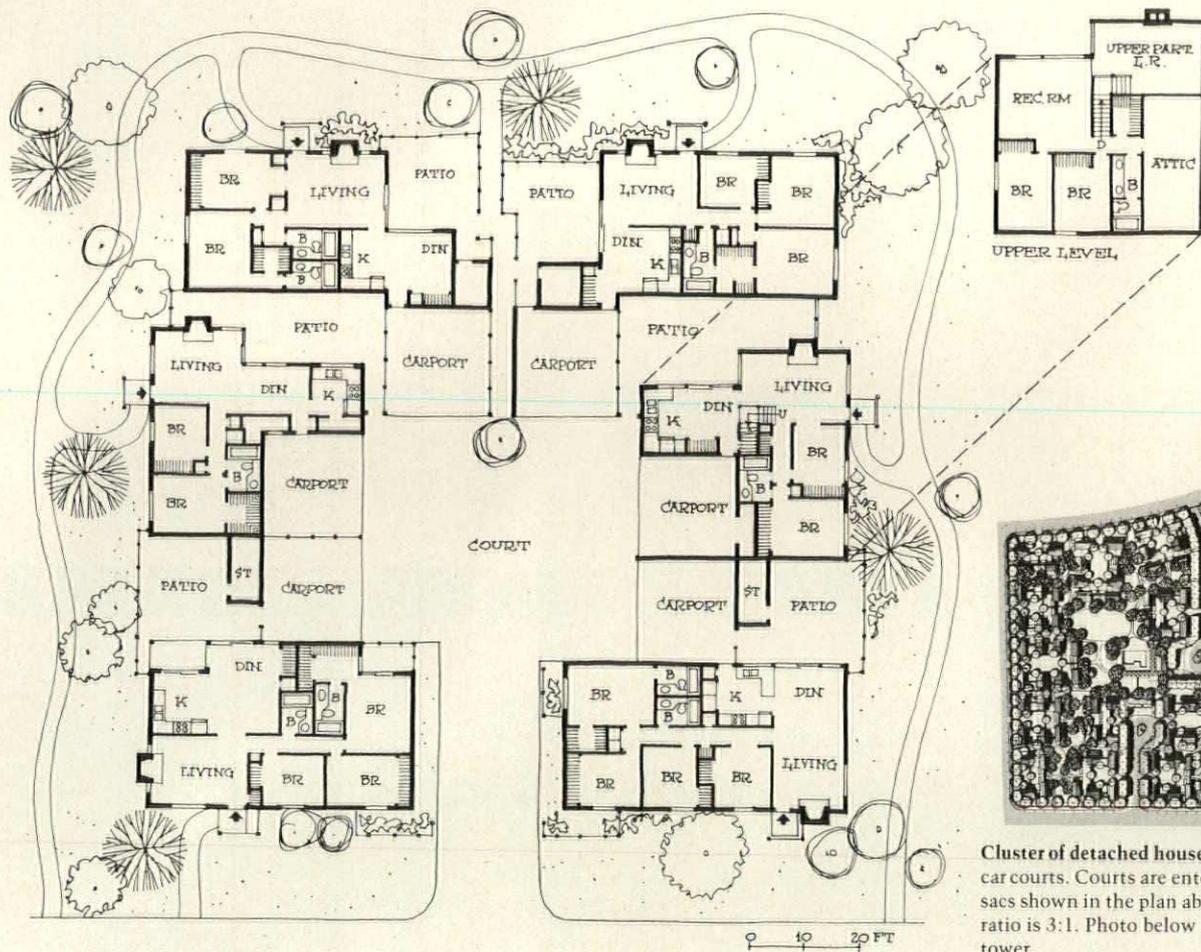
You never have to worry about quality, either. Norandex starts with fine materials, fabricates them

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HERE'S THE COMPLETE LINE THAT WRAPS UP THE JOB WITH ONE ORDER!



Cluster of detached houses like the six-unit group at left enclose car courts. Courts are entered from perimeter streets and cul-de-sacs shown in the plan above of the project's first phase. Parking ratio is 3:1. Photo below shows rec building and adjacent clock tower.

Patio clusters: how to pack in the houses—and pull in the buyers

The density of this San Diego condominium project is 8.5 units per acre—near townhouse density, and appreciably higher than more conventional single-family projects nearby. Yet the developer reports that at 12 sales a month, he often is outselling conventional units in the same price range (\$24,900 to \$33,950) by a considerable margin.

Behind this sales record, says

Claude Waymire, marketing manager for the A.J. Hall Corp., are a number of highly successful features:

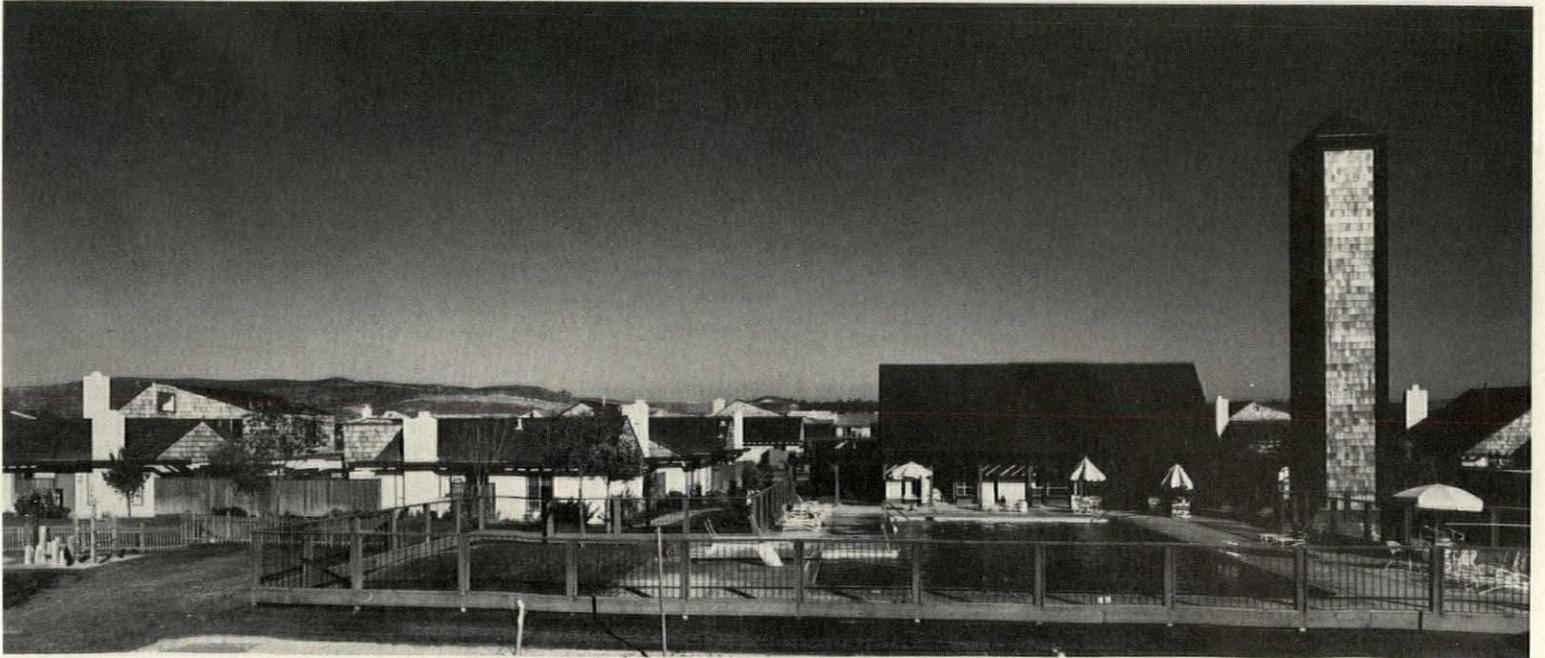
An uncrowded feeling. Groups of four, six or eight patio units are clustered around each motor court. Entries and windows open outward toward green belts, while cars are hidden from view within the central parking area at the rear. Result: an open feel-

ing that belies the high density.

"You have a warm, friendly feeling in and around the clusters, and individual units were made to feel more spacious by the use of extensive floor-to-ceiling glass areas, and by strong visual emphasis on private patios," says Howard Spector of Daniel N. Salerno, AIA, and Associates. The Salerno firm de-

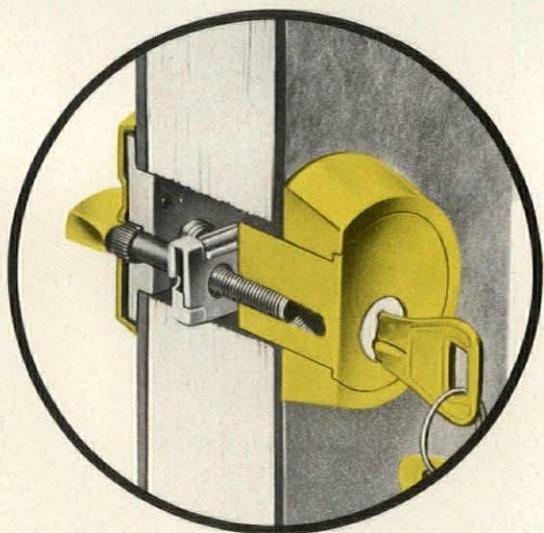
TO PAGE 40

WAGGAMAN/WARD





**AT
LAST...
THE
VANDAL
PROOF
LOCK!**



The above cutaway shows one of the heat-treated steel bolts that provide the vandal-proof protection in this high security lock.

The new Weiser D4000 Series Deadlock is bad news for vandals. In recent laboratory tests, it outlasted six competitive locks in a supervised malicious attack. After over 4 minutes, the Weiser lock was still rigid on the door. All others had failed.

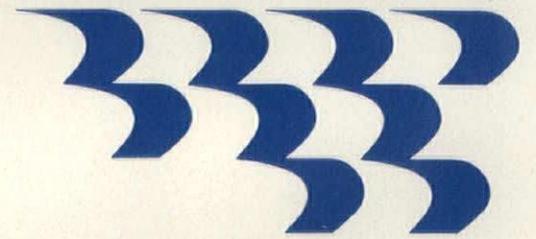
The construction of the D4000 Deadlock is the reason for this superiority. Two $\frac{1}{4}$ " heat-treated steel bolts pass through a steel plate on the inside and thread directly into the outer cylinder housing. Add a 1" dead bolt with a free-turning steel roller, and you have the D4000 Deadlock, the best security lock money can buy.

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CIRCLE 39 ON READER SERVICE CARD



Briggs brings you an everyday answer to the growing pressure for cutting costs, saving water, reducing waste.

The idea of a closet using less water has been around. And now Briggs has found the way to make it work . . . simply . . . most efficiently.

The secret of the new Briggs Conserver two-piece water closet is in its "balanced" design . . . the balance of less water *and* positive flushing action.

The volume of water needed has been reduced, yes . . . actually 30% less than most ordinary two-piece closets. Yet because of the way Briggs has designed the Conserver, there's *no* loss in operating efficiency.

The Conserver saves. And it works! Already it's an important factor where saving water is not only desirable, but required. It's ideal for institutions, motels and hotels; and for high density apartment areas where less waste is important. You'll install it in single family homes, too . . . especially in areas of high water and sewage rates. *Everybody* likes the everyday savings (water and money) the Briggs Conserver offers.

Choose from two syphon jet models, elongated front or a round front design. Both are available in all Briggs decorator colors, and black or white.

What a beautiful idea!



Briggs

5200 WEST KENNEDY BOULEVARD,
P. O. BOX 22622, TAMPA, FLORIDA 33622

a Jim Walter company



Narrower tank uses less water with no loss of efficiency



FROM PAGE 36

signed the project, incorporating a cluster concept on which another architect, Robert Van Roekel, has applied for a copyright.

A park-like environment. The natural flat and barren terrain was reconstructed with numerous hills and mounds, and thousands of trees and bushes were planted to create a lush setting. Pedestrian paths lead into parks and open areas. Along the main streets are tall evergreens and cupanias. And eucalyptus and fig trees surround the cul-de-sacs and line inner pathways.

Says Waymire: "We went to great expense and effort to landscape the site. It gives us a big marketing edge over developments where the buyer landscapes his own property after he's bought it."

Broad market. The mix of buyers runs the gamut from young marrieds without children to middle aged couples with teenage children and retirees.

"Evidently, the ease of condo living, the single-family feeling, and the privacy of the patio concept all have attractions for many market segments," says Waymire.

"Of course, our largest model with its four bedrooms has been attracting large families. But some of the three bedroom units have been bought by retirees because they want extra space for guests."

To date, 193 out of 198 completed units have been sold since the project opened in May, 1972. When built out, the 64-acre project will include 538 units in 89 clusters.

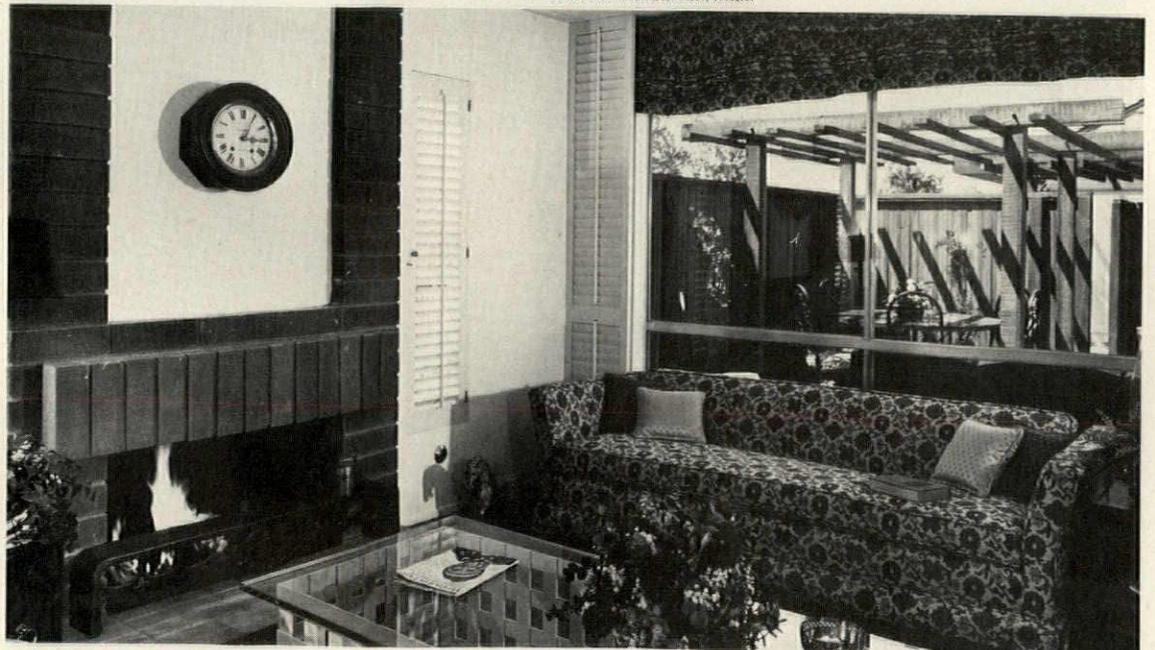


Open spaces between clusters are heavily landscaped. High fences and trellises enclose private patios.



Glass walls and sliding doors open houses to private patios. At left is the stairway and kitchen/family room of the project's only two-story unit. Below is the living room of a typical two-bedroom, two-bath unit.

PHOTOS: WAGGAMAN/WARD



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building board

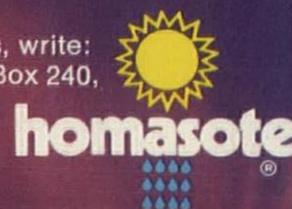
Available for the first time, N.C.F.R. Homasote, $\frac{1}{2}$ " thick, 4' or 8' widths, 8' or 12' lengths, is a structurally strong, weather resistant panel ideal for interior or exterior applications. As with all Homasote products, N.C.F.R. Homasote is noise deadening, rot and fungi protected, easy to cut and shape, won't crack or splinter, and provides constant insulation against air and moisture penetration.

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- Tested in accordance with ASTM E 84 and UL-723.
- Federal Specification SS-S-118A Class "25"
- Underwriter's Laboratories, Inc. Report No. R5268

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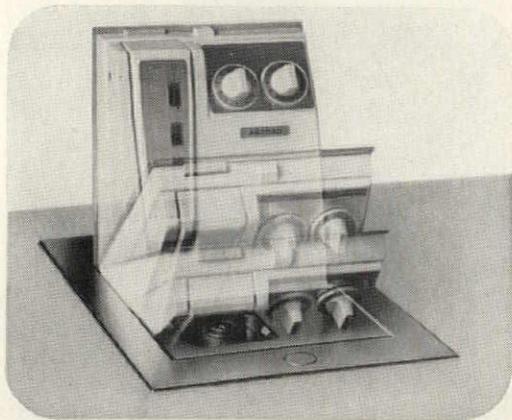
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Hydraulic Lift-Lower Mechanism
Module raises and lowers in and out of counter. Closes flush with counter top.

Latch Release Knob
Retracts two latches located inside attachment well to unlock and release attachments.

3-Position Mixer Arm
1) Locks in horizontal position for mixing.
2) Raises even higher and locks in place to drip-clean beater.
3) Folds out of the way when not in use.



Beater Release Latch
Releases beater from power socket.

Professional Two-Way Mixing Action
Bowl and beater are powered by separate drives. Bowl rotates one way, beater the other way for smoother, more complete beating and mixing.

Beater Clutch and Arm Release
Button stops beater while bowl continues to rotate. Also releases arm to adjust to one of three positions.

Automatic Timer
Sets the Foodmatic for automatic use. Also can be set for manual use.

Solid-State Speed Control
Provides infinite choice of speeds. Solid-state circuitry assures no-stall power.

Speed Selector Guide
Imprinted on mixing arm.

1/3 HP Motor
Extra power to operate more than a dozen attachments. Will not stall at any speed.



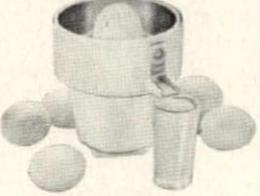
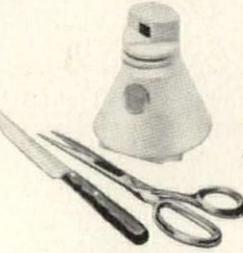
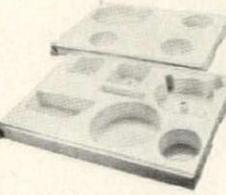
New Ronson Built-in Foodmatic

Listed by Underwriters' Laboratories 

New Ronson Built-in Foodmatic

...the one appliance that does the work of dozens, does it better and in less space. It mixes, blends, slices, shreds, grinds meat, grates, sharpens knives, grinds coffee, juices oranges, crushes ice... it even cooks!

The following attachments are available for the Ronson Foodmatic

 <p>Two Beaters, Two Bowls, Turntable and Dough Hook Turntable and heat-resistant glass bowls interlock to keep bowls firmly in place.</p>	 <p>Deluxe Juicer Comes with two interchangeable ceramic reamers... small for lemons and limes... large for oranges and grapefruits.</p>	 <p>Knife and Scissors Sharpener Hones knives and scissors to original sharpness in seconds.</p>	 <p>Salad Slicer-Shredder Comes with three types of discs.</p>	 <p>Meat Grinder Three grinding discs store in handy compartment.</p>	 <p>Wide-Base Blender Takes whole fruits and vegetables. Even crushes ice.</p>
 <p>Two Custom-Molded Trays Contoured to hold all attachments.</p>	 <p>Ice Crusher Dial settings for ice from chunks to shavings.</p>	 <p>Coffee Mill Grinds beans for drip, percolator or vacuum coffee makers.</p>	 <p>Stirring Cooker Stirs automatically as it cooks at dial-set temperatures from 100 to 400 degrees.</p>	 <p>Mount Organizer Holds beaters, turntable, blender key on cabinet door.</p>	 <p>Recipe Booklet Over 100 pages of recipes and illustrations for hundreds of drinks and dishes.</p>



Portable On-Counter Model
Uses same attachments and has same operating features as Built-in Foodmatic. Storage trays can be mounted in kitchen cabinet.

Console Model
Free-standing cabinet with casters. Only 18" wide. Power module hydraulically lowers flush with "butcher-block" counter top. Uses same attachments and has same operating features as Built-in model.



Ronson Corporation
Built-in Major Appliance Department
One Ronson Road
Woodbridge, New Jersey 07095

HH 173

Please send me additional information on the Ronson Foodmatic.

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Street _____

City _____ State _____ Zip _____

RONSON

DIFFERENT BY DESIGN AND BETTER BECAUSE OF IT



"A homes association can apply environmental clout—but only if it's set up properly in a project's planning stage"

As more states require environmental impact statements, residential developers should think about using community service associations (frequently referred to as homeowner associations) to bolster the developer's commitment to on-going environmental management.

This can be done if the developer provides authority for such management in legal documents which establish the association. These documents must be structured flexibly so they can be modified later when new information becomes available or new needs develop.

To illustrate, the Declaration of Covenants and Restrictions would properly establish an environmental service committee and set down its general powers. If given no independent rule-making authority, such a committee could suggest rules to be adopted by the Board of Directors as policy resolutions. These are simply decisions of the Board adopted in the form of resolutions establishing standard procedures and rules for administration and operation of the association. When such policy resolutions affect the land, they should be recorded in the land records of the locality as well as in the association's Book of Resolutions.

The committee also could 1) review and comment on actions recommended to the Board by other committees which might have an adverse environmental impact; 2) draft and recommend for adoption by the Board standards and guidelines for the use and improvement of common areas; and 3) encourage and/or establish programs for volunteer activities which would provide enjoyment to residents and improve the quality of the environment. Such a committee could, for example, monitor the water quality of streams or lakes within the development, investigate pollution sources and recommend corrective action.

Expanded committee action. Community service associations generally are programmed to act through committees which advise the Board in such areas as communications, maintenance, finances, architectural controls, recreation and safety. But these committees can do much more than simply coordinate activities under their jurisdiction. They can act as grass roots vehicles to encourage sound environmental management by the residents, both as indi-

viduals and as members of the various committees. For example:

- A maintenance committee can do more than see that streets are paved and trees pruned. It also can develop guidelines on pesticide and fertilizer use.

- An architectural control committee can do more than prohibit construction that might interfere with community esthetics. It also can prevent activities which might interfere with drainage patterns or disturb natural vegetation.

- A communications committee can do more than report on activities that have taken place. It can, through the community newsletter, stimulate interest in recycling, wildlife inventories and tree planting.

- A recreation committee can do more than plan sports events. It also can program environmental workshops and nature walks.

Making it work. The degree to which associations will be successful in their environmental management tasks depends on a combination of factors: community size, financial viability, institutional strength, legal opportunities and limitations, etc. These factors are important both alone and in the aggregate.

A recycling program will work best if there are interested residents, if encouragement is offered through the appropriate committee and if financial support to cover start-up costs is made available. Such financial support could come from the maintenance committee's regular budget or, as an alternative, from a foundation set up to receive a portion of monthly assessments for disbursement to resident groups proposing a new community service. The establishment of such a foundation would need to be set down in the legal document.

A lake-oriented community may have adequate financing and willing volunteers but be unable to protect the lake because legal documents don't spell out the authority, or because there's a lack of management guidance. For example, if the Board does not have the power to establish rules and regulations relating to private property (in addition to common property) there may not be any feasible way to control resident use of fertilizers that contribute to lake eutrophication.

Realistic assessments. A community also may find it difficult to maintain environmental quality if the cost gets out of hand. If the developer intentionally sets maximum assessments at a low rate to attract buyers, he may run into resentment later when owners discover that special assessments are

needed to maintain or improve the environment. For example, assessments in a lake-oriented community must anticipate dredging and/or chemical treatment costs and build them into budget reserves.

A community's character and the expense of its administrative sources and activities also will determine how well it can provide environmental management services. The number of units will not be the sole determinant because the best ideas may be ignored or unworkable unless they are realistically based on the ability of residents to interact. A 20-unit project of residents with a sense of commitment to high environmental goals and a willingness to pay for them would be able to do so; a diverse community lacking cohesiveness and environmental commitment would not. If the latter considered installation of a swimming pool more important than expenditure of available funds to maintain a lake's water quality, the association would not be able to properly manage a lake environment.

National opportunity. There are over 15,000 community service associations in the United States and an estimated 4,000 more being created each year. It is time for developers to recognize that these associations can provide a valuable service to their respective communities as on-going environmental management agents.

Collectively, associations could also exchange information and advice on environmental management and other areas of mutual concern. This potential for cooperation already has been recognized by individuals in the District of Columbia who are trying to set up a non-profit, tax-exempt Community Associations Institute. This institute would distribute to builders, managers, officers and other association participants the most advanced and effective guidance for creating, building, financing, operating and maintaining common facilities and services.

The proposed institute and all persons involved in developing and operating new communities will, it is hoped, more clearly recognize that community service associations can both contribute to sound environmental management and provide strong evidence of commitment by developers to protection of the natural environment.

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**"The Treasury's barking up
the wrong tree if it thinks proposed
tax reforms won't affect
the ordinary real estate developer"**

Earlier this year the Treasury Department introduced its Proposals for Tax Change. Their avowed purpose is to close tax loopholes, save the federal government tax dollars and create a more equitable tax system. One proposal—Limitation on Artificial Accounting Losses (LAL)—would limit real estate tax shelters whereby wealthy investors can benefit from substantial accounting losses from a project's early years.

The Treasury claims that LAL will not affect the ordinary real estate investor, but rather the outsider who buys in search of tax "losses." I disagree: Enactment of LAL will just as certainly have a profound impact on the ordinary developer who depends on these losses for his profits.

As previously discussed in *HOUSE & HOME* ["The Apartment Scene", July], the rental segment of the industry will be particularly hard-hit. The following example shows why.

Assume a typical conventionally financed rental project of 100 units with a replacement cost of approximately \$2 million and average monthly rents of \$300 per unit. Based on standard accounting principles, a projection of tax losses under both existing and proposed regulations is:

Year	Existing regulations	Proposed regulations
0	(\$112,090)*	\$ 0
1	(86,728)	(29,375)
2	(75,194)	(27,246)
3	(64,597)	(24,943)
4	(54,757)	(22,458)
5	(45,510)	(18,113)
6	(36,718)	(13,703)
7	(29,480)	(10,565)
8	(22,243)	(6,772)
9	(14,973)	(2,226)
10	(20,837)	(10,677)
11	(7,967)	(265)
12	(1,230)	0
13	5,755	0
14	13,032	0
15	20,640	0
16	28,620	0
17	37,018	0
18	45,884	0
19	55,268	0
20	61,018	0

* Parentheses denote tax loss.

The reason for the tremendous differences is that under proposed regulations losses generated by all construction deductions and accelerated depreciation in excess of straight line are deferred until taxable income occurs. It is not until year 12 that deferred losses can be applied to offset taxable income.

The net effect of such deferrals is reflected in the syndication value of these losses which is one measure of profitability to the

developer. Under present regulations, assuming standard syndication terms and a 15% discounted rate of return, investors should be willing to contribute \$253,000 for the project's equity. Under the proposed regulations, investors would contribute only \$146,000, a reduction of over 40%. After the developer takes into account cash requirements, syndication costs, overhead, etc. (conservatively estimated at \$120,000 in this example), his net profit is only \$26,000 as compared with \$133,000 at present.

Here are three possible industry responses should the proposals become law.

Syndication. More complicated devices will be created to take advantage of the deferred losses that accumulate. Under the proposed regulations for residential real estate, such deferred losses from a given project need not be applied against future taxable income from that same project, but can be transferred to any related taxable income. Hence, a syndication could be devised which pooled a heavy loss rental project with a heavy cash rental project. Or, a heavy loss rental project could be combined with a for-sale project, effectively sheltering sales profits by the losses generated.

Such arrangements would be largely counter-productive to the stated purpose of the proposed regulations. And, the inherent complications of pooling will tend to limit this option to sophisticated developers and investors who can support the technical, legal and accounting counsel required. In particular, more of the tax incentive value will be lost to the middlemen who structure such deals, reducing the net profit for the developer. So in practice the proposed tax changes may promote more abuses than the present system.

Higher rents. The reduced tax incentives of the proposed regulations will have to be compensated for by increased costs to the consumer, i.e., rents will be raised to maintain an adequate return on investment. This would wipe out one of the original purposes of real estate tax incentives—to hold rents down by substituting tax benefits for cash flow to balance the return on investment.

Any upward pressure on rents will price more households out of the market. So the new regulations would have a significant negative impact on rental housing production if they are not accompanied by new federal assistance programs.

More condos. Condominium development (or conversion) can be expected to accelerate since individual owners are unaf-

ected by the proposed regulations. While ownership versus tenancy is not a negative condition per se, to some degree a strong market depends on a balance between them.

Equally interesting is what occurs in the area of taxes paid into the Treasury. Here's what happens when our example building's 100 units are sold as condos for 100 times rent and mortgaged for 80% of the sales price.

Based on an 8½%, 25-year loan, the average annual interest cost over the first five years would be about \$2,000 per unit, assuming an effective real estate tax rate of 3% of the sales price, annual taxes would be \$900 per unit. So, the 100 condo owners would be entitled to an average of \$290,000 annually over the first five years in personal federal tax deductions. This compares to a \$65,000 average deduction over the same period if the project remained a rental under existing regulations. Even assuming a lower bracket for individual owners than the typical 50% investor bracket, the disparity still is great.

Another point: When he sells his project, the investor's tax on his gain is related to the amount of earlier losses claimed. But there is no similar recapture or later tax to an individual owner—the favored beneficiary of the tax system—who can take far greater deductions from his taxable income. Thus, to the extent that the new proposals result in a shift from rental to ownership projects, the biggest loophole will be expanded.

Changes needed. There is no question that the existing tax regulations related to real estate contain certain problems and inequities. Indeed, the current system should be changed, if for no other reason than because it is an unnecessarily complicated and inefficient way to provide needed incentives for housing production.

That said, it also must be realized that the profit incentive has to come from somewhere else if not through the tax system. Housing development is not strictly an economic activity, but depends in part on external forms of assistance—especially if we're to reach the national goal of a decent home for everyone. The Treasury Department's action to circumscribe effective tax subsidies for production cannot be unilateral, but must be balanced by compensating direct subsidies through HUD or by other means.

Putting it another way, tax reform and housing production may be an either-or situation: Either developers and investors are afforded adequate incentives or new rental housing simply will not be built.

ROBERT H. KUEHN JR., PARTNER, HOUSING ECONOMICS, CAMBRIDGE, MASS.



Jerry J. Avison shows off the double Nord Imperial doors used in the Knightsbridge Condominium Apartments near Detroit.

From Michigan, An inside story on Nord entry doors.

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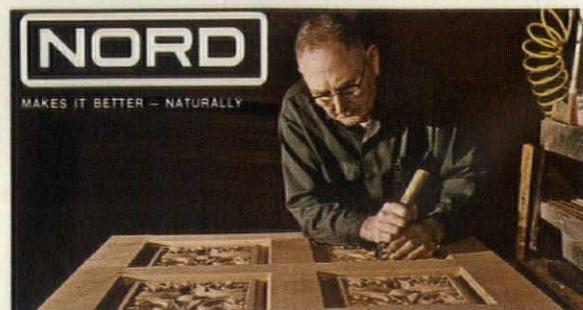
Explains Jerry, "Because the doors are located on the library, just off the living room, a quality, distinguished-looking door was needed. It had to be decorative and give a massive impression, as well as provide a warm reception for company." Nord's Imperial filled the bill. And Jerry found its quality craftsmanship helped sell these \$59,900 condominiums.

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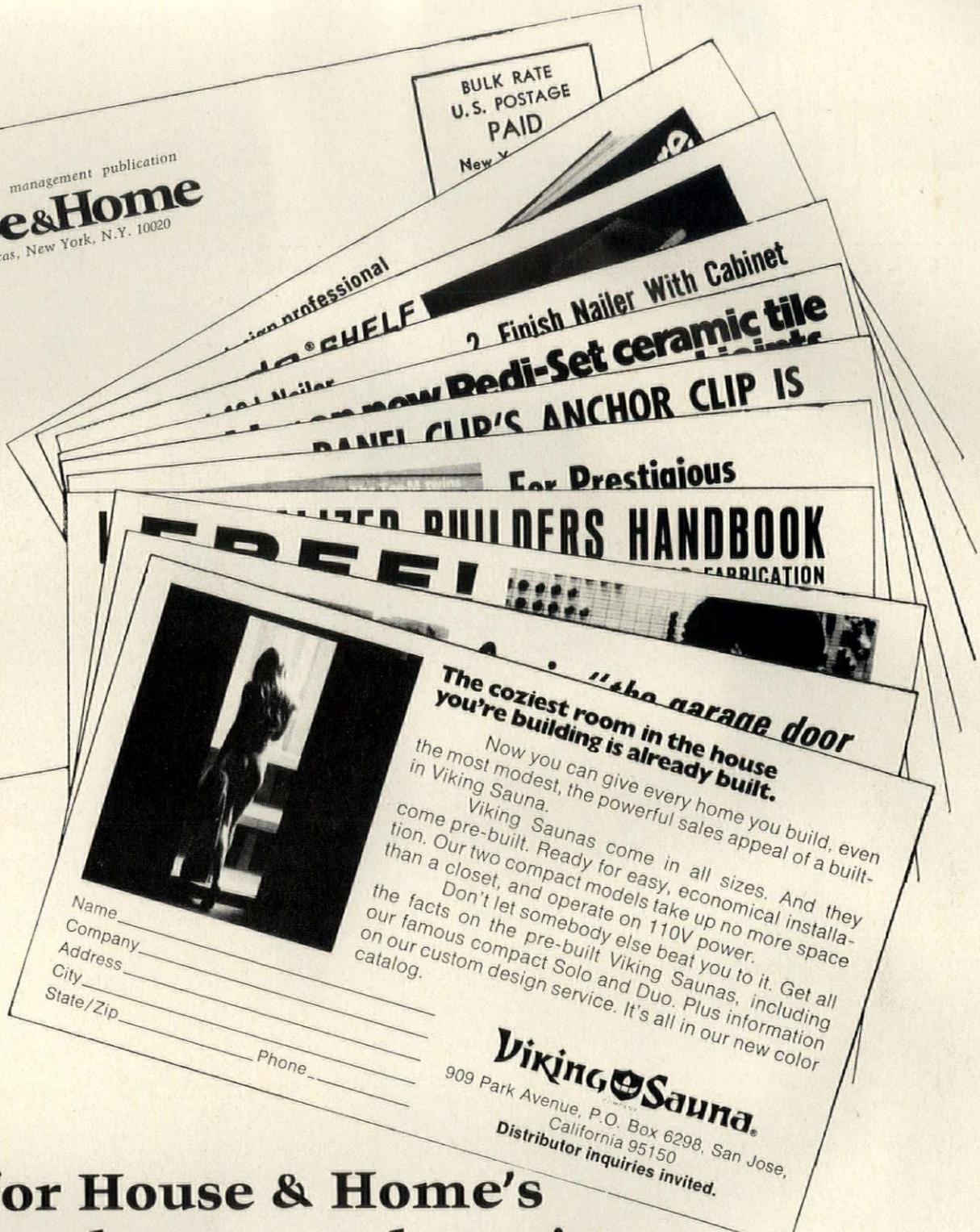
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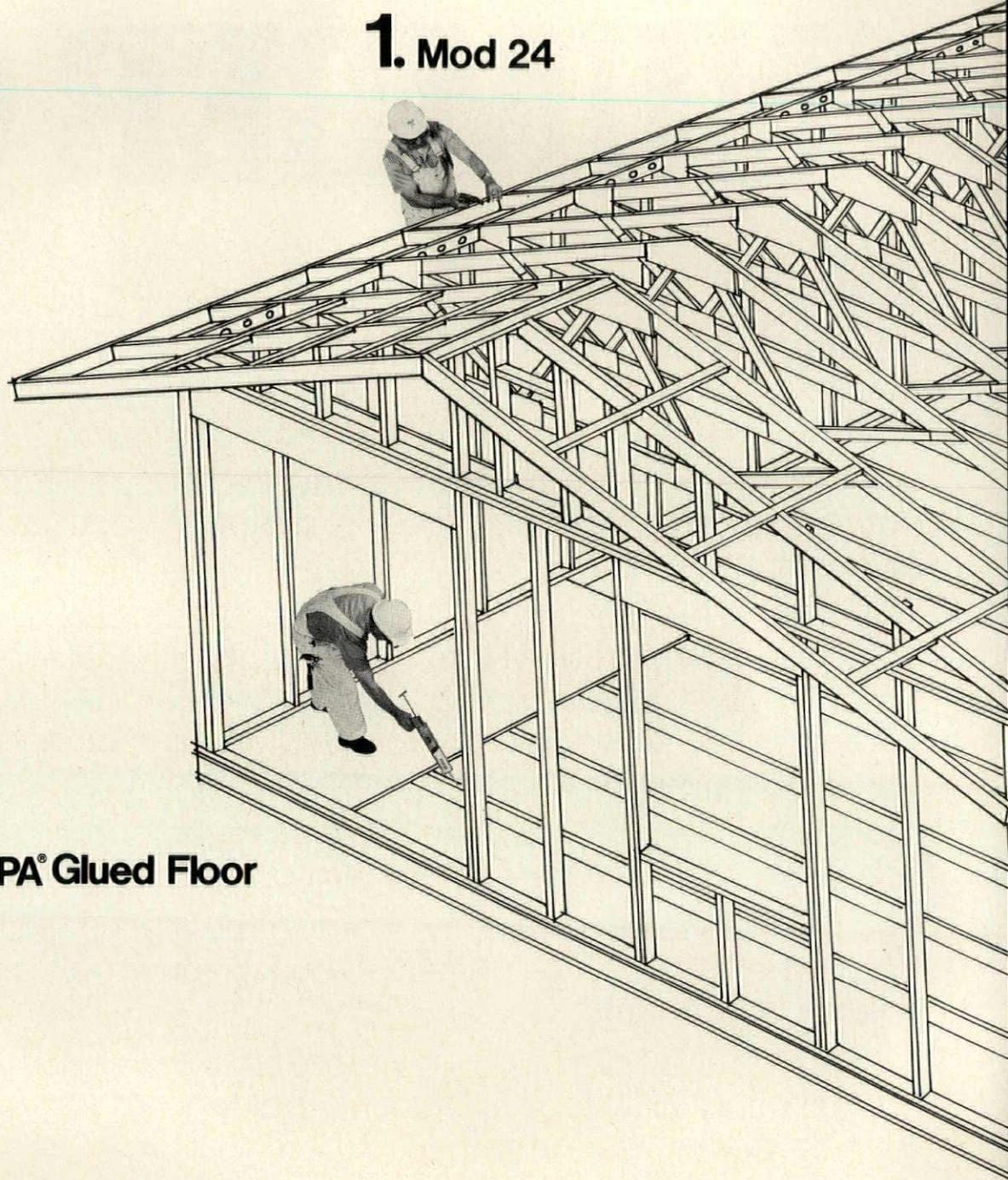
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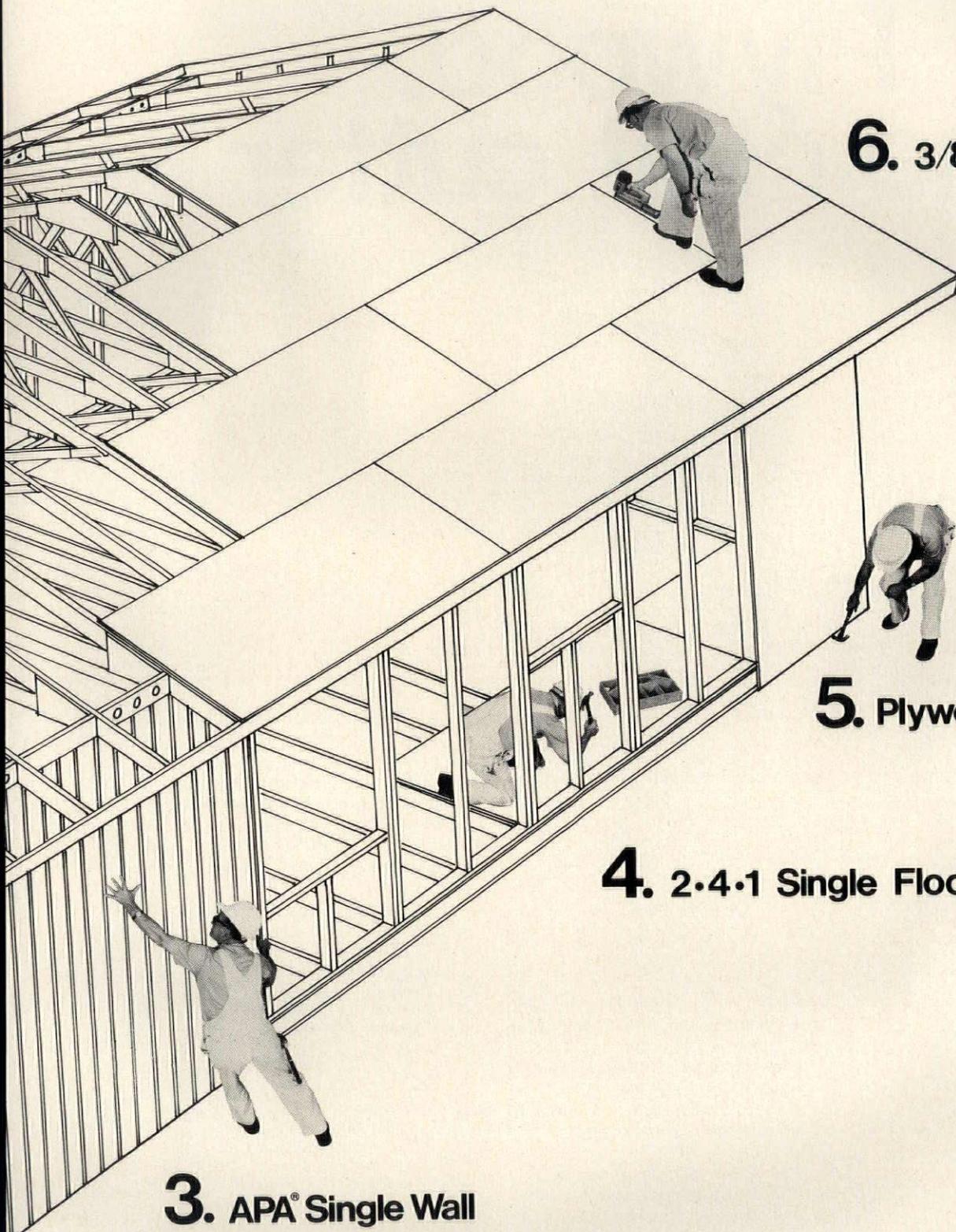
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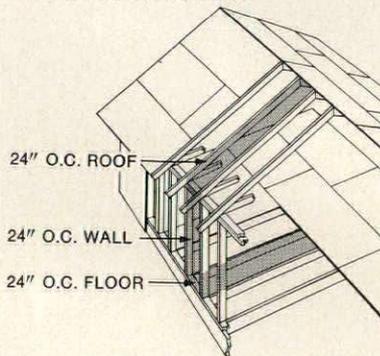
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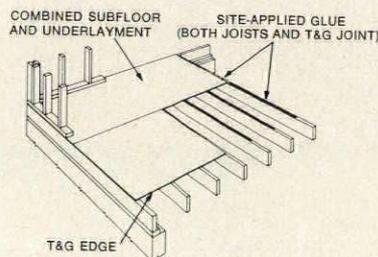
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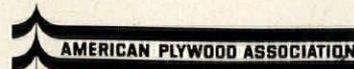
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Editorial

First test for impact zoning —or the thinking town's alternative to no-growth

Seventeen months ago HOUSE & HOME, in a report on the land-use crisis, introduced the concept of impact zoning to the housing industry.

Here, we said, was a workable way to avoid those destructive collisions between developers on the one hand and communities and environmentalists on the other. Simply put, impact zoning replaces arbitrary density restrictions with a process for measuring a proposed project's effects on a community. It answers questions like these: Are the developer's marketing goals in tune with the town's reasonable growth? Can the project's need for essential services be met by the town? Will the project generate enough tax revenue to pay for those services? And will the project work with, not against, its environment?

Seventeen months ago, however, impact zoning was still an untried idea: No town had put it to a public vote. Now the public has had its say—in Duxbury, Mass., a Boston commuter town beset by the sort of growth problems afflicting hundreds of other communities.

H&H Associate Editor Natalie Gerardi tells why and how Duxbury adopted a new bylaw based on impact zoning in this issue (*see next page*). Her story—"The town that said 'no' to no-growth"—is heartening for a number of reasons:

Partly because it shows that citizens of all stripes can face reality and then compromise their differences for the common good. Even the people who worked the hardest to develop the new bylaw and to get it passed would have preferred no-growth, reports Ms. Gerardi. But they knew growth was inevitable and the best they could do was to direct it on Duxbury's terms.

Partly because, in a time of cynicism and disillusionment with the democratic process, it

shows that grass-roots democracy still works: The bylaw was finally passed after 11 hours of debate at a typical New England town meeting.

And partly because it offers developers, hard-pressed by building moratoriums, at least a grain of hope.

For impact-zoning purists—and there are already some among professional planners—the Duxbury bylaw leaves quite a bit to be desired. It limits the number of bedrooms per unit in multi-family projects. It is too specific about the housing mix in planned unit developments. It is not specific enough about Duxbury's fair share of Boston-area housing. And it imposes impact zoning on top of the town's existing zoning—an awkward arrangement that lets developers use the land in the same old way if they don't feel like negotiating with the town.

None of those shortcomings stem from loose thinking by the planners. All of them are concessions to public sentiment—results of the very compromise that got the bylaw passed in the first place. Furthermore, they are not locked into the bylaw because, as the town planner notes, impact zoning is a changing process rather than a rigid set of rules. What Duxbury has now—and what other towns need—is a flexible framework of performance standards subject to negotiation as new problems arise.

"It's a tremendous plus to have some guidelines to work with," says the land planner for one Duxbury developer. "A lot of our homework has been done for us." Says another: "Everyone will be tracking through in the same way and will know exactly where he is and what he has to do."

It is tempting to suggest that Duxbury's impact-zoning bylaw is a model for other towns. That, it isn't. But the process of developing and adopting it is.

—JOHN F. GOLDSMITH

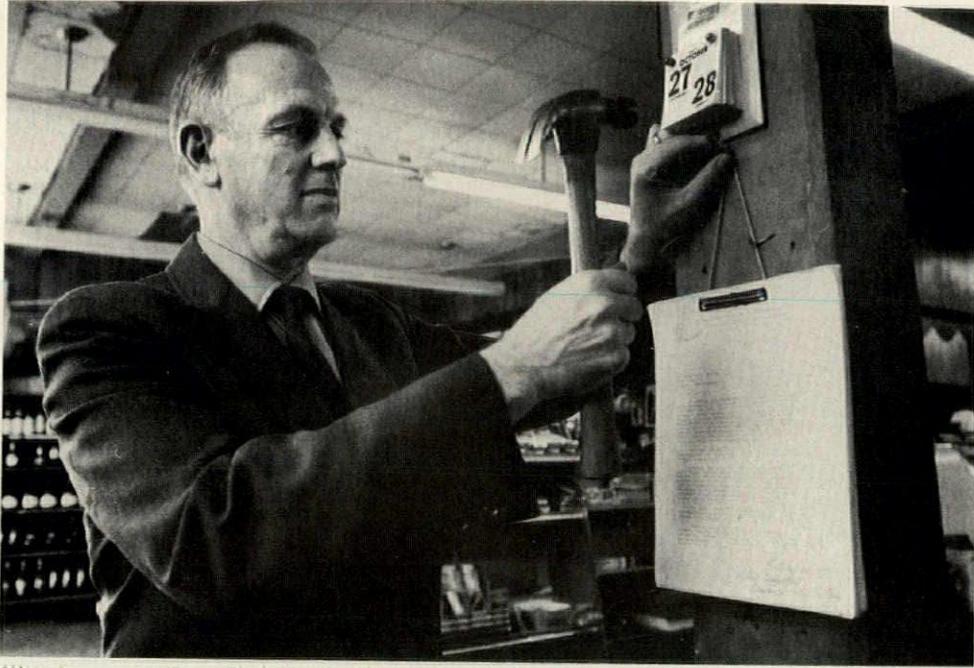


PHOTO: STEVEN HANSEN

Historic moment: Town Clerk Maurice Shirley posts Duxbury's new zoning bylaw in Osborn's General Store.

the town that said **no** to no-growth

When the opening of a new expressway drew historic Duxbury, Mass., into Boston's commuting orbit, the 345-year-old town was suddenly confronted with two typical suburban problems: growing tax rates and shrinking open space.

But Duxbury, which already had one-acre zoning, rejected the usual no-growth panaceas and decided instead to take a closer look at its land and its goals. The upshot was a new zoning bylaw—the first in the nation to be based on impact zoning [H&H, Aug. '72]—in which the town set up the machinery to sit down and negotiate with developers.

Far from no-growth, Duxbury's new bylaw actually encourages higher densities—provided that the developer sets aside open space and provided he can prove that the taxes from his project will offset its cost to the town in schools and services. Here's how it came about . . .

It all began in March 1971, when two-acre zoning failed to obtain the necessary vote at the town meeting.

Some concerned citizens got together to discuss ways to tackle the town's problems, most of which stemmed from one simple fact: Duxbury was just too attractive.

This Pilgrim town 31 miles south of Boston on the Massachusetts coast had long been a popular summer resort, but otherwise it had remained relatively undiscovered. The people who lived there liked it that way.

Their houses, many dating back to the 17th century, were screened from the roads by tall maples and pines. Some enjoyed sweeping vistas of Duxbury Bay or of salt marshes or cranberry bogs. Few were in sight of their neighbors.

A providential sand spit provided Duxbury residents with nearly seven miles of beach. Their children's schools were clustered on a 120-acre campus that would put many colleges to shame.

As recently as 1960 fewer than 5,000 people lived on Duxbury's 15,000 acres. Today's population estimates range from 9,100 (the figure used by the planning board) to 12,000, yet parts are still so secluded that quail calmly parade along the blacktop.

The concerned citizens who met after that 1971 town meeting knew that their rural way of life was in danger unless they did something to control Duxbury's growth.

Seven years earlier Route 3, a fast new expressway, had pushed south and it was threatening to turn Duxbury into a suburb of Boston. New families were pouring in and new houses were springing up to accommodate them: Seventy-three building permits were issued in 1967, 143 in 1968, and 250 in 1972. Pretty soon one out of every three residents of Duxbury was a school-age child and the tax rate was soaring.

"As we sat around talking," attorney Donald Connors recalls, "we realized that large-lot zoning is merely one tool in a community's possible range of tools and that what we really ought to do was to take a good look at Duxbury, see how it has grown, inventory its resources and then try to articulate some goal as to where we might want Duxbury to go. Then we might find the combination of tools that could help us reach those goals."

That was the beginning of the land-use committee.

"The land-use study went through the hands and minds of many different types of people . . . That's what made it what it is"

**—Edmund Dondero,
planning board member**

A good cross-section of Duxbury was represented on the land-use committee: a selectman, members of all the town committees (including the finance, capital budget, school building, recreation, water committees and the planning board) plus representatives from the major community groups such as the League of Women Voters, the Rural and Historical Society, the Conservation Com-

mission and the Friends of Conservation.

The committee chairman was Francis Park, a member of the planning board and former director of research and planning for the attorney general of Rhode Island, whose involvement with Duxbury had led him to return to school for a degree in planning from MIT.

As most members of the land-use committee had constituencies to report to, a sizable segment of the community—and virtually its entire leadership—was kept informed of the group's activities.

The first priority was to get some professional advice, so the committee spent ten months interviewing 25 town planners. It decided that the Philadelphia firm of Rahenkamp Sachs Wells & Associates had the best approach for Duxbury. So one year after two-acre zoning was defeated, a different approach to zoning came before the town meeting. This time the town was asked to appropriate \$85,000 for the Rahenkamp firm to prepare a series of inventories and evaluations, a master land-use plan, a zoning map and a model for a comprehensive ordinance.

Needless to say there was plenty of debate over spending such a large sum at a time when everyone was feeling the pinch of rising property taxes. Francis Barton, a journalist, had prepared a booklet, entitled "Duxbury and the Negotiated Landscape," explaining the Rahenkamp proposal. In it he reminded the skeptics:

"Plans for our newest school cost \$130,000. Beyond this is the building of the school and the expenses of staffing and running it. If Rahenkamp Sachs & Wells save us the building of one school, we will be repaid many times over."

His argument finally prevailed, the town voted the money and work began.

"It's an expensive town; no question about that" —Donald Walker, Realtor

For years one man was responsible for the exclusive character of Duxbury: real estate broker Percy Walker. (His sons Donald and Charles are still carrying on his business today.)

"He was the kind of fellow who wouldn't rent or sell you a house unless you belonged in Duxbury," recalls Atherton Loring, who headed the planning board for many years.

Walker was responsible for establishing the water district and the planning board. He also tried to institute zoning as far back as 1926 but was voted down unanimously.

Zoning finally came to Duxbury in 1944 when a reluctant majority decreed that the minimum lot size for a single-family house should be 20,000 sq. ft. with 100 ft. of frontage. In 1952 this was increased to 30,000 sq. ft. with 150 ft. of frontage, and in 1954 to 40,000 sq. ft. with 200 ft. of frontage.

In recent years, with land costing anywhere from \$8,000 to \$20,000 an acre, the only houses that were built in Duxbury were four- and five-bedroom houses that could be sold for at least \$50,000. And naturally these houses appealed to families with children.

Between 1966 and 1973 Duxbury's school population rose from 1,655 to 2,985. Assessments on homes were pushed up to the 100% mark, so in effect taxes were rising at a rate of 15% a year.

The high taxes were particularly hard on older people. For example, the following letter from a soon-to-be ex-resident appeared in the local newspaper, *The Duxbury Clipper*:

"A growing number of people in the 60-plus age bracket (and I am one of these) who will soon be living on retirement incomes can no longer afford to live in communities like Duxbury. Soaring taxes are forcing us to do what we never intended to do, for when we built in Duxbury twelve years ago we intended to spend our retirement years here."

The Conservation Commission had an answer to the problem: Slow growth by buying land for open space.

"It is cheaper to borrow money and conserve land than to allow it to be developed," the Commission wrote. Backing up this statement were projected costs and revenues to the town from one block of 69 houses built between 1967 and 1968, showing that the 1969 deficit of \$7,725 could grow to \$84,677 by 1974.

So Duxbury set about acquiring its own land. Over the last three years it has spent nearly \$1.5 million to set aside 1,200 acres.

Conservation was not a new issue to Duxbury. As far back as 1960 the town had adopted a bylaw saying that no one could build in a wetland or marsh without a special permit from the board of appeals. The community's right to protect its wetlands was later upheld in a series of court cases. But the courts made it clear the board of appeals had to base its decisions on scientific evidence that the welfare and safety of the community were at stake. If the intention was merely to keep the town open and unspoiled, the courts said, that would constitute depriving a person of all practical use of his land without compensation and would thus be illegal.

As a result of these court decisions, the Conservation Commission decided to map Duxbury's wetlands. This mammoth effort soon became a community project, and the interest it stimulated helped launch the land-use committee.

The effect of the high taxes on Duxbury's older population might have been less drastic if there had been some apartments for them to move to. But Duxbury has only two apartment buildings: An old mansion on its main street has been converted into six units populated almost entirely by widows, and a 32-unit garden apartment was built on Route 53 on the site—and with the zoning variance—of a former motel.

Proposals to build apartments came before the town meeting on several occasions, but Duxbury residents turned them down. They cited the example of the neighboring town of Marshfield, where apartment buildings sprawled all over the landscape once the zoning was changed.

Duxbury residents also turned down pro-

posals for cluster zoning which resulted from an updating in 1968 of their comprehensive plan. They did, however, establish a housing authority to build housing for the elderly under a state subsidy program; nothing has been built yet.

"An enlightened developer can do an excellent job if he takes full advantage of all the information we can supply him."

—*Jeremiah Browne, planning board chief*

Partner Roger Wells headed the Duxbury project for the Rahenkamp firm. He traveled to Duxbury regularly, consulted with the land-use committee and with local officials. Then, with material gathered from local, state and federal sources and at times specially commissioned, he mapped and fed into the computer information on the town's natural and man-made systems.

These maps, in full color and all drawn to the same scale, have been mounted in Duxbury's planning board office for anyone to consult. Nine chart the town's natural systems, including its physiography and climate, wetlands, slopes, vegetation and other cover, hydrologic soil groups, subsurface geology and hydrology, on-site sewage restrictions and a visual analysis. Two others—the public water system and the existing land-use and historic sites maps—show the town's man-made systems. Finally, a composite of the conditions described by the various maps appears on a comprehensive restraint map and an improved zoning map.

Wells also evaluated Duxbury in relation to the pressures generated by housing demand in the Boston metropolitan area. The town's share of housing demand was calculated, taking into account six factors that affect the amount of housing any town can reasonably absorb: natural capacity of the land, present population density, highway access, employment concentration, housing stock and revenue effort. These calculations showed a projected demand of 9,282 units between 1970 and 1990, or an average of 462 units a year.

The next step was to draw up a master plan statement, in effect a policy statement on Duxbury's future development.

The master plan statement recommended that Duxbury continue as a predominantly residential community, both because this was the desire of the town's residents and because the town offers no particular advantages for commerce or industry.

It recommended that Duxbury's low-density single-family zoning be continued but that a variety of housing types be encouraged. Its chief recommendations were that houses be clustered to create common open space and to save money on the installation and maintenance of utility lines and roadways, and that planned developments, including both single- and multi-family units, be permitted.

Wells designated three areas that would be suitable for such planned development: area I with densities of one to four units per acre; area II with up to six units; and area III with

up to eight units. Areas II and III would also allow certain business and light industrial uses.

As a developer who wished to build a planned development would in effect be asking for an exception to Duxbury's traditional zoning, the town, under a process called negotiated landscape impact zoning, would be entitled to ask him for some concessions.

"This approach," says Wells, "is based on the assumption that both the town and the developer can benefit from alternatives to rigid prohibitions on land use."

What it boils down to is some good old-fashioned horse trading. The town allows the developer to build at higher densities, to cluster his units or to build multifamily housing; in return the developer agrees to take the town's ecology into account, to mix his housing types in a way that would have a favorable impact on the school budget and to set aside permanent open space.

It took Wells 10 months to collect the data, develop his ideas, do the studies for the master plan, draft the master plan and design the

zoning map. And that was the easy part.

"Our contract said we were to recommend a format, or what we call a model, which Duxbury was then to work on and make into a bylaw," Wells recalls. "But it became clear that if we went into the town meeting with a recommendation that they take another year to write a bylaw, it was going to be all over. So everyone decided 'we'll write a bylaw'."

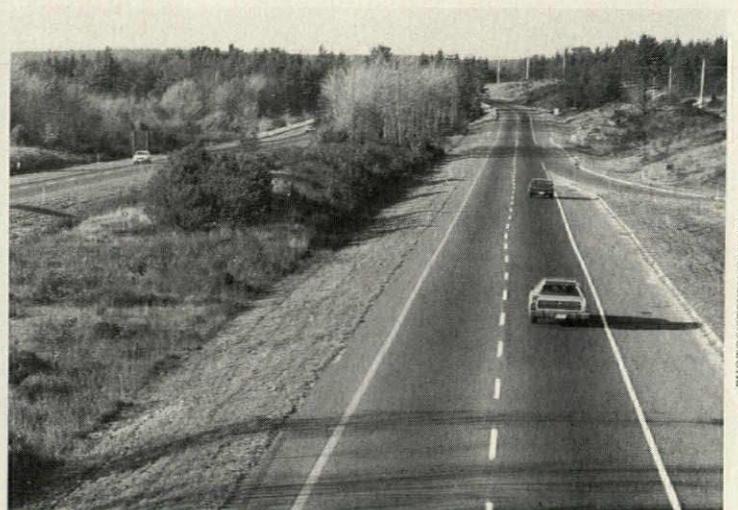
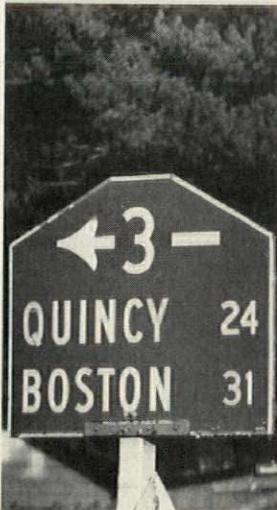
This was in December. The town meeting was three months away.

"People worry so much about density that they forget about quality . . . I'd rather see less emphasis on density and more on quality"

—*Francis Barton, land-use committee*

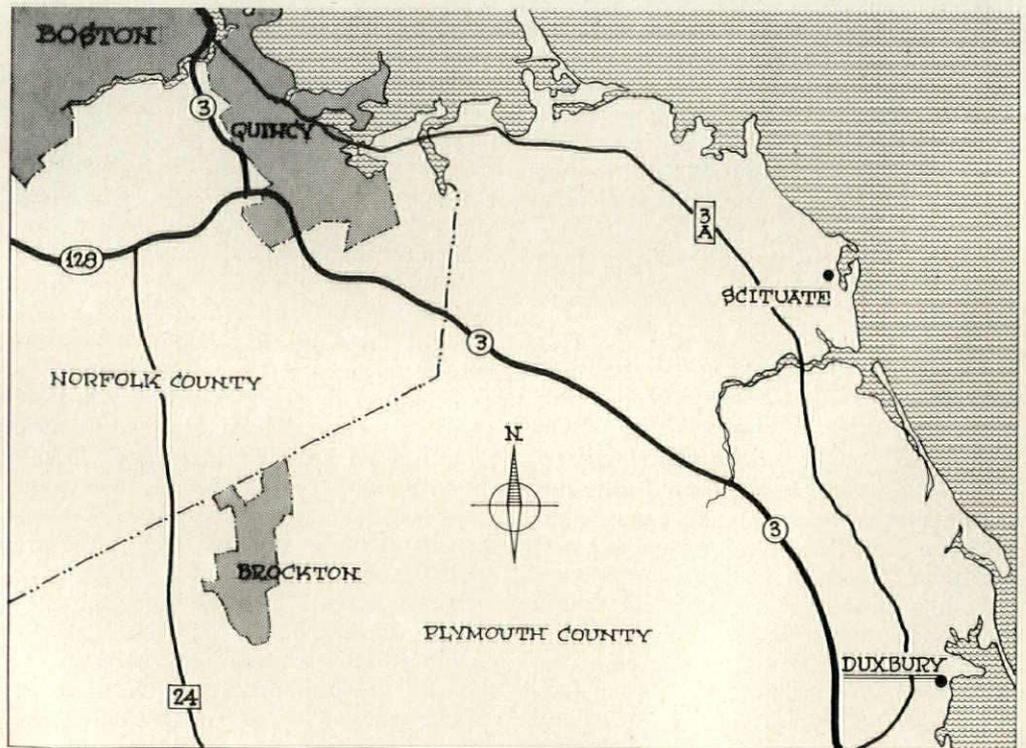
The new bylaw incorporates the principles of Well's master plan, tempered by two important factors: the will of the people of Duxbury and the law of the Commonwealth of Massachusetts.

Some of the changes were suggested by the land-use committee; others were proposed on the floor of the town meeting; still others



PHOTOS: STEVEN HANSEN

New link to Boston, Route 3 cut commuting time to under an hour and opened Duxbury to young families.



were made by the Massachusetts attorney general's office, which had to approve the bylaw before it could take effect.

In essence, Duxbury retained its old one-acre zoning, so a landowner could still do anything with his property that he could have done before the new bylaw.

In addition, the bylaw set up the machinery for making exceptions to the old zoning on a rational basis. These exceptions permitted cluster housing and planned development under specified conditions. And as a concession to Massachusetts law, which does not permit floating zones, the areas where such development would be permitted were clearly marked on a zoning map.

Because of pressures from the town, the densities suggested in the master plan were reduced to one to two-and-one-half units per acre in area I, one to four units per acre in area II, one to six units per acre in area III.

"We wanted to be sure we didn't go too far," says Edmund Dondero. "If it's going to be unworkable, at least it's going to be unworkable in the town's favor rather than a developer's."

The new bylaw also calls for a mix of three different housing types in planned developments, with no one type to exceed 60% of the total and none to be less than 5%.

"The land-use committee was worried about assuring a balanced mix and these proportions were the result," says Wells. "I would have preferred to leave the mix open, because a guy with 20 units shouldn't have to have three different unit types. That's a pain in the neck. But on the other hand, if it were left open, someone could come in and justify a 500-unit townhouse project, which would not be good for the community."

The biggest change to Wells' plan was an amendment made at the town meeting that "no dwelling unit in a multi-dwelling unit building shall be designed, constructed, or altered to have more than two bedrooms."

This amendment was proposed by Jeremiah Browne, planning board chairman.

"When we cut the allowable density we cut the appeal of this type of development from the developer's point of view," he explains. "In effect we forced him to try to get more out of each acre by building larger units

because there would be fewer of them. If a developer built six four-bedroom townhouses per acre we would have a substantial impact on our school population but not necessarily get an adequate tax base in return."

Wells is unhappy about including a bedroom limitation in the bylaw.

"It's counter to the whole philosophy of what we are trying to do. The idea is to leave as much open to negotiation as you can. I have no objection to someone building a ten-bedroom house. I just want him to be evaluated fairly as to his impact."

There's no change in prospect. Bedroom limitations have already been tested in the Massachusetts courts and found legal.

A few minor parts of the new bylaw were ruled illegal by the attorney general. He deleted the requirements on the developer's financial capability and on the fees paid the town at each stage of the application procedure.

Wells expected the financial measures would be deleted as there is no legal precedent for them. But he is disappointed that the fee structure was removed from the bylaw, which can only be amended at the annual town meeting, and inserted in the rules and regulations, which can be changed after any public hearing.

The original draft of the bylaw included a section on community-supported public housing. It was dropped, however, because the land-use committee feared that discussion of this one point might obscure the real issue of the bylaw itself.

"They have the chapter and they can insert it when they feel ready," says Wells. "I think it would be very good if the community acquired land and held it for low-income housing. They could do the studies themselves, rezone the land and then grease the works for someone to build the houses."

Perhaps the thorniest problem in drafting the bylaw was to find a way around the Massachusetts law that requires a town to act on a developer's application within 60 days. That isn't enough time for the developer to submit, and for the town to evaluate, all the information required under impact zoning.

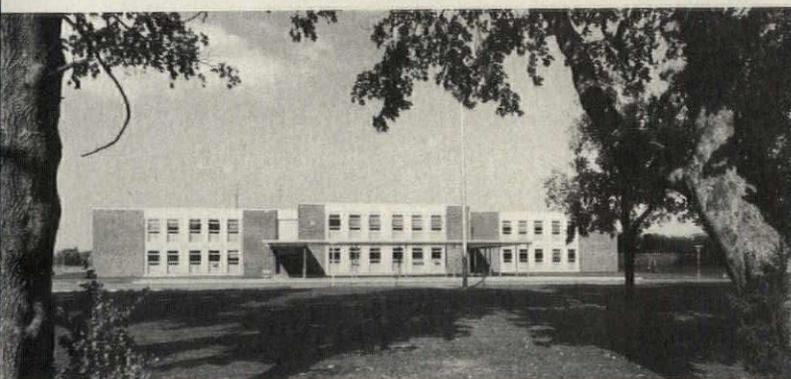
For example, the developer's site analysis must include: a topographical map; a soils map based on data maintained by the town; a vegetation and special features map showing all woodlands, groups of trees, rock outcroppings, existing buildings, roads, streams, drainage ways and ponds; a map of the neighborhood locating the site in relation to the surrounding community; and a sketch plan showing the general location, type and number of units proposed, common open space and ways.

Later he will have to provide more detailed maps on these features plus other maps showing roads, parking, utilities, open space community facilities, land coverage drainage and land use.

Finally, he must submit reports evaluating the land, population, economic impact, traffic impact, utilities impact, analyzing



John Alden's house is one of many historic homes, some of them still inhabited, scattered through the town.



Quality schools like this make Duxbury particularly attractive to young families.

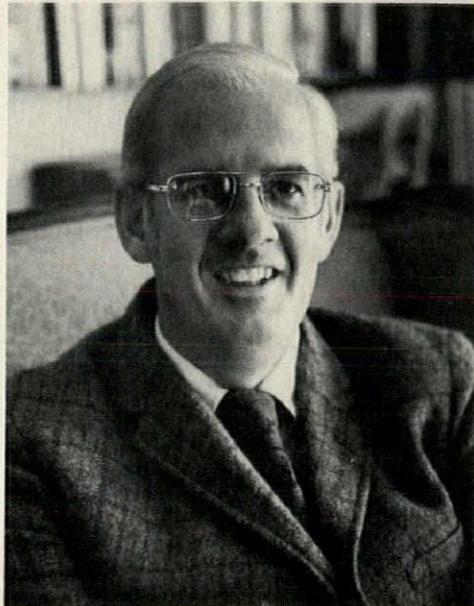
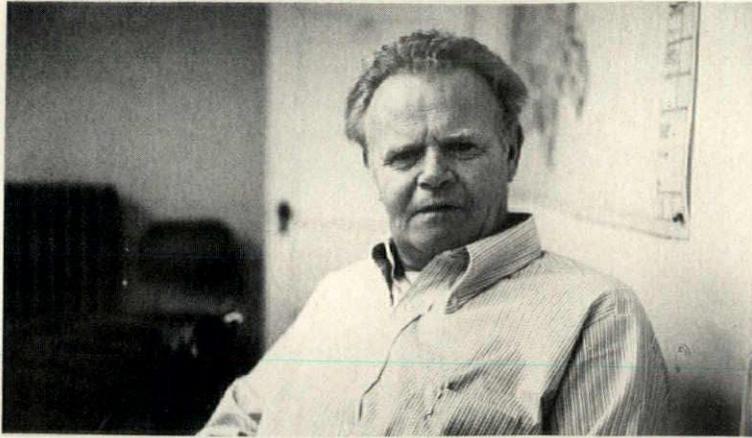


Old mansion on main street once housed a wealthy ship owner. Now it's one of the town's two apartment buildings.

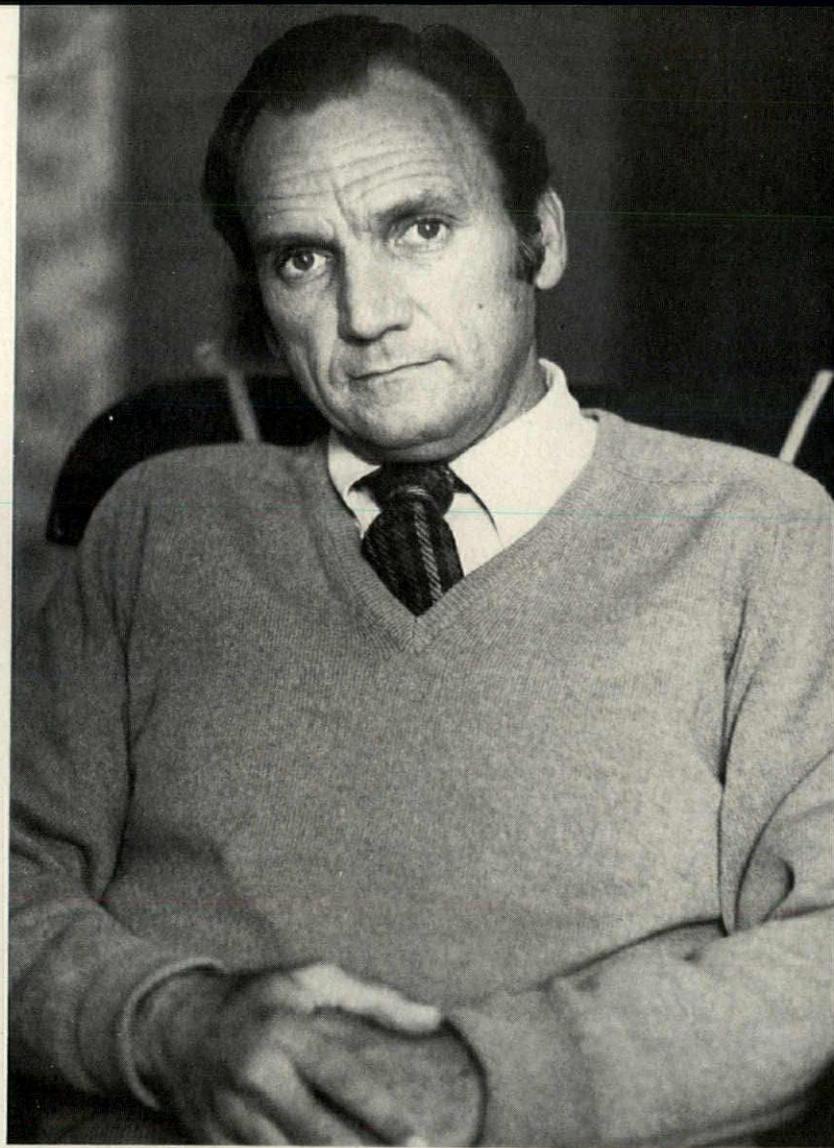


Town Harbor has fishing pier and moorings for small boats.

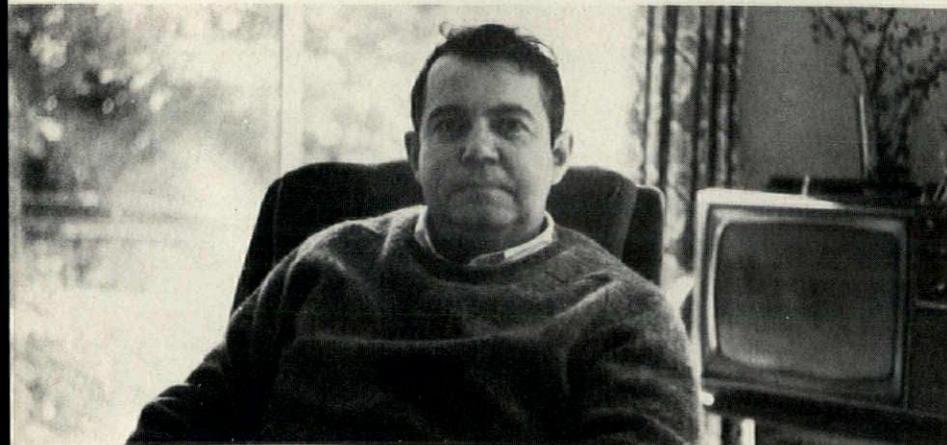
PLANNING CHIEF JEREMIAH BROWNE
I think the bylaw will do more to keep Duxbury semi-rural than anything else we could possibly have done.



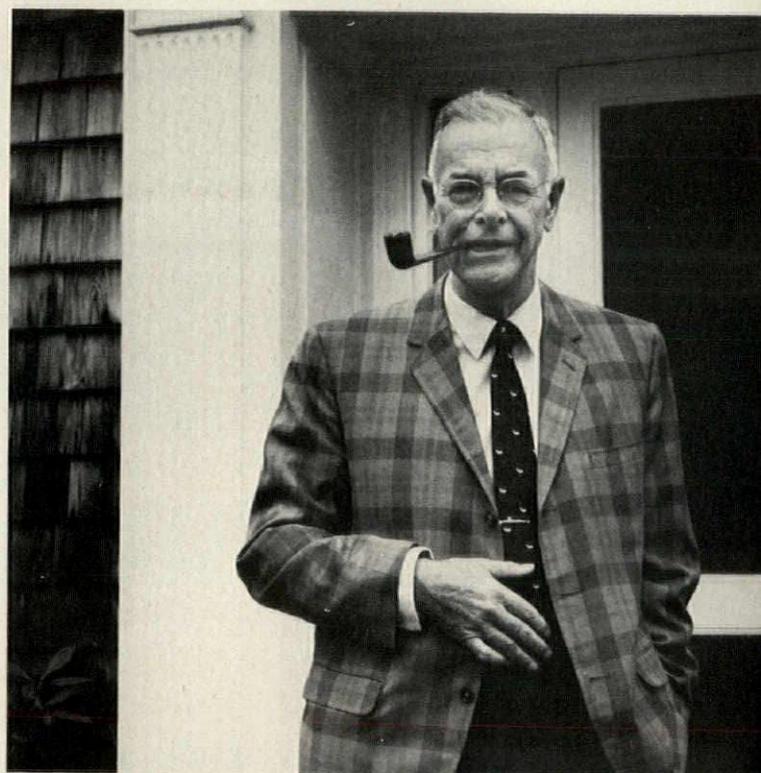
COMMITTEEMAN DONALD CONNORS
We don't know if the bylaw will achieve our goals, but at least we have something to work with.



COMMITTEEMAN CHIEF EDMUND DONDERO
I think a lot of developers want to do a good job. We shouldn't look at these people as the enemy all the time.



COMMITTEE CHIEF FRANCIS PARK
There's no way to keep the town just the way it is now. We've got to make some compromises.



OPPONENT CHARLES DAVIS
I think they're whistling in the dark when they say that they're going to slow down the school population.



COMMITTEEWOMAN POLLY HARRINGTON
The bylaw wasn't supposed to solve Duxbury's problems . . . just slow things down and give us a more balanced approach.

common open space and detailing his construction schedule.

Then the planning board must review this information with the assistance of the various town agencies and committees and prepare a written report for the board of appeals, which administers the bylaw.

Obviously 60 days is an unrealistic period in which to accomplish all of this.

To solve the problem, Wells finally settled on a voluntary pre-application stage, during which the developer would submit the required material without making formal application. Thus the town can get reviews from its various agencies before the 60-day clock starts ticking.

"The great advantage of the town meeting is that everybody confronts all of the issues very fast . . . You get a cleaner and better mandate than you could get any other way"

—John Rahenkamp, planner

The first draft of the bylaw was received with unanimous dismay. Even the staunchest supporters of the concept were tempted to postpone bringing the bylaw before the town meeting because they felt it was unworkable. The haste with which it had been prepared was evident; in addition, it failed to take Massachusetts law into account.

"I was very much opposed to it as a lawyer," Donald Connors recalls. "But then I figured we'd committed two years of an extraordinary amount of effort and invested over \$85,000. So I finally said to myself, 'The hell with it. Let's straighten it out as best we can and let's go.'"

Wells admits:

"It was quite an undertaking to try to combine zoning and the standards by which subdivisions are judged into one comprehensive code in just three months."

The reason for the urgency was that zoning changes can be made only at Duxbury's annual town meeting. And the land-use committee knew that they could not maintain their momentum for another year. It was now or never.

So the refining and redrafting of the bylaw began. At the same time teams from the land-use committee went out to explain the bylaw to church groups, the senior citizens, the men's club, the Rotary and Kiwanis clubs, and anyone else who would listen.

"We sold the land-use program the same way we sold conservation: neighborhood by neighborhood," committee member Polly Harrington recalls. "We had a list of the registered voters in town that showed whether or not they voted and went to town meetings. Then through our personal knowledge we found the ones in the various areas who would be good at running neighborhood discussion groups."

The weekly *Duxbury Clipper* came out firmly in favor of the new bylaw. It reminded its readers:

"America is justifiably proud of its Constitution. But this document as drawn up by our founding fathers was not perfect. Had it

been, there would have been no need for the 22 ensuing amendments. The proposed . . . [bylaw] is not perfect either. It has loopholes that need to be corrected. . . . Make your amendments, but don't throw out the baby with the bath water."

The town meeting convened on a Saturday, but the new bylaw did not come up until Monday night. The vote finally came Thursday night. In between were eleven hours of debate. It was touch and go all the way.

Howard Publicover, chairman of the board of assessors, told voters that one-acre zoning by itself would put the town on the track to bankruptcy.

John Taft, a member of the land use committee, urged postponing action to allow more time for Rahenkamp and the committee to refine the bylaw and for the town to study and debate it.

"We do not yet understand the compromises implicit in this program," he said. "The small independent builder and the fellow with a home on one acre may very well be on the wrong side of the compromises."

One opponent, Robert Mastrovita, who later admitted he had just read David Halberstam's book on the key men behind the Vietnam war, *The Best and the Brightest*, compared Messrs. Rahenkamp, Sachs and Wells to Robert McNamara, McGeorge Bundy and W. W. Rostow. "Too often theoretical concepts turn out to be wrong when they are put into practice," he warned.

Amendments were offered. One would have required developers to give the town funds for perpetual care of the open space. It was defeated 351 to 95.

The two-bedroom amendment (*see above*) passed 270 to 177.

One important amendment increased the board of appeals from three to five members and stipulated that one of the five be an attorney.

For the first time in anyone's memory, a town meeting debate was tinged with acrimony. There were inferences that some people were on the take. There was also a feeling that the east—or older part of Duxbury—was putting something over on the west—or newer part.

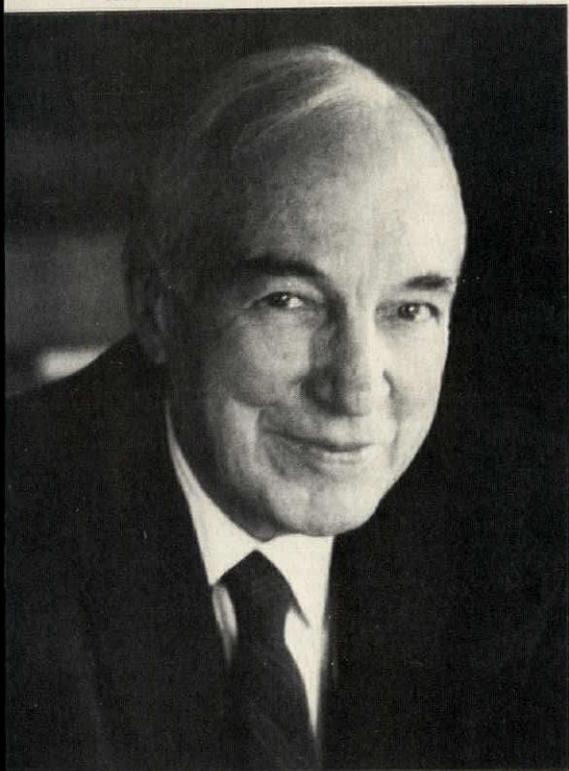
Delaying tactics, such as calling for a show of hands on all votes, were used so that the vote would come after the older voters, who favored the bylaw, would have gotten tired and gone home.

Under Duxbury's town meeting it takes only one dissenting vote to keep a nonvoter from speaking at the town meeting; this device was used against John Rahenkamp. The moderator called a recess so that all who wished could hear Rahenkamp, but when the meeting reconvened Donald Connors had to field the questions.

It was Edmund Dondero, former chairman of the powerful finance committee and a member of both the planning board and the land-use committee, who made the speech that everyone remembers.

"Duxbury is no longer the best-kept secret on the South Shore," he said. "The bylaw is giving the town an overall land-use program

PROPONENT ATHERTON LORING
Higher assessments were making people unload their land. We could have been flooded with new homes.



OPPONENT EDWARD SOULE
We'd end up with fewer people if we'd stuck to one-acre zoning.

and is not trying to take away anyone's rights. Give the planning board the tools it needs."

The final vote was 574 to 214—49 more than the two-thirds necessary.

"There's going to be trouble . . . There always is with change . . . But with a little luck and some amendments the new zoning should work"

**—Atherton Loring,
ex-planning board chief**

"People move to Duxbury because they like it and then they try to change it to make it just like the place they came from"

Edward Soule, farmer

There were Lorings and Soules in Duxbury as far back as the 17th century, and obviously the ones who live there today love the town and want to preserve it. Atherton Loring welcomes the new bylaw; Edward Soule does not. Their views are typical of how different segments of the town see the change.

Loring, a retired telephone company executive, served as head of Duxbury's planning board for many years. Soule, a retired Ford dealer, has gone back to farming. He recently spurned developers' offers for his land and deeded it to a boys' camp so that he could be sure it would remain as open space.

Loring was concerned that the higher assessments—the town recently went to 100% valuation—would force people who owned large tracts to sell them to developers so that single-family houses would spring up at an ever increasing pace.

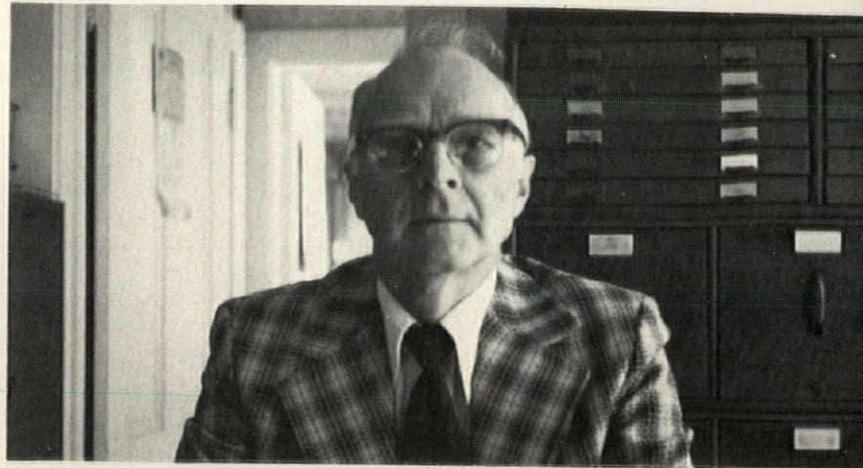
Soule is concerned that the new bylaw will allow higher densities. He does not like the idea that wetlands and cranberry bogs, which were out of circulation under the old ordinance, can now be counted in a developer's total acreage to give him a higher density on the upland portion of his tract.

Much of the argument over the new bylaw was based on growth versus no-growth. Even the people who worked the hardest to develop the new bylaw and to get it passed would have preferred no-growth. But they acted from the conviction that growth would come whether they liked it or not, and the best they could hope to do was to direct it on Duxbury's terms.

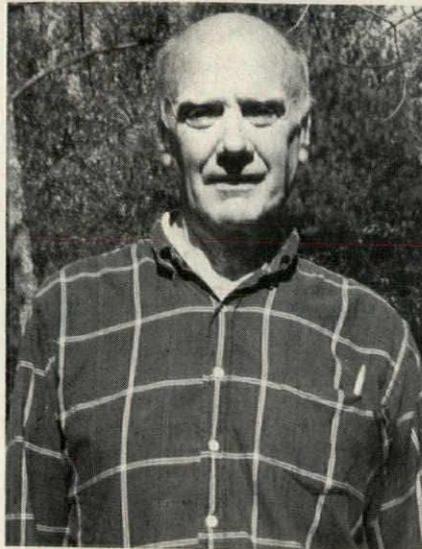
This was recognized by some of the more vocal opponents, such as Charles Davis, retired chairman of Stone & Webster Engineering, and Robert Mastrovita, research director of an investment firm. Their disagreement was more with the method chosen to control growth.

Both doubted that the new bylaw would solve the tax problems, both favored experimenting on a smaller scale rather than with the whole town and both are apprehensive about how far the negotiating process might be pushed in the future.

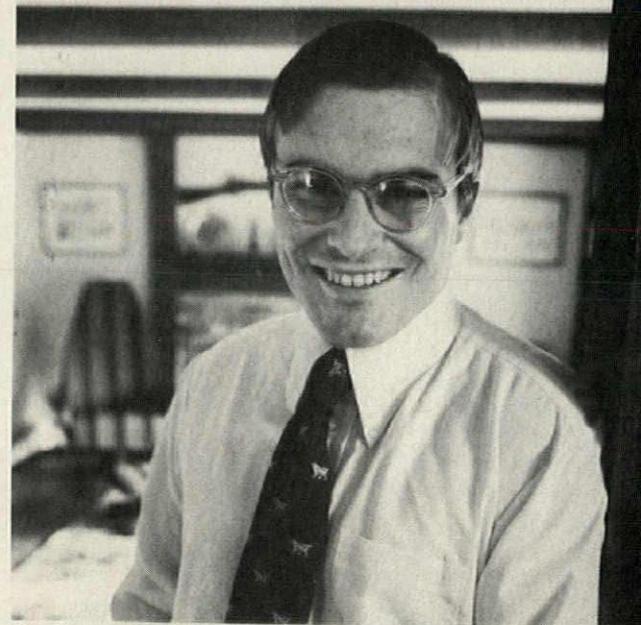
"As I see it, just the pressure of attrition will constantly downgrade our regulations," says Davis. "For example, here comes developer A with something pretty darn good, so the planning board leans over backward for him. The next guy, developer B, is a bandit.



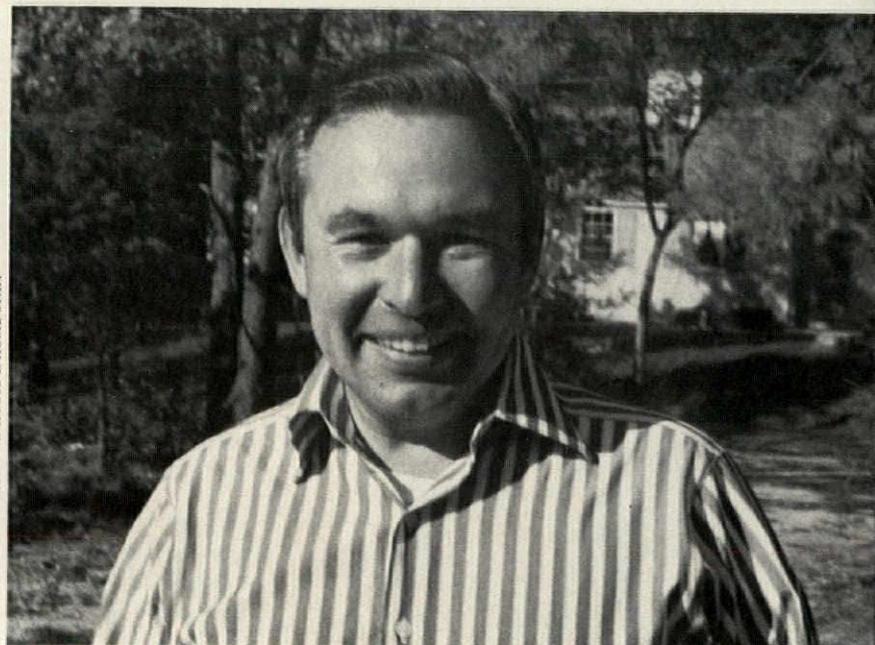
REALTOR DONALD WALKER
It's natural to think back to the good old days, but we have to change. We can only hope to drag it out a bit.



COMMITTEEMAN FRANCIS BARTON
This plan makes it possible for us to preserve the character of the town.



OPPONENT ROBERT MASTROVITA
I accept what's happened and hope for the best, but I have some real doubts about the value of what we've done.



DEVELOPER EDWARD KEATING
It's not a program a small builder can participate in easily. Preliminary expenses could go to \$100,000.

PHOTOS: STEVEN HANSEN AND HOUSE & HOME STAFF

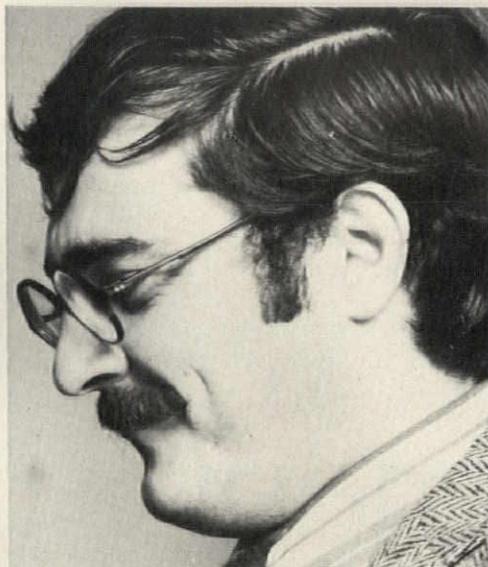
PLANNER ROGER WELLS

It wasn't just a handful of people who decided the bylaw was good for Duxbury. The whole town decided.



JUDGE JOSEPH COLLINS

It should be laws that govern, not men. I don't like giving too much discretionary power to town boards.



But if they don't go as far with him they're hauled into court immediately."

Wells disagrees:

"If the conditions were identical, then I guess developer B could sue," he says. "But the likelihood of conditions being identical are very remote. For one thing, developer B will apply at least one second later than developer A, and that means developer A will already have changed the situation."

Judge Joseph Collins, who recently retired from the State Supreme Court, is concerned about the negotiating process from a different point of view:

"Although the general idea of planned development may be all right, the bylaw may have the basic effect that we're approaching a rule of men rather than of laws."

The planners don't see it that way. Daniel Orwig of Guidelines, who recently submitted preliminary plans for a 50-acre planned development, says:

"Everyone will be tracking through in the same way and will know exactly where he is and what he has to do. There can be no political influence at the planning board."

George Matarazzo, president of Hanslin Planning Associates, which is doing the planning for a large Duxbury tract known as North Hills, agrees:

"It's a relief for me to be able to walk into a town and know that we'll all be talking the same language. It's a tremendous plus to have some guidelines to work with. And a lot of our homework has been done for us by a great planning outfit."

It's too early to answer the big question of whether the new bylaw will protect open space and slow the school population rise.

Even with its requirement that 25% of any planned development be in open space, the bylaw may not have as great effect in keeping Duxbury's land from being cut up as many had hoped. For one thing, there are very few tracts left that are large enough for major planned developments. Most future building will be on sites 50 acres or less, and it will be done by smaller developers. There is the

danger that they may elect to continue building single-family houses on one-acre plots rather than go through the unfamiliar and complicated planning process required for planned development.

Edward Keating, who builds some \$700,000 worth of houses annually and who was the only builder-developer on the land-use committee, was in favor of the new bylaw but admits he doesn't know how it's going to affect him.

"It's not a program that a small builder can participate in very easily," he says. "Preliminary expenses could easily run to \$100,000. I couldn't afford to do it on my own."

Wells thinks that the advantages to the smaller builder outweigh the disadvantages, and he has proposed that the planning board fund the cost of a design for a small project to prove this to the builder.

The new bylaw is unlikely to have an effect on Duxbury's schools in the immediate future according to Dr. Lawrence Anderson, superintendent of schools. Based on his projections—which were only 15 off the mark for 1973—Duxbury will need additions to the high school and intermediate school by around 1975, a new elementary school by 1976 and a new intermediate school by around 1980, when the school population will top 5,000.

A major selling point that convinced many people to vote for the new bylaw was that it would encourage the building of condominiums attractive to empty-nesters.

No one knows how much of a market Duxbury has for this type of housing, however. And even if many of Duxbury's older couples do move into such condominiums—many have already indicated that they will—it would mean that their large older homes would come on the market. The logical buyers, of course, would be young couples with children.

Wells believes the new bylaw can have a positive effect on Duxbury's tax problems, but he does not believe it is the whole answer.

"The town has to make some decisions about taxes," he says. "I don't think we've ever come across a community that has such a high level of service and therefore such a high cost per capita. But if everything were to stay equal, and if inflation were held constant, bringing in more people with fewer children would definitely have a positive effect on Duxbury's tax spiral."

It will be some time before the returns are in. The bylaw did not take effect until mid-October, and the first projects are coming before the planning board right now.

Roger Wells, who has been appointed Duxbury's town planner, has just reviewed the first application.

"I already have a whole series of recommendations on how to make the bylaw better administratively," he says.

And the people of Duxbury, those who were for the bylaw and those who were against it, agree on one thing: They want it to work.

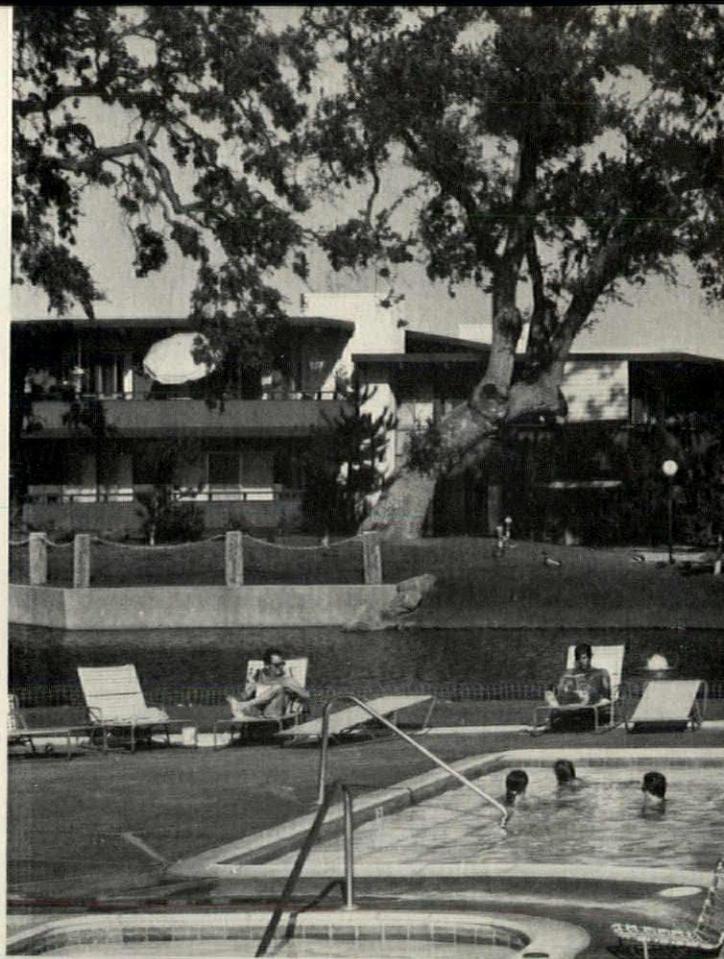
"... After all," says Mastrovita, "I don't plan on moving..." —NATALIE GERARDI



Newspaper editors John and Roberta Cutler gave the new bylaw a big push with articles and editorials in the weekly *Duxbury Clipper*. "Without them we wouldn't have had a snowball's chance of success," says John Rahenkamp.

Environment:

It's the key to a full house in competitive rental markets



The four apartment projects at right are in California, which is as tough as any rental market in the country. Yet all are full or almost full. Ask the developers why, and, to a man, they say environmental quality is the lure that pulls in tenants and keeps them. Typical comments:

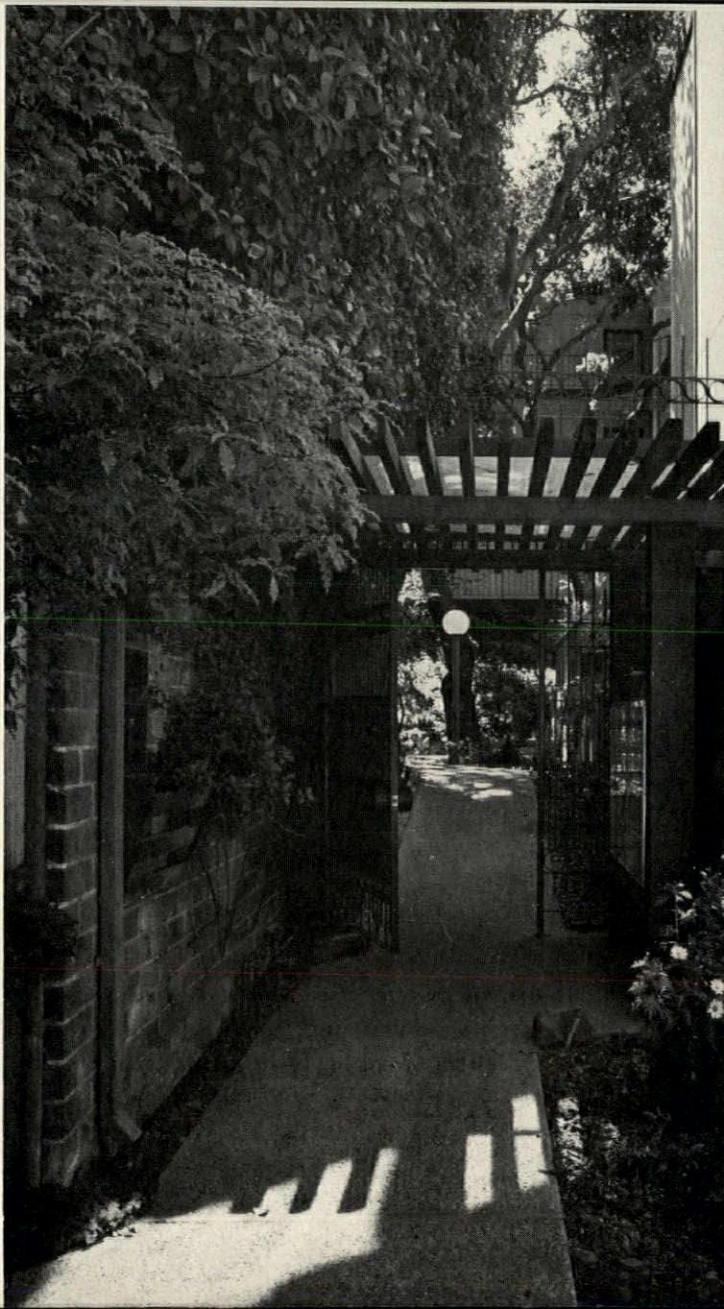
From Marina Playa (*top left*): "Landscaping and siting carry the burden of today's rental projects. Building design is playing a secondary role."

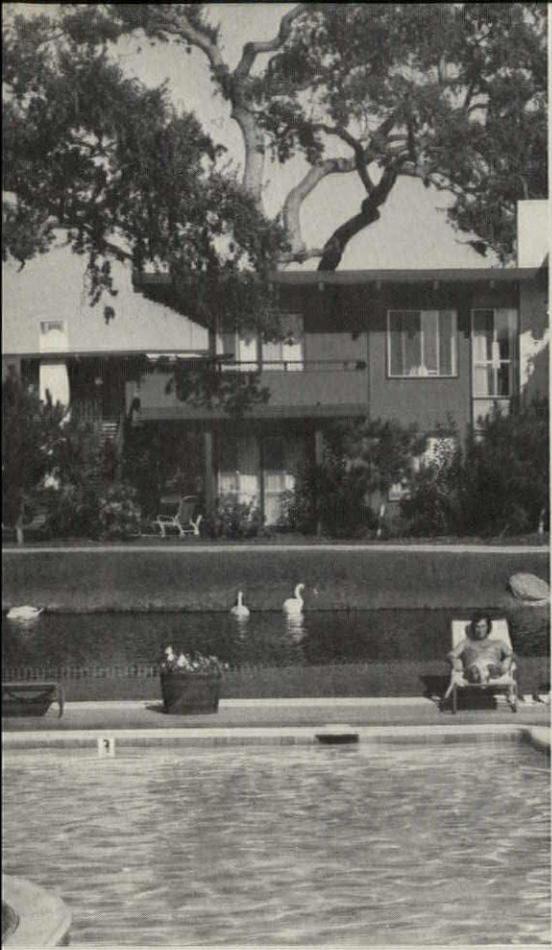
From The Place (*top right*): "We concentrate on landscaping because we've found the average resident appreciates it more than architecture."

From Oaktops (*lower left*): "If you're looking for quality tenants, environment is your best renting agent—particularly with small buildings."

From Lakeside Village (*lower right*): "Today's apartment renter is as sophisticated about environment as today's homebuyer."

For a close look at each project—and what it offers in terms of environment—see the next ten pages.





SEE PAGE 72
SEE PAGE 80
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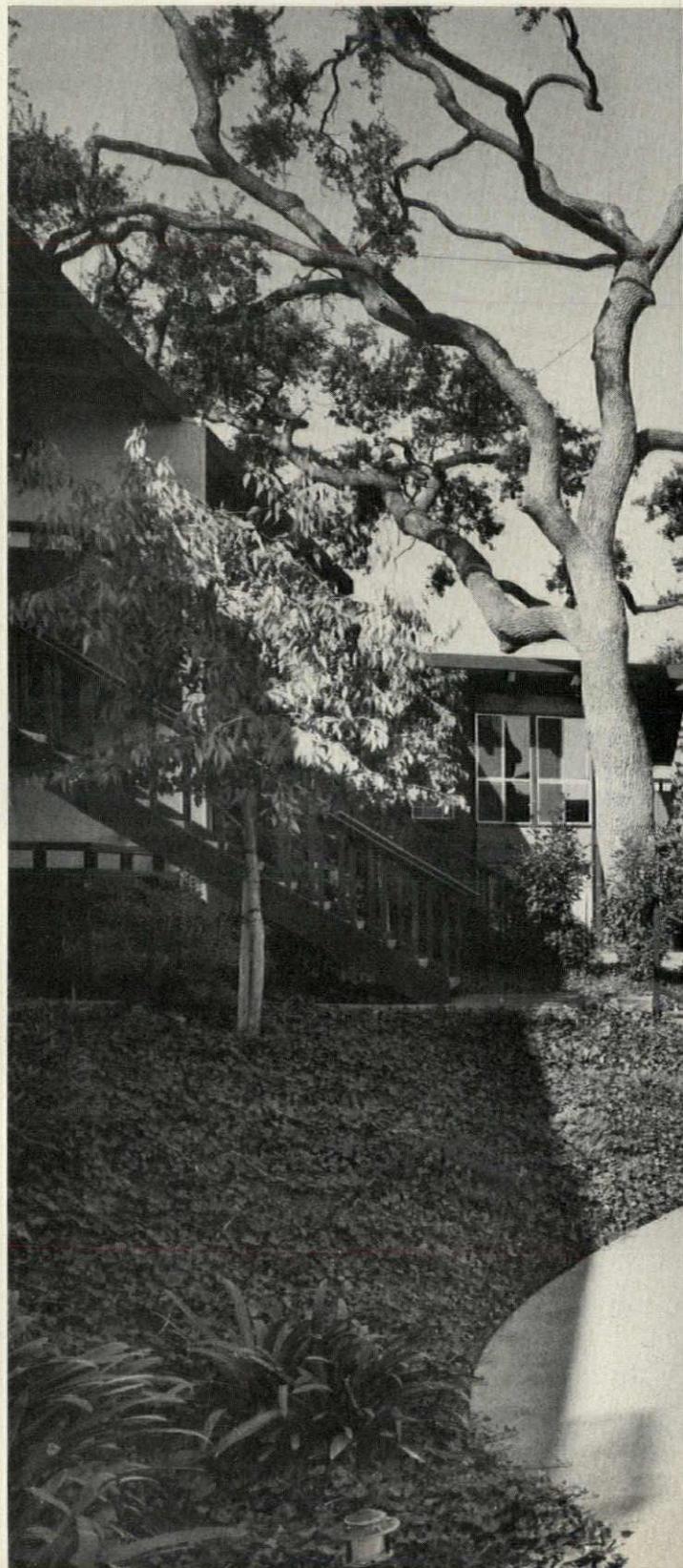




Sand, fountains and swans add to the resort-like atmosphere at the 9.6-acre project. Portion of building at far right in photo (right) is the clubhouse-restaurant.



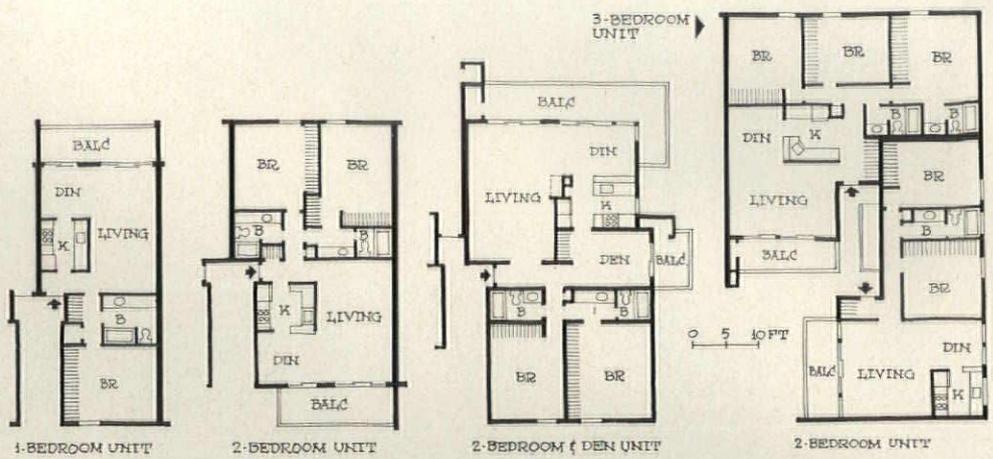
PHOTOS: ROY FLAMM



In an urban area you can create a resort-like atmosphere

Offices, shopping areas and townhouses surround Marina Playa, the 324-unit Santa Clara project shown here. Yet its residents might be living right on the waterfront. There's a man-made lake (photos above and overleaf) that meanders the length of the project, a small beach (photo, above) and a large, two-story clubhouse and restaurant at water's edge. There also are swimming pools, handball and tennis courts, a driving range (photo, right), a jogging track and a boat dock.

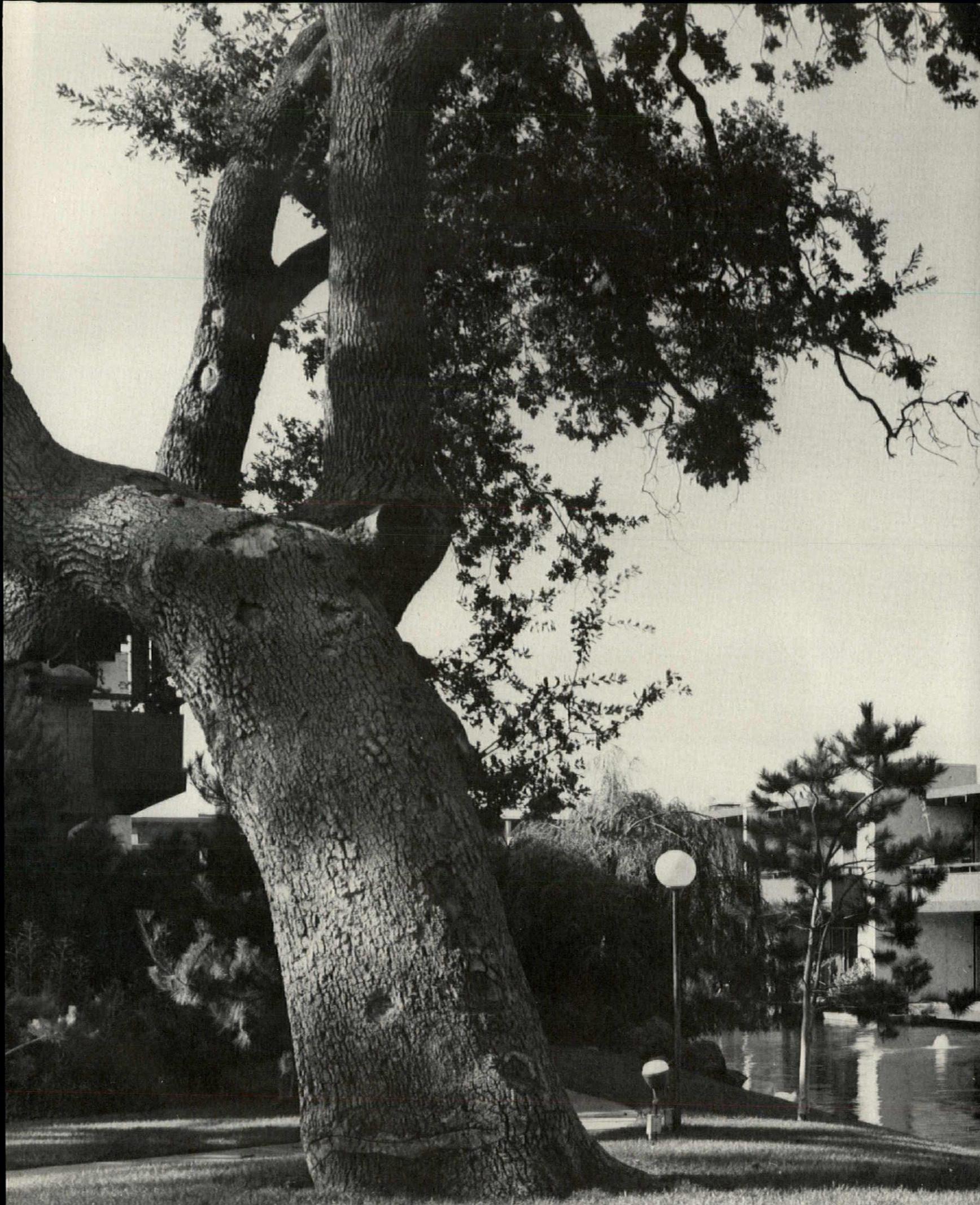
The rental market was so soft when the project was begun that the developer, Interland Corp., replanned over half the original site as an office park (see plan, overleaf). Nevertheless, units rented up quickly and remain fully occupied—mainly by young sophisticates, executives and empty nesters. In fact, Marina Playa has been so successful that a similar project is now planned for an adjacent site. Matt Copenhaver Associates was the architect; Anthony Guzzardo, the landscape architect.



Five of eight available floor plans are shown above (the plan at far right combines two of the layouts). Units contain from 620 to 1,300 sq. ft. and rent for \$180 to \$425. The majority front directly on the lake or are grouped

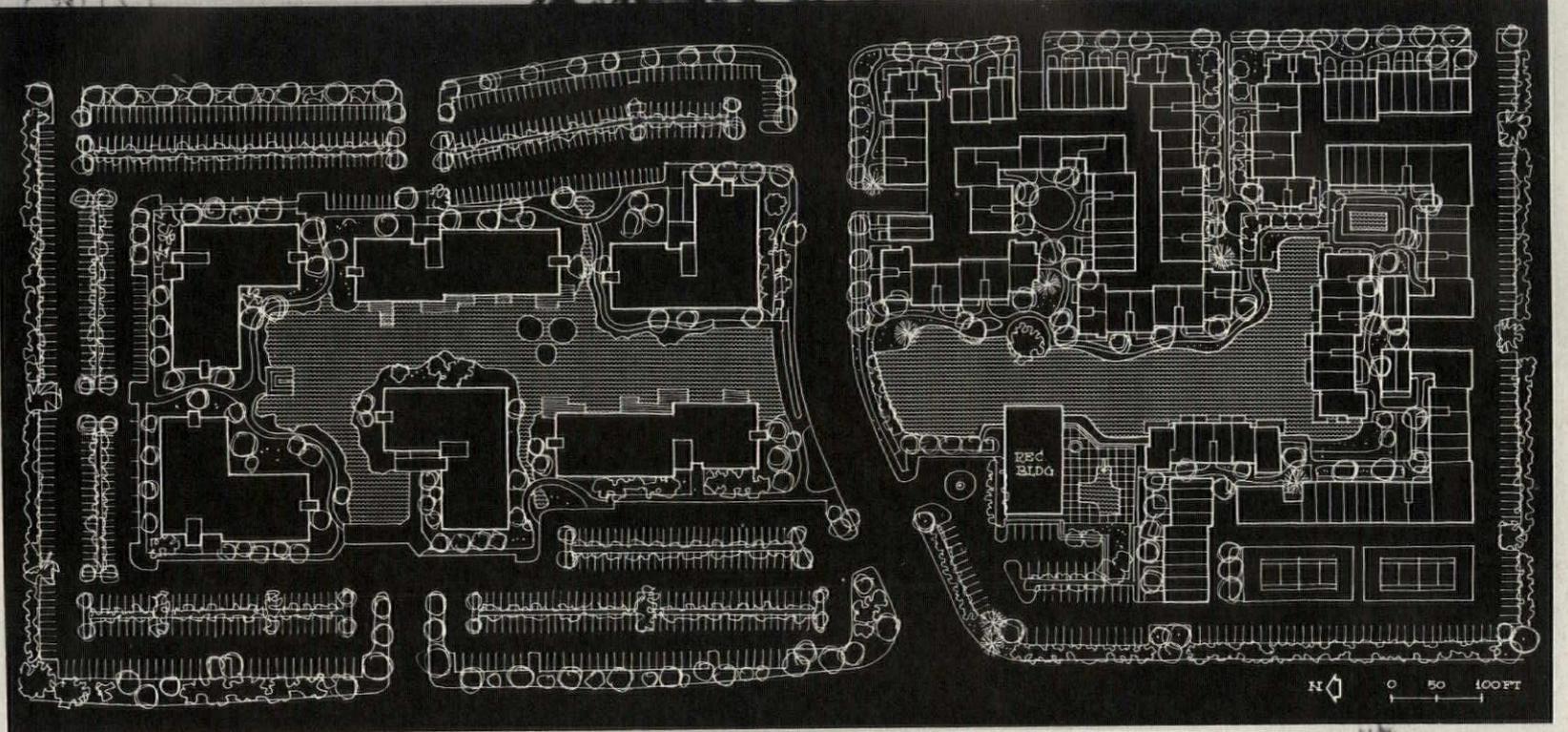
around courtyards that open to lake frontage so there are water views from most balconies. A further environmental asset: Few cars intrude on the ambience since all tenant parking is under the two-story buildings.

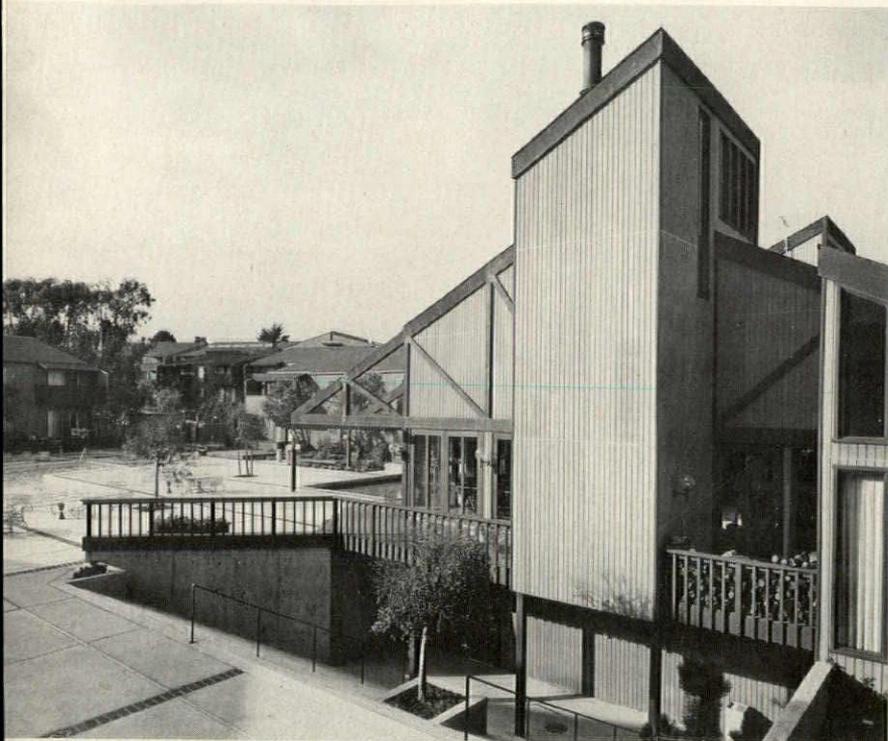




ROY FLAMM

Original 22-acre site is shown below. Smaller portion at right comprises Marina Playa apartments and the larger portion is now an office park. The site—a deteriorating orchard—was level, so grading was required throughout to provide a variety of elevations for the apartment buildings which step up at 3½' intervals. Exposed parking areas at the perimeter of the plan are almost hidden from view since they are depressed about 4½'. Additional underground parking is provided beneath the tennis courts in the lower righthand corner of the apartment site. Restaurant facilities also serve the commercial area tenants during the day.





Multi-level clubhouse (photos, top) is part of two-acre recreational area that also includes a swimming pool and tennis courts.

Photo at right shows how mature trees and newly planted ground cover and saplings enhance the open feeling.



PHOTOS: KARL H. RIEK

In a high-density project you can emphasize a natural feeling

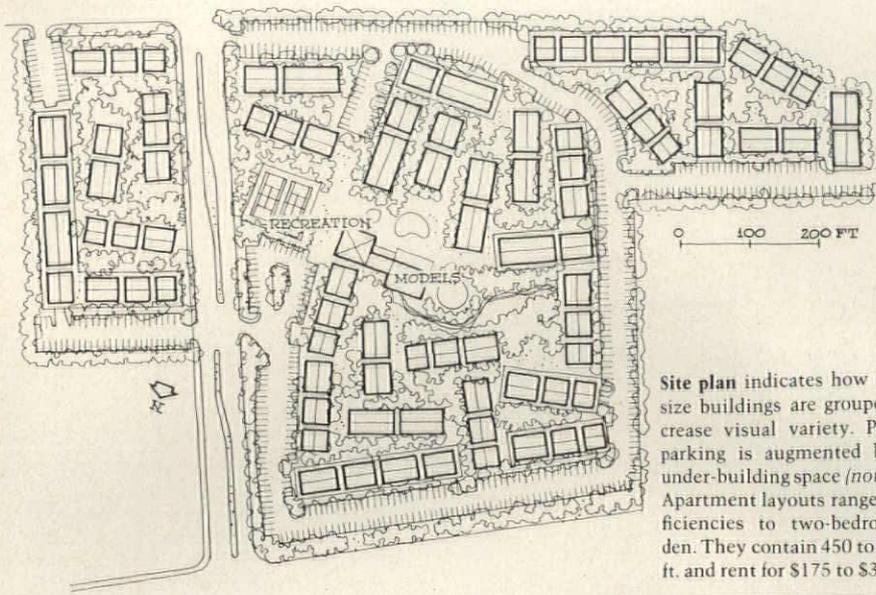
Density at The Place, shown here, is 34 units per acre. Yet the 20-acre San Bruno project feels open because of judicious husbanding of the site's natural assets. For example, an existing stream (photo, right) was restructured so it would run through most of the green belts; wherever possible, buildings were sited to fit into the natural terrain; and much of the existing plant life was preserved.

Focal point of the complex is a two-acre recreational area toward which the project's central buildings are oriented. Perimeter units have views of wooded areas and a military cemetery that surround the project.

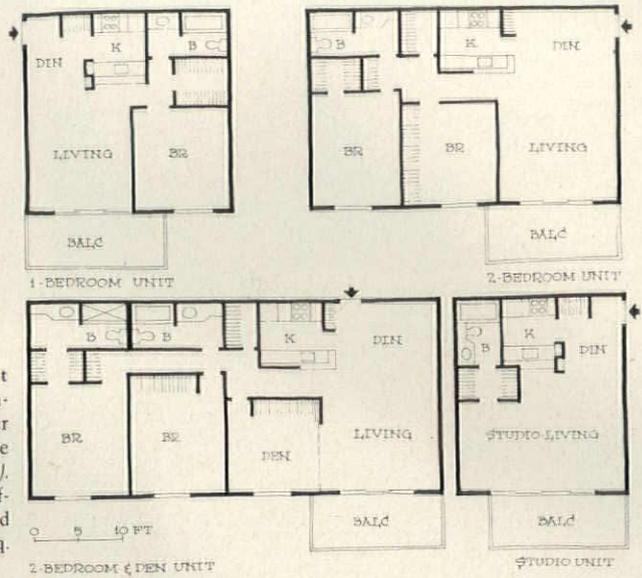
The first two phases—408 units—are 95% rented, slightly higher-than-average for the area. A third phase, currently under construction, is renting at a rate of 30 units per month which the owner, Lincoln Property Co., says is excellent for the area.

Tenants are mainly young marrieds—both blue collar and professionals—in their mid-thirties. While the project was designed for adult living, the first two sections were FHA-financed so there are some children. Conventionally financed phases three and four will be for adults only. The architect is Frank L. Hope & Associates; the landscape architect, Robert Adsero; the builder, Herman Christensen & Sons.



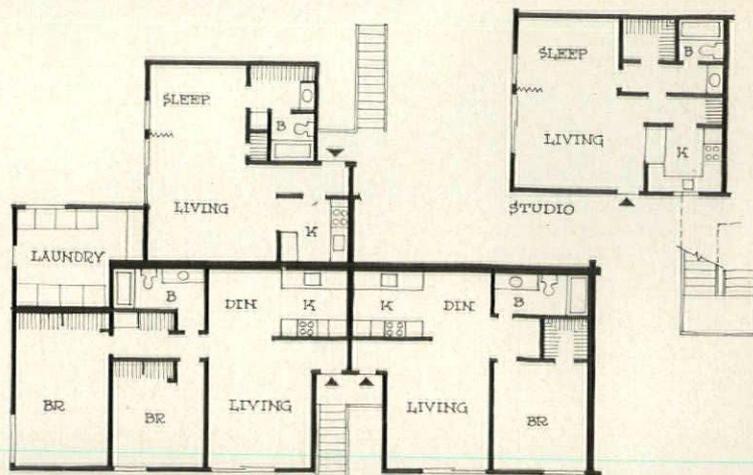


Site plan indicates how different size buildings are grouped to increase visual variety. Perimeter parking is augmented by some under-building space (not shown). Apartment layouts range from efficiencies to two-bedroom and den. They contain 450 to 1,130 sq. ft. and rent for \$175 to \$375.





Three swimming pools, like the one above, provide water views for some tenants whose units do not overlook lagoons.



2-BEDROOM UNIT

1-BEDROOM UNIT

0 5 10 FT

Rustic exteriors for apartment and rec buildings (photos below and left) also help mask the project's urban location and contribute to the country feeling.

One-bedroom plans make up over half the unit count, a percentage the developer now feels is too high. Units rent for \$165 to \$230, contain 550 to 900 sq. ft.

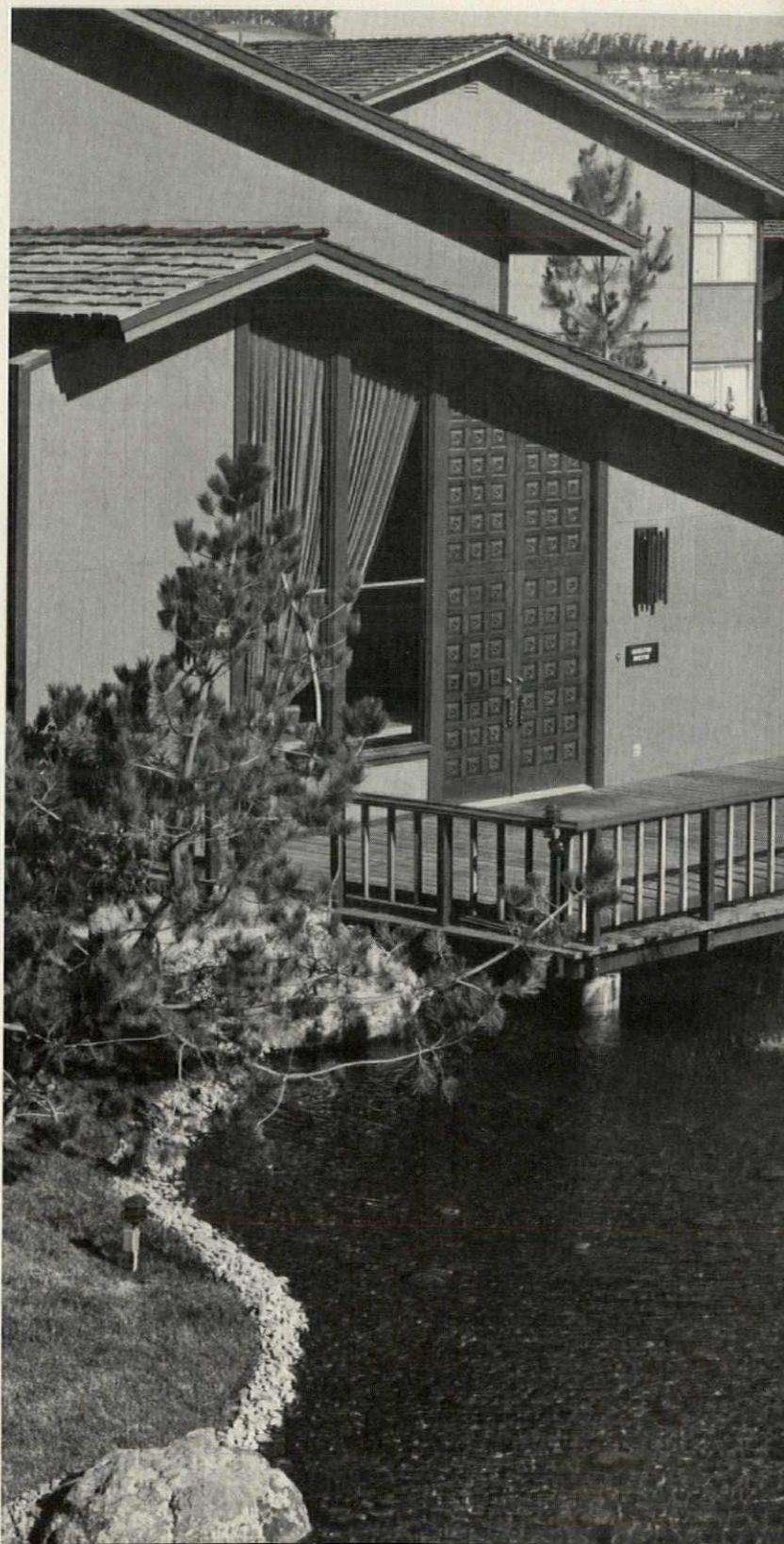
On a site surrounded by highways, you can create a lakeside community

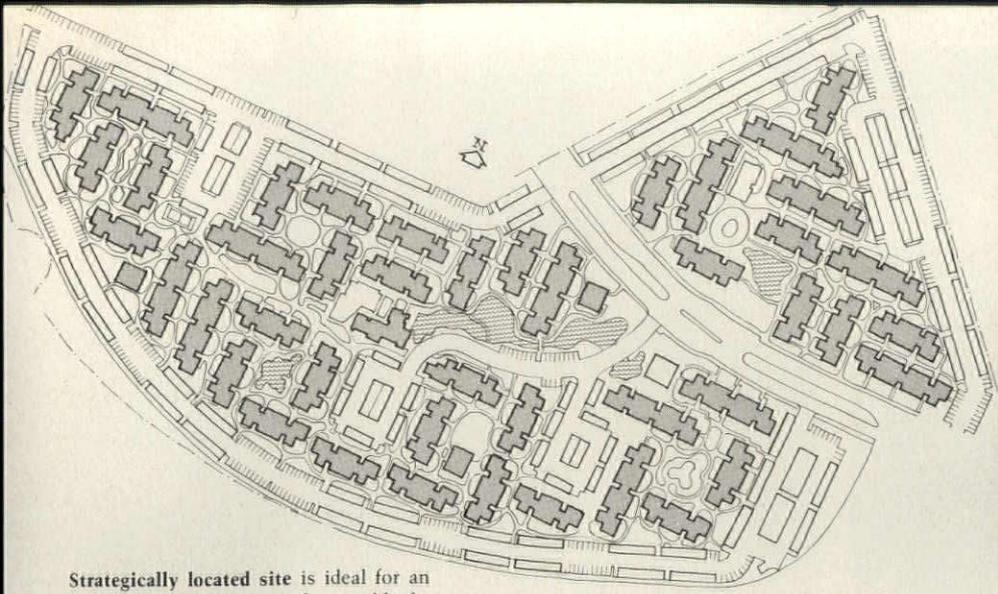
There are four man-made lagoons in this 840-unit project which, not surprisingly, is called Lakeside Village. The lagoons, like the one seen in the photo at right, help residents forget their apartments are bordered by the intersection of two highways (*aerial view, top right*) and that the 32-acre site is bisected by a major connector street that eventually will link two heavily trafficked boulevards.

Some other amenities that help block out the surroundings: two recreational buildings—a two-level structure with 5,000 sq. ft. on the main floor and 1,500 on the second—and a single-level building of 2,700 sq. ft. They include a gymnasium, saunas and facilities for dancing, shuffleboard, pool, volley ball, basketball and swimming.

L.B. Nelson Corporation's decision to provide a country atmosphere in the midst of a highly urbanized section of San Leandro paid off. Lakeside's first section of 232 units opened during a soft market period in mid-1971 when the area's vacancy rate was running as high as 14%. Yet, half of the units were rented in one month [*H&H, Sept. 1971*] and the entire project was soon 95% filled. Presently only about 1% of the 840 units are vacant, against a 4% rate for the area.

The project is oriented to singles and young marrieds in their mid-twenties, mostly working at blue collar jobs. The architect: Morris, Lohrbach & Associates Inc.; landscape architect: Jones/Peterson Associates Inc.





Strategically located site is ideal for an apartment project. It's only two blocks from a rapid transit station and three from a large shopping center.



PHOTOS: BARBEAU ENGH





Concrete and masonry garage (above), tucked under the rear of the three-story and penthouse frame building, was designed to conform to the slope of the 38,650 sq. ft. site. Rooftop laundry facilities (not visible) serve all tenants.



PHOTOS: TOM F. WALTERS

In a very small project you can wrap the building around a landscaped court

The Oaktops, shown here, occupies less than an acre of land. Yet there's no skimping on environmental quality. It starts at the building's ornamental entrance gate (photo, above right) and continues through the heavily landscaped courtyard (photos, right and opposite page) and into the apartments, which feature double-wall construction to insure soundproofing between units.

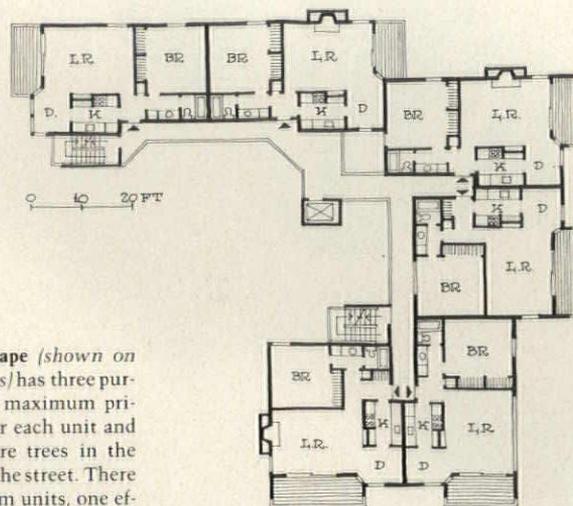
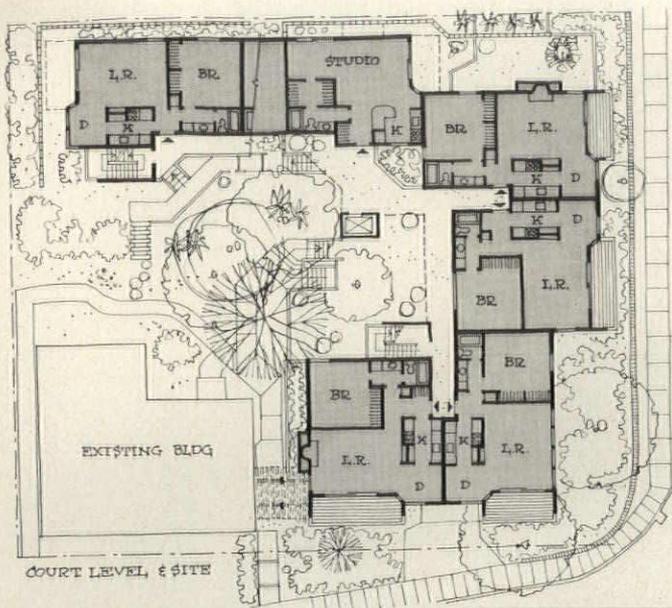
Building owner Michael Marston's aim was to attract a select market—more stable than the student-tenants who occupy a majority of Berkeley's rental buildings. Typical Berkeley leases run for the nine-month school term and units often are vacant during summer months or rented at reduced rates.

Oaktop leases run for a year and tenants include professors, architects and others who are employed in Berkeley or San Francisco. A stable market is best, says Marston, when you're a small-building owner looking for a long-term investment.

There's a waiting list for the 21 apartments which average 750 sq. ft. and rent for \$180 to \$300, depending on view orientation, floor and whether they have fireplaces. Architect: Wisser/Olin Architects; landscape architect: Edward J. Janelli; builder: Newman Construction Co.

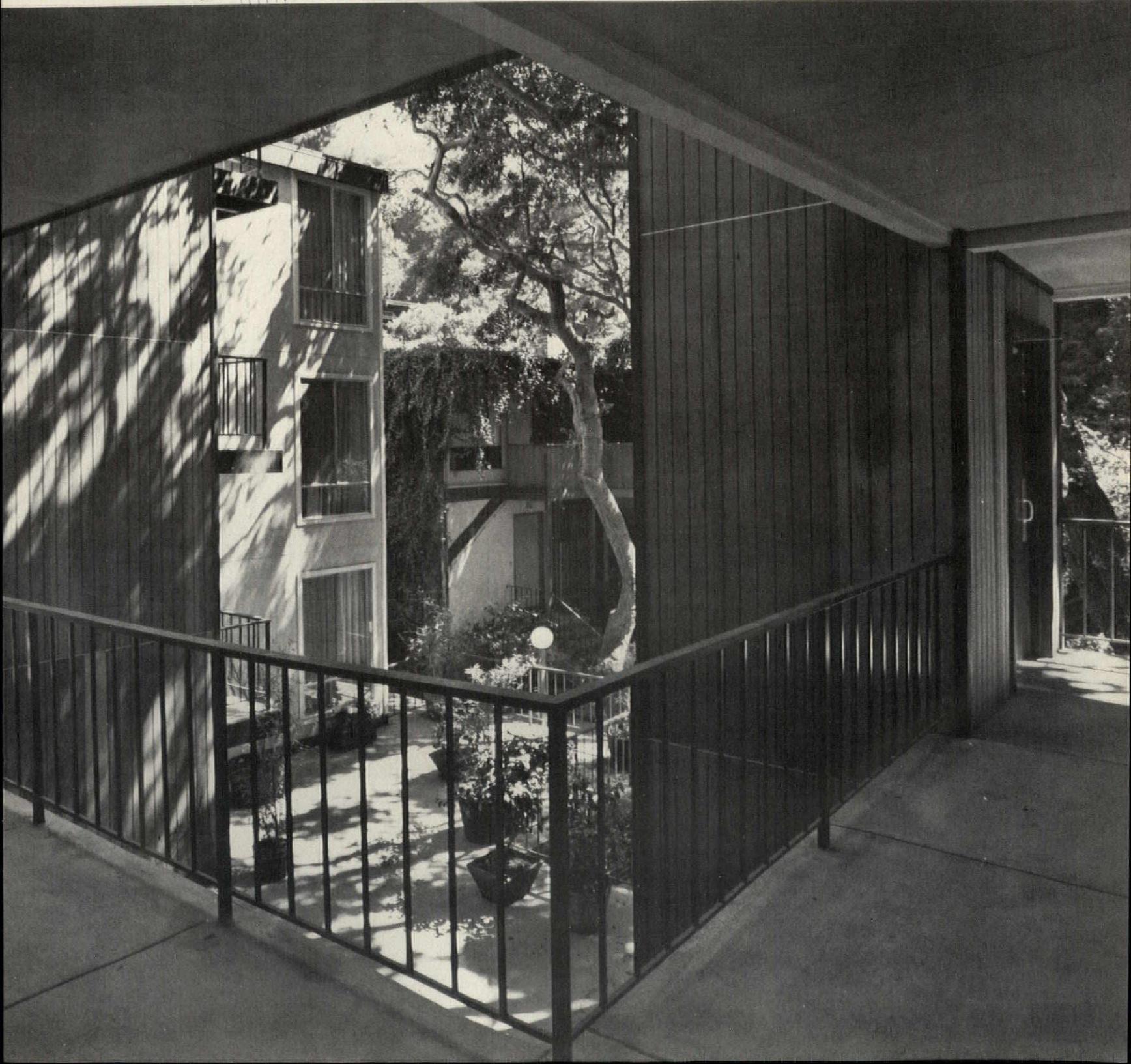


Elevator tower (center in photo above) connects to covered walkways that overlook the landscaped courtyard and lead to apartment entrances.



Basic building shape (shown on site and floor plans) has three purposes: to provide maximum privacy and views for each unit and to preserve mature trees in the courtyard and on the street. There are 20 one-bedroom units, one efficiency. All but the latter have private balconies or terraces.

TYPICAL UPPER LEVEL





Management team consists of (clockwise from lower left) general manager Jerome Zaccaria, office manager and salesman John Cavallaro, construction superintendent Phil Mingione, packager Don Elliot, president (and sales manager) Roy Dygert, assistant production manager (and salesman) Richard Klatt and production manager Larry Kakerbeck. Dygert, Zaccaria, Cavallaro and Mingione organized the company and are full partners. Kakerbeck and Klatt have half partnerships.

No, they don't hold management meetings in the field, but their tight job control often makes it seem that way. Here's . . .

How one company prospers in the risky business of suburban remodeling

Few sectors of the housing industry promise more aggravation than remodeling. Too many chances of losing money on a job because of unexpected problems . . . Too many snafus in coordinating trades . . . Too many adjustments to the whims of customers . . . And too many complaints—often justified—to the Better Business Bureau.

Yet remodeling is big business—roughly \$18 billion this year, according to the National Home Improvement Council. And most of that volume is in the suburbs, where rising land costs have driven up the prices of new housing and where growing families need more space but often want to stay put in their own neighborhoods.

So there's a strong suburban market for anyone who wants to take a crack at remodeling. But how do you get a piece of it without losing your shirt or being cast as a suede-shoe operator?

One company that thinks it has the answer is Remodeling Consultants Inc. of North White Plains, N.Y., a partnership operating in New York City's suburbs. Four experience-wise construction men launched Remodeling Consultants on \$40,000 in 1969. The company has since grown to 52 employees, increased annual volume to \$1.7 million and earned a consistent 5%-to-6% after paying healthy salaries, commissions and bonuses.

Most customers own houses that were built since World War II and now need expansion or modernizing. There are affluent executives or professionals and there are families of modest means who get the remodeling jobs roughed in and then do the finishing themselves.

Are they all satisfied?

To find out, HOUSE & HOME randomly checked a score of customers. Their comments provide clues to why Remodeling Consultants has gone so far so fast: "We got

exactly what was promised—no corner cutting" . . . "They're expensive, but they do quality work and they're quick about it" . . . "They clean up so well it looks like nothing has happened" . . . "Quick and eager to please" . . . "Phenomenal teamwork."

Customer kudos aside, the overriding reason for the company's success is what the partners call "total control." Here, they say, is how such control should apply to every facet of the suburban remodeling business.

Management:

Systematize every phase of the operation

"And," adds general manager Jerome Zaccaria, "put those systems down in writing."

The principals of Remodeling Consultants pooled their experience, which ranges from 20 to 33 years in the building and remodeling business. Once they had agreed on procedures, they wrote out their consensus in a set of rules and regulations.

The result is a how-to library that guides every facet of company activities. Included are loose-leaf books on selling; drawing up and packaging a job; estimating; current per unit cost figures; percentage mark ups; items in stock; items in short supply; buying procedures; preferred suppliers; and building, plumbing and electrical inspectors. There's also a book of job descriptions for every job title in the company.

"We live by these rules and regulations," says Zaccaria, "but when they turn out to be inadequate we don't hesitate to re-write them."

Purchasing:

Don't settle for a 10% trade discount

"We get from 25% to 50% off by buying directly from factories or regional distributors," says Zaccaria.

This, he believes, is why Remodeling Consultants has been able to hold the line

on prices: "Despite higher labor costs, our prices today are only 1% to 2% more than they were in the late 1960s."

Volume, of course, is the key to those hefty discounts—the company spends roughly \$60,000 a month on building materials. But organization and careful planning are also factors. Says Zaccaria:

"First, we know what we'll need in the months ahead because of past experience, so we order large quantities of standard items in advance and then stock them or hold them for future delivery. Ventilating products, leaders and gutters, shower enclosures, nails, fans, ducting and roofing and siding accessories are typical of what we keep in our store room.

"Secondly, we never start a job until every major piece of material is at the job site. Usually, we figure 30 days from contract signing to start-up. This gives us time to precisely plan the job and obtain all the materials. Obviously, 30 days is the lead time needed to order most items direct from the factory."

The company buys millwork direct from a mill house and saves 25%. Similar savings are possible when buying masonry material from a masonry yard and roofing and siding from a specialty distributor.

"Lumber is bought from several yards at the lowest prices available in the county," says company president Roy Dygert. "Each yard is anxious to get as much of the \$20,000 to \$25,000 a month we spend on lumber as it can. In return for low prices, we pay right on the barrel and use our own trucks to pick up little odds and ends."

For some manufactured items the company obtains 50% discounts and more. For example, on certain aluminum and plastic products, the company gets a 25% discount off the retail price plus 50% off the wholesale price. This reduces a \$200 item to \$75.

The company considered establishing a warehouse to stock large quantities of all materials used regularly. But the cost of possession and expediting would increase over-

head without providing any significant savings, so the plan was scrapped.

Job size:

Don't take anything under \$5,000

"For some remodelers, small jobs like a \$2,000 roofing or siding installation make sense," says Zaccaria. "But for us they are just a waste of time."

First of all, he explains, there's no sense in using skilled carpenters, who earn up to \$19,000 a year plus benefits and bonuses, for simple roofing and siding work. And lower-cost, semi-skilled men can't be put on simple jobs by themselves because it's the high-cost skilled men of each crew who supervise workmanship and push productivity.

Second, Remodeling Consultants gets its competitive edge by maintaining a high dollar volume—and this means concentrating on big jobs. Conversely, it's high dollar volume that supports the costly overhead necessary to do complex jobs.

And third, the company has to focus on work that keeps all of the trades on its payroll occupied.

Typical projects include adding main-floor wings, garages, second stories and dormers and expanding and modernizing kitchens.

This year the average job size has increased steadily. In the first quarter, 40 jobs were sold at an average of \$9,351 each; in the second quarter, 43 jobs averaged \$11,301; and in the third quarter, 31 jobs averaged \$14,359.

Pricing:

Shoot for a 10% profit on each job

But, Zaccaria notes, Remodeling Consultants occasionally winds up with no more than 5% or 6%, primarily because of call-backs.

"Even 10% is slim," he concedes, "but keeping prices low is one of the basic reasons we've increased our volume from \$500,000 in 1969 to \$1.7 million in 1973. Next year we'll do \$2.1 or \$2.2 million."

Zaccaria estimates that his firm usually underbids the competition by 10% to 15%, but adds that "we never, never shave prices to get a job."

The company's pricing is based on a formula that's a tightly guarded secret. No standard cost book is used. Instead, labor and materials costs are broken down precisely for every element of each job. And all materials estimates hinge on buying at maximum discounts.

If a customer asks for extra work not covered by the contract, he is charged an hourly labor rate—\$17 for carpentry foreman, \$15 for carpenters, and \$10 for helpers—plus the cost of the materials, 10% for overhead and 10% for profit.

Salesmen:

Construction know-how counts more than selling experience

"We call our salesmen consultants—not because we're playing with words, but because they advise and consult with customers," says Dygert. "They are technical men offering a service, not just guys looking for a fast

commission."

Typically, the salesman has at least 15 years of construction experience—as a builder, for example, an engineer or a draftsman.

Such men are hard to find, Dygert concedes, "But we've got to have them—they are one of the keys to our success."

Here, briefly, is how a salesman sells a job:

Together, he and the homeowner go over the owner's requirements. The salesman has to determine the lowest cost way to satisfy these requirements," says Dygert. "So he sketches various alternatives right there in the home. If it's a very big job, he'll come back once or twice. Normally, he'll spend two or three hours going over all the details so the homeowner knows exactly what he's getting in the way of materials and design."

"Once the homeowner agrees to the design and an estimated price, the salesman goes back to the office, prices the job and draws up a complete materials list. He then returns to the home and again reviews all details to make sure there is no misunderstanding about what the customer wants and how it will be done. At this point, the contract is signed.

For their high level of construction expertise, the salesmen are paid well: 4% of each sale plus a bonus. Incomes for the company's six salesmen range from \$15,000 to \$40,000 annually.

Sales contracts:

Spell out every little detail

"We want the customer to know that we're professionals," says Zaccaria, "and one of the best ways to get this idea across is to never go back to him to readjust original cost figures."

Zaccaria believes that too many remodelers start a job at one price and then say, "This is an extra" or "I didn't figure on this". And all too often, the price soars beyond what the customer can pay and the job can't be completed. Result: an angry customer and another blackeye for the remodeling business.

Remodeling Consultants avoids that problem by using a contract that reads like a spec sheet, plus architectural drawings approved by the customer.

The contract includes 1) the quantity and dimensions of all materials broken down into sections—demolition, excavation, foundation, flooring, walls, ceilings, roofing, gutters, exterior trim, ceramic tile, kitchen, and bathrooms; 2) a construction schedule showing when each phase of the job will be finished; 3) a payment schedule: 10% down when the contract is signed, 25% of the balance when work starts, 25% after rough framing, 25% after closing in; 20% upon completion of carpentry and 5% when the job is done.

Finally, the contract stipulates what's not included in the job—taping and painting, floor finishing, landscaping, iron railings, and electrical fixtures.

The standard contract is four pages. It's written in triplicate on carbonless color-

coded paper—white copy for the office, pink for the bank and yellow for the customer.

Job packaging:

Check, double-check and leave nothing to chance

All this checking and double-checking starts shortly after the salesman gets a signed contract. Here's the sequence:

Step 1: The salesman returns to the job with an architect, who remeasures everything and makes sure the rough design is in esthetic harmony with the house.

Step 2: The architect produces a full set of working drawings—floor plans, foundation plan, elevations and interior detailing.

Step 3: The salesman goes over the drawings with the customer, indicates changes (if any) in red ink and has the customer sign each sheet.

Step 4: The customer makes his color selections for tile, bathroom fixtures, kitchen appliances and cabinets, etc.

Why make these choices so late in the game? Says Dygert: "We sell a construction service. Colors don't affect the construction process or the cost of a job. So we don't risk side-tracking a sale by talking color selection before the sale is made."

Step 5: All paperwork—the contract, drawings, specs, etc.—goes to the production department, which assigns a packager to the job.

Step 6: With the salesman and architect, the packager checks the job for possible structural and materials-handling problems: Where are the loadbearing walls? Is there garage space to store materials? Can the existing roofing and siding be matched?

Step 7: The packager makes up purchase orders for all materials, which are ordered by an expeditor.

Step 8: When prices are confirmed, the expeditor writes up a cost card to pinpoint the anticipated profit.

Step 9: The packager assembles all elements of the package—the contract, drawings, purchase orders, list of suppliers and delivery dates, payment schedule and cost of each type of labor as a basis for figuring bonuses.

Labor:

Pay what it takes to develop productive crews

Remodeling Consultants does it with a wage-and-salary/fringe-benefit/bonus package that outstrips anything offered by many large new homebuilding companies. Here are the details:

Annual pay. The company guarantees annual earnings to its foremen and assistant foremen. Rain or shine, work or no work, they are paid for a five-day week. Annual pay for foremen averages about \$19,000, which includes overtime for Saturday work—a norm for the company—and \$15,000 for assistant foremen.

Other workers are paid only when they work. Carpenters average \$12,000 to \$14,000 annually, helpers and apprentices \$6,000 to \$10,000.

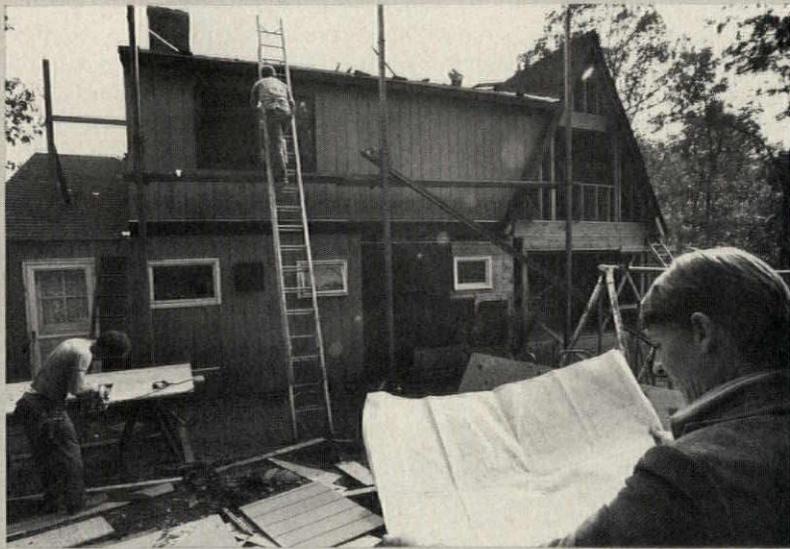
Typical company jobs: They run the gamut from a \$5,000 shed dormer shell to a \$44,000 two-story addition



\$16,000: Built dining room wing; remodeled kitchen and installed new laundry and bar in existing structure.



\$5,000: Removed half of old roof and installed shed dormer with two windows; owner installed interior partitions, insulation and drywall.



\$18,000: Added second story, three-level extension and sun deck to one-story cottage, but left interiors unfinished; also re-sided entire house.



\$19,000: Added second story accommodating three bedrooms, two baths, den and storage room; finished off both baths, but left other areas unfinished.



\$25,000: Built one-story addition to enlarge master bedroom, extend hall, and add guest room, bath, three closets with built-in storage units and walk-in closet.



\$44,000: Added two-story, 1,300-sq.-ft. wing including dining room, living room with fireplace, balcony, master bedroom and bath, enlarged existing dormer and bay window.

PHOTOS: ED LADA

Why the guaranteed wage for foremen and assistant foremen?

"To keep experienced foremen," says Zaccaria, "and to encourage other men to work up to the top jobs. In only three or four years, several semi-skilled men have moved up to foremen."

Insurance. The company provides basic hospital and surgical coverage, life insurance and insurance for disabilities incurred both on and off the job. (There's also New York State's mandated workmen's compensation and disability insurance.)

Pensions. Foremen, assistant foremen and other key employees are covered by a company-paid retirement plan based on pension insurance and variable annuities purchased from Metropolitan Life. For example, a 25-year-old foreman now making \$19,000 per year can expect to retire at 65 with a lump sum of \$206,000 or \$1,943 a month for life.

Vacations. In the Christmas-New Year period, the company closes down to give all employees a paid two-week vacation. And every summer each employee gets one to four weeks' paid vacation depending on length of employment. Additionally, there are four paid holidays.

Bonuses. The company has five incentive plans, all aimed at stimulating what Construction Superintendent Phil Mingione calls "push"—his term for productivity.

• Bonus Plan I starts at the beginning of each job when the company breaks down the budgeted expenses for carpentry, masonry, etc. At the job's end, each crew member gets a statement comparing the budgeted labor costs with actual costs. The difference—plus or minus—is credited or debited to his bonus

account. Thus, if carpentry was budgeted at \$2,700 but comes in at \$2,500, the crew shares the \$200 difference. Here's how shares are allocated:

Crew Size	Foreman	Ass't Foreman	Carpenter	Helper	Apprentice
2 man	40%	none	none	20%	none
3 man	40%	20%	none	none	10%
4 man	30%	15%	15%	none	10%
5 man	30%	15%	15%	10%	10%

The balance is held for company overhead and callbacks.

"This bonus plan instills real drive in the men," says Zaccaria. "In fact, the only time you hear them bellyaching is when some guy isn't working fast enough. They get on his back so they won't lose bonus money."

But for a foreman, this bonus plan can be a two-edged sword: He's fired or demoted if his crew doesn't receive any bonus money for two consecutive quarters.

• Bonus Plan II encourages competition among the crews by paying additional annual bonuses to the top three crews in Plan I. First place brings an extra \$250, second place \$150, third place \$100.

• Bonus Plan III provides annual cash awards for crews obtaining the most letters of recommendation. The winner receives \$150; second place receives \$100.

• Bonus Plan IV is an annual dollar-volume contest for the crew that completes the most work. (A typical three-man carpentry crew should do about \$5,000's worth of work per week.) The prize: an all-expense-paid trip to Puerto Rico for the workmen and their wives.

• Bonus Plan V is a year-end, lump-sum payment to each foreman and assistant foreman. Payments are \$1,000 for foremen and

\$500 for assistant foremen during their first three years on those jobs; they increase to \$2,500 and \$1,250 by the tenth year.

There are other incentives for Remodeling Consultant employees. For example, travel allowances are issued to all men when jobs are more than 20 miles from the main office. And each foreman is given a van to use during non-working hours. (He is penalized if the van doesn't pass a weekly inspection for cleanliness.)

But there's another side to the pay/benefit/bonus picture—namely, a set of hard-and-fast rules that smack of the discipline imposed by first sergeants and football coaches. Beards and long hair are taboo. Men are forbidden to accept anything but water from customers. And company uniforms (issued for summer, winter and spring) must be worn by every worker and foreman.

Training:

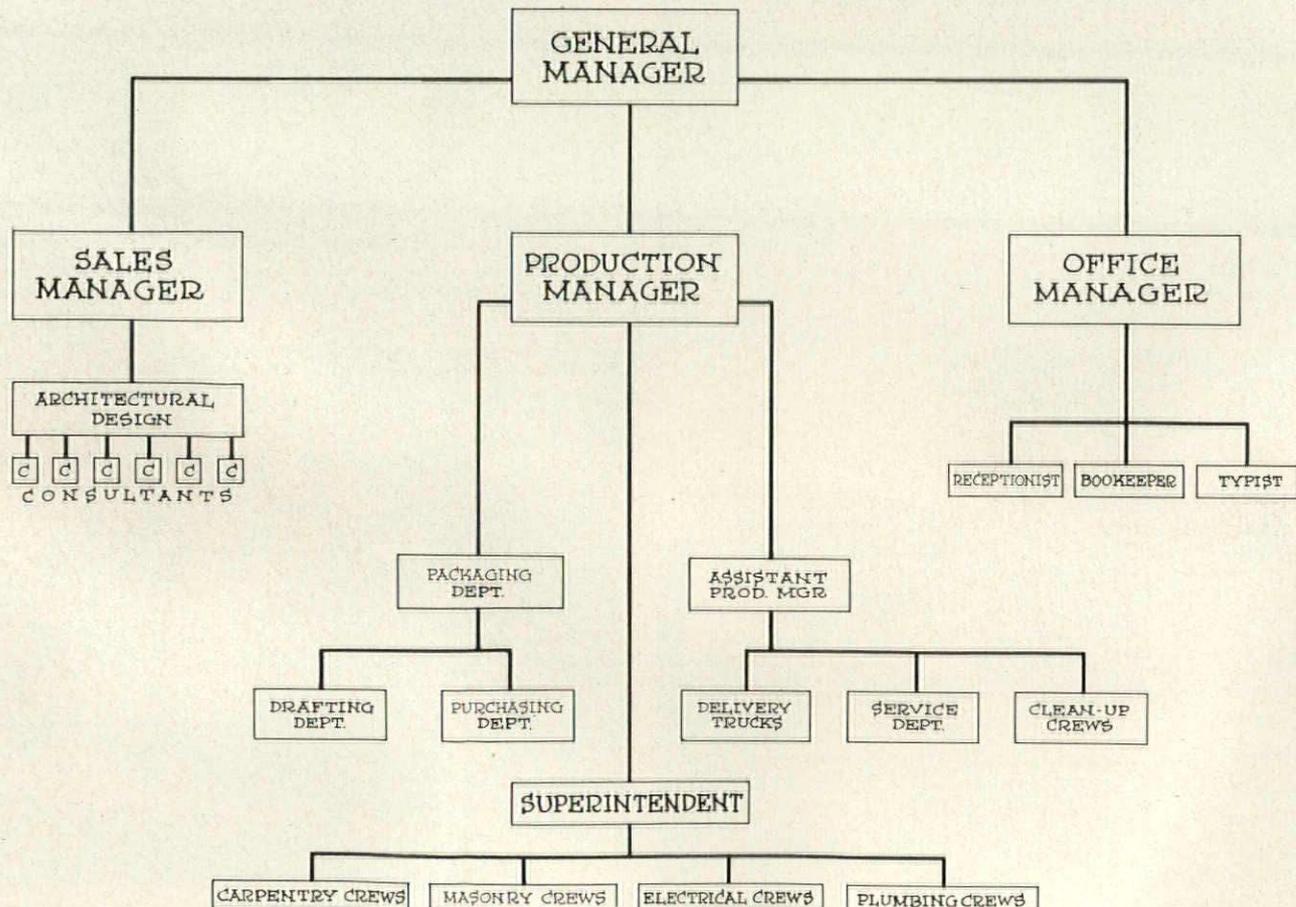
School your men in standardized remodeling procedures

At Remodeling Consultants every man has to learn to do it "Phil's way."

Since Phil Mingione is the construction superintendent, every new man spends at least two weeks working with him.

This training period does two things: It allows Mingione to evaluate the man's skills and thus to set his wage; and it gives the man a chance to learn Mingione's step-by-step methods for every phase of every job. His goal: Teach the men to work fast without sacrificing quality.

"One guy who calls himself a journeyman will take an hour to hang a door casing," says Mingione. "Another guy will do just as good



a job in 15 minutes. I teach each man the quickest way to do things. But only one new man in ten is a good learner."

If it's hard to turn out good carpenters, it's harder to develop good carpentry foremen, Mingione says.

Not only must the foreman possess the highest degree of carpentry skills, but he must maintain high output from his crew and also coordinate the work of the various trades on the job. And at the same time, he's responsible for customer relations.

"If I'm lucky, one carpenter in 50 turns out to be a good foreman," says Mingione.

Subcontractors:

Try to avoid using them

"In remodeling, you've got to have high productivity, good workmanship and complete reliability," says Zaccaria. "You'll get none of that from subcontractors who, for the most part, simply want their payments as quickly as possible and have no incentive to leave the homeowner perfectly satisfied."

As evidence Zaccaria cites the fate of competitors he has known since he entered remodeling in 1950: "They relied on subs, and not one of them is in business today. Our only real competitors are the small contractors who have two or three men working for them. They tend to do good carpentry work but get into trouble when they have to farm out plumbing and electrical work. And, all too often, it takes them two or three months to finish a job."

Remodeling Consultants employs its own salaried crews. The line-up: eight 4-man carpentry crews, two 3-man masonry crews and two 2-man electrical crews. The one exception to its no-subs policy is plumbing, but the plumbing sub works exclusively for the company. And even here the company hopes to set up its own crew.

What if a customer asks for work requiring trades not on the company payroll—taping and painting, for instance, laying floor tile and carpeting or paving a driveway.

"We try to steer clear of that sort of thing," says Zaccaria. "When the customer insists, we urge him to hire his own sub-contractor rather than have us bring in one. We point out that he'll get the work done for less because he won't have to pay extra for our overhead and profit."

Build-out time:

Start fast and keep pushing

"If there's one sure way to turn off a customer, it's to let the job drag out," says Zaccaria. "Once you start, you've got to keep moving."

Remodeling Consultants completes a typical job in less than two weeks. And even a 1,300 sq. ft., \$44,000 addition (see p. 85) took only one month.

The company's jobs are finished fast for a variety of reasons. Chief among them:

- Every job starts at a running pace, primarily because all materials are delivered before work begins. On the first day the salesman introduces the foremen to the homeowner and reads aloud a letter stipu-

lating the payment schedule and other details of company procedure. Then he goes over a start-up check list that reminds him to pick up monies due, check materials against purchase orders, review job plans and details with the foreman, fix dates for electricians and plumbers to start work and set the job completion date.

- Scheduling is tight but flexible enough to cope with unexpected problems, partly because only one trade is subcontracted and partly because of close coordination among the foreman, salesman and production department. The job foreman must phone the production department three times a day; the salesman wears a radio beeper that signals him to call the office.

- Bonuses stimulate high productivity.
- The company insists that when a house is opened up, it must be closed in on the same day. How's it done? First, by pre-cutting all materials; second, by mobilizing as much manpower as necessary for as long as necessary.

A typical example: adding a \$19,000 second story to a ranch house (for result, see p. 85). Two days before the opening all lumber was pre-cut at the site. At 8 a.m. on opening day a seven-man crew started stripping off the old roof and siding. The chain of events from there on: 9:30—old framing exposed; 10:30—old framing removed; 11:30—new flooring being laid; noon—crew supplemented by four more carpenters; 1:30 p.m.—framing is well underway; 4:30—roof sheathing laid; 5:30—wall sheathing almost complete; 7 p.m.—second floor watertight with tarpaper over sheathing and plastic sheeting over window openings.

Tools of the trade:

Don't stint on labor-saving equipment

"We buy anything that can save us time and money," says Zaccaria. The company's \$120,000 equipment investment includes:

- Eighteen vans outfitted with complete sets of tools for different trades. For example, each carpentry truck has an air compressor to run two gun nailers. Says Mingione: "If it takes a good man two hours to nail up sheathing with a hammer, he can do the job in 20 minutes with an air gun."

- Four station wagons, used by the salesmen to carry sample materials, and a \$12,000 custom-made garbage truck to haul away refuse.

- Scaffolding, pumps, hoists, cables, chain saws, generators and heavy-duty drills.

There's even a portable toilet to be used on days when old bathrooms are torn out and new ones installed.

Customer relations:

It's the key to future sales

Referrals are important to any remodeler, but to Remodeling Consultants they are a fixation. So the company's entire operation is geared to getting a letter of recommendation at the end of each job.

"We've got to make sure the customer is completely satisfied, even beyond the terms of our one-year guarantee," says Zaccaria.

"Otherwise, he won't refer his friends to us. And our growth depends on getting business from those friends."

So the company insists that although a salesman has many demands on his time, service calls are Priority No. 1 (other priorities in descending order: 2) jobs in final stages, 3) jobs in progress, 4) preliminary preparations to start jobs, 5) contract signing, 6) new jobs to be estimated).

"We want customers to know we'll respond quickly to a problem," says Dygert. "Our consultants (salesmen) must include their home phone numbers on their business cards. This gives the customer confidence. Also, it lets the consultant deal with any situation before it festers into an argument."

Obtaining a reference letter is the responsibility of the supervisor (carpentry foreman) on each job. His incentive is a special bonus.

When a letter is received, the customer's name, address and phone number are entered on a constantly up-dated list labeled "Our References". The list is arranged by locality to make it easy for prospects to check other homeowners who have used the company.

"We never know when a prospect will call on old customers, so we've got to keep giving good service, even after we get the reference letter," says office manager John Cavallaro.

All this emphasis on references pays off in three ways.

- Right now, forty percent of all sales leads come from prospects who were referred to the company by previous customers. And that percentage is increasing.

- Half of the company's dollar volume is generated by referrals. For example, of 31 jobs (worth \$445,146) sold in the third quarter of this year, 16 (\$241,835) came in this way.

- Referrals reduce advertising costs. And advertising is where the balance of the company's work comes from. In the third quarter cited above, seven jobs came from Yellow Pages, eight from newspaper ads. The Yellow Pages cost 1.9% of the price of each job sold against 9.6% for newspaper advertising. In a typical quarter, the company's ad budget is \$8,000 to \$9,000.

—Michael J. Robinson

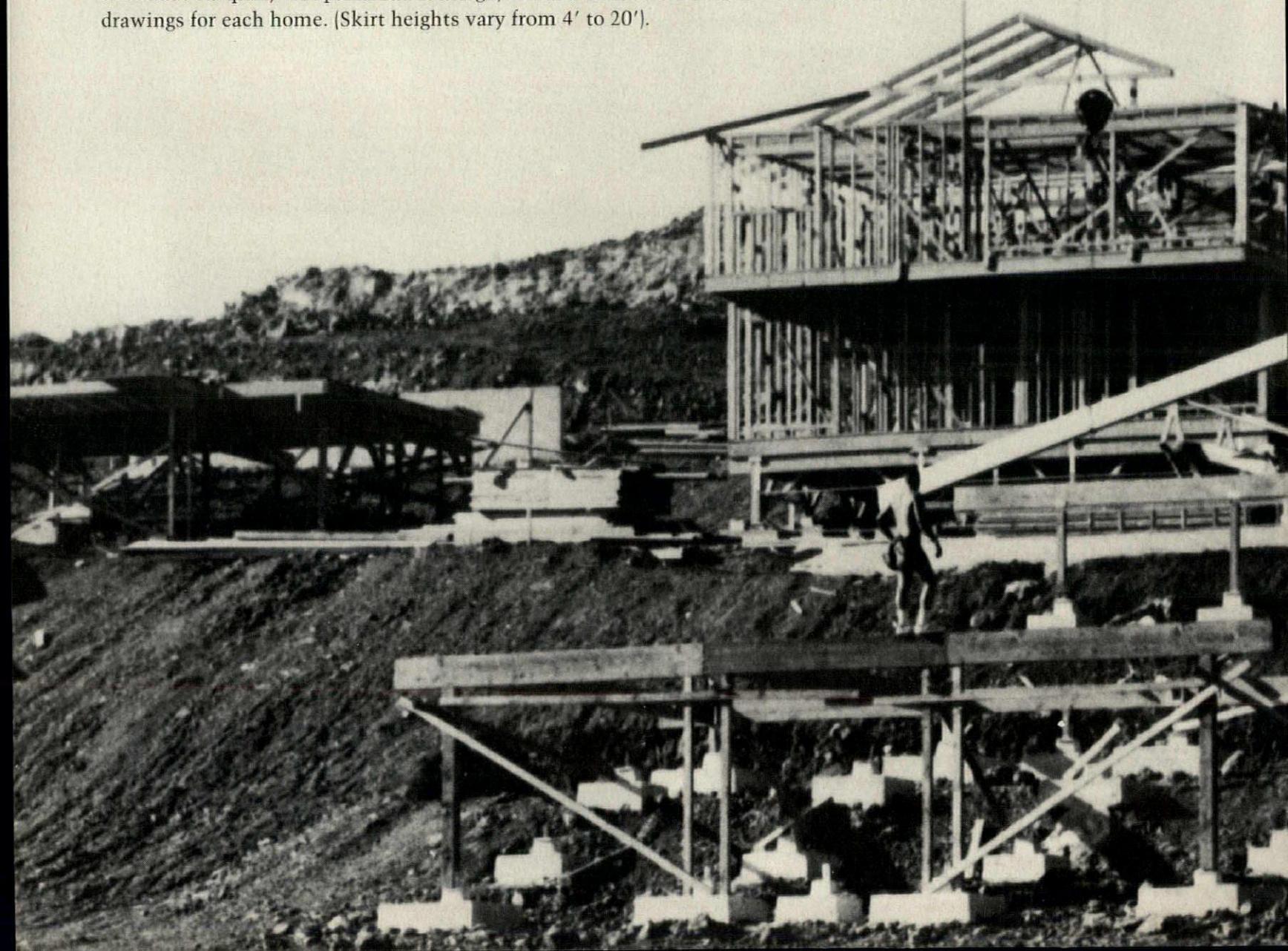


Company T-shirts, given to customer's children, help promote Remodeling Consultants. Salesmen ask for children's shirt sizes when contracts are signed.

Why is a tough site like this worth tackling?

Because it offers such strong marketing opportunities the developer can't bypass it, no matter how difficult. The project is Mariners Ridge—420 single-family homes being built on spec by Grant Co. at Hawaii Kai on Honolulu. The site is usually steep (lot slopes vary from 7% to 23%) and extremely rocky—so much so that 56,000 cu. ft. of solid rock had to be ripped in just one section of the access road. Development costs—over \$25,000 per lot—would seem to be prohibitive. But the location—offering spectacular views of Diamond Head, Cocoa Head and the ocean—made it worth the time and expense. In less than two years 200 homes have been built and sold for \$67,000 to over \$100,000, excluding lots that are held under typical 55-year Hawaiian leases at \$600 per year.

Two key steps that helped solve terrain problems: Robert Kay, president of Grant's Hawaiian operation, imported two HD 41 cats (largest in the world) to avoid drilling and blasting; and Armando Vasquez, vice president of design, worked out individualized foundation and skirt drawings for each home. (Skirt heights vary from 4' to 20').

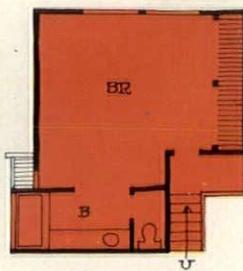
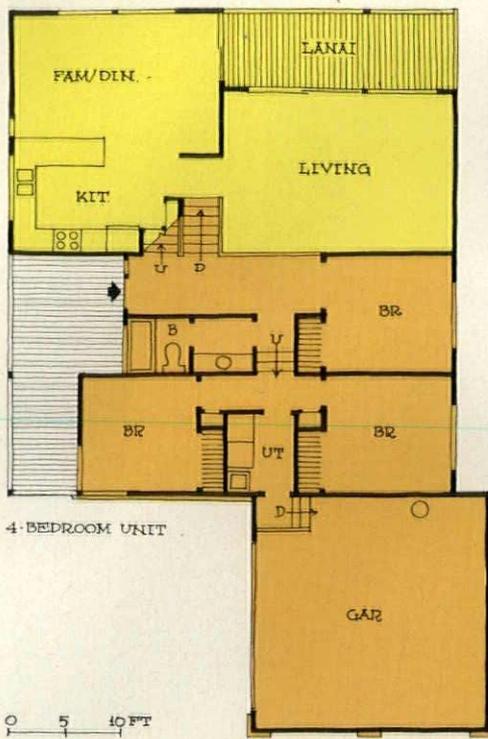




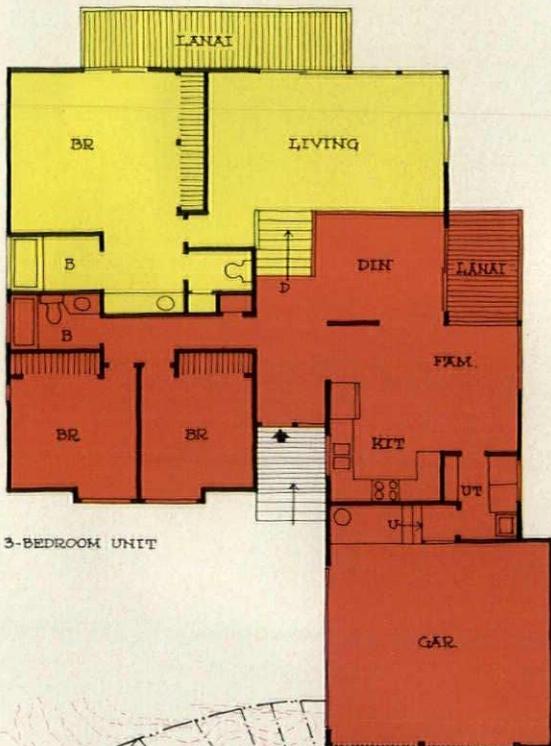
Multi-phase site work (photo below) called for close coordination between engineers, grading contractor and filling people. For example, if bathroom drain lines were too high, sewage would drain into solid rock. Home shown above is similar to the one being framed below.

PHOTO BELOW: GRAPHIC PICTURES HAWAII



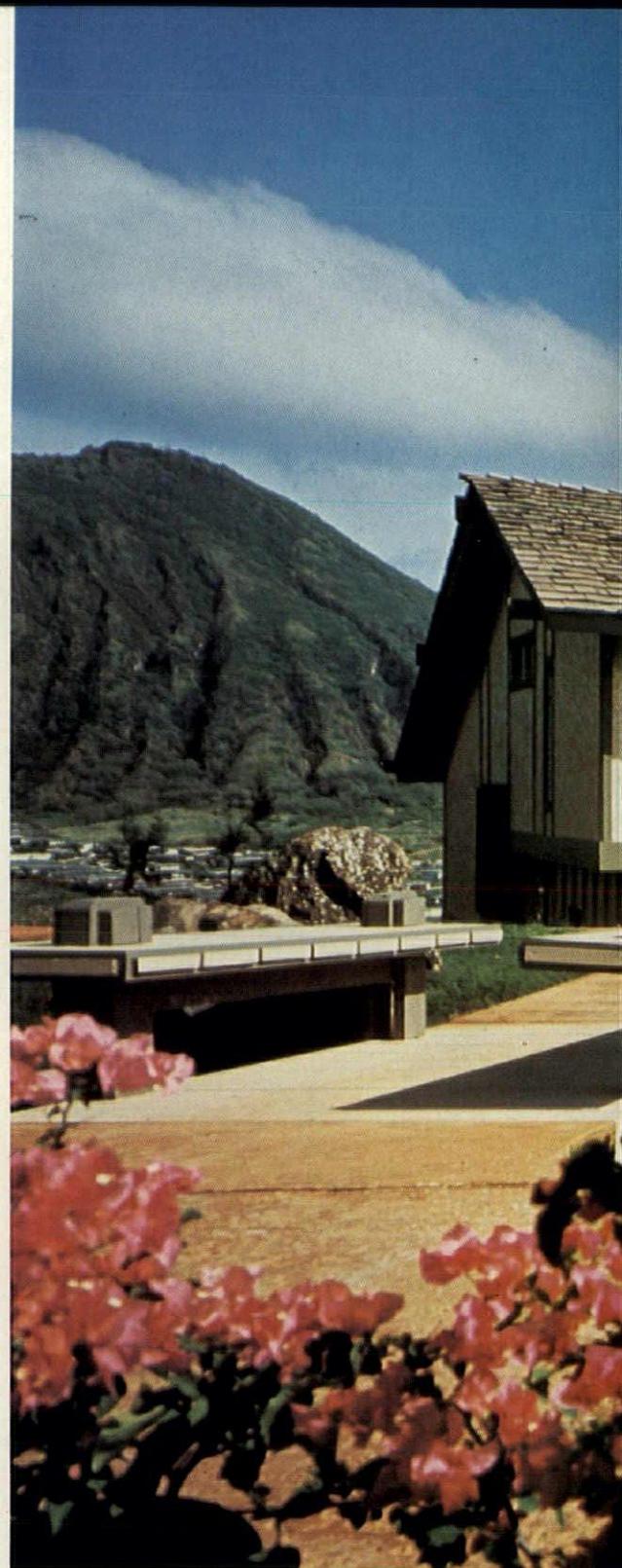
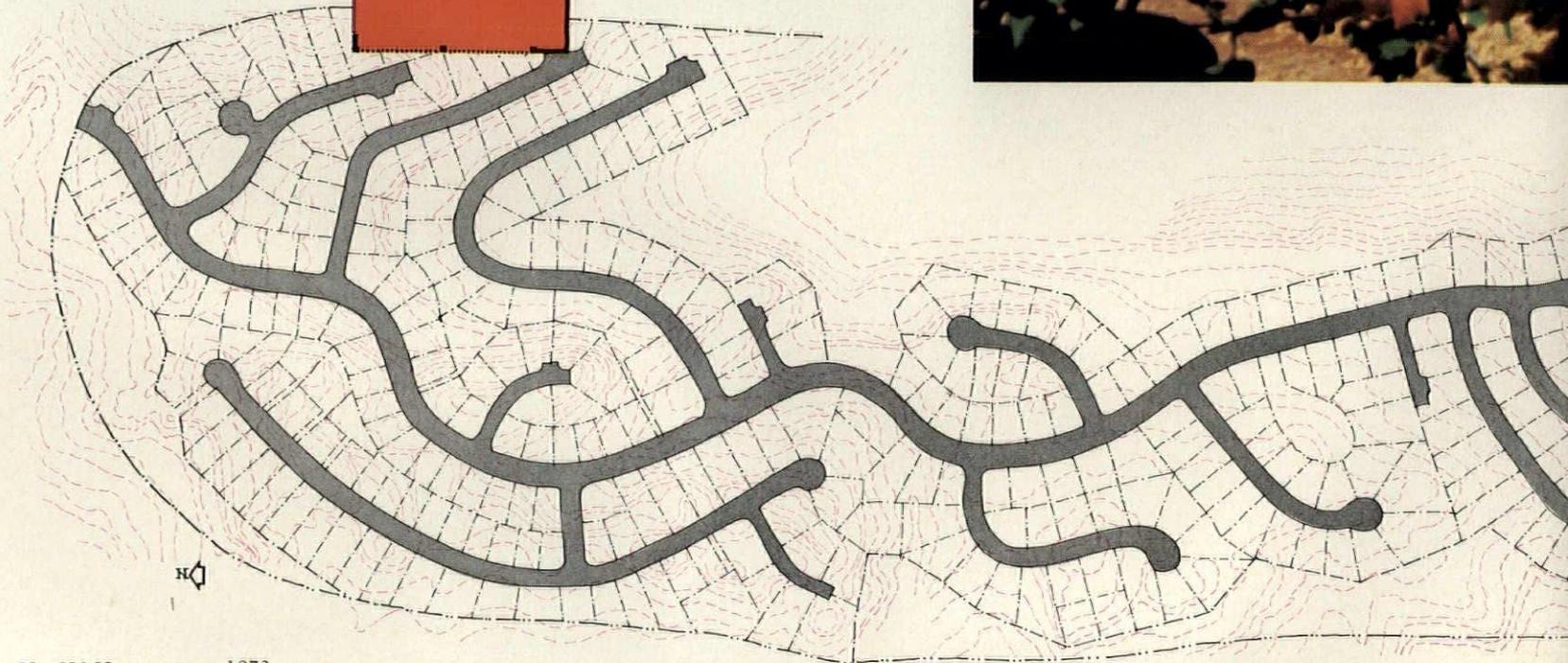


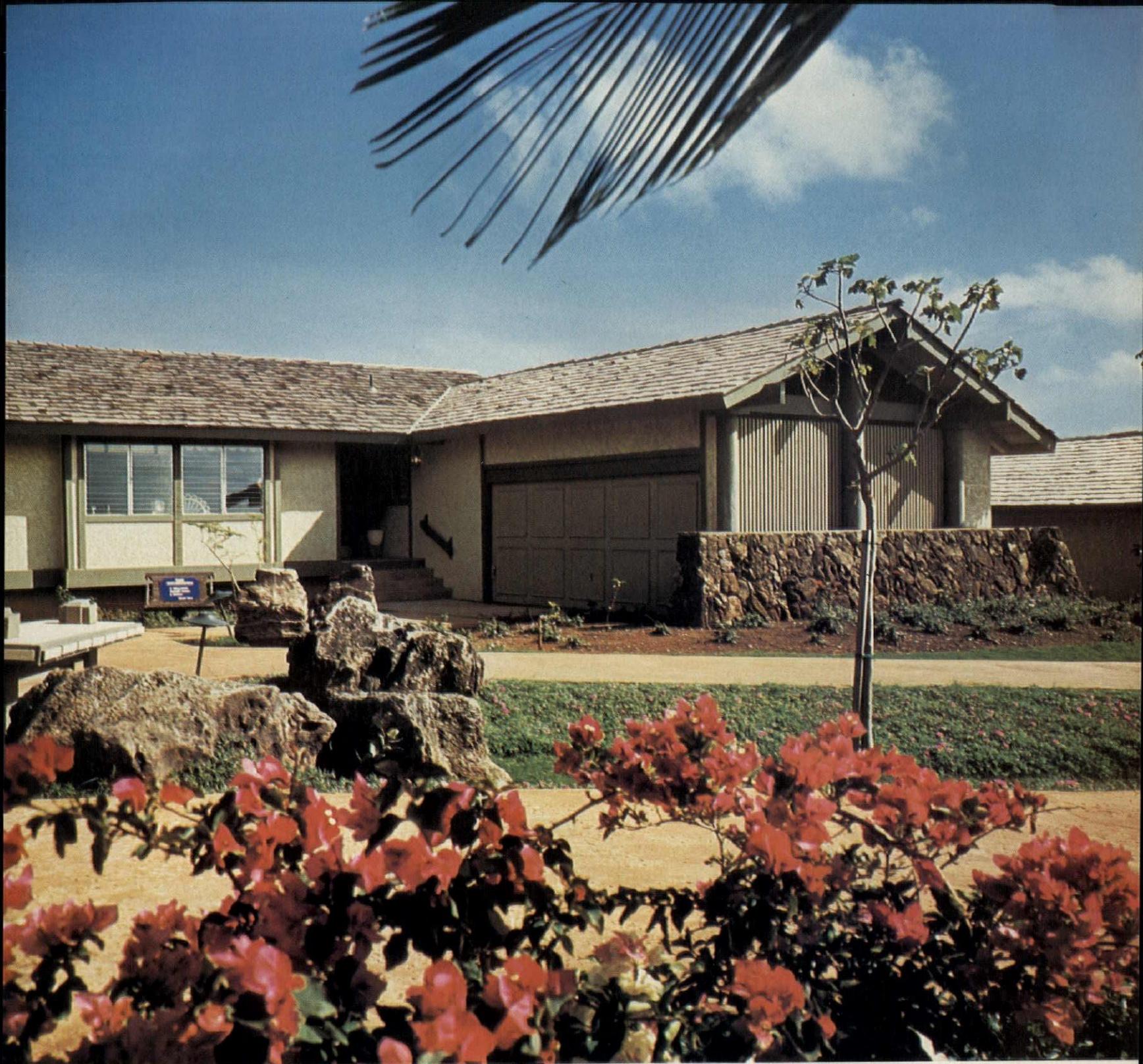
■ UPPER LEVELS
■ MIDDLE LEVELS
■ LOWER LEVELS



Four basic layouts are offered at Mariners Ridge. The four-bedroom plan shown above is for the home pictured on the previous page; the plan below is for the three-bedroom model at right. Because of varying lot slopes, three of the plans are multi-level. Each of the layouts had to be modified to allow for up-hill or down-hill siting. Square footage, including garages, runs from 2,179 to 2,649.

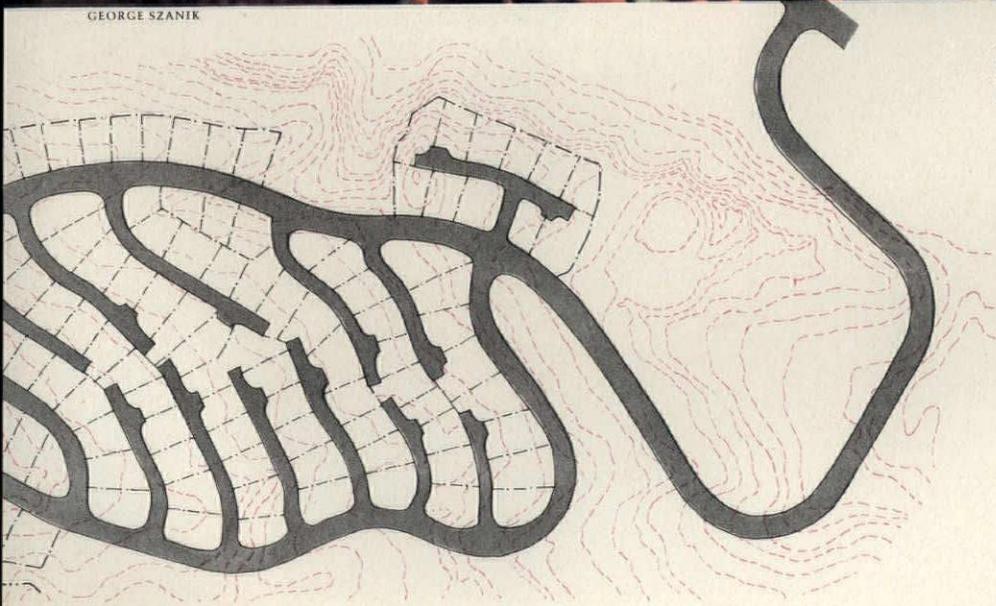
Extreme steepness of the 424-acre site is shown by the topo lines in the plan below. Development work required unusual protective procedures. For example: the building of boulder barriers to prevent homes at lower elevations from being crushed by rocks during upper-level site work, and the installation of temporary multi-lift pumps and reservoirs for water to control dust before the permanent reservoir was built.





GEORGE SZANIK

ARCHITECT & LANDPLANNER: LEITCH & KIYOTOKI & ASSOCIATES
LANDSCAPE ARCHITECT: LENT FORSUM & ASSOCIATES
ENGINEER: V.T.N. PACIFIC



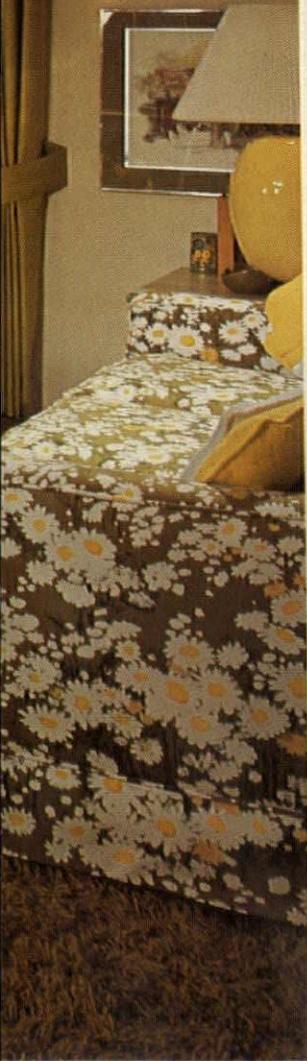


PHOTOS: GEORGE SZANIK



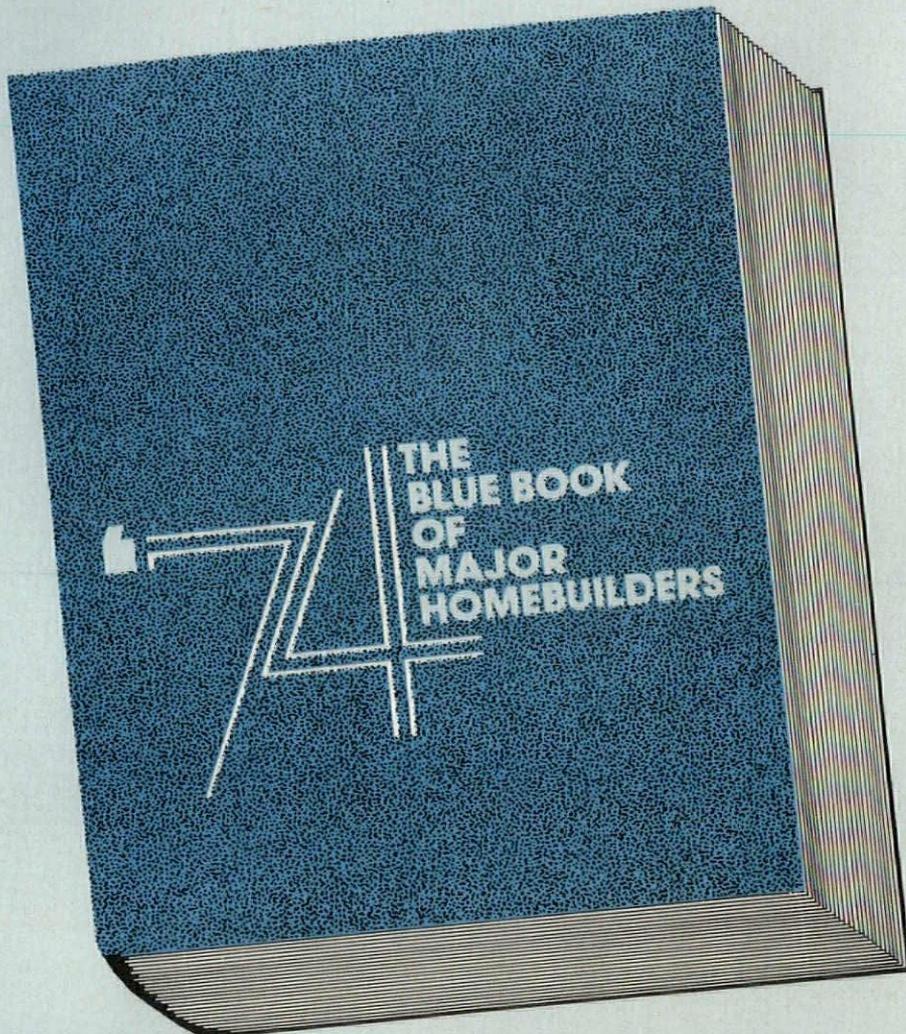
Panoramic views, like the one seen from the living room at left, are what made the site worth developing. To assure the best view for each home, plotting was critical; yet grading had to be held to a minimum because of the solid rock. Model units were decorated by Carole Eichen.

Master bedroom suites, similar to the one shown in the photos above and below, are features of all models; in most cases they are oriented to a view. Interiors on this page are from the three-bedroom model pictured on the previous page; its living room-bedroom lanai contains 137 sq. ft.



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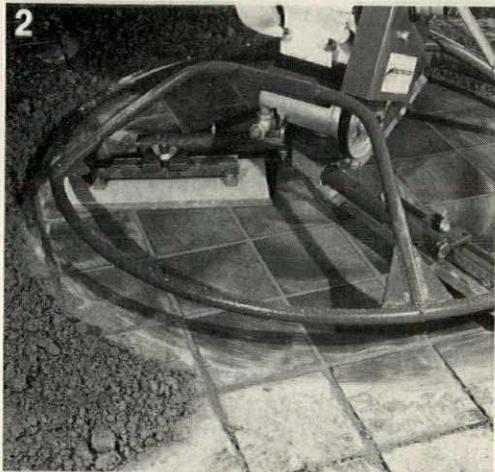
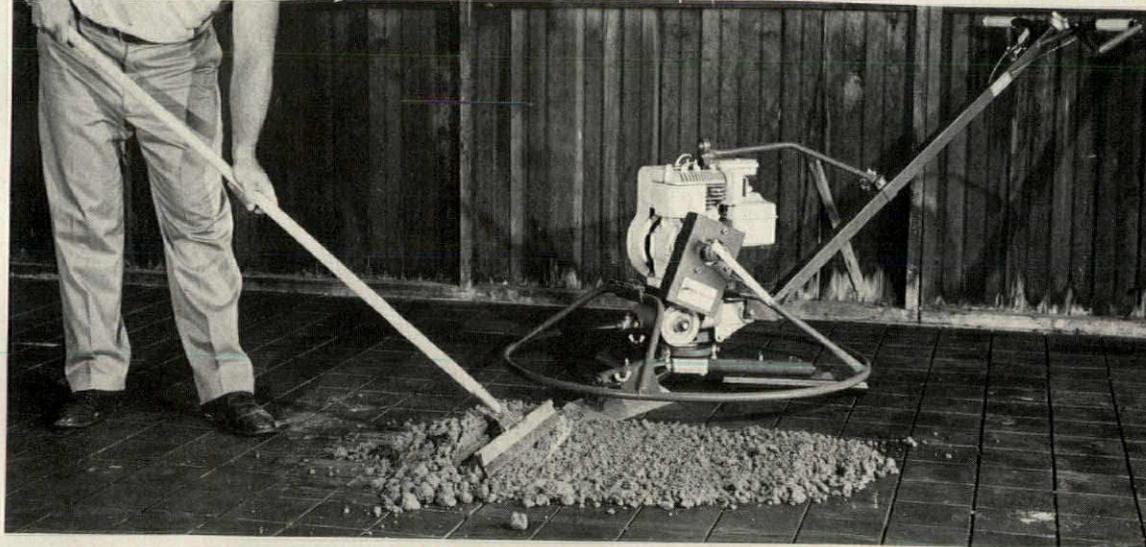
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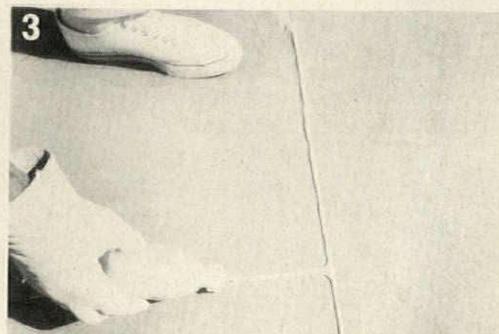
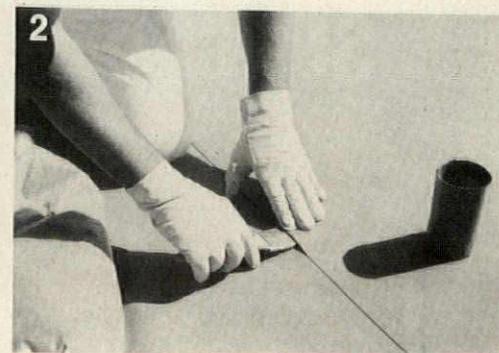
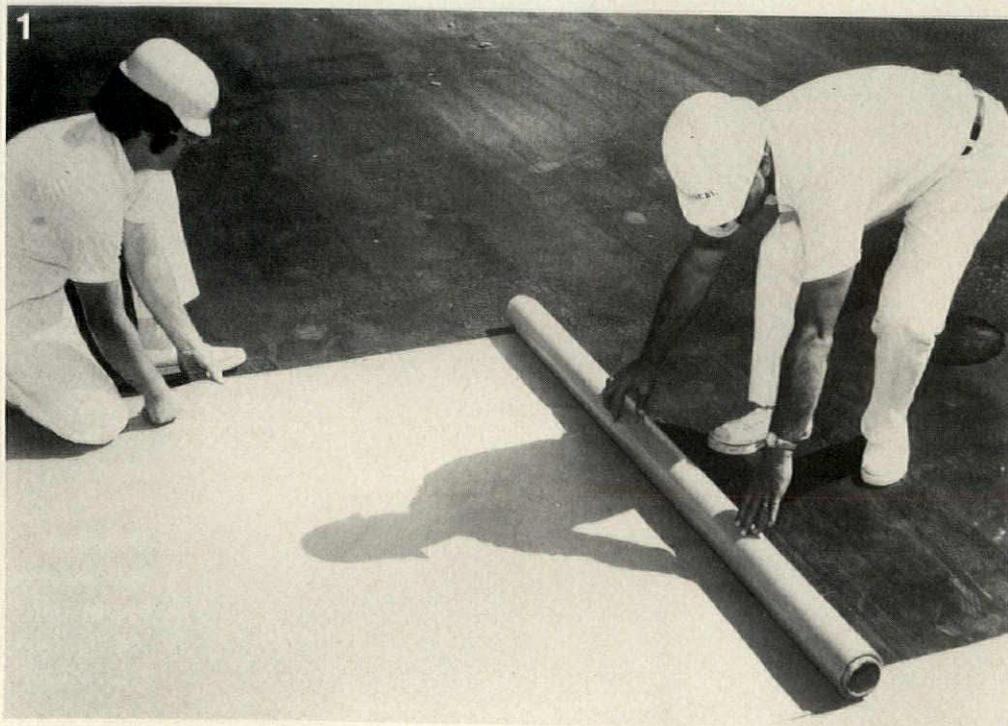
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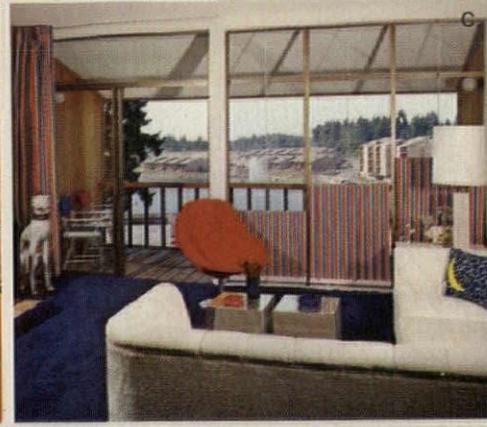
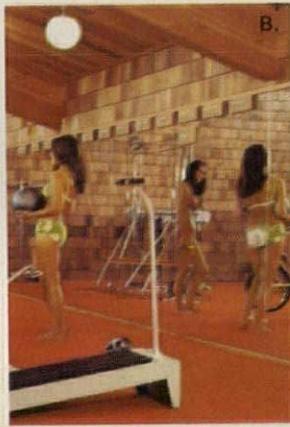
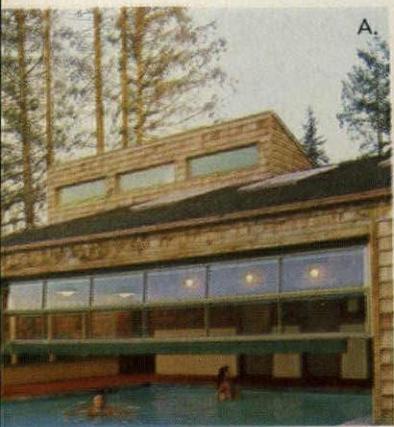
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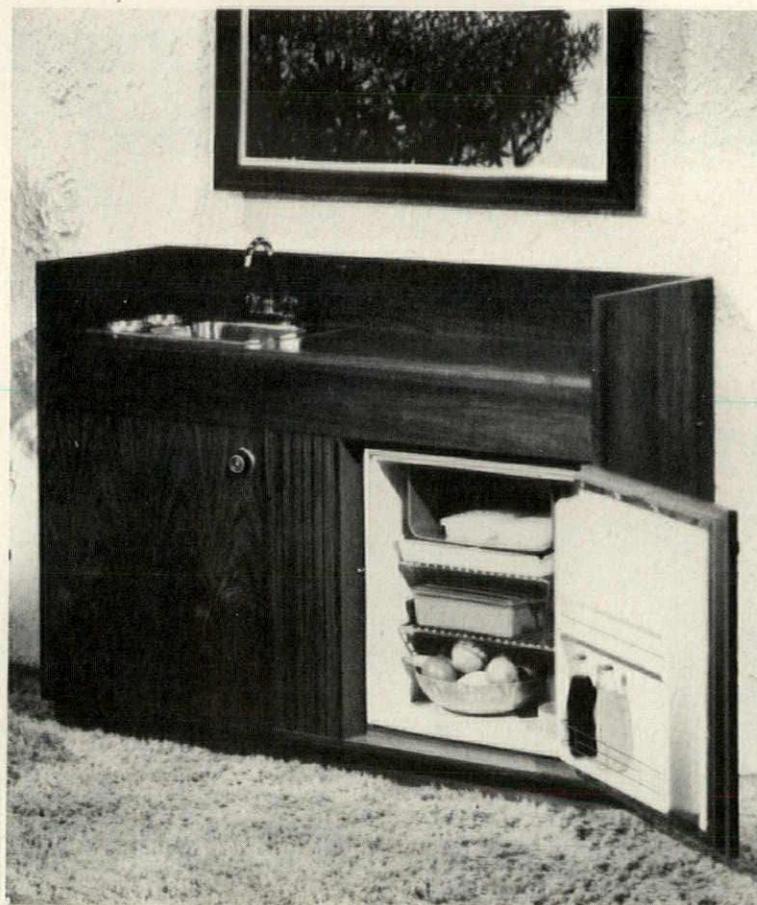
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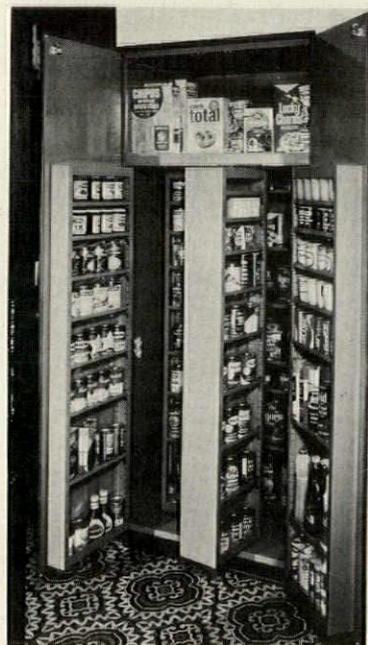




Compact wet bar is a space-saving unit ideal for installation in play or recreation rooms or around pool areas. Measuring 63" wide, 29" deep and 42" high, the basic unit contains a 4.2-cu.-ft.-capacity refrigerator, a stainless steel bar sink and undercounter storage. Cabinets of selected hardwood veneers are finished in Spanish oak, birch or ash. All appliances are reversible. Cervitor, El Monte, Calif. CIRCLE 202 ON READER SERVICE CARD



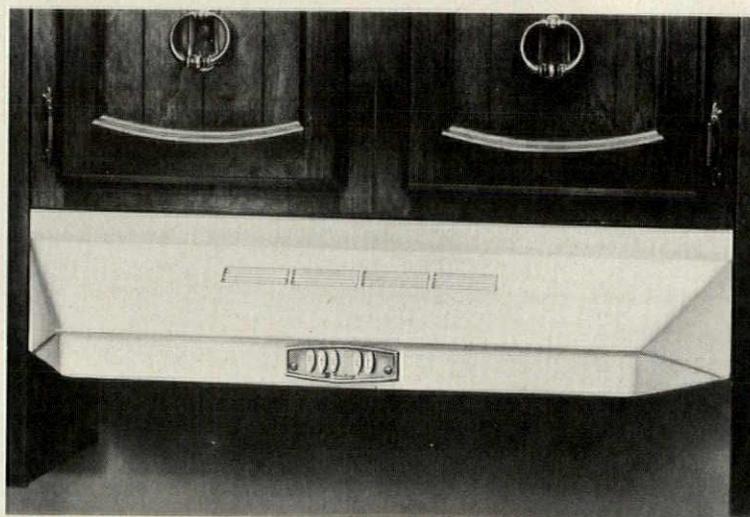
Country kitchen combines convenience with simplicity of style. The colonial-designed, maple cabinetry with a fruitwood finish provides country-size storage. It is complemented by a thick-edge, grained-maple tabletop that serves as a chopping board, extra counterspace and serving/seating area. Maple tabletop hutch provides triple drawer storage and three open display shelves. Wood Mode, Kremer, Pa. CIRCLE 205 ON READER SERVICE CARD



Steel pantry-storage cabinet measures 36" wide, 84" high and 24½" deep. The unit is divided into upper and lower sections. The lower contains storage racks on the inside of each door, two swing-out storage compartments with racks on both sides and easy-to-reach adjustable shelves along the back wall. The top compartment is for deep storage. Geneva Industries, Geneva, Ill. CIRCLE 203 ON READER SERVICE CARD

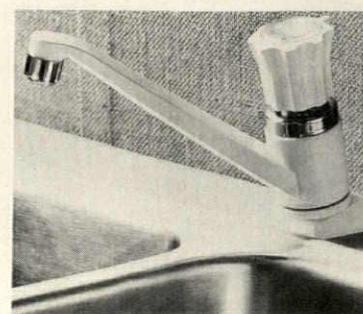


Smooth top electric range features top and bottom continuous-cleaning ovens. The four smooth top cooking surfaces with infinite heat controls have decorative patterns to indicate the heating area. Unit, equipped with an automatic clock, broilers and black glass windows in both ovens, comes in a choice of coppertone, avocado, white or harvest gold. Tappan, Mansfield, Ohio. CIRCLE 204 ON READER SERVICE CARD



Ductless range hood with sculptured lines is available in 30" and 36" lengths. Unit, equipped with dual filters—one for odors, the other for grease—and a 2-speed fan, comes in stainless brushed aluminum, shaded antique copper-tone, avocado, harvest gold or white. Hood has an enclosed recessed light with a diffuser lens. Air King, Chicago. CIRCLE 206 ON READER SERVICE CARD

Thermoplastic single-handle faucet is designed to be installed in narrow ledge sinks. Unit features a Brad-trol™ cartridge control that carries a 1,000-month guaranty against leakage. Faucet, which will not corrode, is available in pastel blue, sand, avocado and harvest gold. The shell, handle and major internal components are made of Celcon. Bradley, Menomonee Falls, Wis. CIRCLE 207 ON READER SERVICE CARD





A splash of summer sunshine

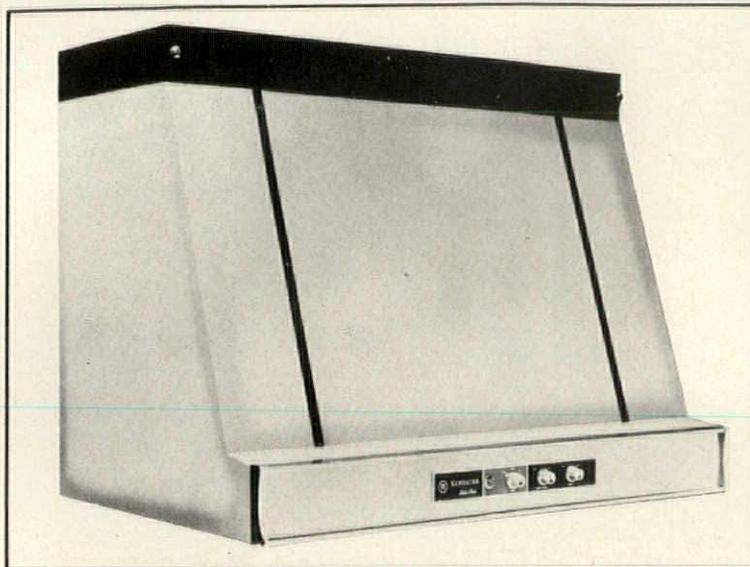
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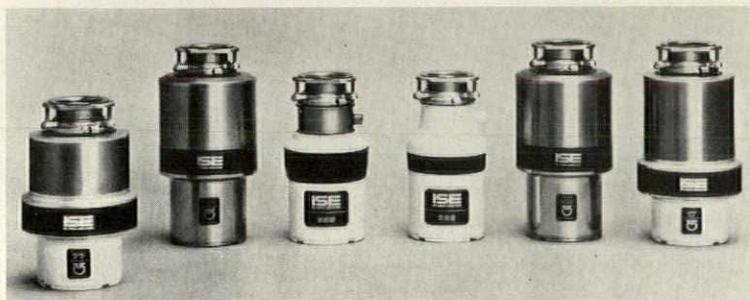
Eljer Plumbingware Division/Wallace-Murray Corporation



Economical range hood, "Americana," can be installed against soffit and does not require expensive cabinet assembly. The unit, with twin worklights and an individually controlled nightlight, features solid state infinite fan control. The hood, in ductless or vented models, comes in a choice of decorative colors. Rangaire, Cleburne, Tex. CIRCLE 208 ON READER SERVICE CARD



Budget micro-wave oven is designed to be built-in without using special kits, tools or wiring. The unit provides 450 watts of cooking power yet draws only 10 amps of electricity. Standard outlets are more than adequate. Ovens feature smooth acrylic interiors, removable shelves and see-through doors. Magic Chef, Cleveland, Tenn. CIRCLE 212 ON READER SERVICE CARD

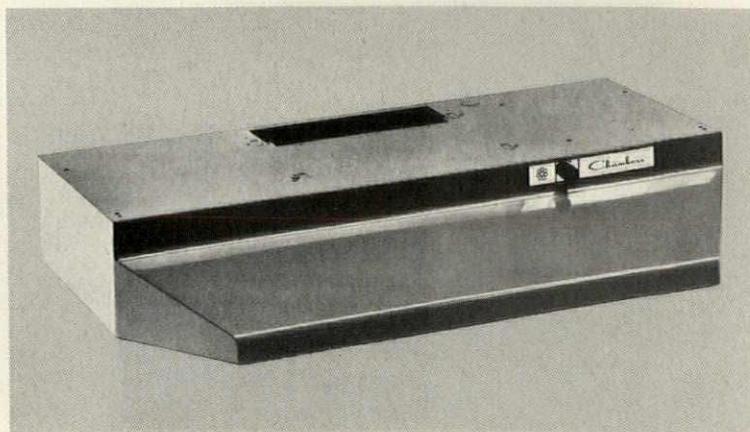


Garbage disposer line includes: 1/2 hp stainless steel continuous-feed unit, a similar batch-feed model; 1/2 hp continuous-feed and batch versions with double-shell sound insulation; and two 1/3 hp continuous feed units, one in stainless. In-Sink-Erator, Racine, Wisc. CIRCLE 209 ON READER SERVICE CARD

Self-rimming, double-basin sink is constructed of DuroCast acrylic. The unit, available in a selection of colors, is chip, stain and burn resistant. Surface blemishes can be easily removed. Construction Components, Westminster, Colo. CIRCLE 210 ON READER SERVICE CARD



Economy range hood is available in round duct, rectangular duct and ductless models. All units feature two-speed operation, a concealed light, an easy-to-remove aluminum mesh grease filter and a five-blade plastic fan. Chambers, Oxford, Miss. CIRCLE 211 ON READER SERVICE CARD



Surface-mounted ironing center is fabricated of heavy duty metal. Pre-wired unit, with a baked-enamel finish in either harvest gold or butter-scotch, is equipped with an adjustable-height board and work-light. Iron-A-Way, Morton, Illinois. CIRCLE 213 ON READER SERVICE CARD



Plastic laminate in a butcher block pattern is recommended for countertop surfacing in kitchens and other high wear areas. The maple woodgrain design simulates the tones and planking detail of real butcher block. Parkwood Laminates, Lowell, Mass. CIRCLE 214 ON READER SERVICE CARD

Compact refrigerator with a 2.2 cu. ft. capacity comes in the white shown or in a decorative walnut woodgrain finish. Designed for tabletop or undercounter use, unit features a freezer and door storage. U-Line, Milwaukee, Wis. CIRCLE 215 ON READER SERVICE CARD



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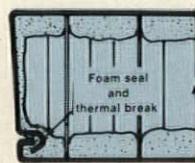
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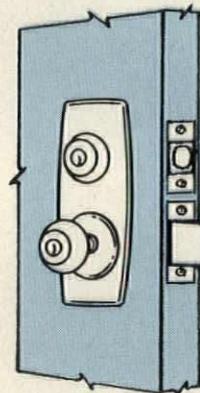
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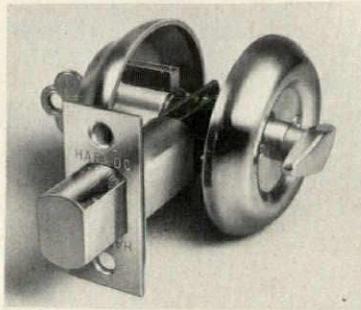
All steel construction



Double lock preparation available

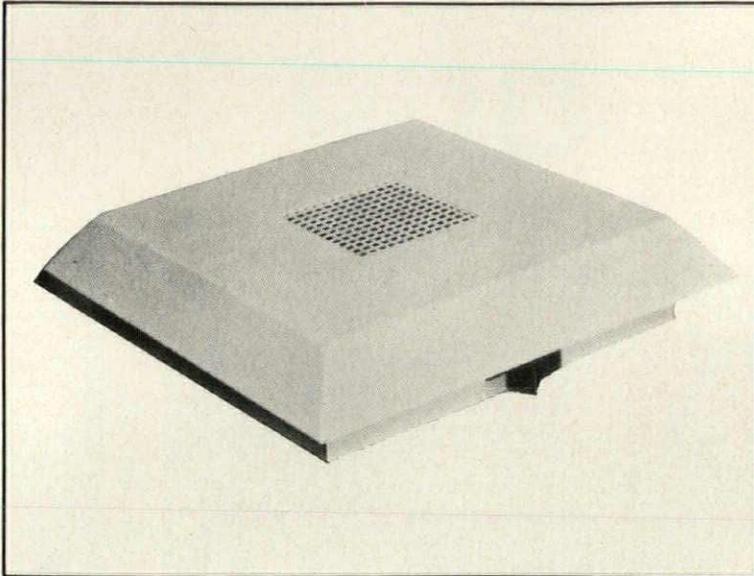
Versailles
Apartment/
Townhouse
Complex, Kanter
Corp., Forest
Park, Ohio.



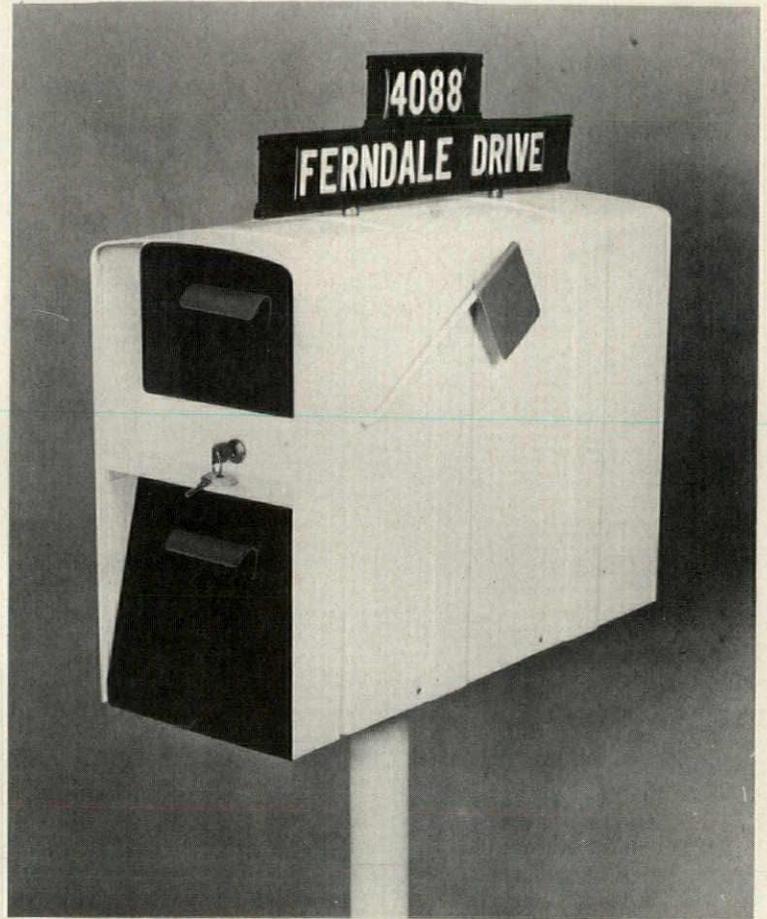


A line of cylinder deadbolts, for new or replacement installations, includes a single cylinder with inside thumbturn and outside lock, a double cylinder with locks on both sides, a one-way unit that locks and unlocks from the exterior only and a thumbturn deadbolt that is controlled just from inside. Solid brass cylinders resist tampering. Harloc, West Haven, Conn.

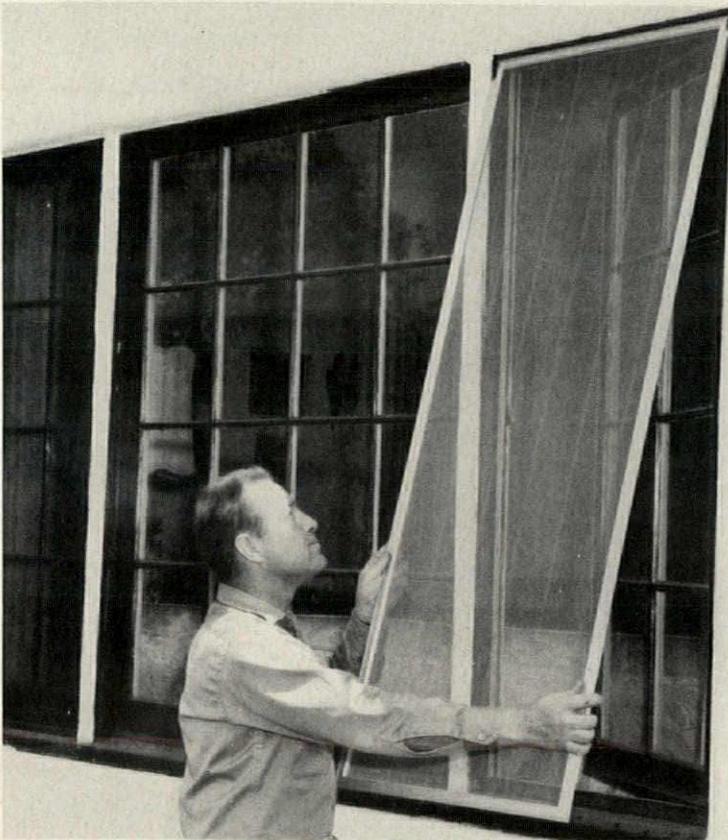
CIRCLE 216 ON READER SERVICE CARD



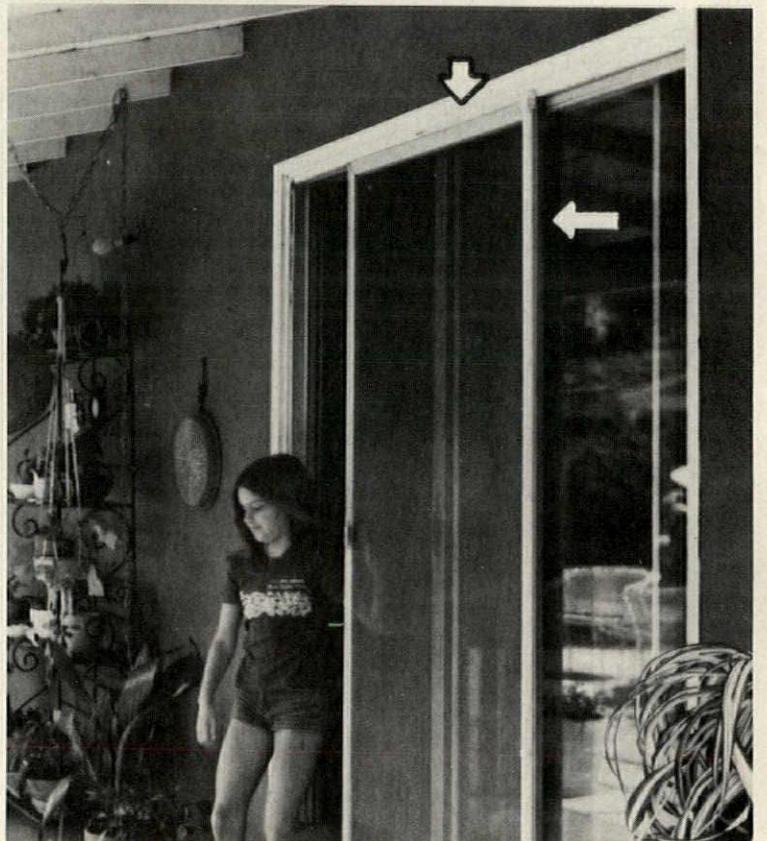
Early-warning home fire detector is capable of locating the invisible combustion gases of a fire before smoke and flames begin. Unit, which measures 7" square, is designed to be easily installed on ceilings, in hall and stairways. The self-contained, ionization-type detector features its own power source that signals when battery is weakening and a 110 decibel sounder. Mountain West Alarm, Phoenix, Ariz. CIRCLE 217 ON READER SERVICE CARD



Security mailbox is U.S. Postal Service approved. Postal carriers insert mail in the top compartment where no key is needed. Mail automatically drops into the locked lower compartment which requires a key for opening. Constructed of galvanized steel, unit has a weather-resistant finish offered in three colors. Mailbox comes with universal mounting brackets that fit any type post. Trend House, Monroe, La. CIRCLE 219 ON READER SERVICE CARD



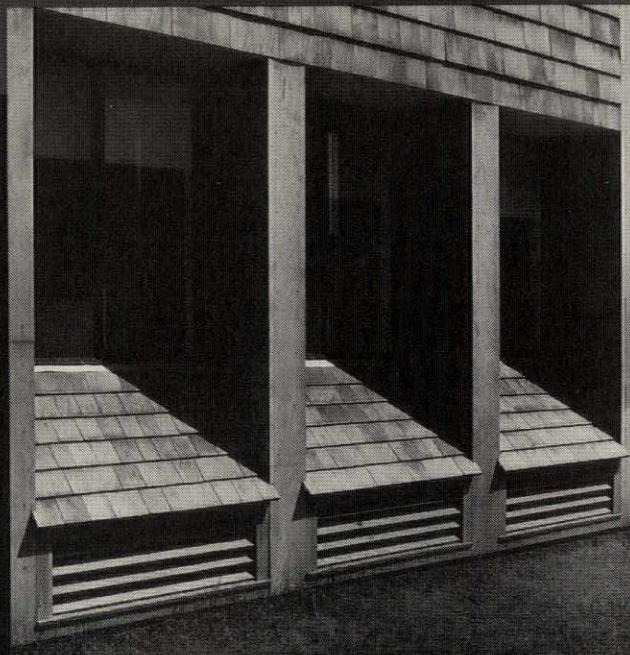
Alarm screens, to be used with any perimeter system, provide complete intrusion protection. Screens to fit any window feature insulated copper wiring woven into the fiber glass screening. Cutting the mesh activates the alarm. Frames have integral switches that also trip the system if disturbed. Imperial Screen, Lawndale, Calif. CIRCLE 218 ON READER SERVICE CARD



Easy-to-install automatic closer is suitable for use on any type of sliding screen door. A plastic tube is affixed to the vertical edge of the sliding section of screen. A weighted cord coming out of the top of the tube is fastened to the door jamb to provide uniform closing from any point. Mesco, Cupertino, Calif. CIRCLE 220 ON READER SERVICE CARD



*Turnkey housing project, Middletown, Connecticut
Certigrade shingles No. 2 Grade, 18" Perfections
Architects: Henry Schadler Associates
Builder: Carabetta Enterprises, Inc.*



Red cedar shingles: low maintenance for low-income housing.

Practicality was essential to the design of this Turnkey apartment in Connecticut. So red cedar shingles were specified.

Red cedar's acknowledged durability means low maintenance, an important consideration in public housing. Cedar shingles retain their beauty for decades with little or no upkeep.

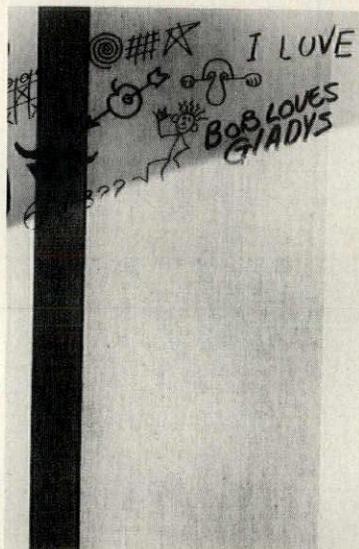
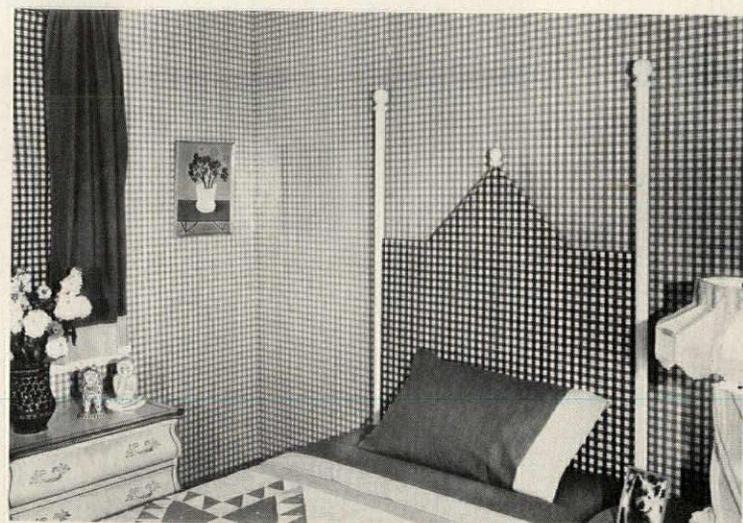
Red cedar's value goes further. Richly

textured shingles help the development look good in the eyes of neighbors and local planners. And their natural warmth appeals to tenants.

For details and application tips on Certigrade shingles and Certi-Split handsplit shakes, write us at 5510 White Building, Seattle, Washington 98101. In Canada, write 1055 West Hastings St., Vancouver 1, B.C.

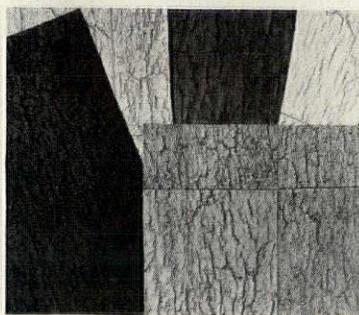


Red Cedar Shingle & Handsplit Shake Bureau

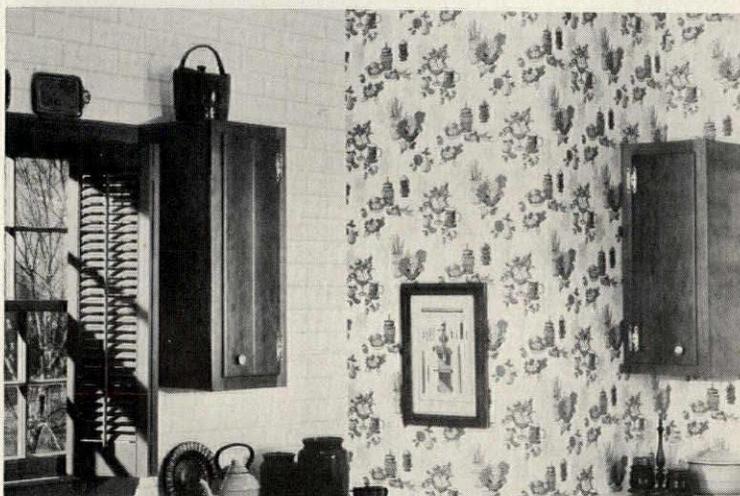


Fiber glass masonry panels, like the brick above, can be installed indoors or out. The 4'x8' sections are available in nine patterns: four brick, three stone and two Aztec stone designs. Precut corner sections dovetail with panels for a perfect match. Panels are fire-retardant, flexible, lightweight. Cavrok, Vernon, Conn. CIRCLE 221 ON READER SERVICE CARD

Stain-resistant vinyl wallcovering, "Sequence" (left), is from a line of Tedlar-coated patterns. The finish makes it possible to even wipe off felt-tip marking-pen ink. Mildew-resistant, 54"-wide "Shielded Genon" line comes in two weights, six patterns and 76 colorways. General Tire, New York City. CIRCLE 222 ON READER SERVICE CARD



Textured "Tapato" pattern is a "Vicrtex" vinyl wallcovering available on a 54"-wide, 30 yd.-long roll. The design, which is available in 22 colors including several earthtones, is a repetition of unlike squares, each with the look of tree bark. Perfect for adding a natural look to any informal room, the low-maintenance fabric is durable and easy to install. L.E. Carpenter, New York City. CIRCLE 223 ON READER SERVICE CARD



Three-dimensional-looking brick and "Montvale" pattern wallcoverings transform a lackluster work area to a homey country kitchen. The vinyl-coated fabrics are from the Sanitas® line of flocks, murals and textured

Fabric-backed vinyl wallcovering, "Country Gingham," is from the "Backgrounds in Vinyl" collection. The easy-to-maintain fabric, available in red, blue, black, brown, yellow and olive checks comes in 27"-wide double-bolts. Line also includes plaids, stripes, florals. United DeSoto, Chicago. CIRCLE 225 ON READER SERVICE CARD

Prefinished plywood panels in a wispy forest pattern are part of the "Masquerade" series. The 3/16"-thick, 4'x8' panels can be installed with adhesive or color-coordinated nails. Collection also includes an embossed pin stripe and a mosaic design, each in a choice of three colors. E.L. Bruce, Memphis, Tenn. CIRCLE 226 ON READER SERVICE CARD



Stylized wallcoverings, floral "Dance Princess Dance" and striped "The Chocolate Soldier," are patterns on silver-foil backgrounds from the "Flock and Foil Collection" of fabric-backed vinyls. The easy-to-hang coverings

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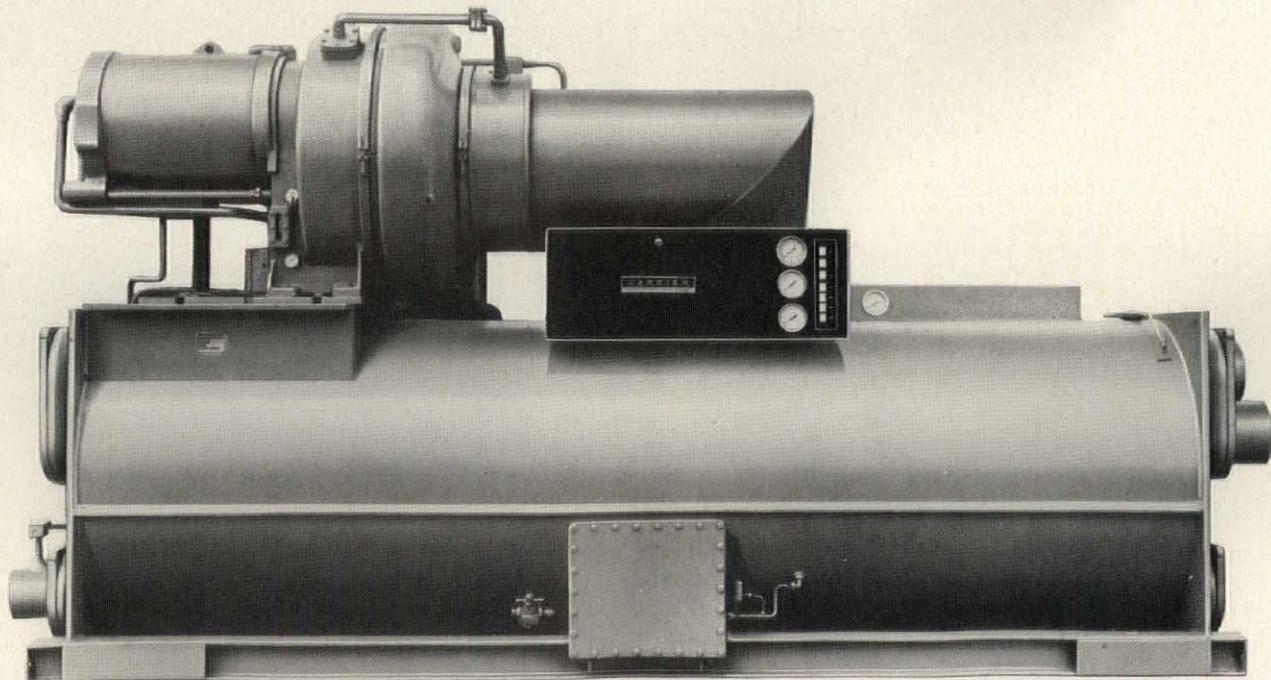
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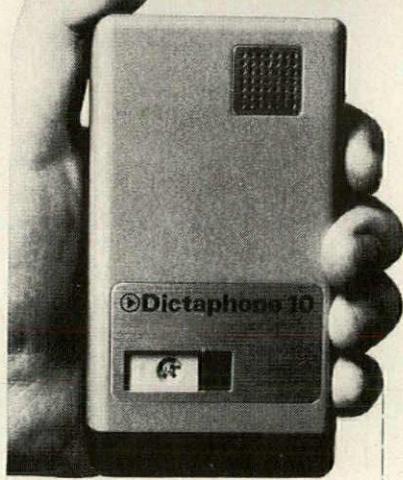
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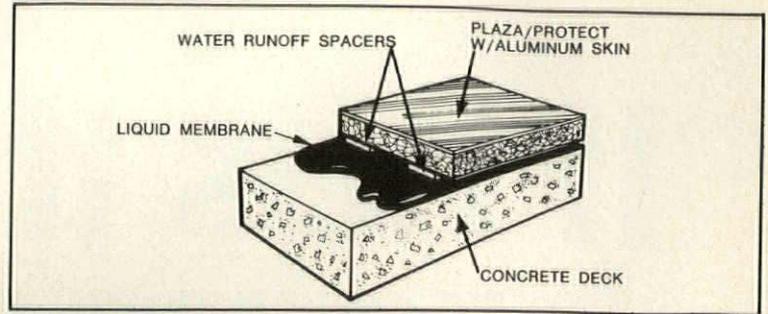
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CIRCLE 106 ON READER SERVICE CARD

PRODUCTS/EXTERIOR



Roof system has the waterproofing membrane between the deck and insulation. A high density urethane foam panel with integrally bonded supported aluminum skins is placed over the liquid membrane—applied directly to the roof. Apache, Linden, N.J. CIRCLE 228 ON READER SERVICE CARD



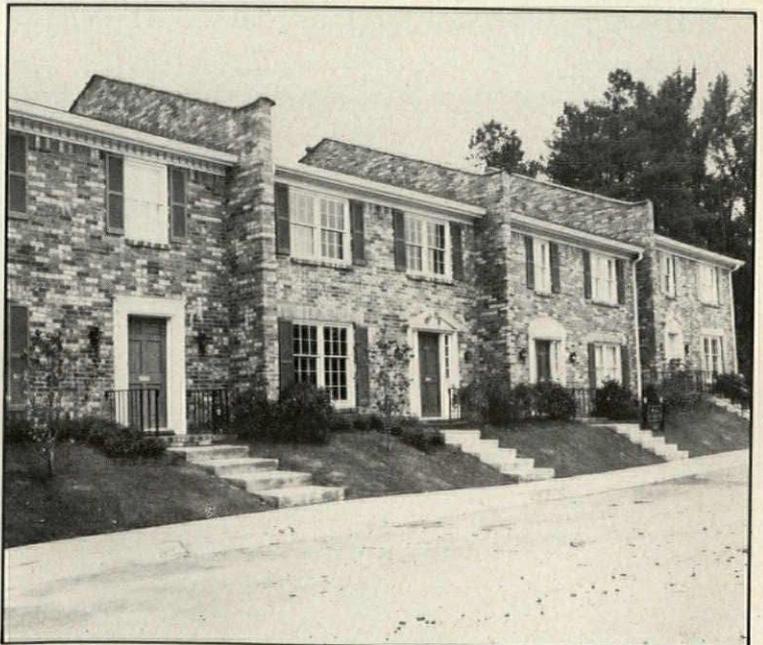
Turbine ventilator, constructed of high density polyethylene eliminates corrosion problems. Unit, with a 10-year materials guaranty, resists salt spray, acid fumes, hydrocarbons and weather and temperature extremes. It features a sealed, permanently lubricated ball-bearing that prevents squeaking and slow-down. Wind-Wonder, Houston, Tex.

CIRCLE 229 ON READER SERVICE CARD

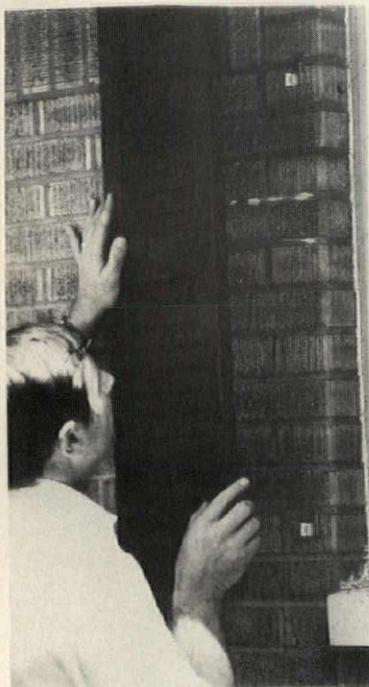


Aluminum soffit and fascia system is available in a choice of white, yellow, brown, green or gold, to match any styling. Prefinished panels, matching fascia and trim, combine the rich appearance of select grade wood with the low-maintenance characteristics of aluminum. Material will not rot, split or rust. Kaiser Aluminum, Oakland, Cal.

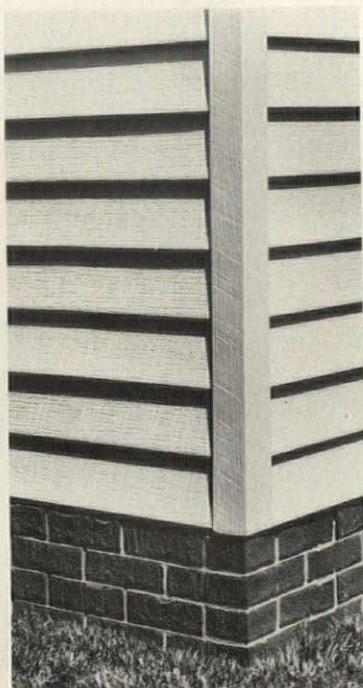
CIRCLE 230 ON READER SERVICE CARD



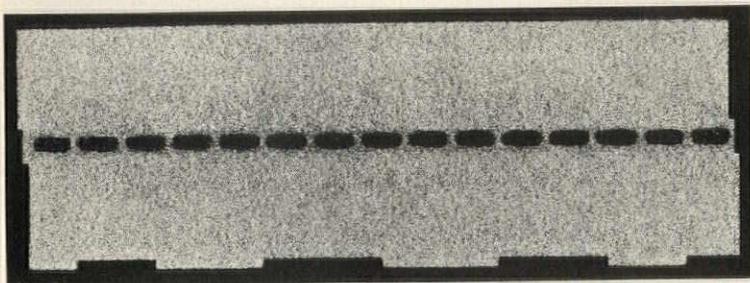
Plastic structural foam shutters "Cell-wood" simulate the natural-grained look of wood. Shutters are 1"-thick throughout the frame and feature fully open, integrally molded louvres that look authentic. Easy-to-install shutters snap into place using concealed mounting clips that attach to any type of wall with a single nail. Shutters will not chip, dent, split, warp, rot or mildew. Allastics, Norcross, Ga. CIRCLE 231 ON READER SERVICE CARD



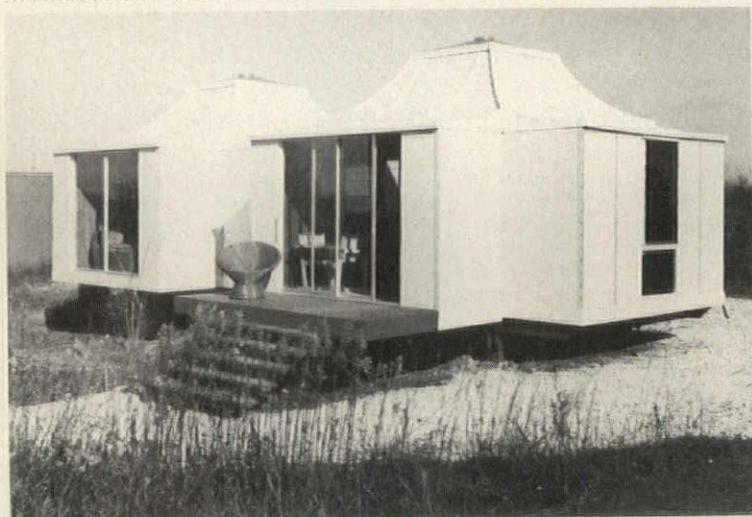
High speed mounting system for use with all styles of plastic shutters involves the use of hidden metal clips. The clips are nailed or screwed to the exterior siding. Special masonry nails provided with each clip make mounting on difficult materials such as brick, a fast simple procedure. Benson, Menomonee Falls, Wisc. CIRCLE 232 ON READER SERVICE CARD



Aluminum siding with the look of sawmilled wood is available in a double-five width. The deep-embossed panels, available in a variety of colors, combine the appearance of wood with the benefits of aluminum. Material, with a Dymalar® or Tedlar® finish, needs little or no maintenance. Also, Akron, Ohio. CIRCLE 233 ON READER SERVICE CARD



Shingle with a random edge no cut-out design is available in a wide range of decorative colors including a fungicidal white. The easy-to-apply shingle with a built-in self-alignment notch on either end comes with 2" intermittent strips of Sun Set adhesive that withstands gale winds. Atlas Roofing, Meridan, Miss. CIRCLE 260 ON READER SERVICE CARD

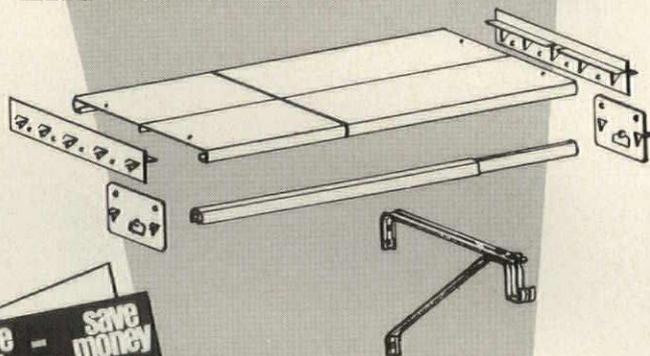


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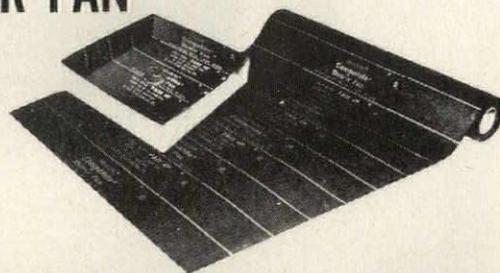
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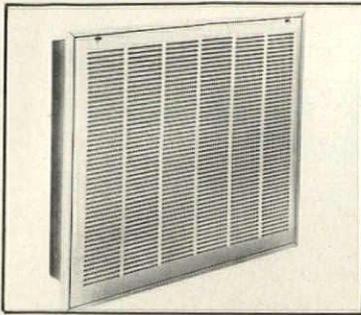
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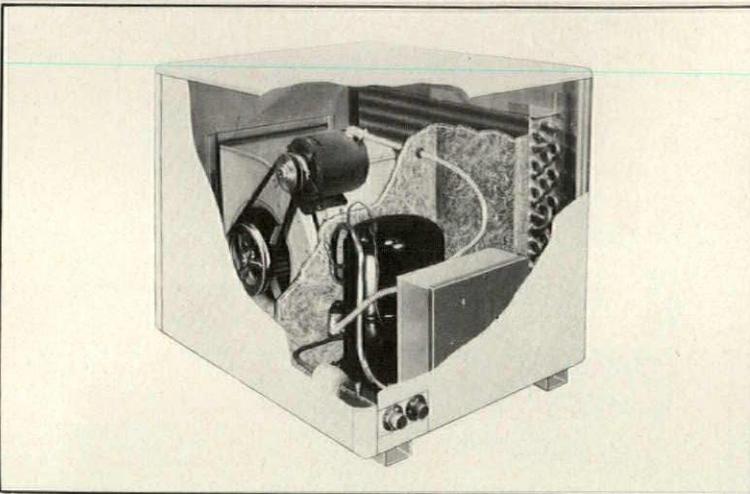
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CIRCLE 107 ON READER SERVICE CARD



Electronic air cleaner is designed for installation in homes equipped with single air-return grille for forced-air heating and cooling. The media-type two stage cleaner has disposable filters and a self-contained power pack. Available in 800, 1,200 and 1,600 cfm capacities, unit, with its own fawn beige grillwork, can be easily installed vertically or horizontally. Carrier, Syracuse, N.Y. CIRCLE 240 ON READER SERVICE CARD



Air conditioner, in a 3½ ton capacity, is designed for remote installation. Unit features a low maintenance, hermetically sealed compressor, built-in relief valves, internal electric overload devices and a two-speed, centrifugal-force blower. Factory-wired and -charged unit comes ready to install. Thermo Products, North Judson, Ind. CIRCLE 241 ON READER SERVICE CARD



Packaged terminal air conditioner, "Zonline II," features separate fan motors for indoor and outdoor sections to reduce noise and increase efficiency. Unit, shown with an optional woodgrained baffle, is available in standard or corrosion-resistant models in a wide range of capacities. General Electric, Louisville, Ky. CIRCLE 243 ON READER SERVICE CARD

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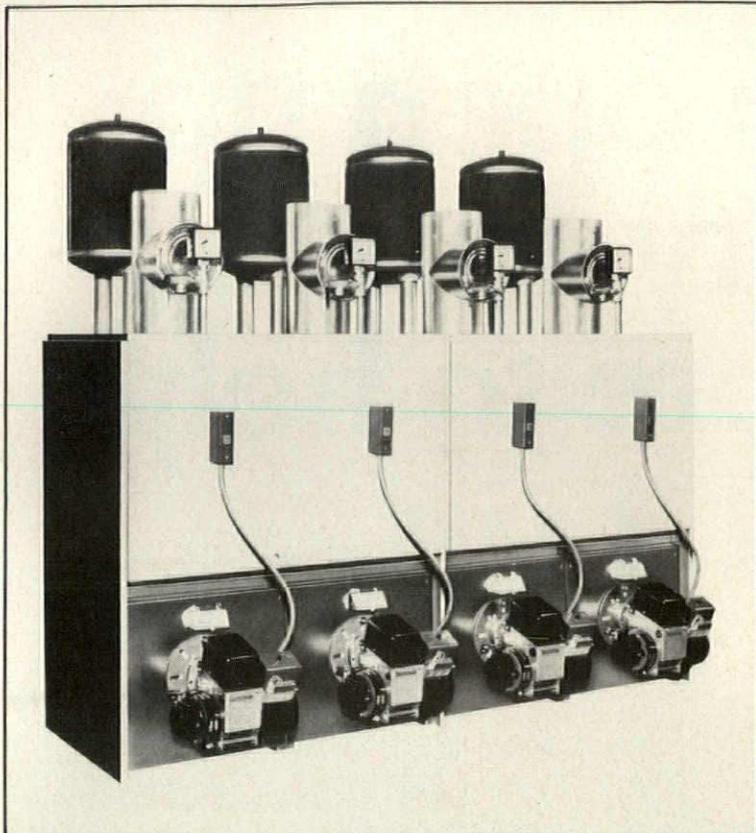
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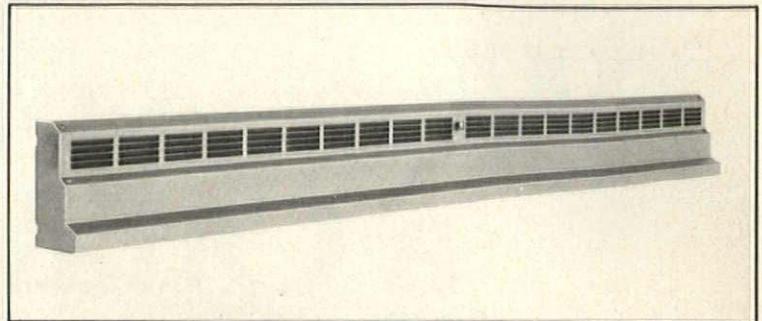
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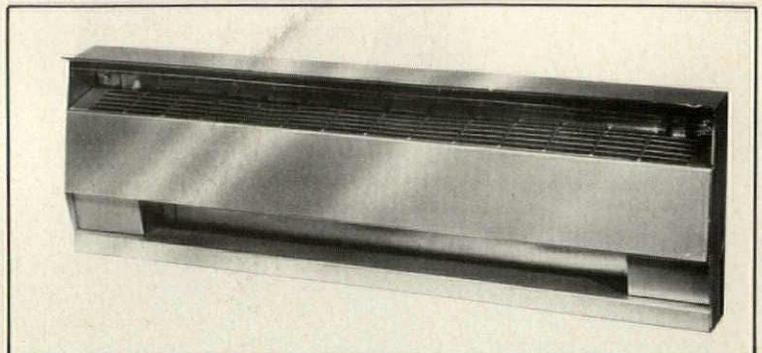
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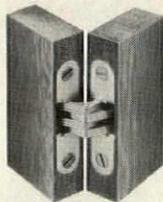
Oil-fired water heaters come in models with unlimited inputs starting from 175,000 BTUH. Units heat water instantly but indirectly by combining a cast-iron boiler with modular water-to-water heat exchangers. Heaters, operating on thermal gravity drive, need no circulators in the primary water circuit. Hydrotherm, Northvale, N.J. CIRCLE 242 ON READER SERVICE CARD



Baseboard diffuser and matching return air grille come in 24" and 48" lengths. Units feature automatic pushbutton damper controls. Pushbutton is turned to set the control at the balance desired. Then a touch of this button automatically opens the damper to the preset position or closes it completely. Lima Registers, Lima, Ohio. CIRCLE 244 ON READER SERVICE CARD



Easy-to-install electric baseboard heaters come in seven lengths ranging from 2' to 10'. Units feature four knockouts in each junction box and mounting slots in the back panel. Wiring can enter at any point under the heater. No relays are needed. An integral thermostat can be mounted on the baseboard. McGraw-Edison, Albion, Mich. CIRCLE 245 ON READER SERVICE CARD



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CIRCLE 110 ON READER SERVICE CARD

U.S. POSTAL SERVICE

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION [Act of August 12, 1970: Section 3685, Title 39, United States Code]

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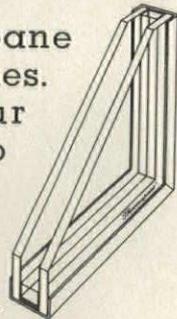
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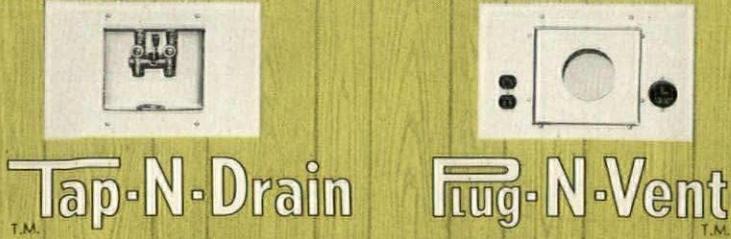
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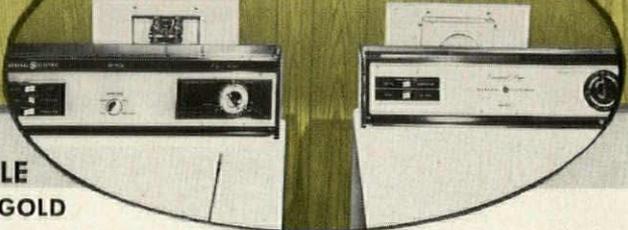
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FAIRFIELD, CONNECTICUT 06430

PRODUCTS/TOOLS, EQUIPMENT



High-speed reversible plate compactor compacts granular and cohesive soils to a depth of 30". A 10.5 hp Wisconsin-Robbin gas engine delivers 4,000 blows per minute with a 6,000 lb. force per blow. Unit, with an 18" sq. plate, features a "Touch-toe" control and swing-over handle. J.I. Case, Racine, Wis.

CIRCLE 246 ON READER SERVICE CARD



Automatic fastener, Spotbradder™, helps reduce downtime and speeds up production. The lightweight 3 lb. unit carries a 925-load coil cartridge of Spotbrads™. Cartridge snaps on instantly permitting almost continuous operation of the tool. Spotbradder™ drives 18-gauge brads from 3/4" to 1" in length and 18-gauge pins from 3/4" to 1 1/2" long. Spotnails, Rolling Meadows, Ill.

CIRCLE 247 ON READER SERVICE CARD

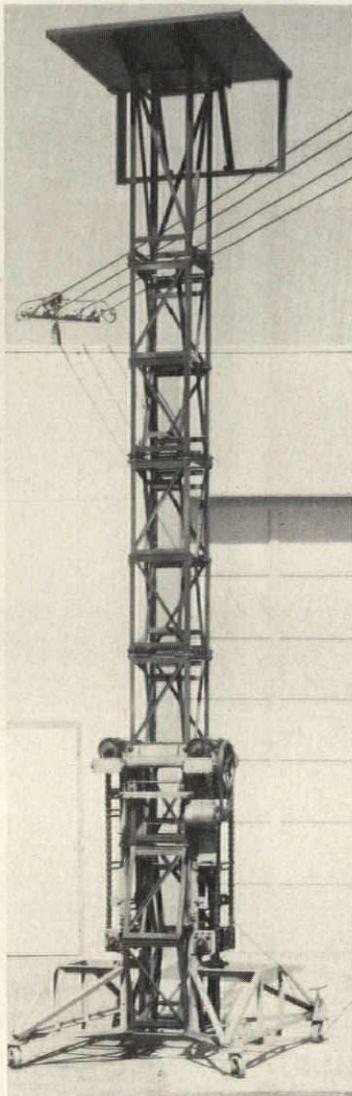


Heavy-duty, track-mounted trencher digs 6' deep and up to 24" wide with a 150,000 lb. test, multi-speed digger chain. Low-maintenance gasoline-powered unit features formed plate heavy construction and balanced design. It travels on wide, high-flotation, springloaded tracks mounted on seven-track rollers. Vermeer, Pella, Iowa. CIRCLE 248 ON READER SERVICE CARD



Rapid-firing pneumatic nailing head is available for custom mounting in equipment designed for automated woodworking assembly application. The unit drives 4" and 3 1/4" coated nails with either smooth or screw shanks. Tool is adaptable to remote firing by hand or foot switch. Duo-Fast, Franklin Park, Ill.

CIRCLE 252 ON READER SERVICE CARD



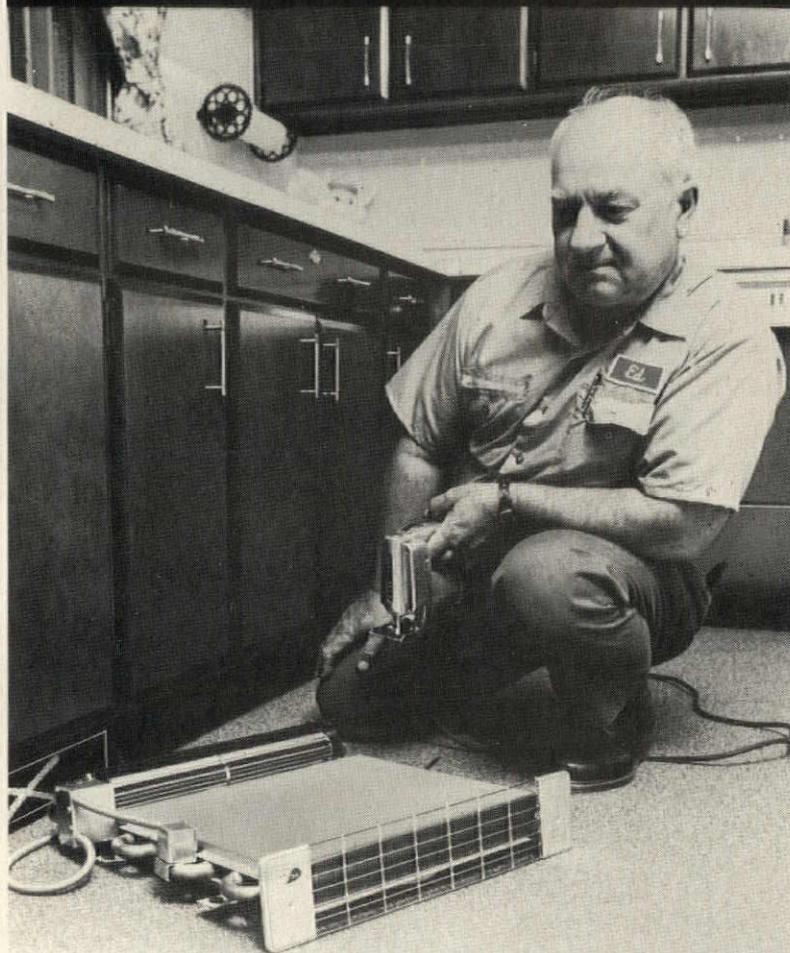
Systors lifting system permits the formation of portable service structures of almost unlimited heights. Box-type steel structures, locked into position, raise in a smooth uninterrupted motion creating a tower section. It is suitable for servicing buildings under construction. Mikulin Research, San Francisco.

CIRCLE 253 ON READER SERVICE CARD



Rough terrain forklift, with a 6,000 lb. lift capacity, is powered by a 63.7 hp Ford industrial tractor. Optional masts, providing lifting heights to 30'6", are available. Heavy-duty unit features a quick drive train disconnect that allows the forklift to be towed at road speeds with the drive train disengaged. BadgerDynamics, Port Washington, Wis. CIRCLE 254 ON READER SERVICE CARD

New compact hydronic heat package does the work of 20 feet of baseboard!



The Beacon-Morris *Twin-Flo* is an integral part of your hydronic heating system, just like baseboard or convectors. The difference is, it's compact, fits most anywhere, and *it literally pours out the heat.*

A 4" x 14" x 18" *Twin-Flo* equals 9 feet of baseboard. A slightly larger model equals 15 to 20 feet. You have 5 sizes and types to choose from to solve any hard-to-heat problem.

The rule is: if you've got plenty of room for baseboard, use it. If you don't, find a mere 14" in a cabinet kickspace, or over a door, in a stair riser, almost anywhere . . . and have your heating contractor install a *Twin-Flo*.

Technical details? *Send for them!*
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By BEACON-MORRIS

FEDDERS, first to meet the challenge

New Fedders E-Flex™ is today's full line of residential central air conditioning systems that already meets the efficiency standards being considered by the U.S. Government for 1975.

Fedders saw the energy crisis coming.

Fedders started doing something about it—a long time ago.

Now, after years of research and the expenditure of millions of dollars, Fedders has achieved an engineering breakthrough and arrived at a new and more efficient system of central air conditioning.

It's called the E-Flex System of central air conditioning.

What This Means to You

Major users of energy—such as builders of office and apartment complexes and large-scale residential builders—are in an energy squeeze. On one side there is the constant rise in the cost of fuels. On the other side is the dwindling supply.

A remarkable quality of the new Fedders E-Flex System is that it is the builder's answer to both these problems—rising costs and dwindling supply. Be-

cause an E-Flex System—by actual tests—requires less energy and makes better use of it.

So startling are the capabilities of new Fedders E-Flex to perform in both these critical areas that, in a feature article in the October 1973 issue of "Airconditioning & Refrigeration Business," editor Sam Milnark reports:

...“for a 200-apartment complex, it would cost the owner about \$10,000 to \$20,000 more (at \$50 to \$100 more for each system) but in 20 years he'd save \$150,000 on the average in electricity at today's rates.”

Since the Fedders E-Flex System will save you considerable sums of money at today's rates, think how much more it will save in the future. Right now, experts predict that within a decade the cost of electricity may double or treble, which means that costs for this energy source alone will rise from an average of 3 cents a kilowatt to 9 cents.

manufacturer of air conditioners of the **energy crisis**

Here's Evidence

Look at the table below. It compares the BTU-Watt efficiency ratios of new Fedders E-Flex Central Air Conditioning with the best and most efficient models (1-1/2 to 5 ton capacities) of five other leading manufacturers. As you can see, Fedders outscores them all.

Translate these energy-efficiency ratios into dollars and cents per month or per air conditioning season and you'll determine for yourself the exact amount an E-Flex Central Air Conditioning installation can save.

CENTRAL AIR CONDITIONING EFFICIENCY RATINGS
BTU PER WATT

CAPACITY BTU/HR	FEDDERS	SEARS	CARRIER	G. E.	LENNOX	YORK
18,000	8.18	6.2	7.5	6.66	—	—
24,000	9.60	8.27	7.5	7.27	7.27	7.01
30,000	8.56	7.89	7.14	8.33	7.89	6.67
36,000	9.23	8.57	7.35	8.78	7.66	7.06
42,000	10.00	8.40	7.77	7.77	7.92	7.37
48,000	10.00	8.42	8.0	7.16	7.50	7.38
60,000	9.52	7.79	7.50	9.37	—	—

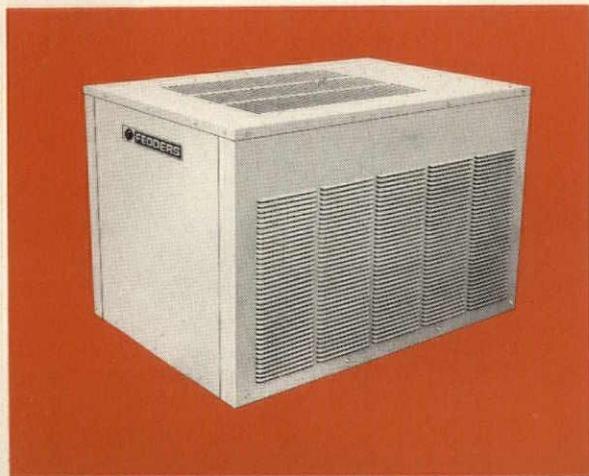
Competitive capacities and watts based on the Directory of Certified Unitary Air Conditioners, published by the Air Conditioning & Refrigeration Institute, August 1-December 31, 1973.

An E-Flex System for Every Use

Are there new Fedders E-Flex Systems with the right capacity for special builder needs? Yes. In fact, the E-Flex System was originally conceived for residential use and smaller commercial installations then later expanded to include units of large capacities.

Whatever your need, whether it is to air condition a 200-apartment complex or to cool an 8 room single family residence, the adaptability of the Fedders E-Flex System is remarkable.

You can combine it with a variety of Fedders vertical or horizontal evaporator blowers or—when gas, electric or oil heat furnaces are involved—with Fedders evaporator coils. The result in every case—large or small—is a custom-built air conditioning system whose unusually high efficiency gives you the lowest operating costs.



What Makes E-Flex Possible?

To oversimplify: at the heart of this revolutionary new system is a compact, smoother, more efficient method of compressing refrigerant gas—a rotary compressor. Coupled with this is a completely new arrangement of uniquely-matched components to create a condensing unit with the highest efficiency in the industry.

For complete information on the Fedders E-Flex Residential Central Air Conditioning System and equipment, circle the appropriate number on the reader reply card or write to Fedders Corporation, Woodbridge Avenue, Edison, New Jersey 08817.

See the E-Flex at the Fedders Booth Number 2220 at the NAHB Show, Houston, January 20 through 24.

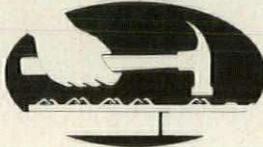
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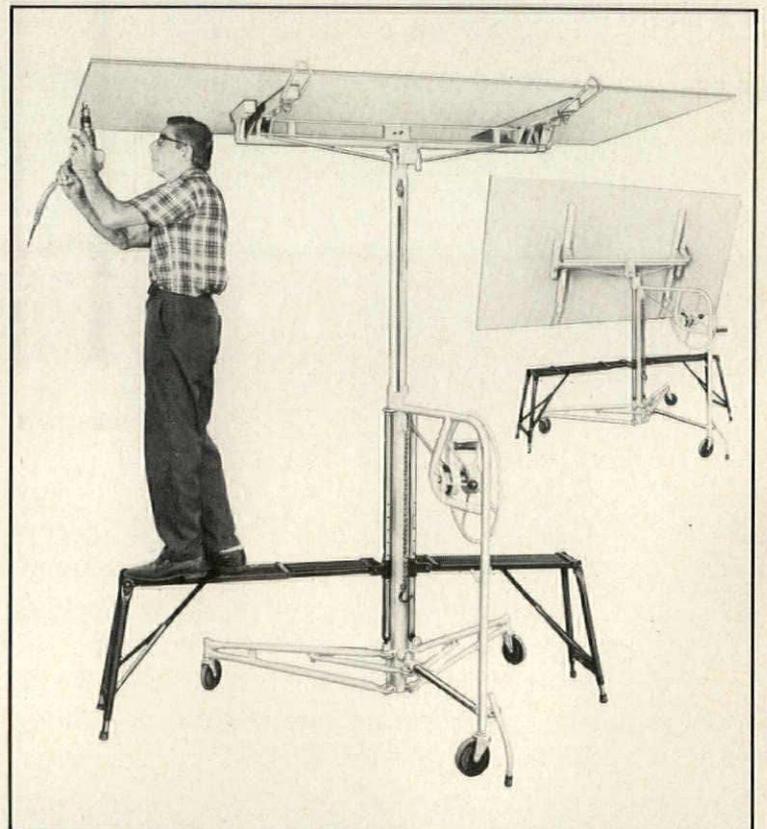
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CIRCLE 120 ON READER SERVICE CARD



Two-stage 8 hp snowblower is equipped with a single cylinder, air-cooled, four-cycle Briggs & Stratton gasoline engine. Unit, with three forward gears and one reverse, features a built-in differential for maneuverability and can be locked for positive two-wheel traction. Blower has a discharge radius of 270°. Homelite, Portchester, N.Y. CIRCLE 249 ON READER SERVICE CARD

Cordless 3/8" electric drill is driven by a self-contained power pack. Ideal for use in areas where electricity is not readily available, the tool has a charger unit that fully recharges the drill in 16 hours. Working at 800 rpm, tool is designed for light, intermittent use on wood and light gauge steel. Black & Decker, Towson, Md. CIRCLE 250 ON READER SERVICE CARD



Lifting device makes applying drywall to ceilings and sidewalls a simple one-man operation. "Panelift", weighing only 60 lbs., lifts sheets to a height of 11'6" and can carry up to 50 lbs. Unit, with a tilt-cradle for easy loading, positions sheet and holds it firmly, eliminating difficult balancing. Goldblatt, Kansas City, Kans. CIRCLE 251 ON READER SERVICE CARD

Arden Follin reports the local Maytag Route Operator took the whole laundry room problem off his back.

"Our residents prefer Maytags and we don't have any headaches," he states.

Silver Oaks is a complex of 281 garden-type apartments in the college town of Kent, Ohio.

"Before Maytag, we had another brand of washers and dryers, and frankly, service was a problem," says Mr. Arden N. Follin, President, Arden Follin Company.

"Our laundry rooms are small, but we have 35 of them, and when one is a problem it is a real headache for us," continues Mr. Follin. So in 1967 they turned the entire laundry operation over to Coin Rentals, Inc., the area's Maytag Route Operator.

"They did a lot of extra things," says Mr. Follin. "They really set up the laundry rooms for us. They painted, cleaned up, even built special folding tables. We like the way they do business."

There are now 70 Maytag Washers and Dryers at Silver Oaks. "Our residents have expressed a preference for Maytags," concludes Mr. Follin. In addition, the machines keep working with minimum maintenance.

Naturally, we don't say your experience will be exactly like that at Silver Oaks. But dependability is what we try to build into every Maytag Washer.

Many Maytag Route Operators offer a Total Operation Service that takes the whole laundry room problem off your back. Find out what this service, plus Maytag dependability, can do for you. Mail the coupon today.



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Please send complete information on how Maytag Washers and Dryers can help us have a smoother, more trouble-free laundry operation.

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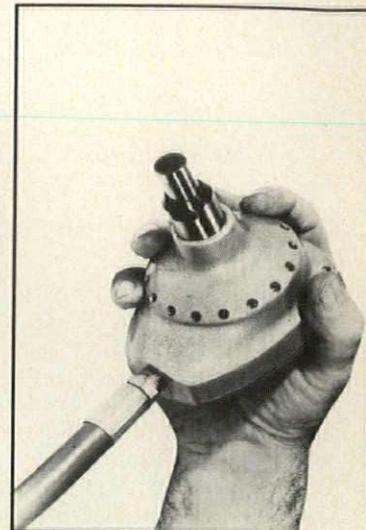
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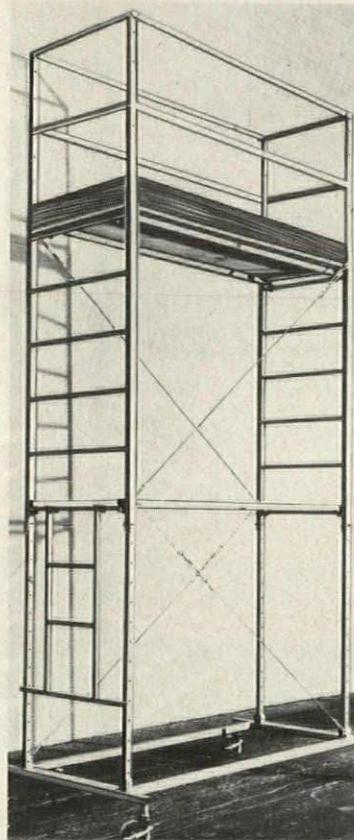
Electric hand tool combines the functions of the drill and the hammer drill. The "599 Xtra-tool" serves as a basic 3/8" drill powered by a 1/3 hp motor, a high frequency impact tool for chiseling, scraping and gouging and as a hammer-drill, particularly efficient in drilling concrete, brick and masonry. Skil, Chicago.

CIRCLE 255 ON READER SERVICE CARD



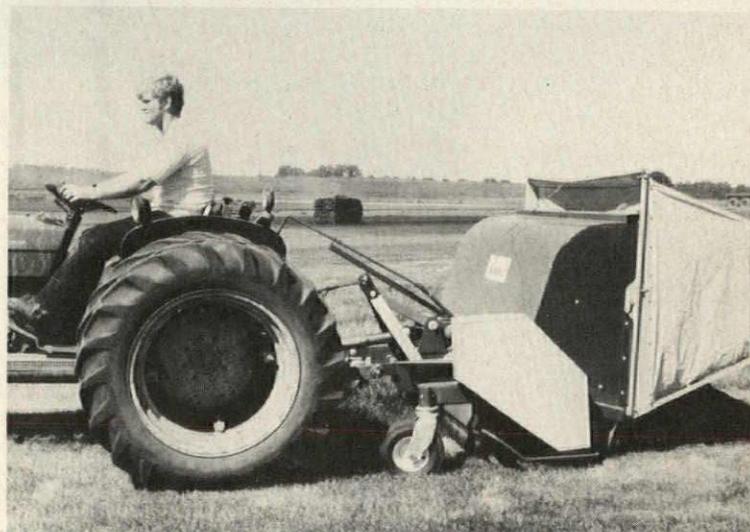
Pneumatic hammer is capable of driving 6d to 70d nails at a rate over three times as fast as conventional tools. Weighing only 2 1/2 lbs. and small enough to hold in the palm of the hand, the hammer operates without a trigger. Slight pressure against the nail begins the driving cycle. Teco, Washington, D.C.

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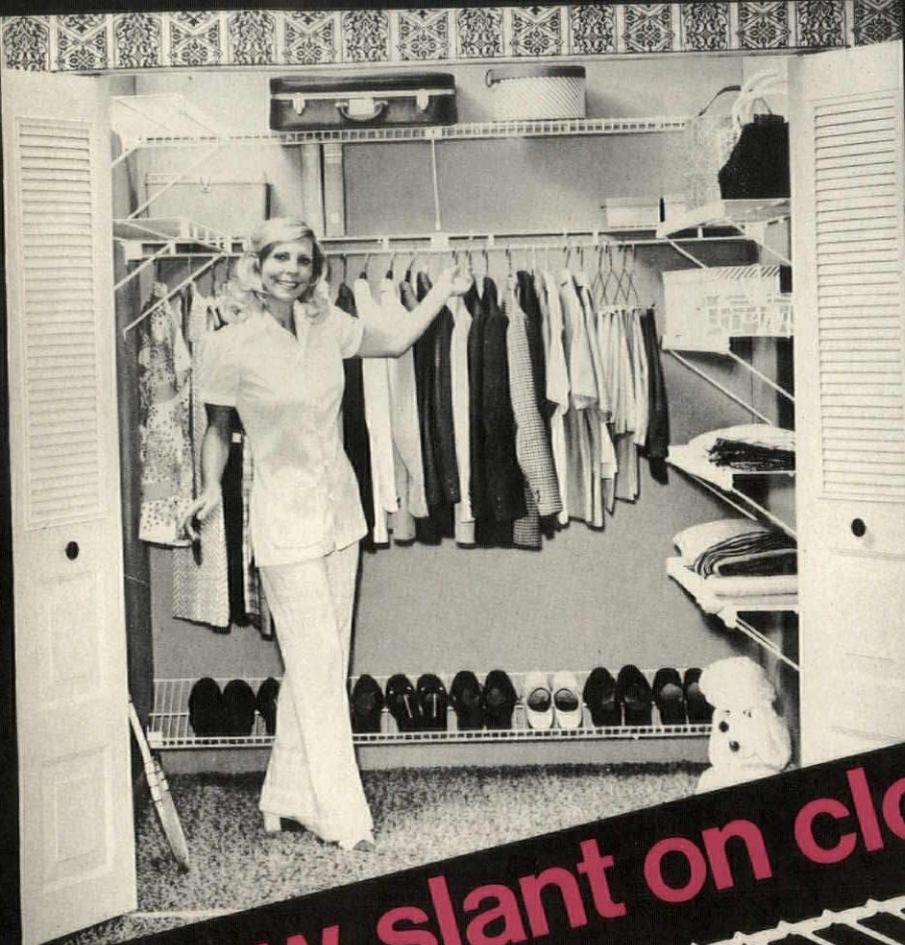


Telescopic scaffold features heavy-duty casters, built-in outriggers, an access ladder that locks to the unit and permanently attached cross braces. Unit, with only 5 parts, can be quickly assembled or disassembled by one man with no tools. Platform height adjusts from 17" to 8'. Fairfield, West Caldwell, N.J.

CIRCLE 257 ON READER SERVICE CARD



Self-powered, PTO-driven "Lawn Genie" mows and sweeps expansive lawns. The 6'-wide unit, designed to be attached to a tractor with a three point hitch, features a floating linkage so that it follows the terrain not the tractor. Mower has a patented rotor and 76 free-swinging knives to cut thick, heavy growth. Matthews, Crystal Lake, Ill. CIRCLE 258 ON READER SERVICE CARD



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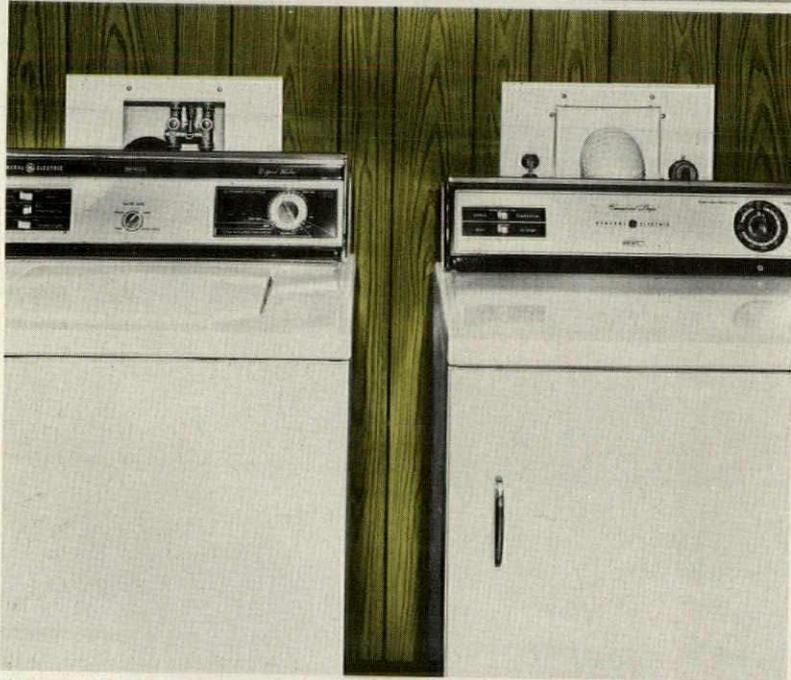
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Install at construction time.*



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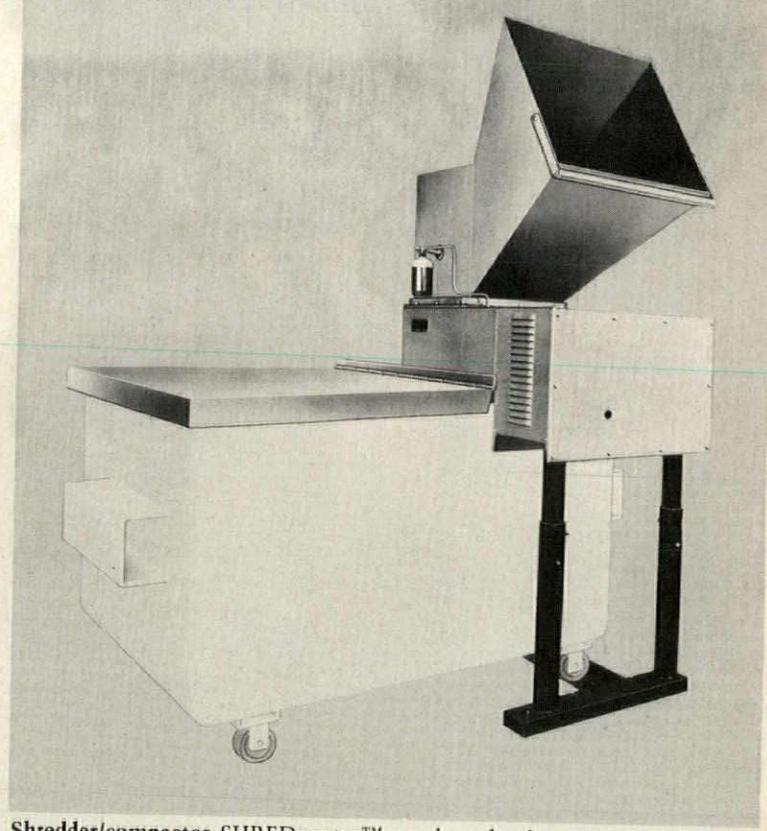
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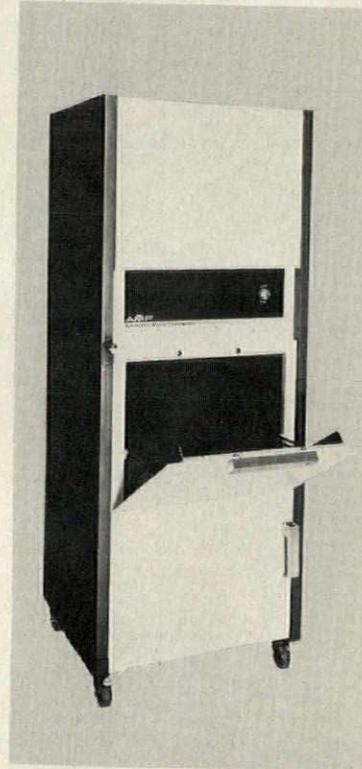
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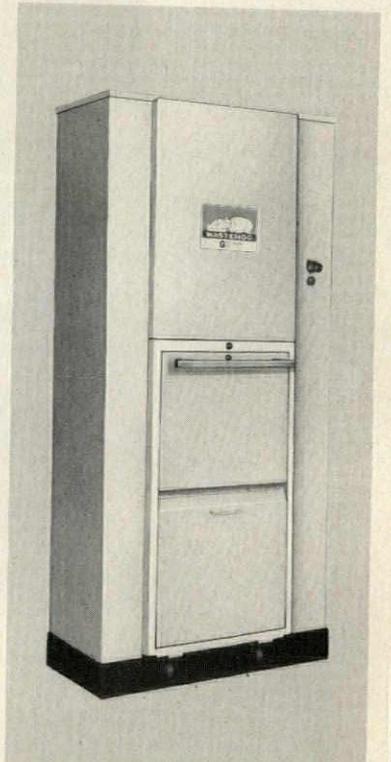
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Heavy-duty waste compactor uses a 1/3 hp motor to compact refuse with a ram force of 6,000 lbs. The mobile unit, with key-lock controls and a positive interlock system, stores refuse in a 5 cu. ft. container. The 74" high, 28" wide and 25" deep compactor can be used in limited space installations. AMF, Essex, Conn. **CIRCLE 235 ON READER SERVICE CARD**



Vertical compactor, "Wastehog DD" is for buildings that generate a volume of solid waste. The low-cost unit fits into a wall to be loaded with trash from either back or front and is adaptable to new or existing trash chutes. It features a built-in double cylinder for even ram pressure. G&W Auto-Pak, Red Lion, Pa. **CIRCLE 236 ON READER SERVICE CARD**

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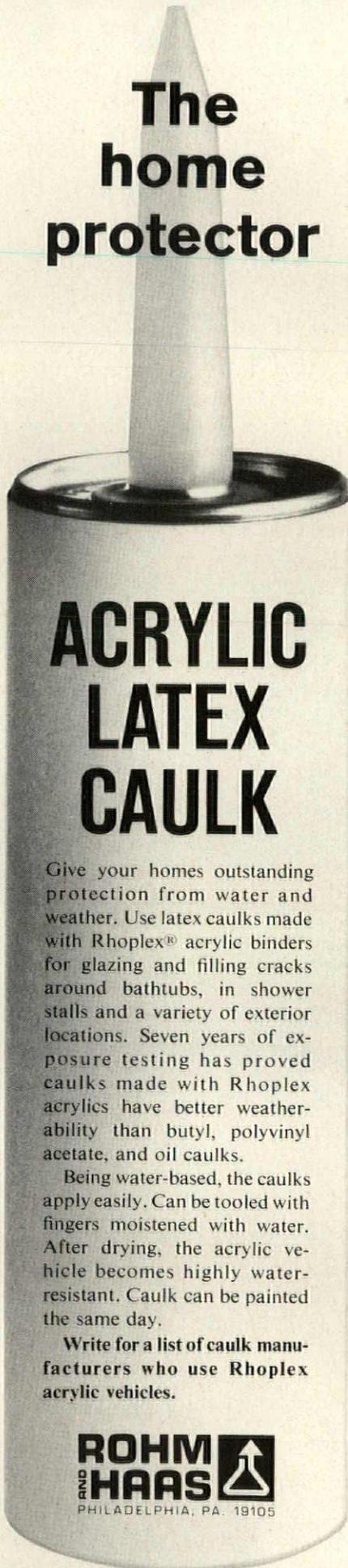
So when you're looking at features, look at the one that can do a lot to help sell your house. Look

at Moen faucets and valves. For details, see your plumbing sub. Or write Moen, a Division of Standa-dyne, Elyria, Ohio 44035.

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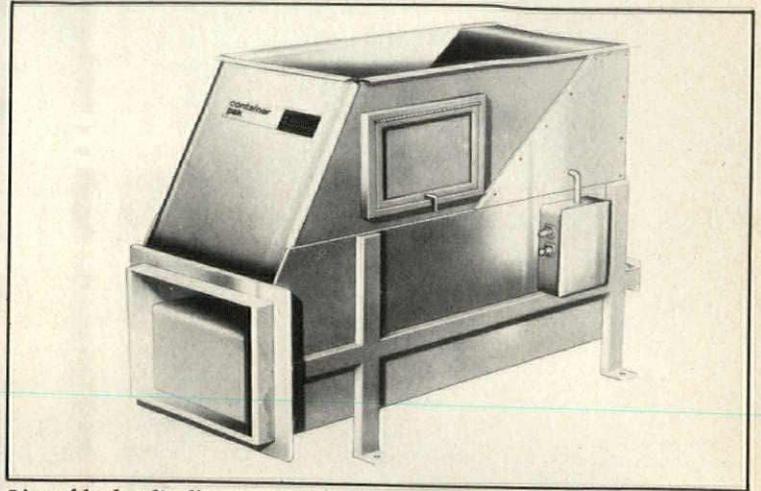
Being water-based, the caulks apply easily. Can be tooled with fingers moistened with water. After drying, the acrylic vehicle becomes highly water-resistant. Caulk can be painted the same day.

Write for a list of caulk manufacturers who use Rhoplex acrylic vehicles.

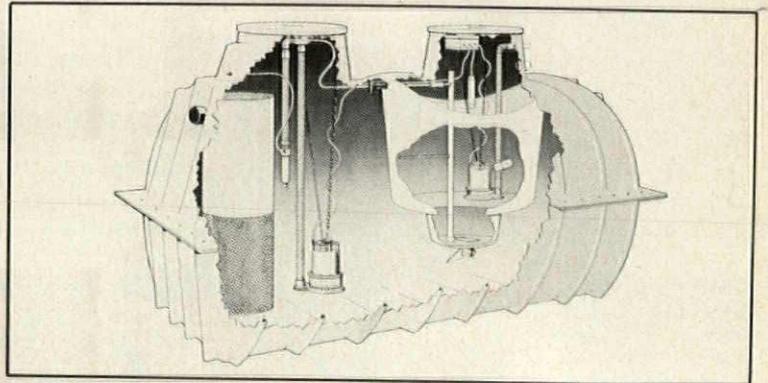


CIRCLE 126 ON READER SERVICE CARD

PRODUCTS/ENVIRONMENTAL



Line of hydraulically operated trash compactors is for high volume applications. The rugged "Container Paks" are especially suited to apartment building use. Units, which can be hand or chute fed, automatically fill and compact trash into caster-mounted containers for collection by loader trucks. Maxon, Huntington Park, Calif. CIRCLE 237 ON READER SERVICE CARD

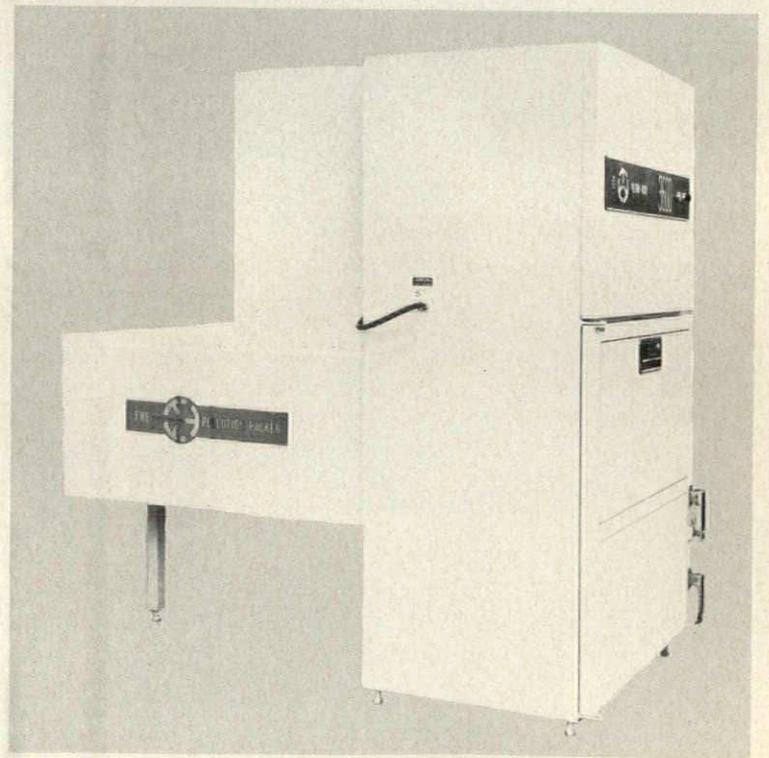


Aerobic wastewater treatment system has low maintenance submersible pumps. Approved by the National Sanitation Foundation, the system is fail-safe, as pump failure sets off an alarm and causes a malfunction of plumbing instead of the discharge of untreated waste. Cromaglass, Williamsport, Pa.

CIRCLE 238 ON READER SERVICE CARD

Automatic chute-fed compactor is designed for apartment building application. Waste and refuse passing a time-delayed electric-eye inside the chute activate the compaction cycle. Unit can be fed through the hydraulically operated rear chute or hand-loaded from the front. The Tony Team, Minneapolis, Minn.

CIRCLE 239 ON READER SERVICE CARD



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price is \$ _____.

LITERATURE

Gas meter remote reading system is described in a four-page brochure. Illustrations of the unit and its installation accompany sections covering construction materials and method of operation. Singer, Philadelphia, Pa.
CIRCLE 310 ON READER SERVICE CARD

Safety rules for on-the-job use of power tools are presented in illustration and text in a brochure. This folder is part of a complete safety program developed by the Power Tool Institute in cooperation with the National Association of Homebuilders, the United Brotherhood of Carpenters & Joiners of America and the National Institute for Occupational Safety & Health. It includes the basic rules mentioned above, a safety check out and maintenance procedure for power tools and a list of contractor responsibilities relating to power tool safety. The Power Tool Institute, Mt. Prospect, Ill.
CIRCLE 302 ON READER SERVICE CARD

Bathroom planning hints and suggestions, plus illustrations and text descriptions of bath units fill a 12-page design guide and 32-page full-color booklet. A color-selection chart is included. To assist in visualizing arrangements, the brochures are accompanied by scaled fixture cutouts to be arranged on a supplied

grid. Thus, although the kit is oriented toward the consumer, it can be a valuable aid to the builder in discovering his client's requirements. American Standard, New Brunswick, N.J.
CIRCLE 301 ON READER SERVICE CARD

PVC window hardware is featured in a four-page folder. Illustrations, diagrams and text are used to describe the unit. A custom design service is discussed. Profile Extrusions, Hastings, Minn.
CIRCLE 306 ON READER SERVICE CARD

Early-warning fire detector is featured in a four-page folder. An illustration compares effectiveness of this model with different types of detectors and a self-monitoring feature is discussed along with other unit characteristics. Specifications are included. BRK Electronics, Aurora, Ill.
CIRCLE 307 ON READER SERVICE CARD

Steel exterior doors are featured in a 16-page, full-color catalog. Product details, specs and design selections are presented in text and illustrations. Steelfcraft, Cincinnati, Ohio.
CIRCLE 312 ON READER SERVICE CARD

Alarm equipment catalog—listing 400 intrusion and fire alarm products—includes specifications, illus-

trations, and application information as well as prices. The 80-page booklet describes units ranging from relatively simple kits to ultrasonic, radar and infrared intrusion detectors. Mountain West Alarm, Phoenix, Ariz.
CIRCLE 311 ON READER SERVICE CARD

Heating products catalog lists residential and commercial/industrial units. Included are electrical baseboard heaters, thermostats, forced-air and versatile unit suspension heaters. Specs, application information and prices are listed. Federal Pacific Electric, Newark, N.J.
CIRCLE 313 ON READER SERVICE CARD

Shake and shingle panels are illustrated on a single page. Photographs of actual installations, representations of available textures and application details are presented. Shakertown Corp., Cleveland, Ohio.
CIRCLE 305 ON READER SERVICE CARD

Water control systems for landscaped areas are presented in a 15-page, binder-hole-punched brochure. Features of individual systems—including flexibility, reliability, maintenance, durability and cost—are described. Step-by-step instructions tell how to design a system, using proper equipment, for maximum efficiency. Photographs,

charts and illustrations complement the text. Griswold, Santa Ana, Calif.
CIRCLE 306 ON READER SERVICE CARD

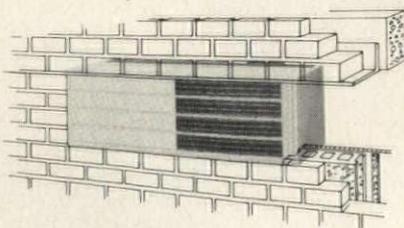
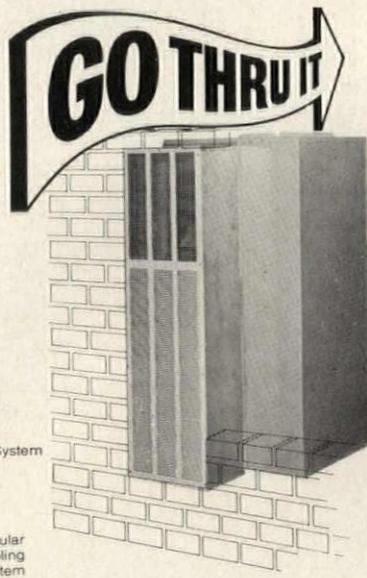
Carpet care for heavily trafficked areas is detailed, with suggestions for the use of specific equipment and chemicals for special problems included. Cleaning machines, such as shampooers and vacuums, are described and illustrated. Multi-Clean, St. Paul, Minn.
CIRCLE 309 ON READER SERVICE CARD

Metal wood connectors, truss and joist components for floor and roof systems and production machinery for component fabrication are described in a full-color booklet. Sanford, Pompano Beach, Fla.
CIRCLE 308 ON READER SERVICE CARD

Modular electric heating system is described in a full-color folder, which includes illustrations and specs. American Stabilis, Lewiston, Me.
CIRCLE 304 ON READER SERVICE CARD

Console humidifiers, in fine-furniture-looking cabinets, are featured in full color. Each model displayed is accompanied by a full list of unit particulars, including information on filling, speeds, operation, cleaning and cosmetic features. Vernco, Columbus, Ind.
CIRCLE 303 ON READER SERVICE CARD

if space and cost limitations have you against the wall...



with Climatrol heating and cooling

Climatrol Thru-the-Wall design concepts for heating and cooling can reduce your project expenditures in these important ways...

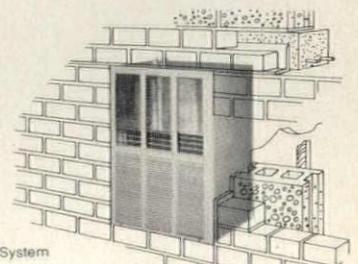
- savings... with no chimney costs
- savings... in on-site labor costs
- savings... with no-slab costs
- savings... on fire retardation code requirements
- savings... with on-site service, without unit removal
- savings... on inside work during bad weather
- savings... with Climatrol's compact, 4 ft. size—needs no special equipment room
- savings... with quicker tenancy and rental income



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Consider Climatrol's multitude of unique engineering adaptations *before* you start your next job. For 111 years we've been building products to heat and cool what you build. No matter what you build, where you build it, or the fuel you use, there's a Climatrol answer to your air conditioning needs... 3696 different Climatrol models.

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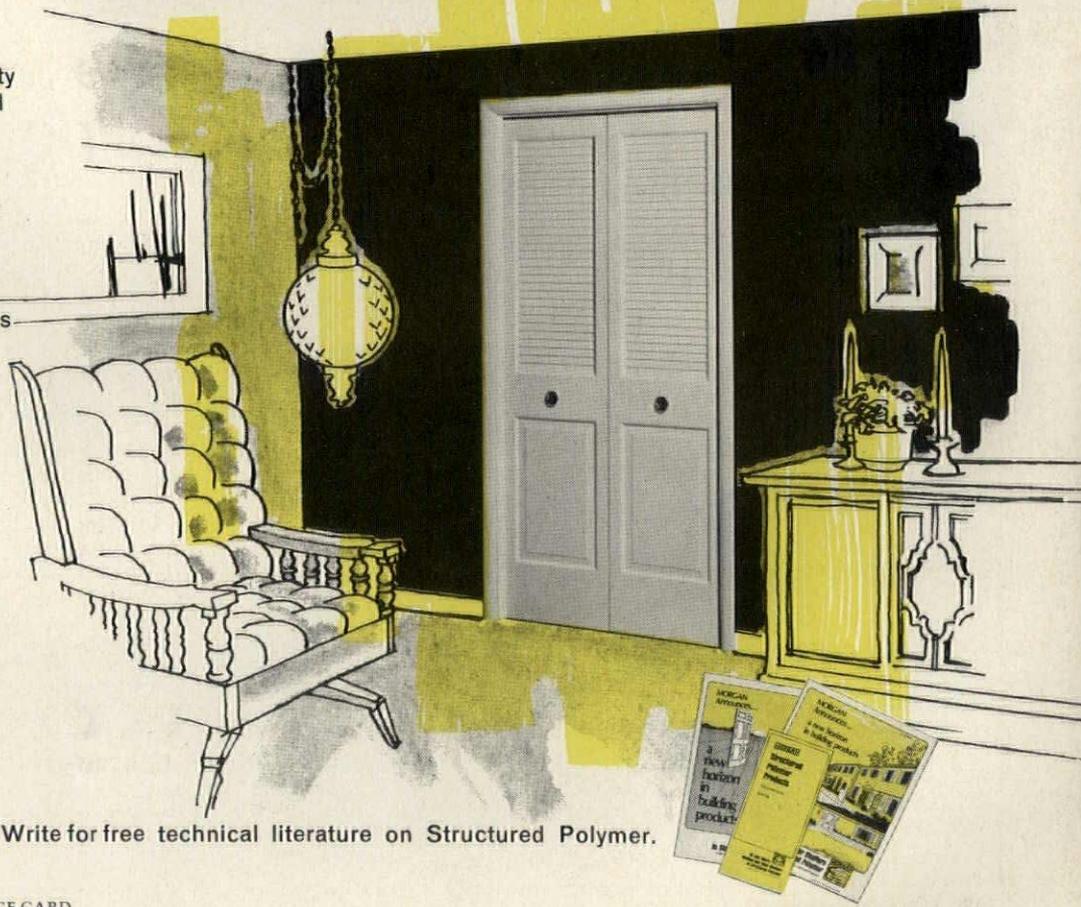


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- A Architectural File (green)
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