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JULY 1966



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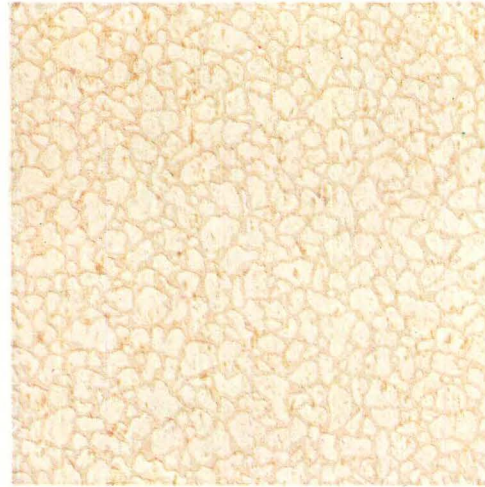
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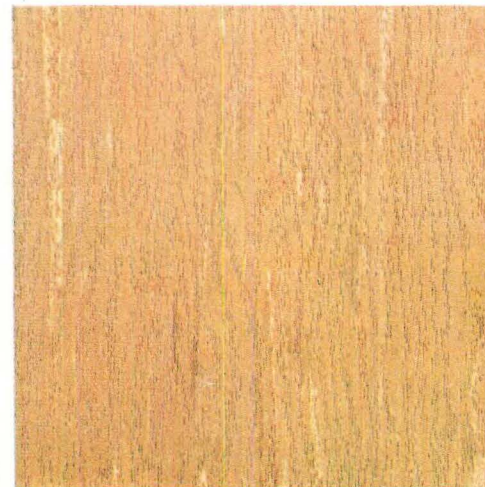
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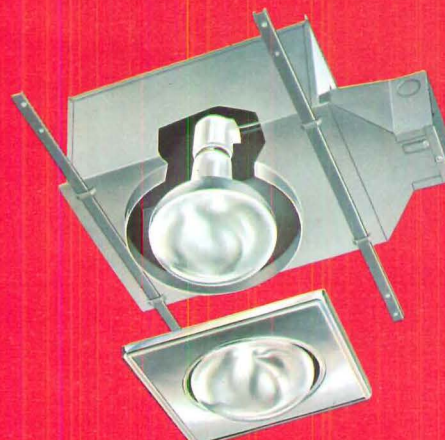


*Electric
Heaters*

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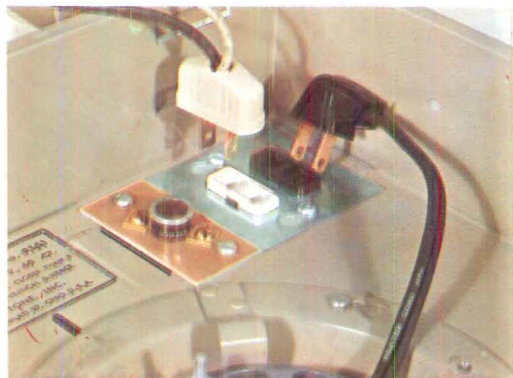


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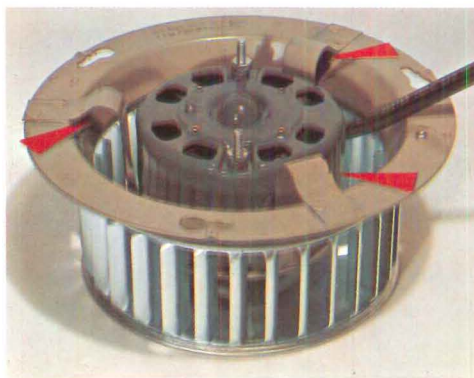
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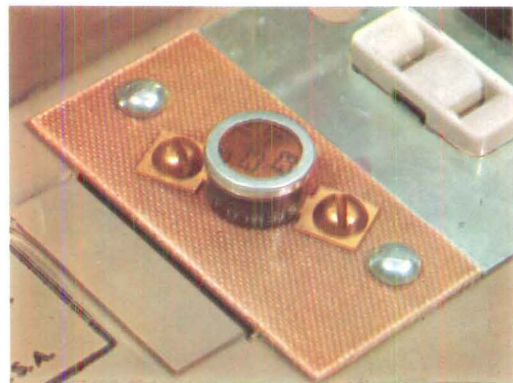
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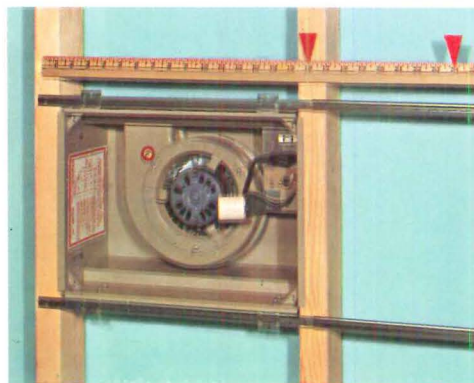
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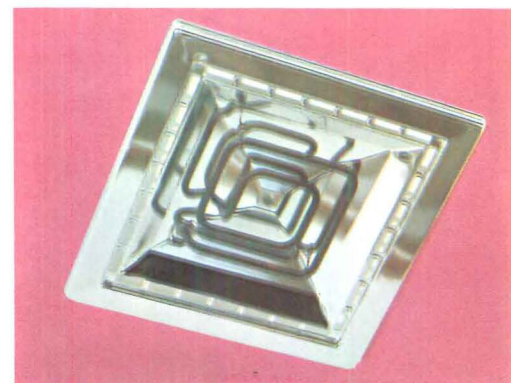
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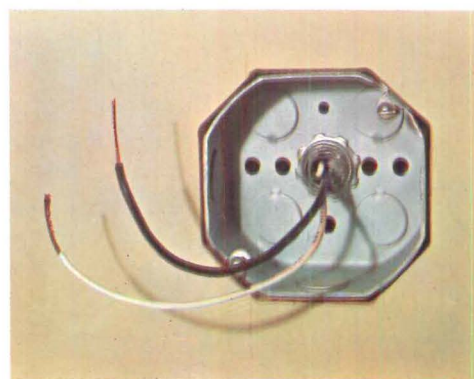
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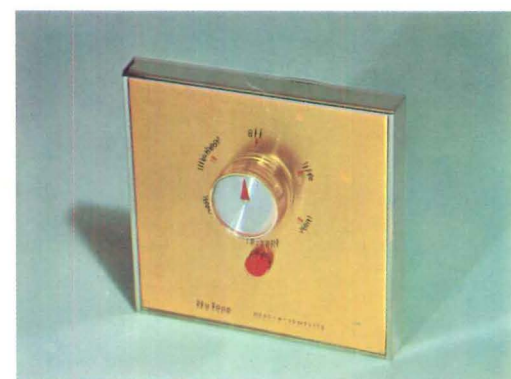
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House & Home

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VOL. XXIX NO. 7

JULY 1966

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Open occupancy: it could be the key to bigger housing markets . . . 63

Homebuilding's annual production could almost double when—inevitably—minority and low-income families finally get a free choice of housing

LAND

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Only 123 acres—but they'll include mixed housing types plus recreation, shopping, and greenbelt areas. Here's how the builder sold the town on his plan

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This annual report tells why. It's significant to everyone in housing because the public companies are the industry's face to the men who control money

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Its function: to speed up planning and tighten control. Its special equipment: visual aids that any builder could install and use. Its total cost: \$2,000

NEWS

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Backed by producers, they press appeal to pension funds for mortgage money. But FNMA orders higher discounts to dim hopes of government relief (p. 23) Also: FHA gives a coming out party for rent supplements . . . San Francisco plumbers to get \$372 weekly . . . Utilities tangle over big loan to apartment builder . . . Canadian builder brings out prefab under \$10,000 . . . *Complete NEWS index on p. 5.*

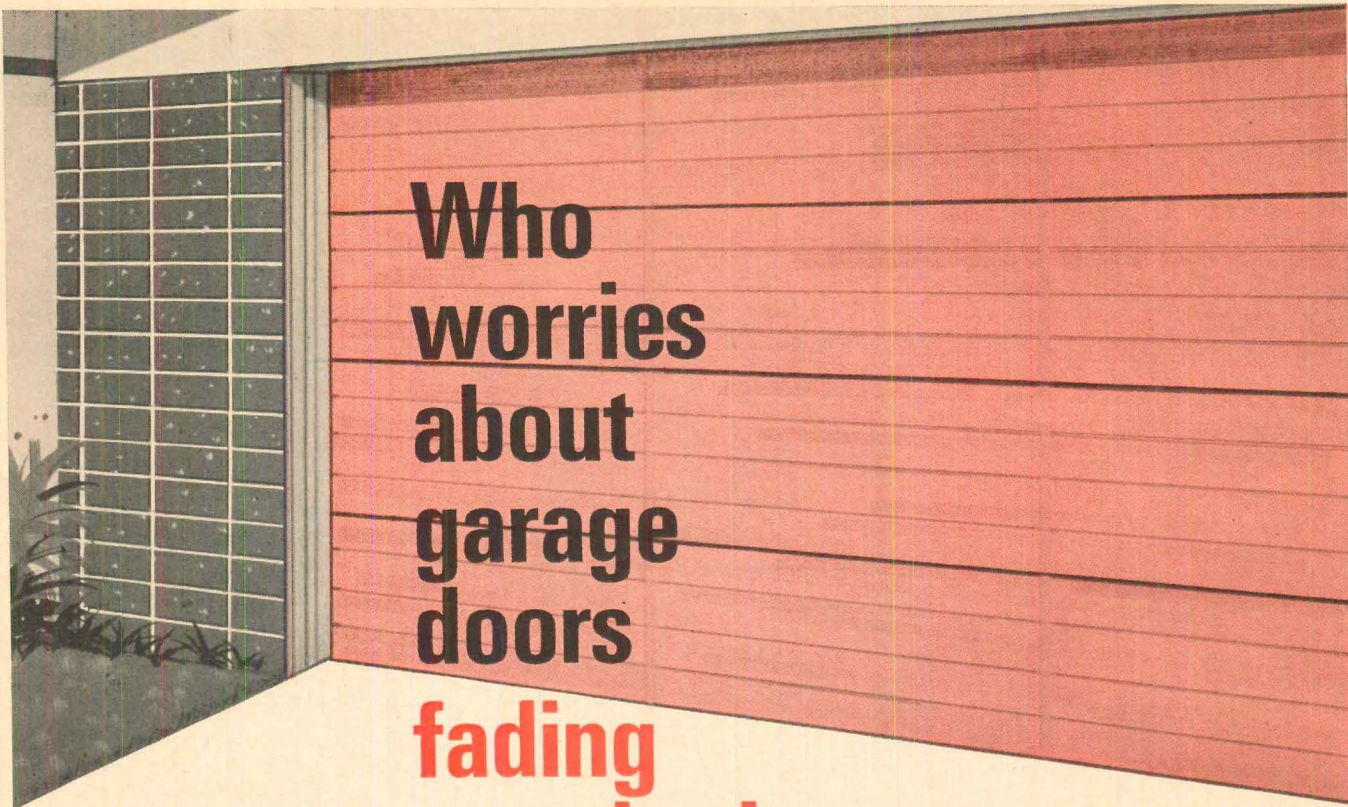
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Cover: AIA Honor Award house in Guilford, Conn. Architect: Bruce Porter Arneill. Builder: Erwin C. Griffiths. Photo: Maris-Ezra Stoller Assoc. *For story see p. 72.*

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Design ideas for multi-family housing—from 13 award-winning apartments and townhouses . . . Construction shortcuts for remodelers—practical methods from five specialists in urban rehabilitation . . . Tricks of the trade from a topflight air-conditioning contractor . . . How a 650-house-a-year builder avoided the pitfalls of rapid growth



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WASHINGTON WIRE

Non-enthusiasm for bold thoughts

Congress just isn't warming to President Johnson's "demonstration cities" idea—even the boldest-thinking legislators. The Administration is renewing pressure for a housing bill that includes all the original LBJ ideas, but observers are betting the final bill will provide little more than some urban renewal money earmarked for planning demonstrations of slum cleanup.

High design

San Francisco Architect George Rockrise, FAIA, a frequent award winner in AIA-HOUSE & HOME design programs, will become special adviser for design to Housing Secretary Robert C. Weaver.

Anti-bias bill sidetrack?

Testimony mounted last month against President Johnson's anti-bias housing bill, although several civil rights disturbances gave impetus to other parts of the civil rights package. Major objections came from both sides: a NAREB spokesman called the proposal "pie in the sky", while Sen. Jacob Javits (R-N.Y.) asked the president to invoke his executive authority to speed action without passing a bill. Outlook: no passage this year.

Anti-inflation appraisals?

FHA spokesmen deny allegations being made privately by realty men that the agency's appraisers have been ordered to hold down appraised values of houses as an anti-inflationary maneuver. Realty men point to the increase in appeals of FHA valuations as proof. FHA statistics show appeals up slightly during the first three months of this year but FHA officials say this happens whenever money tightens.

Plastic bathtub OK

FHA has now approved plastic bathtubs for use in FHA-insured homes throughout the country, based on slip, scrub, and scratch tests. FHA still approves plastic shower stall and lavatory units only on a test basis.

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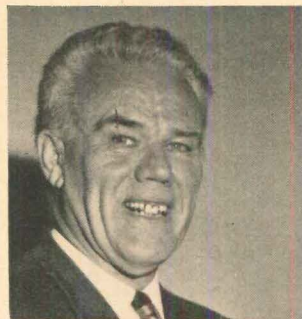
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Walter Daran



VINER

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AHMANSON

Tighter money: builders press appeal to pension funds for mortgage credit

Crying has not helped. So—at long last—the builder is up and moving.

The first counterattack against the building industry's tightest money squeeze since 1929 is under way in California, the nation's most depressed homebuilding state.

Executive Vice President Bill Leonard's Associated Home Builders of Greater East Bay is offering union-management funds a complete home financing program reviving the mortgaging industry's old standby commitment. The builders ask the funds to guaranty a firm take-out on a builder loan for 12 months, at a price of 94, in return for a 1% fee.

The program was put together by building, mortgage banking, and s&L leaders called into emergency session by the builder chapter after numerous California s&LS had halted all lending. Several associations had also been accused of renegeing on commitments (NEWS, June), and starts in the nine-county Bay Area were off 40% for the first four months.

Mortgage Banker Ray Lapin and others at the crisis meeting also decided to support a conference this month of all unions allied with construction in the state. The purpose: to save the Bay Area's homebuilding industry and its 50,000 jobs by getting union pension funds to invest in FHA-VA and conventional loans.

'Buy a home' drive. Meanwhile, speakers told 2,000 conferees at the Pacific Coast Builders meeting that, with inflation in sight, there will never be a better time to buy a house in California. Ray Watt, Ben Deane, Larry Weinberg, and half a dozen other big builders announced a massive public relations campaign on the theme, "Now's the time to buy a house."

Help from producers. Builders got an assist from one major materials producer, and prospects appeared good for wider support. Financial officers of materials producers have discussed asking their pension fund trustees to channel money into mortgages, now returning their highest yields since 1960.

"The building materials companies have to be more aggressive in seeing that more mortgage money is made available to residential building," says Financial Vice President John Schlick of U. S. Plywood. "It is time they woke up and started con-

trolling their own funds where it will help."

New techniques. Schlick disclosed some novel techniques for builders. One closely resembles the California standby commitment. U. S. Plywood is considering using its relationship with a major bank to help Hawaiian mortgage lenders cover mortgage loans from its Hawaiian building subsidiary, Lewers & Cooke, which can't find mortgage money for 200 willing buyers. After a year, the bank can sell the loans, and U. S. Plywood would take back money it borrowed to cover the loans.

All that cash. The building industry's new appeal to pension funds focuses attention on the funds' fantastic growth. Private funds* brought \$80 billion in assets into 1966, and they expect to have \$150 billion by 1980. Fifteen years ago the funds held no mortgages, but mortgage holdings are now 5% of their portfolios, and some funds have up to 15%. The private funds have been moving away from cash and government bonds, and an opportunity for mortgages is present — if restricted.

President Arthur Viner of Investors Central Management Corp. of New York, which buys mortgages for several of the larger funds, points out that many funds already have banks as trustees. Today's cash shortage in the banks is merely a reflection of a similar shortage among pension funds whose money the banks invest. Several pension funds are loaned up, and competition will be severe for any new cash the funds generate.

The calamity talkers. Yet the builders' grass-roots campaign was at least a resort to action, and it contrasted sharply with the long litany of complaint voiced by the industry's national leadership. Using the House banking committee's dais as a wailing wall, executives of NAHB and the U. S. S&L League made the spring months one long April shower of tears.

Certainly the situation was acute. S&LS had lost \$746 million and the savings banks \$341 million in April, although the banks gained \$105 million in May. California, which used to build one of every five single-family houses in the U. S., lost

* Public, or state and local government funds, hold another \$30 billion, but restrictions prevent most of them from mortgage investment.

\$400 million in s&L savings in April and \$300 million in May. National s&L lending for the first four months was only \$7 billion, off 2%, and almost all associations in California had stopped lending.

But in their desperate effort to win legislation restricting the commercial banks' use of 5½% certificates of deposit (CDs), which they blame for luring away savings, the s&L leaders were not content to state accomplished fact. They went on to predict calamity for the rest of the year.

'Severe cutback.' Executive Vice President Norman Strunk said s&Ls might make 100,000 fewer construction loans this year, forcing single-family starts down to 800,000 (from 940,000). The current slump in starts (off 4% in April) is only the beginning of a major slump throughout the industry, he warned. Strunk's boss, President C. A. Duncan Jr., reported that s&L loan commitments fell 20% (from 1965) in April and 50% in May, and he added: "This foreshadows a severe cutback in homebuilding and real estate."

Financial journals noted in vain that most of the thrift industry's savings loss was not going into commercial banks.† President Larry Blackmon of NAHB bewailed the "fierce and unfair competition" from CDs** and said: "The sharp decline [in building] which will occur late this year has not been recorded yet."

Even NAHB's economists turned up some

contrary evidence. Said NAHB Executive Vice President Nat Rogg: "First, expenditures for new plant have jumped 18% over 1965; and LBJ's words of restraint did no good at all.

"Second, stocks and bonds have pulled a good hunk of money from mortgages. In 1965 we [the public] bought \$3.4 billion [of stocks and bonds], but the rate jumped to \$13.4 billion in first quarter 1966."

Half a loaf. After the crying jag the House committee voted, by 19 to 2, to support a modest limitation of 5% interest which have been offered in amounts down to \$19.95. Such a mild solution was nothing like the limits sought by the s&Ls and their champion, Rep. Wright Patman (D., Texas), but it moved the highly responsible financial journal *Barron's* to observe tartly:

"Even Wright Patman can't lose them all. Owing to an outbreak of panic among U. S. homebuilders and mortgage leaders, whose leverage in Congress yields to no man's, the freeswinging Texan has latched on to what looks perilously like a winning

† "There is no evidence . . . that mutual banks and s&Ls have lost deposits primarily because of commercial bank competition," says the *Monthly Economic Letter*, First National City Bank of New York, June, 1966.

** NAHB has \$1 million of its own funds in CDs, has firmly resisted members' suggestions that it might better serve homebuilding by switching it into an s&L.

issue. With their support he is pushing various proposals which would lower the interest rates paid by commercial banks. . . ."

Blackmon got somewhat further with his plea to support a bill by Rep. William Widnall (R., N. J.) to let the Treasury buy \$110 million more of the stock of the Federal National Mortgage Assn., thus expanding FNMA's authority to buy mortgages in the secondary market by \$1.1 billion. (It buys on a 10-to-1 ratio).

A need for giants. Amid all the blues music there was heard one optimistic note, long overdue among the s&Ls. It came from, of all places, the harried state of California. Said Howard Fieldstead Ahmanson, outright owner of the \$2-billion Home s&L of Los Angeles:

"What's this talk of an s&L pinch?"

Ahmanson had solved his savings problem in April by paying 5% on deposits. His accounts gained \$18 million that month while the nation's s&L accounts fell 0.7%. He gained another \$15 million in May. He is lending \$30 million a month and will continue to do so for all of 1966. While many of the state's other s&L men are laying off loan officers (Bart Lytton dropped 170) or sending back loans that had already been approved for processing, Ahmanson is busy on a new advertising campaign. The theme:

"Business at Home is fine, thank you."

California view: the flight of hot money burns builders

Since 1963 falling housing starts in California and ten other western states have dragged down the national housing totals (see graph).

The tight money pinch has now hit the state's s&Ls, who have always depended upon importing Eastern money—the so-called hot money that follows high interest. But when Eastern banks began topping the s&L interest rates this past spring, the hot money fled. California s&Ls lost 2%—or \$468 million—of their savings in April.

Against that backdrop 2,000 builders and manufacturers' representatives were thoughtful and worried when they met last month at the Pacific Coast Builders Conference in San Francisco. Their mood wasn't brightened when the conference considered these hard realities:

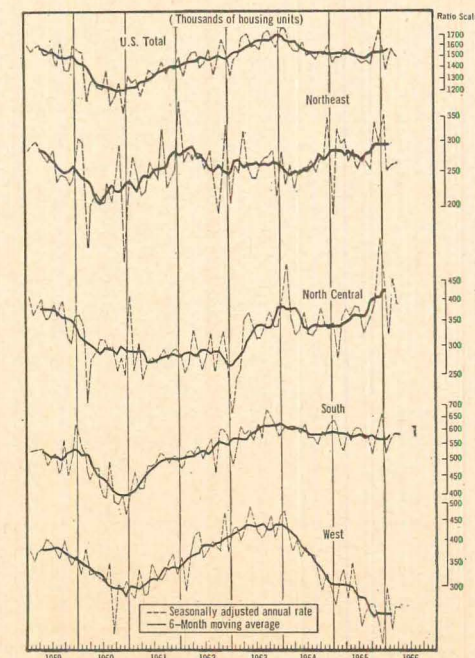
- A preliminary tally shows California s&Ls down another \$300 million in May.
- This year California starts may be down 50% from 1965 to about 90,000 units; in the nine-county Bay area they'll be down perhaps 80% by September.
- Only one s&L—Home in Los Angeles—in the southern counties and a handful in the north are willing to lend. s&Ls all over the state are renegeing on commitments to lend by declaring that apparently good credit risks do not qualify.

Home is the only \$2 billion s&L in the country, and its savings inflow in May ran about \$20 million against \$15 million a year ago. It is making new loans at a

rate of about \$30 million a month, but the builders who get them are little more than salaried employees, in the eyes of other builders.

• Small-volume builders are being driven to the wall, and even if the Federal Reserve curbs bank competition with s&Ls, hundreds may be in financial hot water in the months ahead.

Starts: firm in all regions except West



Everyone was baffled by the Johnson Administration's silence on the crisis because a housing slowdown could pack a hard wallop to the U. S. economy. But NAHB President Larry Blackmon, in a press conference, held hope that the White House would move off its dime soon. He didn't say how, although one proposal is to take away the investment-tax break which has accelerated capital spending.

Everyone was baffled by the Housing and Urban Development Dept. Said Blackmon: "It's time HUD stood up and spoke out for housing. We supported that department. Now that we have it, I do not hear its voice."

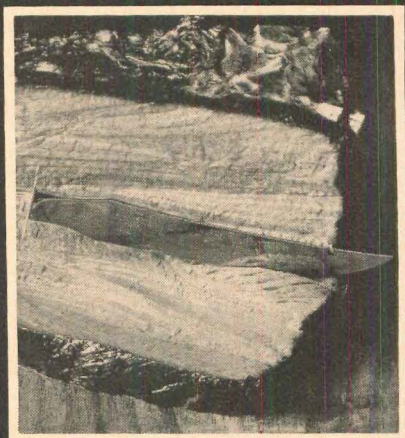
Population dropoff. Southern California's influx of new residents, formerly 1,000 a day, is down to about 850. What's more, most of them are in the low-income bracket so they don't bulk large in new-house demand. In northern California the influx runs about 250 per day—also largely of low-income families.

One big problem is that the second-time buyer loses most of his equity when he tries to sell his old house. Points on a loan for the old-house mortgage, plus the realty commission, usually eat up all his equity. To California's homebuilders, this means that a sales contract is pointless until the deal is closed. Some 85% of buyers at large tracts in Los Angeles are second timers, and a lot of sales fall apart just before closing.

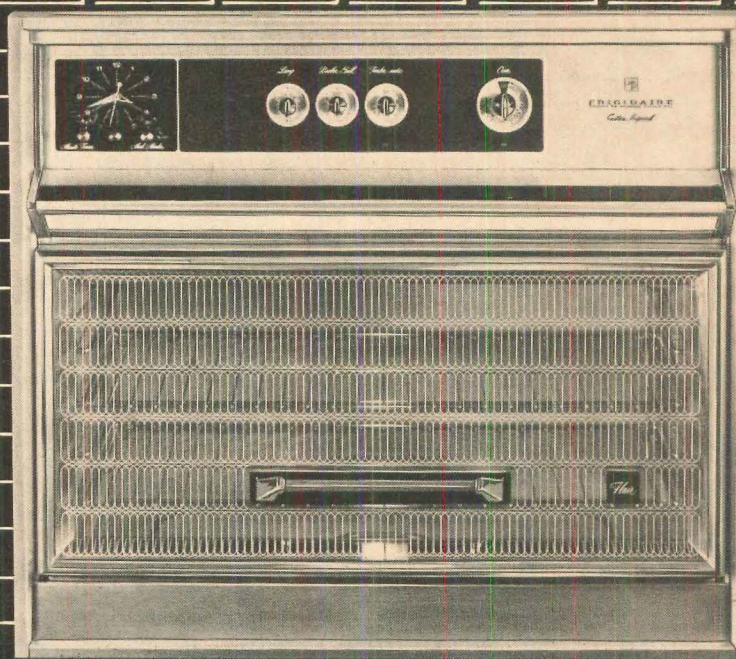
—RICHARD W. O'NEILL

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Rent-aid: FHA's new problem child has a coming-out party

The Federal Housing Administration brought its new rent supplement program out to meet builders in six cities last month, but it wasn't much of a party. The guests kept asking pointed questions, and the officials found themselves repeating, "But she's young yet. Give her time to grow."

It will take time, probably a year, before the \$12-million supplement program handed up by Congress with many strings attached will be helping to house those who qualify for public housing.

How tall the problem child will grow is anybody's guess. Congress provided funds for about 20,000 units initially while sponsors have already bought or optioned sites for 70,000 units.

At each briefing, FHA officials were the first to say the program faces tough going. Here are three of the program's most critical problems:

- Economic and esthetic limitations added by Congress threaten to block rent-aided housing in many areas. What's more, Congress even passed what amounts to local veto power.

- Management of each project will be a trying, 40-year proposition.

- FHA itself must adopt a more flexible approach to insure that each project attempted is economically feasible.

Also, if the program is to weather its first year there must be a new level of cooperation between private enterprise—which will build the housing—and government—which will make up the difference between 25% of the tenant's income and the rent.

Modest and then some. The law limits rent supplements to "modest housing"—regardless of whether the units are new or substantially rehabilitated. And "modest" may be an understatement. Buildings can have no more than one bath per unit, no central air conditioning, no covered garages, no balconies. Room sizes, and the number of rooms per family, must conform to public housing codes.

Those limitations are so strict that one high FHA official said rent-aided buildings may not be as attractive as some of the public housing they were meant to replace. What's more, FHA Assistant Commissioner M. Carter McFarland said rentals may prove to be slightly higher than for similar non-assisted units. He explained that troubles in processing rent applications could boost management costs as much as 20%.

The probable result: Only poor families will be attracted to rent-subsidized units. So the buildings will lack the economic and racial mix that housing and civil rights officials intended to get.

High-rise hindrances. Rents were set so low (\$85 to \$140) that it appears that only garden apartments and townhouses can be supported on land costing up to \$2 a sq. ft. Elevator buildings, even on low-cost land, will need special help.



MCFARLAND

WOOD

But there is little help available. Congress limited the 3% 221d3 interest rate to 5% of the program, and FHA decided to withhold Fanny May special-assistance purchase of rent-aid mortgages at subsidized prices (an academic decision because Fanny May is nearly out of purchase money). That leaves one road open—tax abatements.

But mayors of tax-starved cities and tax-hungry suburbs aren't expected to offer many abatements, especially to benefit low-income, minority families. So even low-rise projects may not be feasible in many places, especially metropolitan areas, which have the greatest need to house their poor.

Unworkable program? Builders in towns that haven't qualified for federal renewal aid by submitting workable programs for eliminating slums can forget rent-aided housing. In such towns no rent-aid units can be built without approval by the local government.

That means rent-aided housing will be vetoed in many small towns and suburbs, even though one aim of the supplements was to provide housing outside of central-city ghettos.

Who will profit? FHA officials are concerned over actual management of the rent-aid units. FHA expects many package deals with builders supplying the practical know-how and sponsoring civic groups pledging to manage the projects for 40 years (possibly with the help of professional management teams). Says Tom Davis of the FHA general counsel's office: "The best of the early programs will be package deals—and so will the worst."

Four different combinations of builders and sponsors are possible, and in each case FHA will ask this question first: Will the builder, sponsor, and tenants all profit equally? The combinations:

1. **Limited dividend corporations.** FHA will insure 90% loans to builders who limit their profit to 6% of investment. But builders who have previously used FHA to get in and out of a project fast face new restrictions. In this program, they must convince FHA that they are willing and able to manage a rent-aided project for 40 years.

"We'll call the builder's bluff," says FHA's McFarland. "We'll be looking for more than sympathetic management as we investigate the builder thoroughly."

2. **Nonprofit corporations.** Church groups, labor unions, and other nonprofit organizations can get 100% loans. But

they also will be investigated to make certain they are stable enough to last the 40-year life of the project and are not controlled by profit-hungry entrepreneurs.

3. **Cooperatives.** They too can get 100% loans—but only if nonprofit buildings are 90% pre-rented and opened as co-ops. Subsidized tenants will have a full vote, so where the poor are the majority, they will be managing themselves. FHA officials say flatly, "We've had very little experience with low-income cooperatives. We will have to be convinced that the poor are being trained to run the project."

4. **Lease-purchase arrangements.** This part of the program is tailored primarily for townhouses. FHA hasn't worked out the details yet, but in general terms the tenant will build equity as he pays his rent. After about five years, he will assume the mortgage and, in effect, buy the unit. This type of housing is being watched hopefully by civil rights and housing experts alike. It will give the poor a chance to own their homes and limit the management period to only five years.

"Bend, baby, bend." Ironically, one FHA problem is FHA itself. It faces a tricky new program, and at the same time it is under heavy pressure from civil rights groups and others to bend over backward to make sure rent-aid works.

Jack E. Wood Jr. of the National Committee Against Discrimination in Housing greeted the passage of rent supplements by calling for a revamping of FHA's district personnel. He said FHA officials who have hampered the housing of poor and minority families should be immediately replaced by qualified members of minority groups.

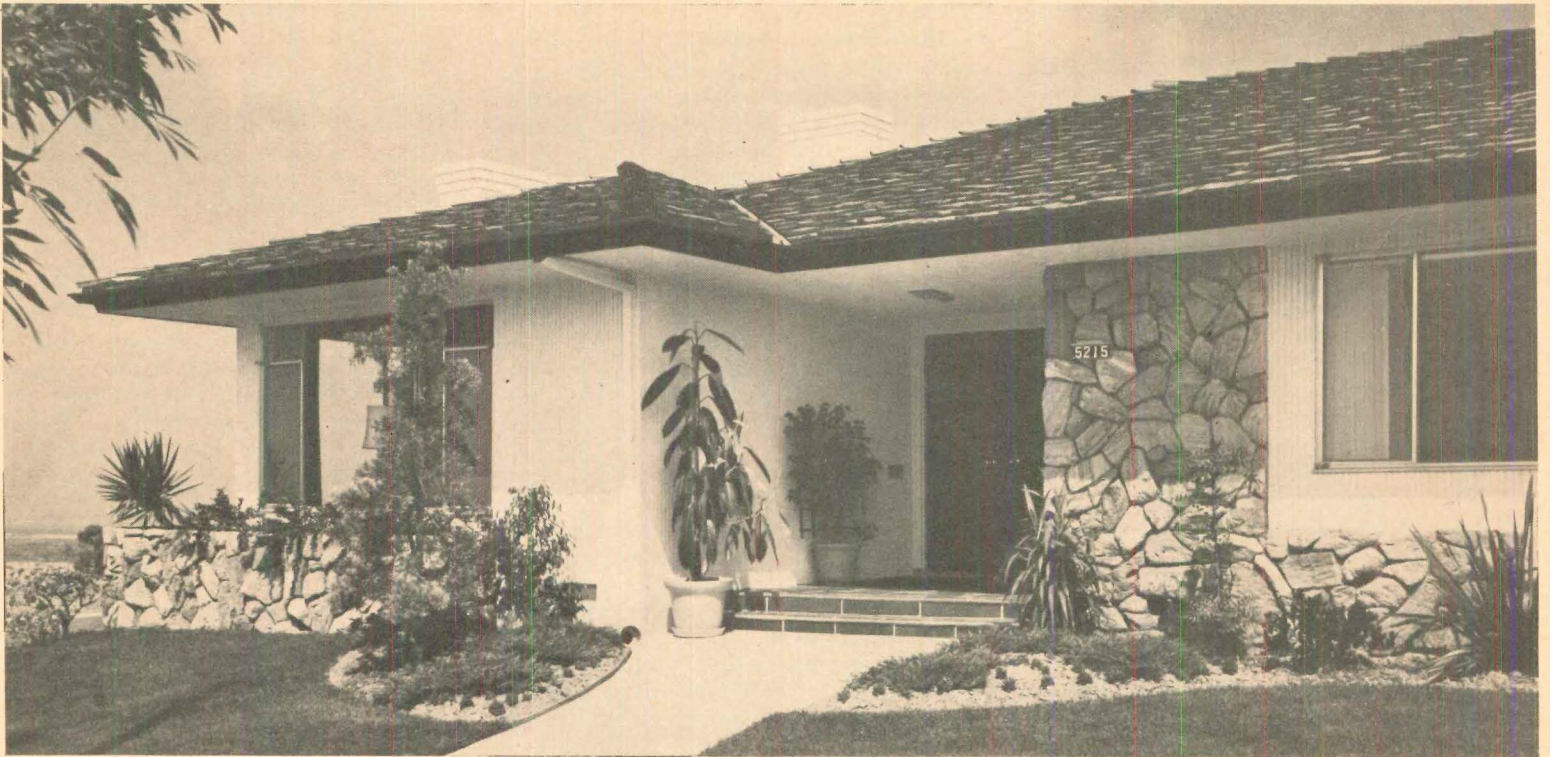
Furthermore, FHA's top men realize rent-aid will demand a flexible approach to each application: "Our appraisers will be playing with numbers to reflect a balance between the rents and the local market."

Finally, FHA appraisers have been told sternly that they should not look for comparable units. Says one FHA official: "How can there be anything comparable? This program is brand new."

FHA is ready to bend a little in processing applications, too. It will cut the vacancy factor normally subtracted from gross cash flow from 7% to 5%. This will make more cash available to support a higher mortgage. Also, rents can go up to \$175 for three bedrooms (or 25% higher) if land is judged especially expensive. Assistant Commissioner McFarland even told a group of builders at one briefing that FHA will "come up with something" if the tight money market impedes the program.

McFarland added candidly, "This program was not put together in a very scientific way. It is going to take us about six months to come up with cost formulas that will really work. But we will learn with experience."

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AN AFFILIATE OF UNITED STATES PUMICE COMPANY 

Brick industry turns to classroom to attack growing labor shortage

"If there aren't enough bricklayers, you can't expect to sell more brick," laments a regional director for the industry's trade association, the Structural Clay Products Institute.

And, explains Lothar F. Riba, his six-state* region needs 1,000 more masons yearly to keep pace with the sharply rising brick production.

So his Philadelphia-based regional office, supported by eight brickmakers who last year produced over half the region's 700-million brick output, has set forth to do something. Its method: recruiting through education.

Riba contends that "contractors and unions have not done their part in assuming responsibility for an adequate supply of bricklayers."

Recruiting young trainees for bricklaying—as for all building trades—has become increasingly difficult in recent years, because these blue-collar jobs carry low social status.

But in Riba's eyes, recruitment is futile if the training programs for bricklayers are understaffed, inadequate, or worse, simply nonexistent.

Hence Riba's SCPI campaign is being waged on two fronts—vocational high school training programs and union apprenticeship plans.

First, SCPI appointed a masons relations director, Frank Doyle. He spends full time contacting educators, school boards, and unions to press for broader apprenticeship programs and training courses.

*Pennsylvania, Maryland, Delaware, New Jersey, upstate New York, part of Virginia, and the District of Columbia.

Plumbers win \$372-a-week package

By 1972 San Francisco-area union plumbers—3,000 strong—will draw \$10.65 an hour in wages and benefits under a new six-year contract.

This works out to \$372 a week and \$19,344 for a full year, although all plumbers don't work the year-round. The increase, nevertheless, will boost the average annual pay well above the \$10,000 a year previously claimed by Plumbers Union officials.

The pact will add \$440 to the cost of a two-bath house. It comes just as building trades are grappling with rising unemployment in northern California, where housing starts have fallen 40% through April. One builder, Henry Doelger, has already cut all his trades back to a four-day week, and other builders are expected to follow.

Union officials said the length of the contract will "stabilize" the plumbing industry. But employers, although aware that the contract protects them from strikes for six years, fear it may drive smaller companies out of business and increase ac-

Other SCPI regional units push such programs. But Riba's mid-Atlantic region is the first to make education a full-time project.

High-school courses. SCPI's long-range strategy calls for stepping up vocational high school training programs. Already it is stirring interest among schools, administrators, and planners.

For example, three-year bricklayer courses are scheduled in 13 of the 17 vocational and technical high schools proposed for Pennsylvania in 1967. (As recently as last year, only three Pennsylvania schools had such courses.)

In Maryland's Montgomery County, a pre-job training course financed by the Manpower Development Training Act has been under way more than a year. Sponsored by the local school board, the 12-week course at the Montgomery County School in Rockville includes blueprint reading, job planning, and estimating. Students are given an MDTA training allowance of up to \$37 weekly (for heads of households). Travel allowances range from 67¢ a day to \$6.50.

The school offers four pre-job training courses a year. Of 83 students graduated last year, 75 still are working in the trade.

Union aid. SCPI views expansion of union apprenticeship as an immediate solution to the shortage. It has joined the unions in several programs. Examples: 1) union-sponsored, pre-job training in a New Jersey vocational and technical high school; 2) a three-year bricklayer course in another Jersey school; 3) an apprentice program at Phelps High School in Washington, D.C.

tivities of non-union and do-it-yourself plumbers. But even with the six-year contract, "We'll come out smelling like a rose," says Chairman Max Malcolm of the Plumbing Contractors Assn., because union demands may rise even more next year.

The contract calls for a 50¢-an-hour annual wage and benefit boost for the next six years. This year wages will go up 24¢ an hour, pension benefits 14¢, and other benefits 12¢. Next year wages will increase 30¢ an hour. Workers will decide how to split the 50¢ package between take-home wages and fringes in the remaining four years of the contract.

This year's boost will raise hourly wages of journeymen construction plumbers from \$6.20 to \$6.44 and those of repair plumbers from \$5.45 to \$5.69. By 1972, monthly pensions for union members with 25 or more years service will rise from \$150 to \$500 a month.

The contract was reached after a series of strikes by the union's Local 38 against selected builders.

Photos: Paul Lybrook



WOMEN'S WORK at National Homes includes installing insulation batts, left, and positioning wall panels suspended from a conveyor line.

'Patty the Prefabber' bows into draft-tight labor scene

"Patty the Prefabber," latter-day kin of World War II's renowned "Rosie the Riveter," has settled quietly and gracefully into the factory picture at National Homes Corp.'s main plant in Lafayette, Ind.

The nation's largest home manufacturer began hiring women in April for jobs traditionally performed by men, and now has about 30 in a total work force of 650. They are busy assembling components, installing insulation batts, and working with trim materials.

"We were having considerable difficulty—as are other factories here—in filling job openings with men," explains Arthur E. Thake, National's vice president for operations.

Are the women doing good work? They do just as well as men, Thake says—so well, in fact, that National plans to continue hiring them.

More wage hikes foreshadow tougher demands in '67

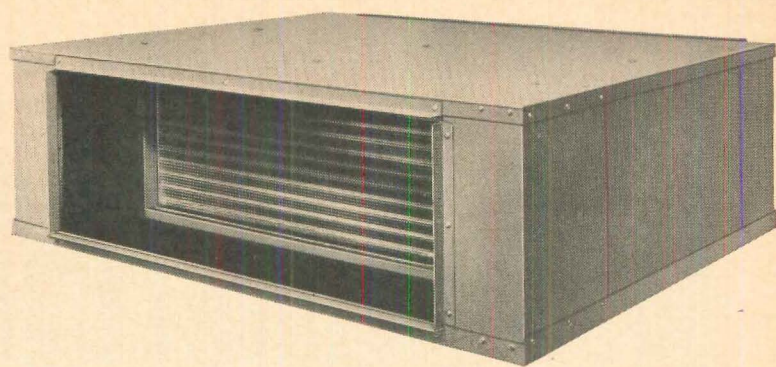
San Francisco plumbers (*story left*) are not the only building tradesmen whose wage settlements exceed the mainly ignored wage-price guideposts President Johnson hoped would stem inflation.

In Chicago, operating engineers last month ended a 50-day strike with a \$1.40 hourly increase spread over four years. President George Arquilla Jr. of the Chicagoland Homebuilders Assn. says the contract will boost the cost of a \$30,000 house by \$140 a year. He fears that other unions will seek similar settlements next year that could add as much as \$1,000 to the cost of a \$20,000 house.

Too, the strike aggravated an already tight labor market, said Arquilla. Builders amassed a two-month backlog of house orders during the strike and Arquilla fears they may not be able to get enough workmen to complete the houses before winter.

"As I see it, the only way we can catch up is through overtime and I don't know if builders can afford it," says Arquilla.

In Lansing, Mich., scene of a riotous "Labor holiday" last autumn (NEWS, Feb.), carpenters won a 29% increase spread over two years. The new scale will bring carpenters there to \$5.47 hourly, up \$1.23, in wages and fringes.



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NEGLECTED FORECLOSURE has broken windows and eroded, littered yard.



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How to sell foreclosed houses: pack them with extras

If you buy or rent from us, we'll make it easy for you to get everything from furniture packages to color television, from soft goods to swimming pools.

That merchandising pitch has helped a two-year-old California company sell 1,600 foreclosed houses (valued at \$43 million) and rent 1,500 apartments in 80 foreclosed buildings.

The company—Maryn Properties of Los Angeles—specializes in getting rid of foreclosed properties for savings and loan associations. For its services, it charges 75% of the net profit on sales and 5% of the gross on rentals.

These services are so effective that FHA is expected to retain the company for a pilot sales project. And they have spread so fast that Maryn now operates in 14 California and Arizona counties, has offices in five cities, and employs a staff of 260.

Key incentive. "People often balk at moving if they don't have what they'll need in a new house or apartment," says Maryn's general manager, Leonard Jaffe. "So we try to provide the extras—mainly furniture and appliances—needed in setting up housekeeping somewhere else."

Maryn provides some extras as part of the basic house package and offers others as options requiring higher payments.

The basic package includes draperies, carpeting, fencing, landscaping, and a lawn sprinkler system. Options include food freezers, washer-dryers, color TV sets, stereo-hi-fi consoles, swimming pools, a wide choice of contemporary and traditional furniture, and—for apartment renters—bedding, pots and pans, and dish towels. Apartment tenants finish paying for their purchases in 12 months.

How does Maryn do it? "We buy in quantity directly from the manufacturers," says Jaffe. "Of course, we ran into a management and logistical problem, so we wound up getting a warehouse."

The stage was set for Maryn formation



KEY SALES APPEAL—a long list of extras—is splashed across upper half of full-page ad.

when California housing activity started slipping in 1964. The slump led to an increase in s&L foreclosures. And the cost of handling foreclosed property boosted the s&L's operating expenses. What's more, their lending was severely limited because the Federal Home Loan Bank restricts the borrowing capacity of associations whose ratio of distressed property (scheduled items) is higher than 4% of their total assets. By the end of 1965, the statewide ratio was 5.27%.

So the s&Ls started seeking new ways to unload foreclosed property. And that's where Maryn entered the picture.

No distress selling. Most houses and apartment buildings handled by Maryn have never been occupied, so they already have two strikes against them: neither the builder nor the s&L has been able to sell them.

But Maryn never slashes prices for a quick sale or advertises houses as foreclosed properties.

"Price slashing simply creates chaos," says Jaffe. "We hold up the price structure".

The bulk of the houses are priced from \$8,000 to \$35,000 although a few are as low as \$6,000 or as high as \$100,000. Rentals of Maryn-handled apartments range from \$60 to \$600.

Does today's apartment dweller want a new or used house?

Chances are, he hasn't made up his mind yet, according to an intriguing study by two San Jose College (Calif.) professors.

The study*, by John W. Aberle and Pe Sheng Wang, shows that 59% of San Jose apartment residents who plan to buy houses will go where they find quarters to their liking, regardless of whether the house is new or old. Of the remainder, 21% intend to buy a new house and 20% favor an old one.

But the professors also found that right now only 29% of apartment dwellers plan to buy any house—new or old. Fifty-one per cent have no present plans to move, and another 30% will move to other apartments when they relocate.

San Jose population has now grown over

843,000 to put it among the nation's most rapidly expanding metropolitan areas, so what its apartment occupants want in houses carries meaning for homebuilders everywhere.

The first house for these renters will probably be priced from \$19,000 to \$25,000. The big majority—61%—want to reach that bottom price but only 22% plan on going over it.

The renters aim for a three-bedroom, two-bath house with a separate family room and laundry. Nearly half—48%—prefer a separate dining room, too.

But they have scant savings; 43% have less than \$500 and only 29% have more than \$2,000.

Students made up 28% of all tenants, the largest single occupational group, even though the study covered the entire San Jose area.

The professors note that residents,

whether families or unattached individuals, have higher expectations of buying a house as their income rises.

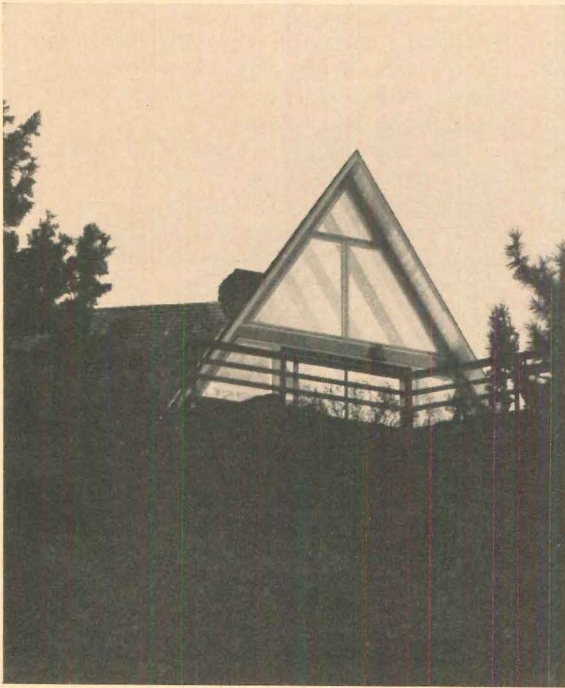
High-rise attractions. In Philadelphia a reverse study of new residents of seven center-city apartment towers found 20% of tenants are leaving suburban homes for in-town living. The figure is up from 17% when downtown high-rises were first built in 1957.

Edward E. Bekhor, who compiled the study for his thesis at the University of Pennsylvania's Wharton School, found the in-town market attractive to single individuals or families with no children. Still, Bekhor found 10% of the units contained children, up from 6% in a 1957 study. A management firm that aided Bekhor in his study, Jackson-Cross Co., says "the market seems to have widened somewhat for larger households—there is a definite influx of children."

* The Characteristics, Preferences and Home Buying Intentions of Apartment Residents of San Jose, School of Business Administration, San Jose State College.

How to make a big profit out of a loud boom.

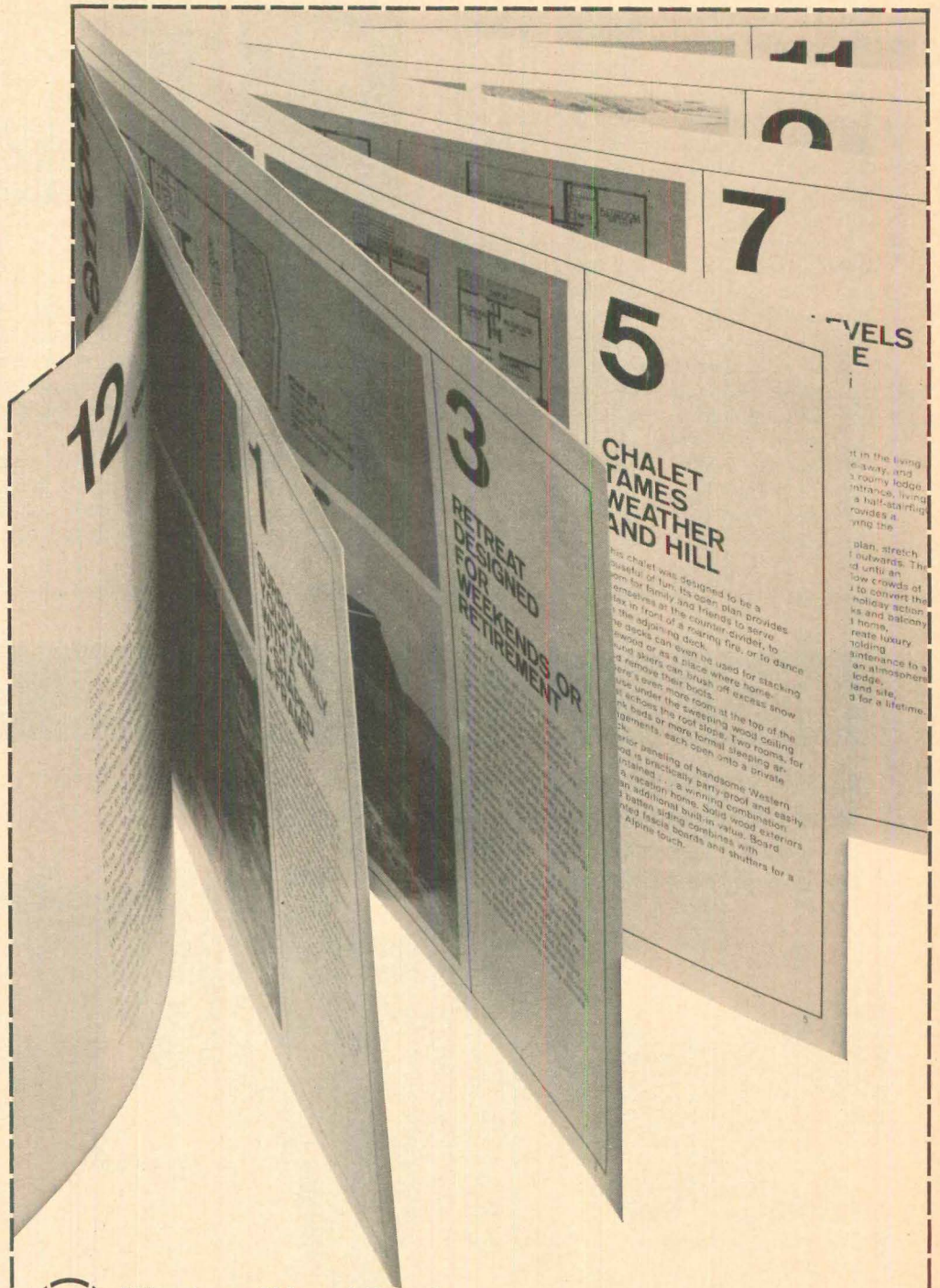
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Drug maker boosts rehab by paying loan interest for builder

Smith, Kline & French Laboratories of Philadelphia is spending \$10,000 in an effort to spark renovation in the decaying neighborhood surrounding its main lab.

The international drug company (1965 sales: \$244 million) has long been concerned about the neighborhood, partly for reasons of employe safety. But it didn't know what one company could do.

Then Vice President Kurt Solmssen, also a member of the Philadelphia City Planning Commission, began poring over city maps. Philadelphia is one city that maps all vacant houses, and Solmssen was struck by the large number of abandoned dwellings, including many apartment buildings, in the Spring Garden Street area around the lab.

Solmssen also learned that the Philadelphia Housing Authority had federal approval to permit private builders to rehabilitate housing units for eventual sale to the authority (NEWS, Dec. '65).

SK&F contacted Hertzfeld & Horowitz, contractors who specialize in rehabilitation, and inquired if they would be willing to restore 200 units in 70 abandoned buildings to livable condition and resell them to the public housing agency.

Partner Irvin Horowitz was agreeable—but said his concern would need financial



ABANDONED HOUSES in Philadelphia will be renovated with aid of a manufacturer.

help. The Philadelphia plan calls for builders to buy the rundown structures and carry mortgage payments on them until they are repaired and sold to PHA. Horowitz estimated he would need \$2.5 million front money to swing the deal.

Enter SK&F. To get the project going, the drug makers have agreed to pay a major part (one estimate: \$10,000) of the interest on the construction loans. SK&F

will be billed directly for its share of the interest and no more than \$200,000 of debt can be outstanding at one time. The \$10,000 will not be repaid and for its investment SK&F will get nothing except a healthier neighborhood.

Fallout. The coming of the public housing rehabilitation plan to Spring Garden Street is stirring other groups.

As a condition of participation the public housing agency will buy the renovated houses only if the city pledges enough money to step up housing code enforcement and to repair streets.

And the federal Commerce Dept. may finance remaking of some vacant neighborhood lots into small city parks.

The Federal Housing Administration is being urged to reflect the neighborhood upgrading by increasing its appraisals, thereby jacking up the potential amount of rehabilitation loans available to homeowners adjacent to the repaired properties for improving their homes too.

And a Spanish-speaking member of SK&F's public relations staff is trying to organize Puerto Ricans in the neighborhood to keep watch at night over the houses being renovated to prevent pilferage. SK&F is budgeting some funds to hire watchmen if they are needed.

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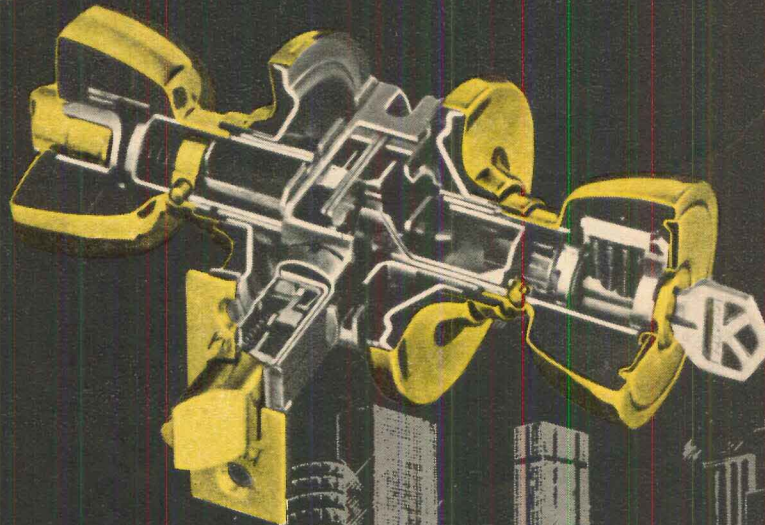
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cally adjusts for beveled doors; full one-inch bearings on each knob for greater rigidity; and balanced steel coil springs for finger-touch turning. Custom Line locksets are being used more and more to answer the consumer's awakened demand for the distinctive, the dependable, the finest in functional hardware. The Custom Line — available only on the Kwikset label (a long-selling record).

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Gas utility battles electricity over loans to builder

Should competing fuel promoters be allowed to woo builders by helping them finance their projects?

That question has been raised for the first time in a case before the Illinois Commerce Commission.

The case in point: Chicago's gas utility, People's Gas Light & Coke Co., asked commission approval to lend \$3 million to Chicago Builder Morris Suson on condition that Suson use only gas fuel in a new 80-story apartment.

Peoples Gas argued in its petition that the \$3 million loan was necessary because Builder Suson claimed that rival Commonwealth Edison Co. of Chicago had orally offered to arrange a \$5 million loan as part of the apartment's permanent financing.

"Of that sum, \$3.5 million was to be furnished by Edison and \$1.5 million by General Electric Co. or one of its subsidiaries," Peoples Gas said. Commonwealth Edison spokesmen say they have talked with Suson but have made no commitment.

Peoples Gas also said, "Promotional allowances in varying amounts are regularly offered by Edison to developers, owners or builders of other projects. Recently Edison has captured a number of so-called

'prestige' high-rise buildings. Petitioner [Peoples] is informed and believes . . . such buildings have been captured, in whole or in part, as a consequence of Edison offers."

Peoples voiced its concern that "such buildings have been heavily advertised as evidence of the purported advantages of using electricity, particularly for space heating, without disclosure of the acceptance of such Edison offers."

Peoples pointed out that it agreed to the loan "to preclude Edison from capturing" the project and added that it would not have done so "in the absence of the Edison offers." The gas utility said it has already advanced \$144,000 of a promotional allowance.

The Peoples' loan would run ten years at 7% to 7½% interest, depending upon the prime bank rate. It would be issued during construction and converted to a second mortgage when the apartments are 75% rented. Suson has yet to arrange a \$24-million first mortgage permanent loan.

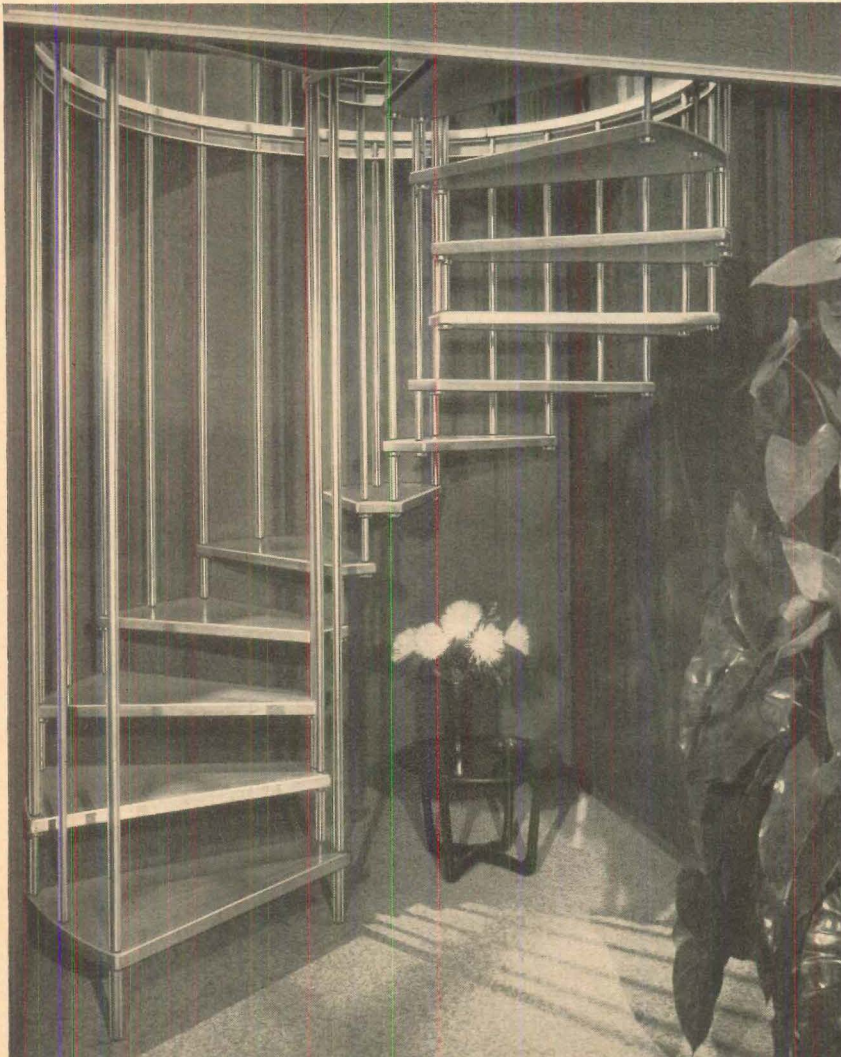
The all-electric prestige buildings cited in the Peoples petition include the 100-story John Hancock building and the 70-story Lake Point Tower apartment.

People's Chairman Bemick McDowell said gas-utility studies showed the John

Hancock Building could have saved \$300,000 a year by using gas. A building spokesman disputes this, saying operating costs with electricity will be no more than with gas.

The Peoples Gas petition came as the Illinois commission was studying promotional allowances by the state's utilities. Elsewhere, the battle over allowances and rebates by utilities has been waged with increasing vigor before the utilities commissions or legislatures of a dozen states. North Carolina has banned promotional payments, and utilities in South Carolina and Delaware have dropped allowances rather than file them with state officials or undergo hearings. The Virginia legislature has ordered hearings on the issue, and bills are pending in New York, Massachusetts, and Rhode Island to restrict or prevent allowances.

In Oregon, Public Utility Commission examiners have concluded hearing 3,000 pages of testimony on tying allowances to underground wiring. Portland General Electric Co. seeks to give square footage and appliance allowances that could bring free underground wiring to new houses. Both the Northwest Natural Gas Co. and Oil Heat Institute of Oregon are protesting the proposal.



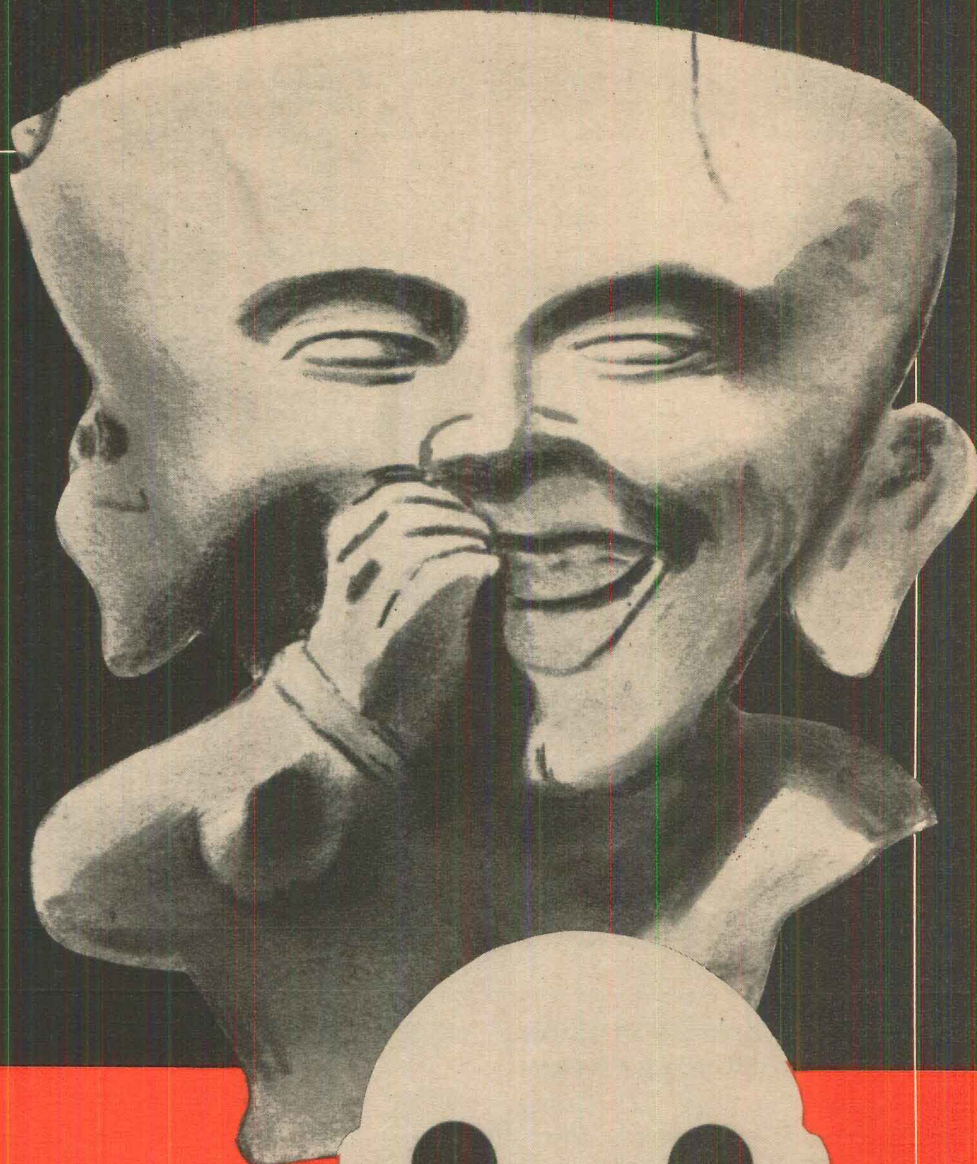
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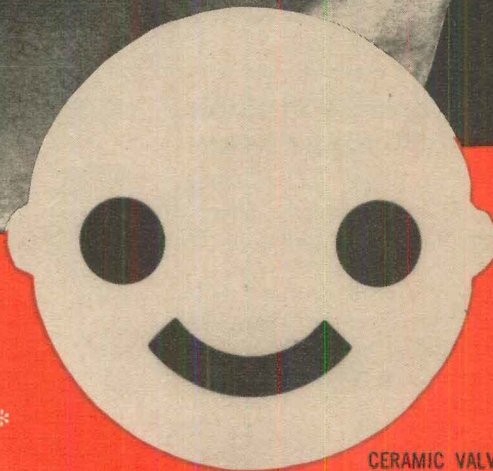
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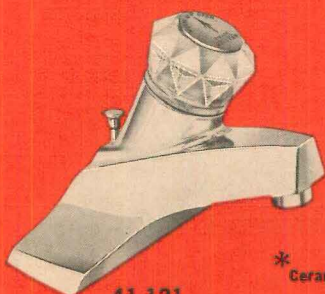


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Wall Street gets new \$63-million realty investment trust

Kirkeby-Natus Corp., a nationwide financing house that has lent at 10% to 15% interest to many a builder whose own banker's smile had turned cold, has just won stockholder approval to transfer its \$63 million in real estate loans to a realty investment trust.

The trust will be organized as Federated Mortgage Investors. Kirkeby-Natus itself will become United Ventures Inc.

The goal: an income tax shelter.

Kirkeby-Natus earnings are down sharply for the first time since it began combined operations in 1962, and taxes weigh heavily. The spinoff would take Federated Mortgage Investors in under laws that exempt from federal income taxes any real estate investment trust that distributes 90% of income to stockholders. Here's how the treatment would help:

Kirkeby-Natus was taxed \$1,181,376 in the nine months to Dec. 31, and earnings fell 18% to \$1,310,376. Had the spinoff been in effect, Federated would have gone untaxed and United Ventures would have paid only \$34,000. In addition, Federated would have earned \$2,328,742 and United \$220,868 for a total of \$2,549,610, or nearly twice the Kirkeby-Natus earning for the same period.

Mortgage holdings. So eager is Kirkeby-Natus to qualify for tax-conduit status

that it is willing to give up its own listing on the New York Stock Exchange to win a listing for Federated. The Big Board warned its rules may require this.

REBIRTH OF SYNDICATORS?

A barrage of inquiries about requirements for issuing shares in new mortgage companies and realty mortgage trusts has prompted New York State to tighten its rules.

"In four weeks we had inquiries from groups wanting to issue a total of \$100 million in new shares, and many had acquired no specific properties," says David Clurman, special assistant attorney general. "It looked like a rebirth of the syndications of the 1920s."

So Attorney General Louis J. Lefkowitz ruled that such trusts will be approved only if the offering "appears to safeguard the rights of investors."

Part of the ruling is a boon to the FHA-VA mortgage market: any company organized primarily to invest in mortgages must put half of the funds sought from the public into government-insured loans.

One Federated share would be distributed for each of the 1,687,307 Kirkeby-Natus shares.* Federated would distribute virtually all income to stockholders.

The \$63-million portfolio that Federated would inherit includes these loans secured by realty: \$26 million in residential construction and land development, \$14 million in apartments, and \$5 million in urban redevelopment. Investments include \$4.1 million in housing and land. The company has \$29.8 million in California, where real estate is in a nosedive (see p. 6). Kirkeby-Natus had \$10 million in delinquencies against \$74 million in loans Jan. 31.

Risks of the game. Delinquent loans are a recurring aspect of its business, Kirkeby-Natus tells its stockholders. That business, it explains, is lending short-term funds in situations where conventional financing is unavailable or unable to provide the full amounts necessary to a business venture. The company, as United Ventures would continue such lending but would stay out of real estate.

*Major K-N holders include Carl M. Loeb, Rhoades & Co., a Wall Street securities house, 90,000, and K-N Chairman William Golden, 30,282. President Phillip I. Blumberg owns 1,100 shares, has an option on 50,000 more, and draws \$60,000 in salary. The stock traded between 14 and 20 3/8 from January through May.

Building stock prices decline on news of tightening money

Every category of stock in HOUSE & HOME's list of 75 issues is down sharply and many declines are traceable to the severely distressed mortgage market.

Prefab company shares dropped 11% despite the fact that Madway Main Line Homes of Wayne, Pa., one of the major losers, was deleted from the list. The company filed for bankruptcy protection, blaming tight money (see p. 89). The stock had traded on bids of 11 1/2 a month earlier but New York and Philadelphia brokers reported no bids after the Chapter X petition. The asked price fell to 9 1/2.

Among mortgage bankers the Colwell Co. (Los Angeles) saw its shares dip from 13 to 8 1/2 about the time its decline in fiscal 1966 earnings was made public (see p. 23). President Bundy Colwell attributed the earnings drop (\$542,205, from the previous year's \$839,801), to tight money and to the slowdown in general housing demand in California. Another mortgage company, Charter, fell 2 3/4.

FNMA stock fell 3 1/4 to 71 3/4.

The averages:

	Apr. 7	May 9	June 13
Building	5.72	5.46	5.15
Prefabrication	2.80	2.78	2.48
S&Ls	8.72	7.93	7.67
Mortgage banking	12.60	11.92	11.20
Land development	7.06	7.26	6.94
Average	7.49	7.18	6.83

HOUSING'S STOCK PRICES

COMPANY	June 13 Bid/Close	Chng. Prev. Mon.	COMPANY	June 13 Bid/Close	Chng. Prev. Mon.	COMPANY	June 13 Bid/Close	Chng. Prev. Mon.	
BUILDING									
• Adler-Built Inc.	1/4	.....	First West Fin. ^c	3 1/2	— 1/2	Christiana O. ^b	4 1/8	+ 1/8
• Capital Bld. Ind.	50¢	-15¢	Gibraltar Fin. ^c	12 3/8	— 3/8	Coral Ridge Prop.	5 5/8 ^d	+ 5/8	
Cons Bldg. (Can.)	1.05	-80¢	Great West. Fin. ^c	7 1/2	+ 1/4	Cousins Props.	14 3/4	- 1 1/4	
• Dev. Corp. Amer.	1 1/8	- 3/8	Hawthorne Fin.	6 3/4	- 5/8	Crawford	21 2/2 ^d	.....
Dover Const.	25¢	.....	Lytton Fin. ^c	6 1/4	- 3/8	Deltona Corp. ^b	11 5/8	- 7/8
Edwards Inds.	1 3/8	+ 1/8	Midwestern Fin. ^b	27¢	- 1/8	• Disc Inc.	23¢ ^d	- 1/8	
Eichler Homes ^b	3 1/2 ^d	- 1/4	Imperial Corp. ^c	6 1/8	.....	Fla. Palm-Aire	21 5/8 ^d	- 1/8
• First Hartford Rty	6 1/4 ^d	- 1/4	Trans-Cst. Inv.	2 5/8	- 1/2	Forest City Ent. ^b	47 5/8 ^d	- 1/2	
First Nat. Rty. ^b	1 1/8	- 1/2	Trans Wrld. Fin. ^c	6 3/8	- 1/2	Garden Land	43¢	- 1/8	
• Frouge	41 3/4 ^d	.....	Union Fin.	6 3/4	- 3/8	Gen. Devel ^b	6 1/2	- 1/4
General Bldrs. ^b	2 3/8	- 1/2	United Fin. Cal. ^c	7 3/8	+ 7/8	Gulf American ^b	10 3/4	+ 1/8	
Kavanagh-Smith	2 1/2	- 1/2	Wesco Fin. ^c	12 3/8	- 5/8	Holly Corp. ^b	1 1/8	.....
Kaufman & Bd. ^b	15 3/8	+ 1/8	MORTGAGE BANKING						
Levit ^b	11 3/4	+ 1	Advance	7 ^d	+ 1/4	• Macco Rty.	14 ^d	.....
Lou Lesser Ent. ^b	3 7/8	- 1/2	• Amer. Mort. Ins.	13	+ 4	• Major Rty.	40¢	-15¢	
Lusk	15¢	.....	Associated Mtg.	7 ^d	.....	McCulloch Oil ^b	9 3/4	+ 1/2
Pres. Real. A.P.	11	- 7/8	Charter	23 1/4	- 2 3/4	So. Rty. & Util. ^b	29 5/8 ^d	- 1/2	
• Sproul Homes	1 3/8	- 1/4	Colwell	81 2/2 ^d	- 4 1/2	Sunasco ^c	21 1/2	+ 3	
U.S. Home & Dev.	3/4	- 1/4	Cont. Mtg. Inv. ^c	28 3/8	+ 1 3/8	a—stock newly added to table. b—closing price ASE. c—closing price NYSE. d—not traded on date quoted. g—closing price MSE. h—closing price PCSE. k—not available. p—formerly Wallace Investments. q—formerly San Diego Imperial Corp. *—not included in averages. x—adjusted for 4-for-3 split. y—tender offer.			
Jim Walter ^c	17 7/8	- 1 1/2	• Cont. Mtg. Ins.	5	- 1				
Del. E. Webb ^c	4 3/4	+ 3/8	• FNMA	71 3/4	- 3 1/4				
PREFABRICATION									
Admiral Homes	7/8	- 1/8	First Mtg. Inv.	14 1/2	- 1/4				
Albee Homes	1 ^d	- 5/8	• Kissell Mtg. ^b	41 5/8 ^d	- 1/8				
• Continental Homes	3 3/4	- 3/8	Lomas & Net. Fin. ^a	33 5/8 ^d	+ 1 1/2				
Gt. Lakes Homes	1	- 1/8	MGIC ^b	25 1/2	- 1				
Inland Homes ^b	5	+ 1/4	• Mortg. Assoc.	5 1/2	- 1				
Modern Homes	3 ^d	.....	• Southeast Mtg. Inv.	9 3/4	+ 1/4			
Natl. Homes A.9.	3 1/4	- 3/8	United Imp. & Inv. ^b	3 7/8	.....			
• Nationwide Homes	1 1/4	.....	LAND DEVELOPMENT					
• Scholz Homes	5 1/8 ^d	+ 1 3/8	All-State Prop.	32¢	- 4¢				
• Seaboard Homes	1 1/16	.....	• American Land	1	-1 1/16			
Steel Crest Homes	3 3/4	- 1 1/4	Am. Rty. & Pet. ^b	3	- 3/4				
Swift Industries	2 ^d	- 1/8	Arvida	7 5/8	- 3/8				
S&Ls									
American Fin.	13	- 1/4	Atlantic Imp.	18 1/2 ^d	- 1 1/2				
Calif. Fin. ^c	43 5/8	- 5/8	Canaveral Intl. ^b	37 5/8	- 1/4				
• Columbia	5	+ 3	SHORT-TERM BUSINESS LOAN RATES						
Empire Fin.	5 5/8	- 5/8	Percent interest and (net change) in year						
Equitable S&L	14	+ 3/4	LOAN SIZE			7 other Northern & Eastern cities		11 Southern & Western cities	
Far West Fin. ^c	8 1/8	+ 3/8	\$1-10	5.92 (+.30)	6.10 (+.25)		6.23 (+.21)		
Fin. Fed. ^c	14 1/4	- 7/8	\$10-100	5.78 (+.42)	6.05 (+.50)		6.01 (+.33)		
First Char. Fin. ^c	13 3/4	- 1/8	\$100-200	5.66 (+.56)	5.82 (+.56)		5.77 (+.41)		
First Fin. West.	4 3/4	- 1/2	\$200 and over	5.34 (+.72)	5.46 (+.61)		5.50 (+.51)		
First Lincoln Fin.	6 1/4	- 1/4	Source: Fed. Reserve Board, April, NEWS continued on p. 23						
First Surety	3 3/4	+ 1/4							

Mortgage money: no help in sight for squeezed builders

A two-point price cut by the Federal National Mortgage Assn. means builders must pay about one percentage point more in discounts on FHA new-house mortgages. Discounts now range up to 8 points in Miami and the Southwest, up to 6 on the Coast (chart below).

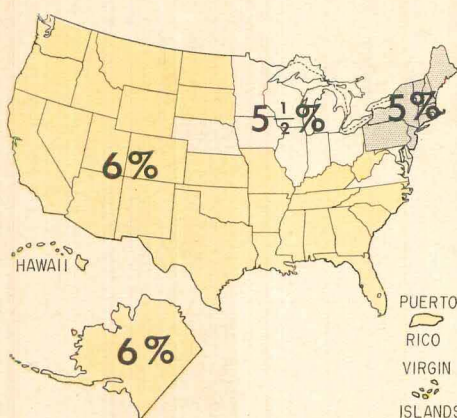
The FNMA move jolted the national secondary market in FHA loans, but it was merely one more piece of disquieting news for builders in a mortgage squeeze that appears to be getting steadily tighter. There were several other adverse developments.

Savings inflow was off 36% for savings banks and 31% for savings and loan associations for the first quarter. Tax and dividend demands indicated new and perhaps faster drains in the critical months of June and July. The s&ls and banks do about 58% of the nation's mortgage lending.

The New York securities house of Salomon Bros. & Hutzler reported a substantial slowdown in new commitments and predicted "a significant decline in net volume of mortgage financing for the year."

Dip in lending. The decline was well under way. Net mortgage volume in the first quarter was \$6 billion, off from \$6.1 billion in 1965. But when FNMA's purchases of \$800 million in first-quarter 1966 and only \$200 million in 1965 were subtracted, the net was down to \$5.2 billion compared with \$5.9 billion—or 12%.

Only big, established builders could get money. Smaller builders could not, and



DISCOUNTS TO BUILDER are shown for 5 3/4% FHA-VA mortgages sold to FNMA under new prices. Figures include 1/2% purchase fee and another 1/2% for FNMA stock-buying requirement.

new-house permits in April fell 14% from March and 4% from April 1965. California's starts were down 35% in the first quarter, and most of the state's s&ls had stopped lending (see pp. 5-6). Even the Colwell Co. of Los Angeles, widely regarded as a blue-chip mortgage banker, closed two major offices in northern California and laid off 40% of its personnel in that area. Its earnings for the year ending March 31 were \$542,205, off 35%.

Realty men's woes. Used housing was in trouble over much of the nation. San Francisco real estate men said sales were 50% behind last year.

The average conventional used-house mortgage rate rose to 6.09% in April, up from 6.01% in March, and Chairman John E. Horne of the Home Loan Bank Board, the s&l regulatory agency, predicted a 6.75% rate by year's end.

Secondary market. The FNMA price cut of two points across the board on virtually all paper it buys (map) translated into 25 basis points, or 1/4%, of yield. Where the agency had been getting an effective return of 5.79% on mortgages being offered to it at the rate of \$39 million a week, it now realizes about 6.04% (average effective price of 94 = 6.54% yield; subtract .50% service fee = 6.04%).*

The private market's yield ran from 6.02% to 6.19% before the change (NEWS, June). The impetus from FNMA drove the private market's top yield limit up about 12 basis points—or half the increase in FNMA's yield—and this in turn translated into the 1% increase in discounts charged to builders. The bottom of the yield range held fairly firm, however, and the new quote in New York in late June was 6.02%-6.31%. "The range has widened," says Colwell's Chris Gebhardt.

The FNMA decision brought immediate predictions of another increase in the FHA's basic interest rate, now 5 3/4% after 1/4% increases in February and April.

* The price cut was the fifth in the agency's quiet campaign to reduce the flood of offerings. Prices were cut 1 point Dec. 10, Jan. 10 and Mar. 4 and 2 points April 12.

Critics says FNMA's big sale takes money from mortgaging

The Federal National Mortgage Assn. sold its \$530 million worth of new participation certificates (PCs) without a hitch, but it has run into severe criticism of the 5.75% interest it is paying to buyers.

The certificates came to market under the Participation Sales Act of 1966, passed May 24. The act's intent is to transfer government agency debt into private hands via the "participation" shares.

The 5.75% on one-year maturities was almost a full percentage point above yields on Treasury bills and was 1/4% above the Federal Reserve's Regulation Q limit of 5 1/2% on commercial banks' certificates of deposit.

Such interest, said 11 minority members of the House banking committee who had opposed the legislation, would lure funds out of savings institutions and commercial banks, thus depleting further the money supply to the nation's severely straitened mortgage market.

Bond prices declined (and yields rose) for the several days preceding the debut of the PCs. Rising bond yields usually have a similar effect, however delayed, on mortgages. U. S. bonds of 1987-92, yielding 4.60% April 1, were at 4.72 June 15.

HOME BUILDER'S MORTGAGE MARKET QUOTATIONS

Reported to HOUSE & HOME in week ending June 17.

City	FNMA Scdry. Mkt. % FHA-VA	FHA Sec. 203b Discount paid by builder Min.-Down* 30-year Immed. w.		FHA 207 Apts. Firm Commit.	Conventional Loan Rates			Construction Loan Rates Interest+fees All lenders
		5 3/4s	Trend		Comm. banks, Ins. Cos. 75%	Savings banks, S&Ls 80%	Savings S&Ls Over 80%	
Atlanta	6	4-5	Up 1/2	a	6 1/4-6 1/2	6 3/4-7	6 3/4-7	7+1-2 1/2
Boston	5	par+1	Steady	a	6-6 1/2	5 3/4-6 1/4	6-6 1/2	6+
Chicago	5 1/2	5-7	Up 2	5-5 1/2	6-6 1/4	6-6 1/4	6-6 1/4	7-7 1/2+1-2
Cleveland	5 1/2	5-7	Up 1	5-5 1/2	6-6 1/4	6-6 1/4	6-6 1/4	7-7 1/2+1-2
Dallas	6	5-8	Up 2	a	6 1/2-6 3/4	6 1/2-6 3/4	6 1/2-6 3/4	7+1
Denver	6	4 1/2-5 1/2	Up 1/2	a	6 1/4-6 1/2	6 1/2-6 3/4	6 3/4	6 1/2-6 3/4+1-2
Detroit	5 1/2	3 1/2-4 1/2	Up 1/2	a	6 1/4-6 3/4	6 1/4-6 3/4	6 1/4-6 3/4	6 1/2
Honolulu	6	6-6 1/2	Up 1	a	6 3/4-7	6 3/4-7	6 3/4-7	7-7 1/2+1-3
Houston	6	5-6	Steady	a	6 1/2	6 1/2-6 3/4	6 1/2-7	6 1/2-7+1 1/2-2
Los Angeles	6	5 1/2-6	Up 1/2	a	6 3/8-6 3/4	6 3/4-7.2	a	6 1/2-7+1 1/2-3
Miami	6	6-8	Up 2	a	6 1/4-6 1/2	6-6 1/2	6-6 1/2	6 1/2+1-1 1/2
Newark	5	4-5	Up 1	5-6	6	6	6	6 1/2-6 3/4+1
New York	5	2 1/2-3	Steady	6	6+1	6+1	6+1	6 1/2-7+1 1/2-2
Okla. City	6	5-7	Up 2	5-7	6 1/4-6 1/2	6 1/4-6 3/4	6 1/2-6 3/4	6 1/2+1 1/2-2 1/2
Philadelphia	5	4-5	Up 1	a	6	6	6	6 1/2-7
San Fran.	6	5-6	Up 1/2	5	6 3/4-7 1/2	6 3/4-7 1/2	6 3/4-7 1/2	7-9+1 1/2-3
St. Louis	6	4-6	Up 2	a	6-6 1/2	6-6 1/2	6-6 1/2	6 1/2-7
Wash., D.C.	5 1/2	6-7	Up 1	a	6+3-4	a	a	6-6 1/2+1-1 1/2

* Immediate covers loans for delivery up to three months, future covers loans for delivery in three to twelve months. * Quotations refer to prices in metropolitan areas, discounts may run slightly higher in surrounding towns or rural zones. * Quotations refer to houses of typical average local quality. * 3% down on first \$15,000; 10% of next \$5,000; 25% of balance.

Footnotes: a—no activity, b—limited activity, w—for comparable VA loans also. x—FNMA pays 1/2 point more for loans with 10%. y—discounts quoted are net after seller pays 1/2% marketing fee and 1/4% adjustment for stock purchase. Seller must pay 1% of mortgage for stock calculated in \$120 units, of which \$20 is contribution to FNMA capital and \$100 is for a share trading at about \$84. z—applies to 66% loans.

Sources: Atlanta, Robert Tharpe, pres., Tharpe & Brooks Inc.; Boston, Robert Morgan, pres., Boston 5¢ Savings Bank; Chicago, Robert H. Pease, pres., Draper & Kramer Inc.,

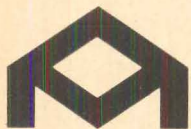
and Robert H. Wilson, pres., Percy Wilson Mortgage & Finance Corp.; Cleveland, David E. O'Neill, vice pres., Jay F. Zook, Inc.; Dallas, M. J. Greene, pres., Southern Trust & Mortgage Co.; Denver, Clair A. Bacon, pres., Mortgage Investments Co.; Detroit, Sherwin Vine, vice pres., Citizens Mortgage Co.; Honolulu, H. Howard Stephenson, vice pres., Bank of Hawaii; Houston, Everett Mattson, vice pres., J. Bettes Co.; Los Angeles, Christian M. Gebhardt, vice pres., Colwell Co.; Miami, Lon Worth Crow Jr., pres., Lon Worth Crow Co.; Newark, William W. Curran, vice pres., Franklin Capital Corp.; New York, John Halperin, J. Halperin & Co.; Oklahoma City, B. B. Bass, pres., American Mortgage & Investment Co.; Philadelphia, Robert S. Irving, vice pres., First Pennsylvania Building & Trust Co.; St. Louis, Charles A. Keller, vice pres., Mercantile Mortgage Co.; San Francisco, John Jensen, vice pres., Bankers Mortgage Co. of California; Washington, James C. Latta, sr. vice pres., Frederick W. Berens Inc.

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NEWS

Courts convict three tax assessors in West Coast bribery scandals

Russell L. Wolden's name was scraped off the door to the San Francisco assessor's office last month after he became the third assessor convicted this year in the West Coast's unfolding tax bribery scandals. Former assessors **Donald E. Feragen** of Oakland and **A. J. (Tony) Steen** of Seattle are serving jail terms.

A fourth assessor, **John McQuilken** of San Diego, committed suicide during a grand jury investigation, and three of his employes have been indicted.

The scandal erupted after secret files of **James C. Tooke**, Castro Valley tax consultant, were turned over to the California attorney general's office by a disgruntled employe. The "Tooke papers" led to indictment of ten tax officials and five tax consultants, including Tooke.

But Wolden was the big catch, a power among assessors who had held office since 1938. After a long and spectacular trial he was found guilty on eight counts of bribery and one count of conspiracy. The jury deadlocked on a tenth charge.

Wolden, who is free on bail, plans to appeal. "I've never done anything but serve the best interests of San Francisco," he says.

The bulk of the prosecution's

case rested on allegations that Wolden had received thousands of dollars in bribes from tax consultants and others in return for reduced property tax rates.

Unlike Wolden, Feragen and Steen pleaded guilty to accepting bribes. Feragen, former assessor for Alameda County (Oakland), was sentenced to two consecutive one-to-14-year prison terms. Steen, former King County (Seattle) assessor, faces a maximum ten-year term.

In San Francisco Wolden's successor, **Joseph E. Tinney**, says he wants to change the methods of assessing and appraising the city's 150,000 pieces of real estate and 50,000 businesses.

Tinney favors a "uniform assessment ratio" throughout California such as would be established under a reform bill pending in the state legislature. The bill would empower the Board of Equalization to enforce a uniform ratio in all 58 California counties.

But reform is slow even in the face of the scandal. At mid-month, the bill was bottled up in a Senate committee.

Still San Franciscans are about to reap one benefit: Enough back taxes will be collected to lower the tax rate 2¢ to \$2.29 per \$100 assessed valuation.

Savings banks pick renewal booster

World Wide Photo

"We feel renewal is our job," says **Frederick P. Smith**, new president of the National Association of Mutual Savings Banks.

Smith, also president of the Burlington, Vt., Savings Bank, has guided his bank into an active role in renewing downtown Burlington. The city has condemned 20 acres in four downtown blocks, and buildings are being razed. To insure redevelopment, Smith's bank has agreed to loan developers enough to buy the land from the city and build a shopping center, hotel, major office building, and apartments.

Smith, 51, succeeds **Robert M. Morgan** of the Boston 5¢ Savings Bank. Previously he was vice president and headed the federal legislation committee, the industry body seeking federal charter legislation for mutual savings banks.

A graduate of Princeton University and Harvard Law School, Smith practiced law in Burlington until 1959, when he assumed his bank post. He is a former member of the Vermont Legislature.



SAVINGS BANKS' SMITH
"We feel renewal is our job"

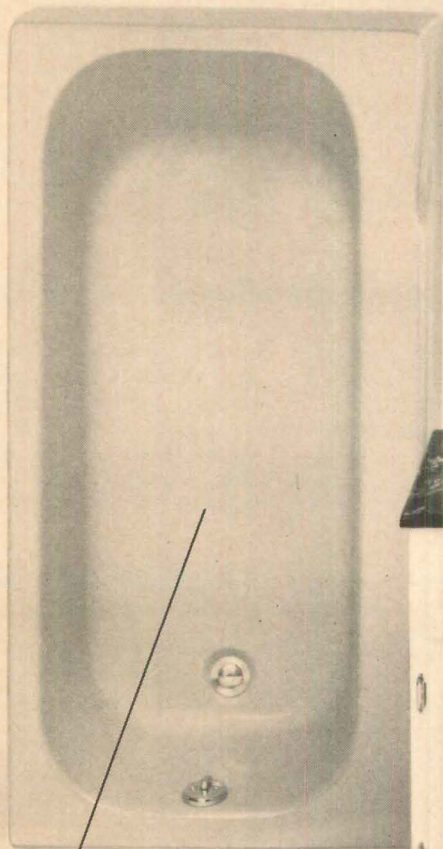
DEVELOPERS: **Robert E. Simon**, developer of the new town of Reston, Va., has received the first award made by the new Department of Housing and Urban Development.

In presenting HUD's "Urban Pioneer" medal, Secretary **Robert C. Weaver** said Simon "has lifted our sights" by attempting to build a model for urban America (H&H, June).

A move to force a referendum on **Thomas Frouge's** Marincello near San Francisco has been denied.

Who but Crane would think of a hidden soap dish?

(or all these other extra-convenience features)

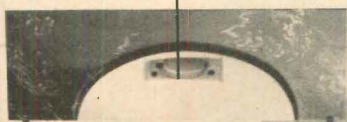


Step in and out with safety

Unusually low silhouette (only 14" high) of Crane's Fairfax tub makes getting in and out safe and easy. Pleasing sculptured styling features full-length rim seat.

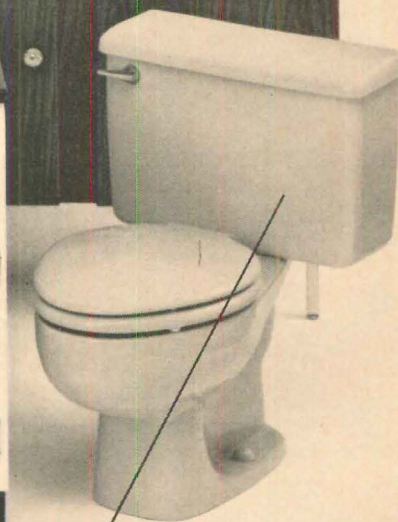
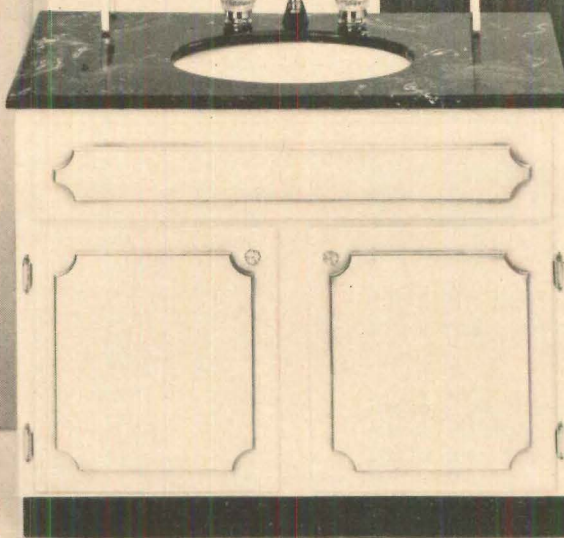
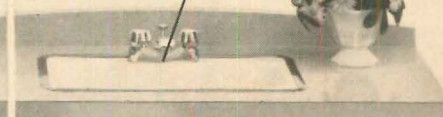
Soap dish out of sight

Crane's exclusive concealed soap receptacle (as shown in the mirror here) puts the soap where it belongs — out of sight. Keeps your countertop neat and clean; also doubles as an overflow.



Leak-proof faucets

Exclusive Crane Dial-ese control keeps stem threads dry, free from corrosion. Lasts years longer than conventional controls. Valve closes with water pressure. No more washers to change. Cuts maintenance costs and water bills.



Sweat-free tanks

Crane's Neu-Sahara tank stays dry even when the bathroom steams up to 80° and 70% humidity! Ends wet floors. (Shown here with Crane Radcliffe toilet.)

THE NAME IS

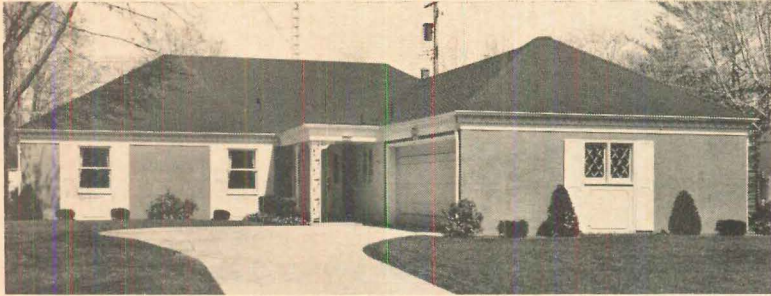


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PIPING • PLUMBING • HEATING • AIR CONDITIONING

Mr. Builder: find out how Crane's "Full Measure of Value" program can help you put new salesmanship in your homes. Contact your Crane sales office, Crane wholesale distributor or write Crane Co., Dept 034, 4100 S. Kedzie Ave., Chicago, Ill. 60632.

TODAY'S MOST VERSATILE BUILDING AND REMODELING PRODUCT

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CENTURY BRICK can be applied to the exterior or interior of any new or existing structure in a variety of color, style and surface texture combinations providing complete distinction and individuality.

In addition to homes of all price categories, CENTURY BRICK has met widespread acceptance among users in the commercial, industrial and institutional field.

A unique combination of time proven materials, namely, pure white pulverized marble, waterproof portland cement and today's latest chemical compounds provide long lasting beauty.

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Erie, Penn'a. 16505

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ADDRESS _____
CITY _____ STATE _____ ZIP _____

SOME CHOICE DEALERSHIPS ARE STILL AVAILABLE IN MOST PARTS OF THE COUNTRY. WRITE FOR COMPLETE INFORMATION.

NEWS

Canadian builder aims a line of prefabs at the under-\$10,000 market

President **J. C. Neely** is moving his Alcan Design Homes Ltd. of Montreal into the moderate-priced field.

The four-year-old subsidiary of Alcan Aluminium Ltd. (formerly Aluminum Co. of Canada) has been steadily expanding sales of high-bracket homes, and last year sold 412 houses at a \$28,000 average price.

Now Neely, a former Reynolds Metals Co. executive who helped set up Alcan's housing effort, is betting \$500,000 in development costs that his mass-produced house can tap Canada's middle- and low-income housing market.

His researchers have come up with four prototype models with from 1,056 to 1,320 sq. ft., with three or four bedrooms, 1½ or two baths, and fully furnished with wall-to-wall carpeting and applianced kitchens. All will sell for less than \$10,000, plus land. Models will be opened in Montreal and Toronto in the autumn.

The houses will be sold

through franchised builders and Neely stresses Alcan itself will not be selling against established builders. The homes make ample use of aluminum, including siding, windows and screens.

University picks Clay to train city reporters

Grady Clay, one of the nation's leading writers on urban affairs and architecture, has resigned as urban affairs editor of the *Louisville Courier-Journal* to join Northwestern University's new urban journalism center.

Clay will help shape the center's program and will conduct seminars on how to report about city planning and urban growth. The center is financed by a \$1.1 million Ford Foundation grant.

Clay, 49, a Nieman Fellow at Harvard in 1948-49, has won numerous national awards for his newspaper and magazine articles since joining the *Courier-Journal* in 1949.

Ray Watt joins producer in project

Ray A. Watt, a consistent builder of 2,000 and more houses each year in the big Los Angeles market, has created a joint venture with wood products producer Boise Cascade Co. of Boise, Idaho. Boise Cascade President **Robert V. Hansberger** told stockholders that bc's share of the venture involved 150,000 shares of stock (valued at approximately \$8.8 million). Neither party would divulge further details. Boise Cascade owns Kingsberry Homes, a Georgia home manufacturer, and operates five components plants in the West.

Max Tipton is new vice president and marketing director for Eichler Corp., new name of Eichler Homes of San Francisco. New Eichler President **Charles Parr Sr.** plans to expand one-family sales and has already set up a finance subsidiary. Tipton leaves a similar post with Signature Homes in Los Angeles.

Ward Crump of Cupertino is new president of the Home Builders Council of California, housing's lobbying arm in the state.

Detroit Builder **Lester Burton** of Burton-Share is first chairman of Michigan's statewide board to supervise a new state law (effective Sept. 1) requiring contractors be licensed and bonded.

William R. Mason is new president of Irvine Co., developer of the 93,000 acre Irvine Ranch in southern California. The ranch's chief designer and landscape

architect, **Alberto F. Trevino Jr.**, has joined the new community systems development division being formed by General Electric Co. to investigate how the company can serve the new-town market.


S&L industry leader Morton Bodfish dies

Morton Bodfish, 64, died May 19 in Wickenburg, Ariz., where he had lived since retiring two years ago. He was a founder of the Federal Home Loan Bank Board in the Hoover Administration and was a member of the board in 1932-33.

Lender, lobbyist, and professor, Bodfish ran the United States Savings and Loan League for nearly a quarter of a century (1929-53). Under his direction, League membership swelled from 10% of the industry to 67% of all s&l's. He led his industry in lobbying crusades against targets like public housing and the Federal National Mortgage Assn. so effectively that the *New Republic* once called him one of Washington's "three invisible senators."

For 28 years Bodfish was top man at Chicago's First Federal s&l, which he and associates founded in 1934 with \$50,000. When he retired as chairman and president, First Federal's \$405 million assets made it the sixth largest s&l in the nation.

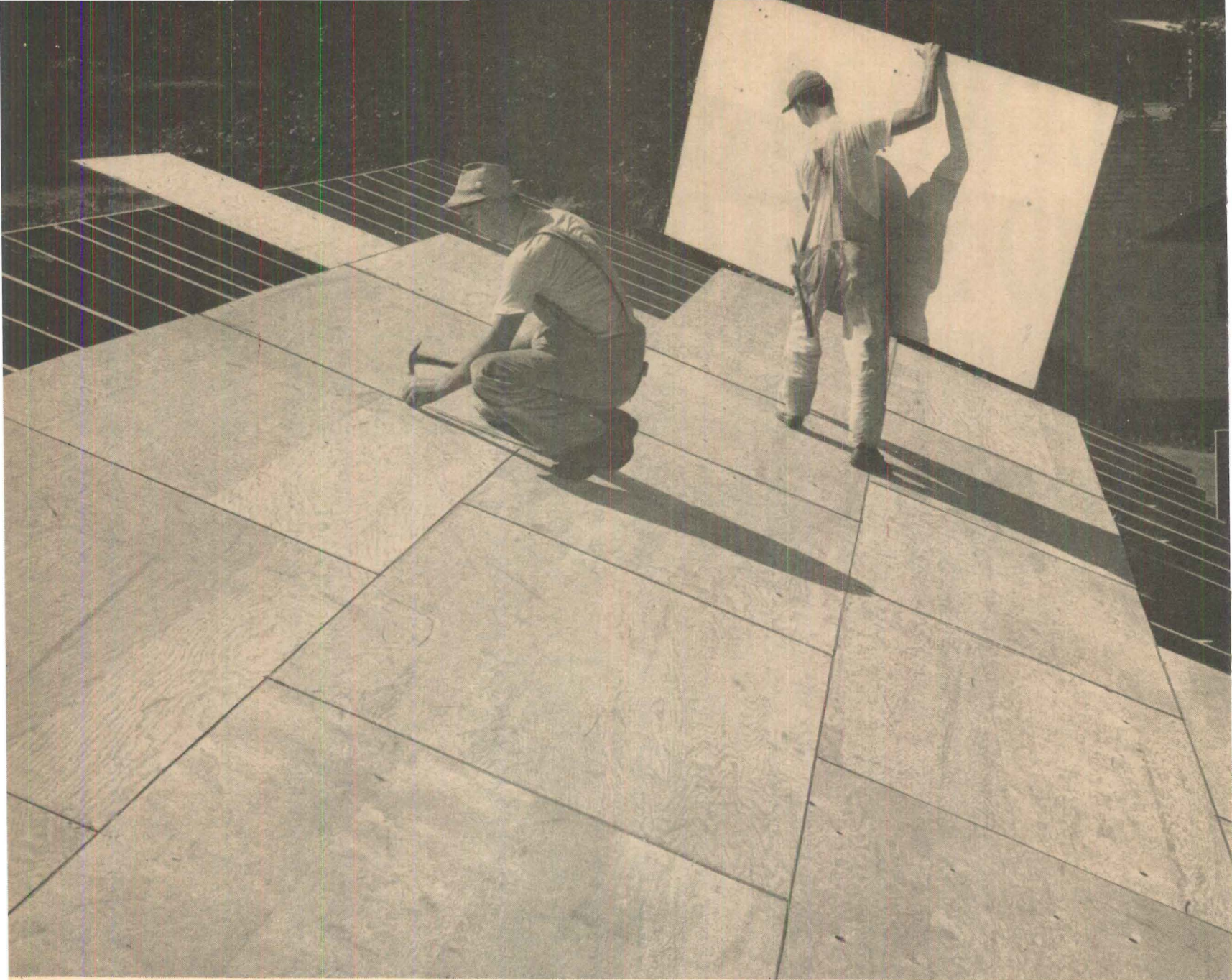
PLYWOOD SHEATHING AND SUBFLOORING IS THE FINEST CONSTRUCTION MONEY CAN BUY.



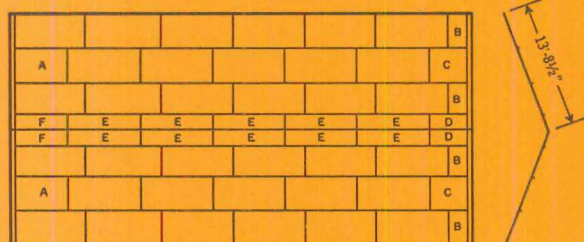
(It's also
the least
expensive.)

ANOTHER NINE-PAGE REPORT TO BUILDERS FROM



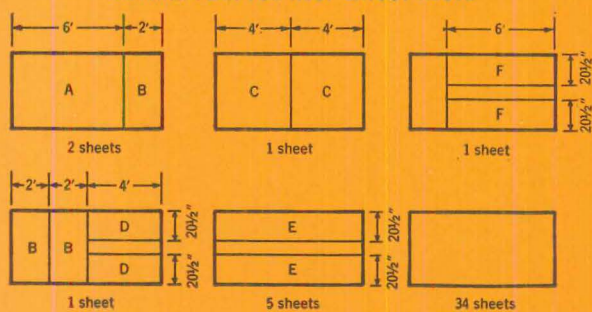


EXAMPLE OF PLYWOOD SHEATHING LAYOUT
(Pitched Roof, 50' x 27'-5"; trusses 2' o.c.)

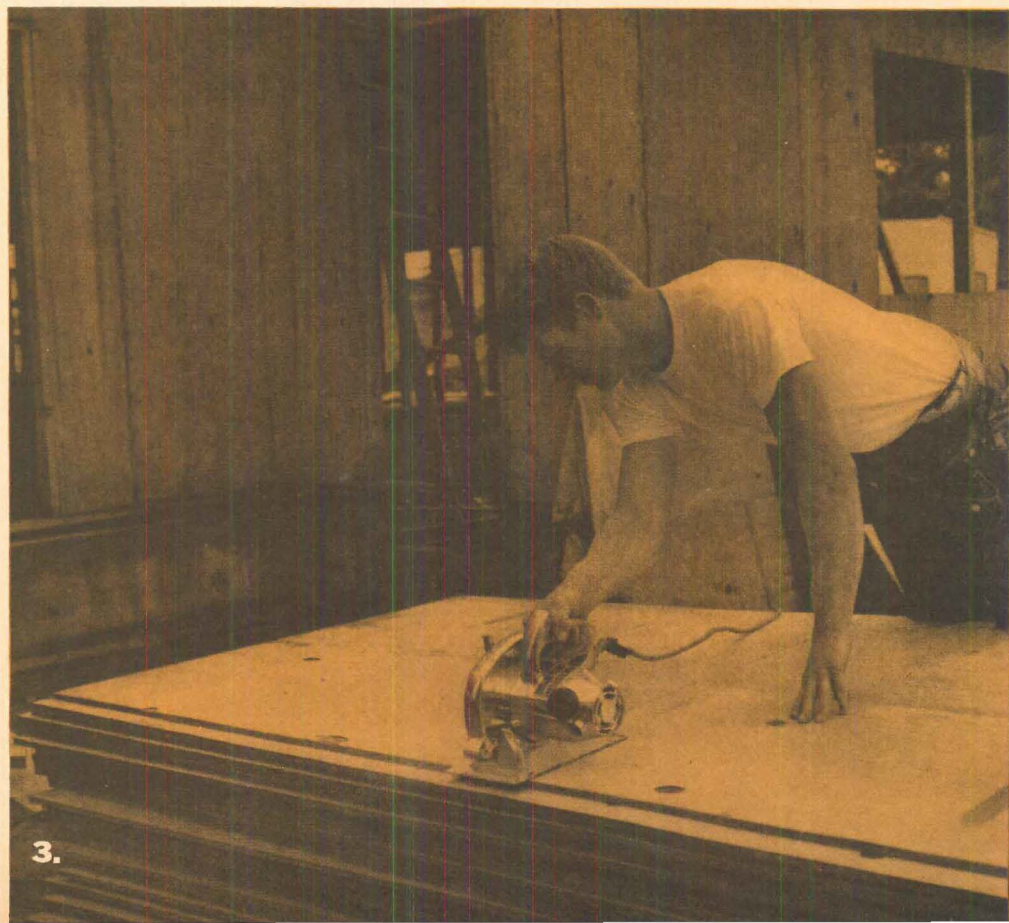


1.

CUTTING PLAN FOR ROOF LAYOUT ABOVE



2.



3.

Even though you're already saving money with plywood roof sheathing you can probably save still more.

NAHB's new TAMAP study shows new ways to cut costs to the bone.

A new study by the NAHB Research Foundation for the American Plywood Association shows you how to save up to 15 percent on roof sheathing jobs.

Careful layout and cutting of plywood plus more efficient handling and fastening are pinpointed as areas of biggest potential savings.

The study used the Time and Methods Analysis Program (TAMAP) approach.

It shows a potential saving of 15 percent or about \$24.00 for a roof with 1,600 sq. ft. Some builders will save less, some a lot more. But most can reduce labor costs by as much as a third and materials costs by at least 10 percent.

Here are the major recommendations:

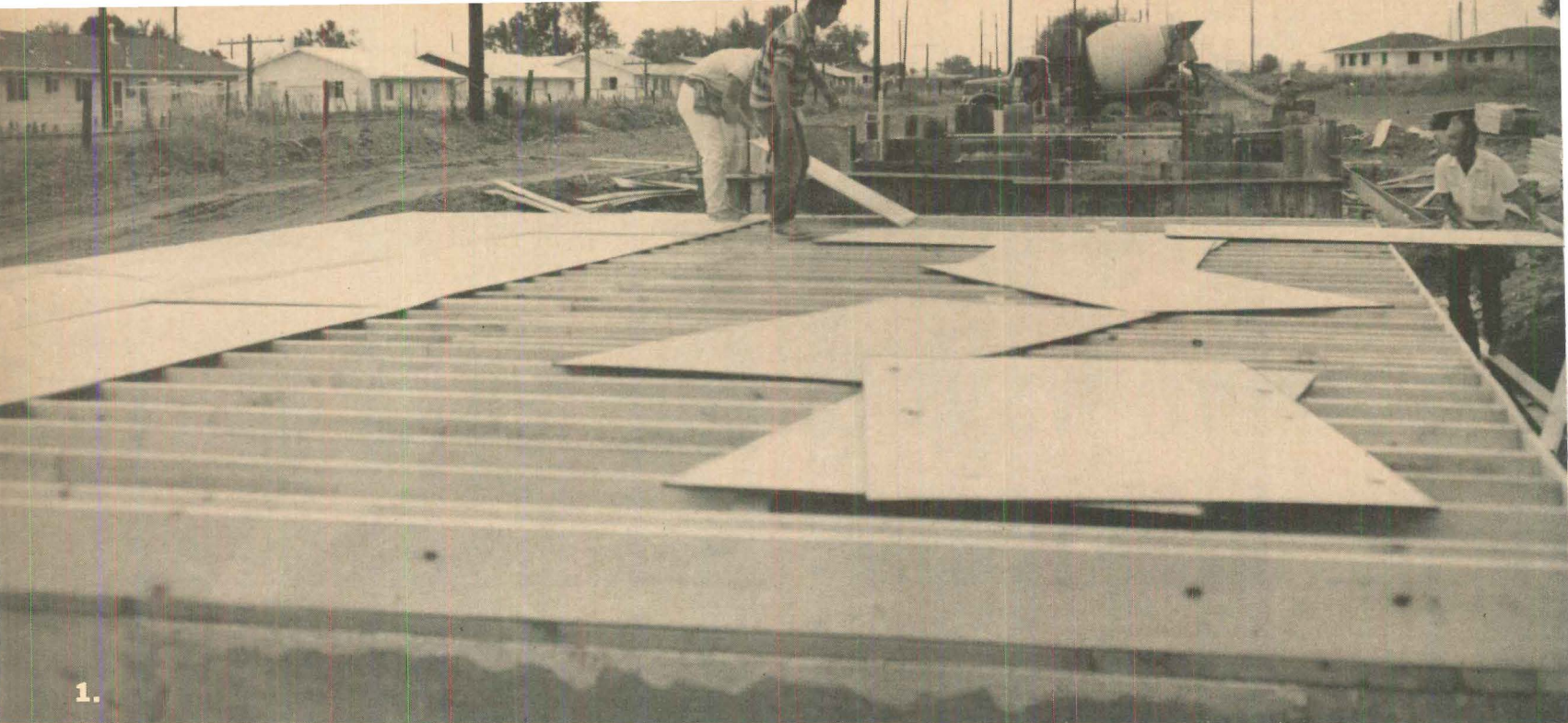
First, plan framing or truss placement to take advantage of plywood's two-foot module. This minimizes cutting and waste. Draw the roof framing plan ahead of time. Then draw each sheet of plywood on the roof plan.

(1) Sheathing layout for a 1,371-sq. ft. roof shows how the builder can pre-plan to use as many full sheets as possible. If the 44 sheets in this layout are cut and used as shown, there's only 8 sq. ft. of scrap.

(2) Work out a cutting plan. Plan cuts so leftover pieces can be used elsewhere. If plywood is pre-cut, number or letter all pieces for identification.

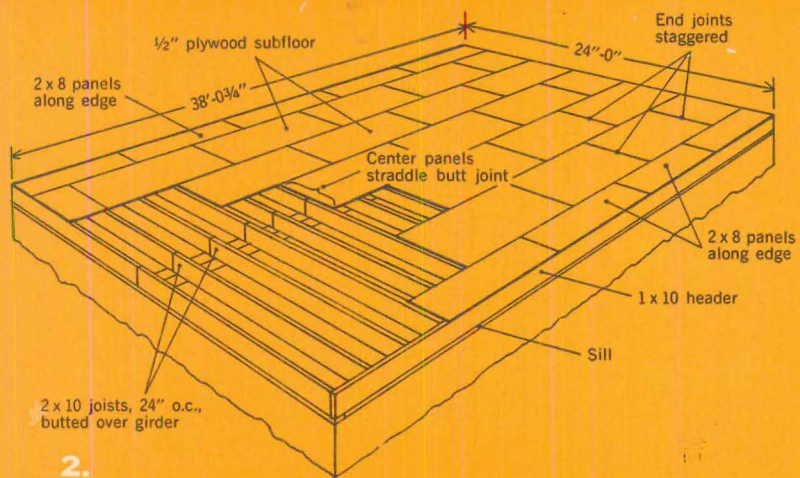
(3) Make sure the plywood is delivered and cut as close as possible to where it will be used.

(Continued)



1.

LOWEST COST PLYWOOD FLOOR SYSTEM



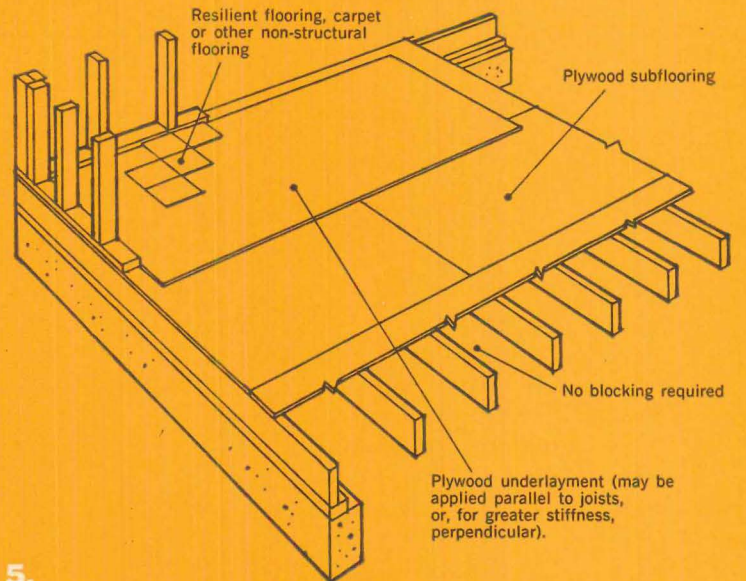
2.

3.

COST BREAKDOWN FOR LOWEST COST SYSTEM

Item	Shop Labor	Field Labor	Total Labor	Total Mtl.	Total
Framing	6.20	11.22	17.42	124.47	141.89
Subfloor	1.45	9.48	10.93	116.00	126.93
Subtotal	7.65	20.70	28.35	240.47	268.82
Bridging		9.36	9.36	5.22	14.58
TOTAL	\$7.65	\$30.06	\$37.71	\$245.69	\$283.40

PLYWOOD UNDERLAYMENT APPLICATION

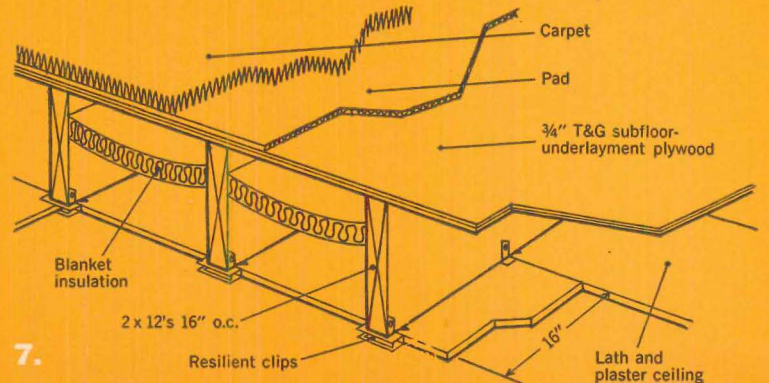


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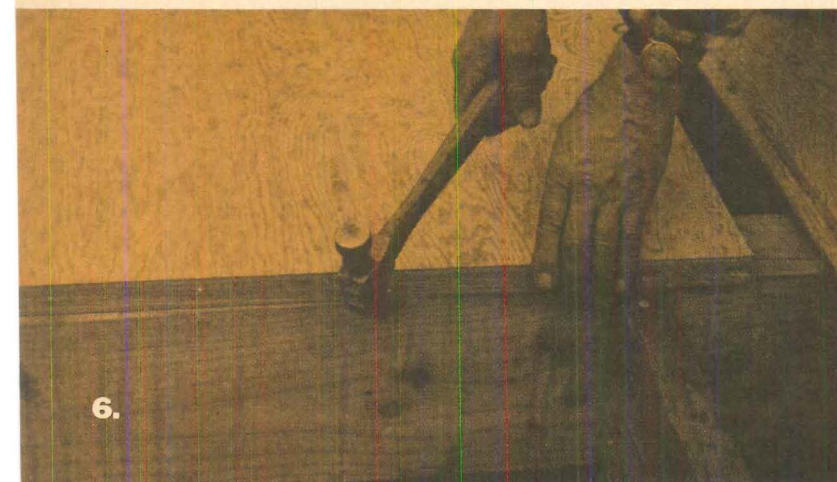


4.

SOUND-CONDITIONED PARTY FLOOR WITH PLYWOOD SUBFLOOR-UNDERLAYMENT



7.



6.

Boards or plywood?

New cost study proves what most builders already know: Plywood subfloors cost less for both labor and materials.

(And plywood underlayment does the best job under any kind of resilient flooring.)

Plywood won hands down when the Small Homes Council-Building Research Council of the University of Illinois recently took a look at the costs of five floor systems.

All five were installed by the same crew, under the same conditions. Builder was William Leichliter, Longmont, Colorado.

(1) Plywood over butted joists (rather than lapped) was used for both the lowest cost systems.

(2, 3) The lowest of all (\$283 for the 912-sq.-ft. floor) used 1/2" plywood over 2x10's, 24" o.c.

Other systems used plywood over 2x8's, diagonal and T&G boards, and preframed plywood panels.

Builders may obtain the complete report for \$1.50 from the Small Homes Council, University of Illinois, Urbana, Ill.

All the floor systems included in the above study were designed for the type of hardwood flooring which doesn't call for separate underlayment. As a base for resilient floor coverings, use plywood underlayment (*not* ordinary plugged Interior sheathing).

(4, 5) Underlayment-grade plywood with a smooth sanded face and a special second ply will resist bumps, concentrated loads, jabs and blows. It comes in thicknesses from 1/4" on up.

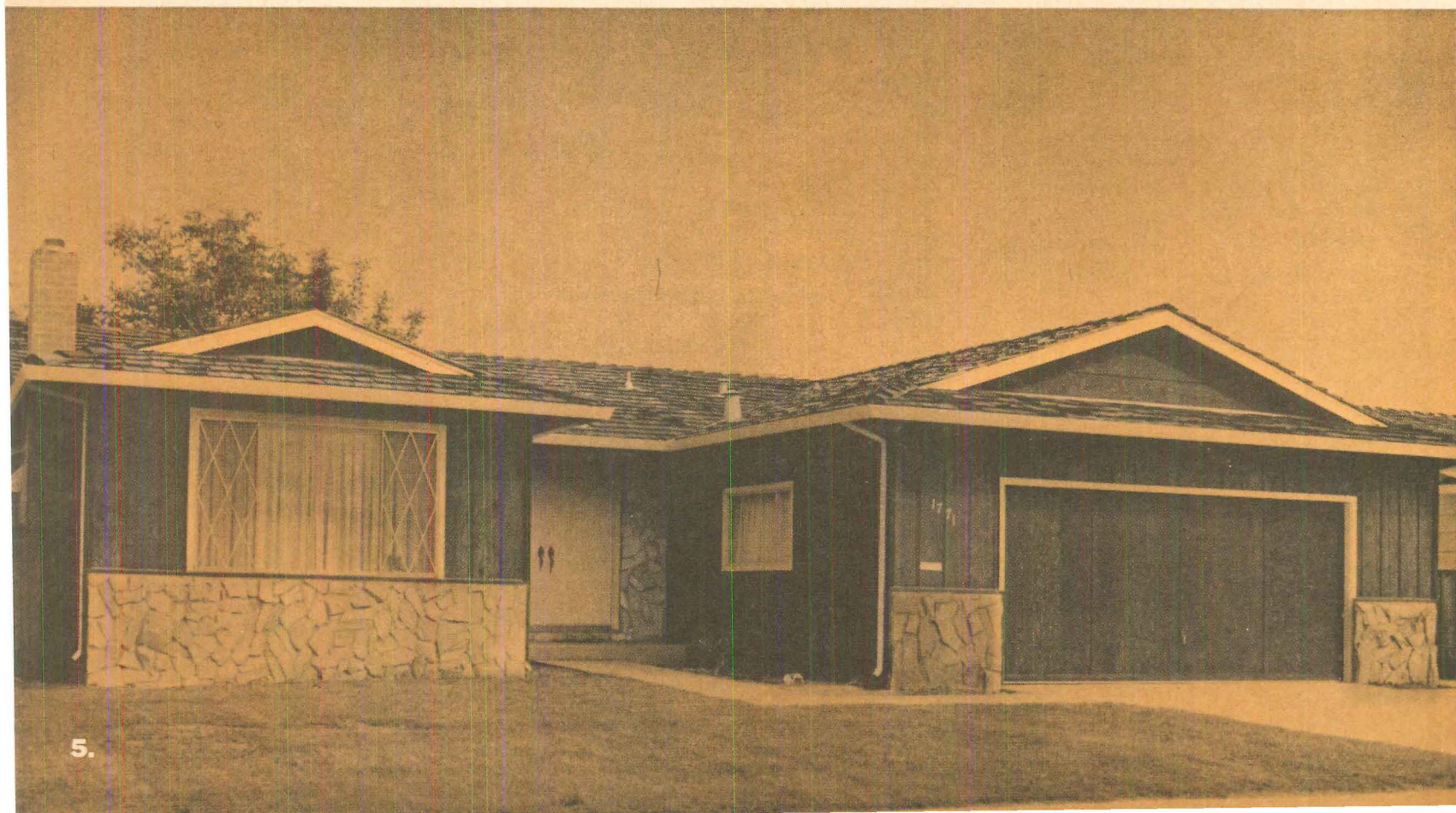
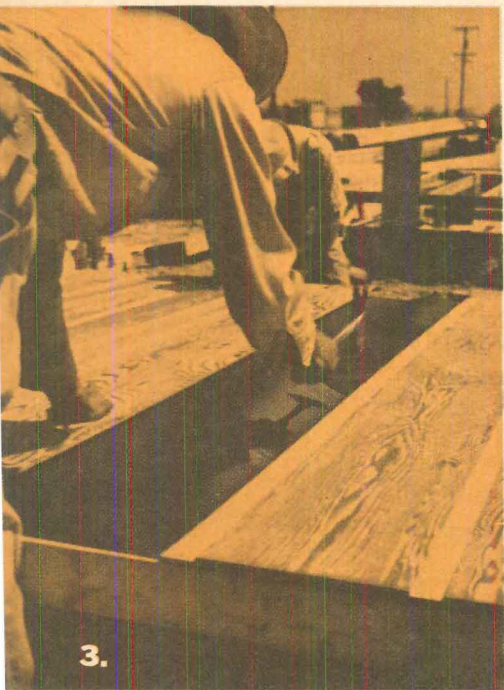
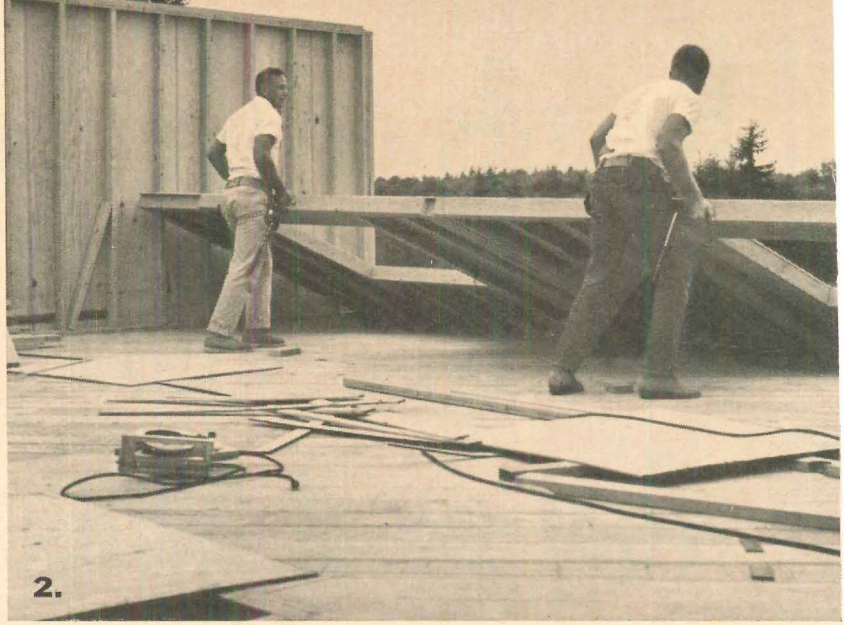
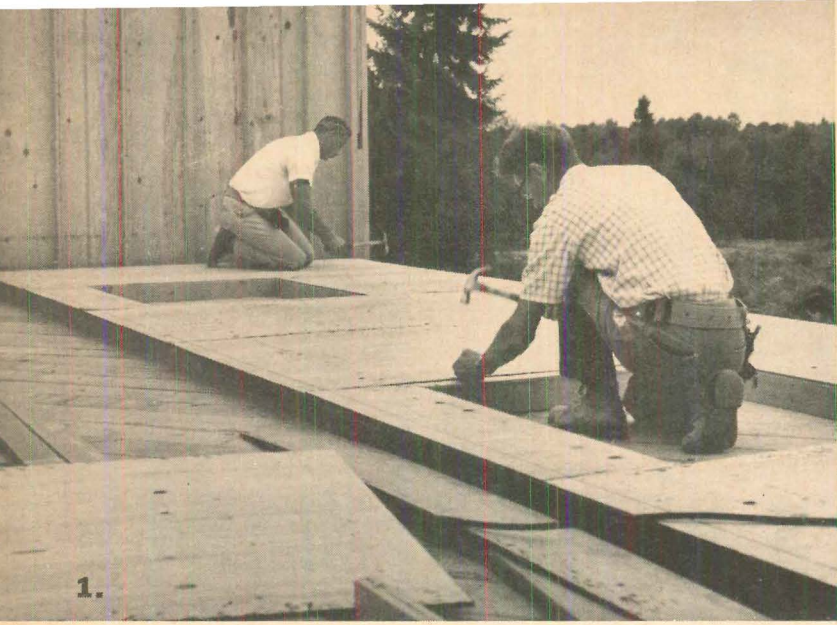
(6) Extra-strong, 1 1/8-in. 2-4-1® plywood is subfloor and underlayment all in one panel. It has T&G edges, needs support only at 4-ft. intervals.

(7) This plywood floor system with 3/4" T&G subfloor-underlayment was specified in a Livonia, Michigan, apartment because it proved less expensive than a competitive fiberboard system, and gave superior control of airborne sound. Architects: Melvin H. Sachs & Associates. General Contractor: K & C Associates.

Send for free booklets on plywood floor systems, with recommendations on grades, application methods. Write (U.S. only): Floors, P. O. Box 951, American Plywood Association, Tacoma, Washington 98401.

(Continued)





Half-inch plywood is the strongest wall sheathing you can use, but if costs are really important, try $\frac{3}{8}$ " or $\frac{5}{16}$ ".

And if you want to save even more, try Exterior plywood that serves as siding and sheathing too.

Bert Lenting, partner in Vista View Builders, Renton, Washington, switched to $\frac{3}{8}$ " plywood wall sheathing eight years ago.

"It costs a good deal less than half-inch," he says, "and it's plenty strong." Lenting's firm (like Schulte & Blackwell, below) saves time with tilt-up.

(1) Wall sections are sheathed on the job, then **(2)** tilted up into place. Siding and plywood accent panels are applied later.

Lenting uses plywood roof sheathing too, and figures that altogether he saves at least \$100 a house with time-saving plywood applications.

Vista View builds about 24 quality homes per year in King County, Washington. Most are in the \$24,000-\$30,000 range.

Single-wall plywood construction saves two weeks per house for Schulte & Blackwell, Santa Clara County, California builders.

(3) They use rough-sawn grooved plywood, applied directly to the studs. (In this area, insulation between studs isn't necessary.) **(4)** They assemble entire walls on the deck slab, then tilt them into place. The wall system cuts labor costs so much that it compares with stucco—the most inexpensive surfacing in the area.

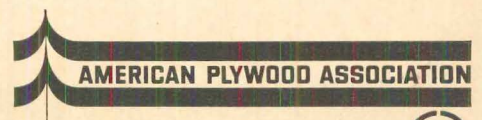
(5) Blackwell says, "This means we can offer homes in the same price range with stucco, but with the extra beauty of wood siding." They were worried

at first about public reaction to a non-stucco house, but sales have been ahead of building schedules from the start.

For free booklets on plywood wall sheathing and new plywood sidings, write (U.S. only): Walls, P.O. Box 869 American Plywood Association, Tacoma, Washington 98401.

The DFPA grade-trademark is your assurance of quality plywood.

It's essential to use highest quality plywood sheathing—whether for roof, wall or floor. You must be able to assure your customers of quality construction, and you want to avoid costly callbacks. So it pays to insist on the American Plywood Association's DFPA grade-trademark whenever you buy or specify plywood. That means it was manufactured according to the high standards of the Association's testing and inspection program. Always look for this grade-trademark on every panel.



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AT HALF PRICE!

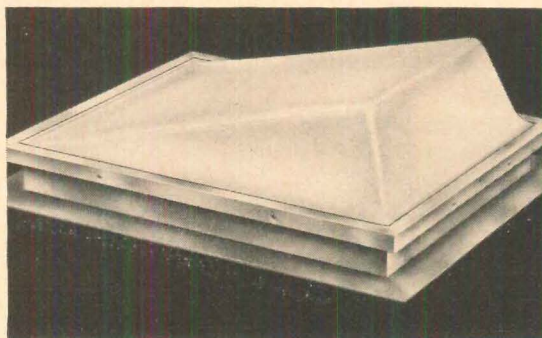
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BUILDER'S REGULAR PRICE... \$46.35

PROMOTION PRICE..... 23.18
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Model HS2432 Skywindow



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Now the problem of dim, windowless bathrooms can be eliminated for good.

The ACRYLITE Skywindow provides abundant daylight from overhead plus the comfort of complete privacy . . . actually makes the interior bathroom a dramatic new home sales feature. The unit installs easily on any roof . . . admits evenly diffused daylight throughout any room . . . adds excitement and value to any home. And the ACRYLITE Skywindow is weather-proof and shatter resistant . . . never needs replacement.

Perhaps you first saw it at the NAHB Show or installed in other new homes. Maybe you've read about it in ads or editorials in national magazines — and wanted to try one in your model home. Well, be our guest. You can buy, for a limited time only, a Model HS2432 ACRYLITE Skywindow at *half price*. Prove to yourself that it will help sell your new homes faster.

Here's why we make this offer!

In 1966 Cyanamid will ship its *one millionth* ACRYLITE® acrylic skylight.

In the past two years alone, over one thousand builders have become users of ACRYLITE Skywindows. The majority of builders who try just one ACRYLITE Skywindow in a model home re-order again and again. Many are installing four, five, even six units in one home — *at the request of owners!* To introduce the ACRYLITE Skywindow to as many builders as possible, and prompt you to try it, we're making this special offer. Once you've installed one in a model home, the interest and excitement it creates among your prospects will prove how effective the ACRYLITE Skywindow is as a new home sales feature.

Look what other builders say:

"Acrylite Skywindows have drawn many comments, and all good . . . product is really seen and admired."

Mr. Bob Jennings
of Bob Jennings, Inc.,
Daytona, Florida

"The Acrylite Skywindows are wonderful! People are particularly impressed with the two we used to lighten

an 18 x 20 upstairs room that otherwise would have been just an attic storage room."

Mr. C. K. Dart,
Building Contractor
Eugene, Oregon

". . . reaction has been excellent . . . we used two in the kitchen, one in the fam-

ily room and one in the bathroom. The people really seem to like them."

Mr. Richard O. Ballschmider,
Realtor,
Sheboygan, Wisconsin

". . . enthusiastic reception of the 'Skywindows'. We had to slide one of the ceiling panels back to prove there

was no electric illumination."

Mr. William S. Cassilly,
President Cassilly Realty Co.
Webster Grove, Missouri

"caught the fancy of many visitors . . . we think they're great!"

Mr. O. A. "Bud" Winkler
of Kinberger-Winkler,
Louisville, Kentucky

For more information, see Sweets Light Construction file 6e/Am.

To buy your ACRYLITE Skywindow at half price, just fill in this coupon, and take it to the building supply dealer displaying this sign. If your dealer can't supply you, mail the coupon to Cyanamid and we'll handle it.

Builders... redeem coupons here!
special introductory offer



Acrylite* Skywindow* at half price

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192G

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TO THE DEALER: This coupon authorizes you to sell to the builder an ACRYLITE Skywindow (Model HS2432) at \$23.18 (half the suggested list price.) Return coupon to your distributor, and he will replace the unit at half your regular cost.



OFFER ENDS AUGUST 31, 1966. NOT VALID UNLESS FILLED OUT COMPLETELY.

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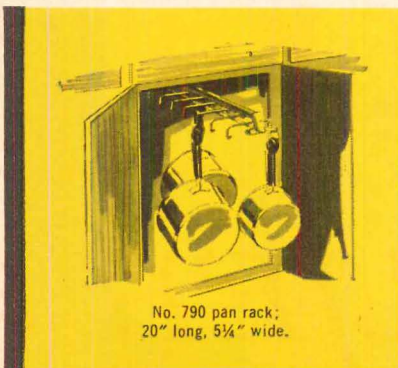
Meet Operators KV790, KV793 and KV796 — trained to trap clutter and mess — usually discreetly out of sight, but they glide out smoothly when it's time for action! And in the best double-agent tradition, they match their kitchen operations with profitable sales increases for you. It's a real sales-boosting combination, this KV blend of out-of-sight storage with fingertip accessibility! Builders and homeowners love the coordinated convenience these modern pull-out fixtures put into any kitchen. Especially when they're so inexpensive, so durable, easy to install. Your KV representative is the man to see, or write for our free catalog.



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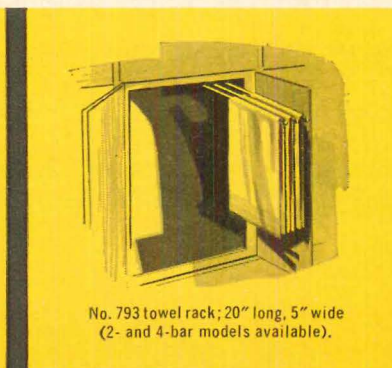
Grand Rapids, Michigan



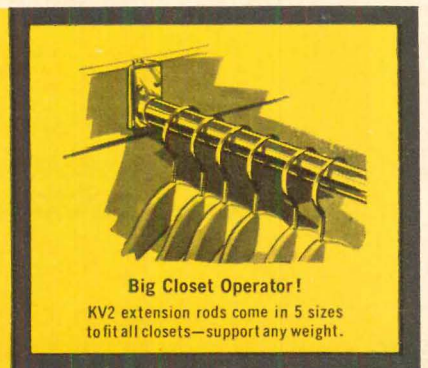
No. 790 pan rack;
20" long, 5 1/4" wide.



No. 796 wastebasket rack;
20" long, 9" wide.

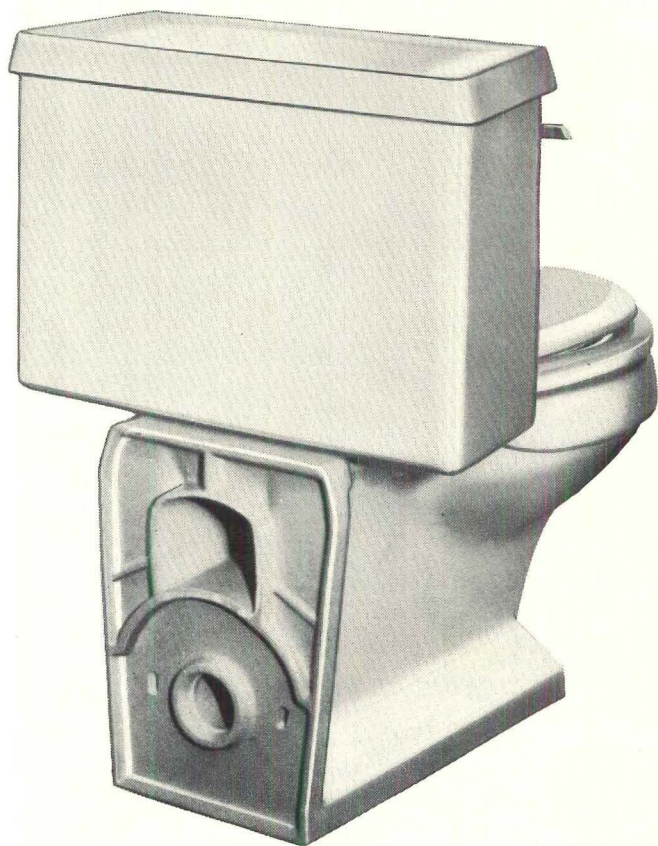


No. 793 towel rack; 20" long, 5" wide
(2- and 4-bar models available).

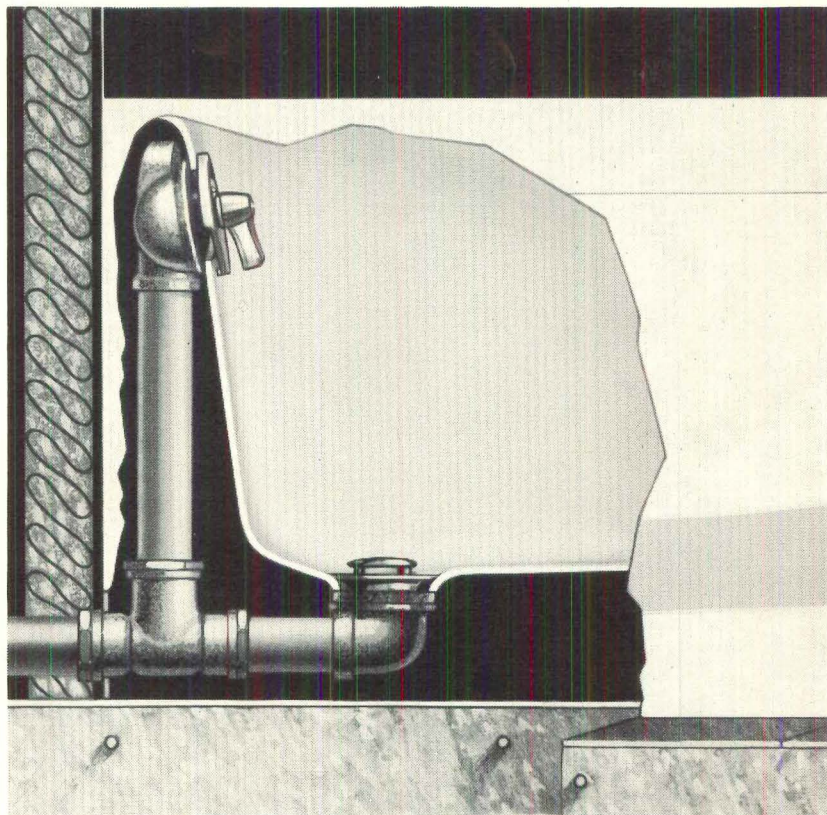


Big Closet Operator!
KV2 extension rods come in 5 sizes
to fit all closets—support any weight.

Eljer has a concrete solution for sidestepping slab piercing.



The Orlando floor-mounted closet roughs-in through the wall.



The Sarasota bath features a raised outlet, 3 1/2 inches from the floor, permits waste line to be installed through the wall.

Eljer's floor-mounted fixtures with raised wall outlets cut slab piercing to a minimum! Permit roughing-in right through the wall.

Orlando toilet and Sarasota bath are quickly and easily installed. Save you time and money. Orlando fits flush with the floor and wall. Features a full-angle back and base for easy cleaning.

Both Sarasota and Orlando are available now through your Eljer plumbing contractor. For information about more Eljer on-the-job time- and money-savers, call your contractor or write Wallace-Murray Corporation, Eljer Plumbingware Division, Dept. HH, P.O. Box 836, Pittsburgh, Pa. 15230.



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SINCE 1904 FINE PLUMBING FIXTURES



Sell the fashionable homemaker



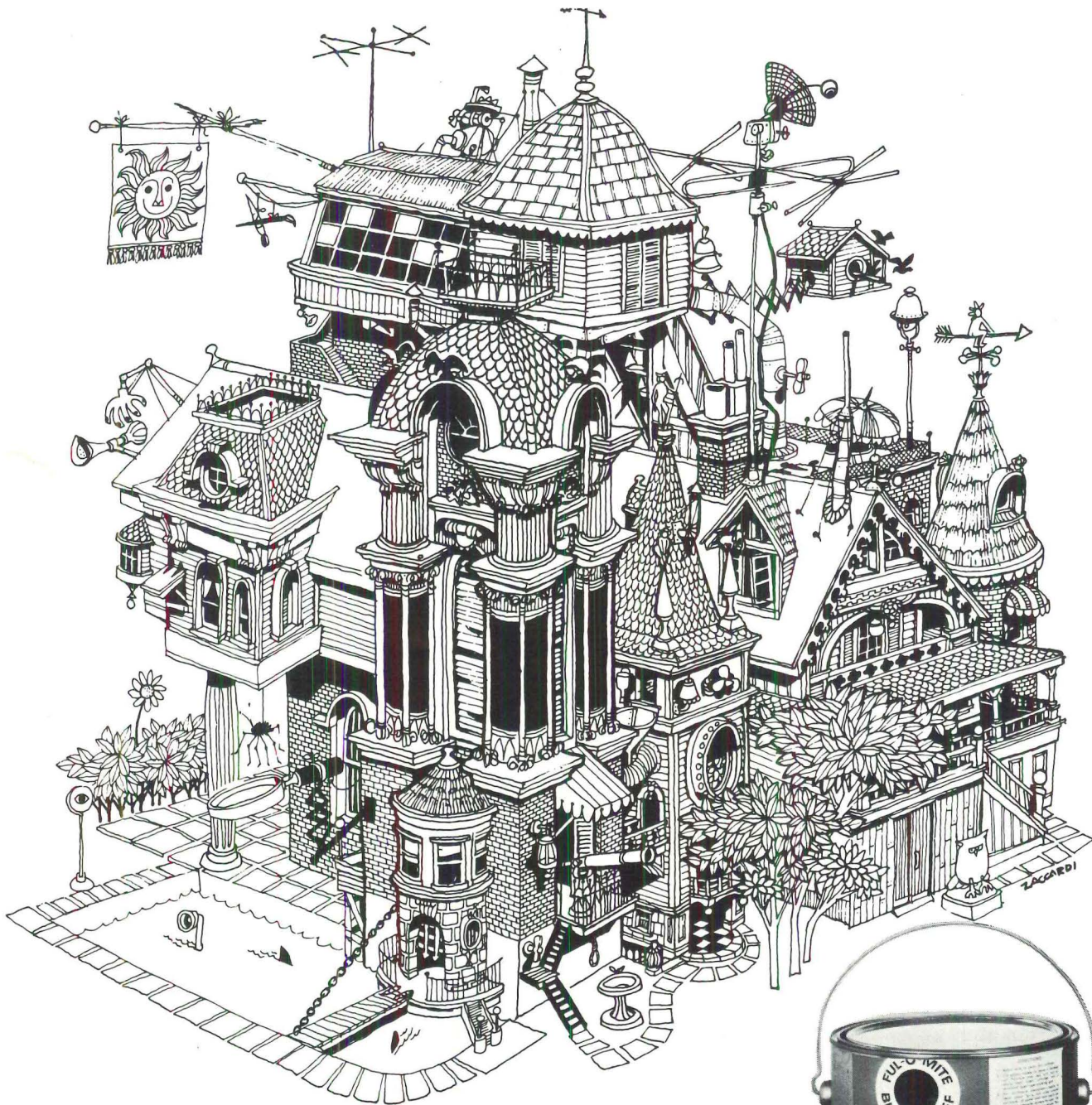
with fashionable Moe Light

She's as style-conscious of decor as she is of clothing. She'll decide whether to take a second look at your model homes. So give her something special to remember: a Moe Light six-candle chandelier in authentic hand-hammered wrought iron.

For more ideas on how to sell the fashionable homemaker, write to Residential Lighting Division, Thomas Industries Inc., 207 East Broadway, Louisville, Kentucky 40202.



MOE LIGHT
THOMAS INDUSTRIES INC.



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Write for **FREE Information File Folder on Construction Adhesives.**

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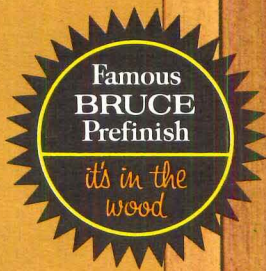
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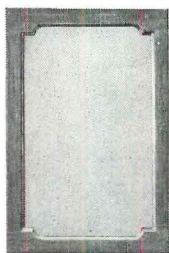
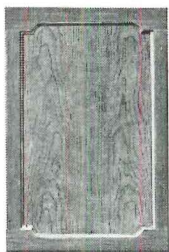
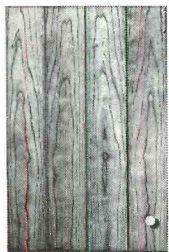
Pictured below: Huntsman Pecan. Also in Cherry and Walnut. Prefinished moldings to match.



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quality built
competitively
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kitchen to fit
every
architectural
style or deco-
rating theme



See them all at your nearby Kemper Distributor or write for your free, full color catalogs on Kemper's complete line of wood Kitchens and bathroom vanities and lavanettes.

Kemper

KEMPER BROTHERS, INC., RICHMOND, IND.

BUSINESS IN THE MAKING

HOUSE & HOME presents locations, sponsors, architects and estimated costs of representative new projects costing over \$500,000 as gathered by ENGINEERING NEWS-RECORD and F. W. Dodge Co., division of McGraw-Hill Inc. to alert builders, lenders and contractors to new business.

CONNECTICUT—DANBURY: Intern residence, \$650,000. Sponsor: Danbury Hospital. Plans: Douglass Orr de Cossy & Winder & Assoc., New Haven. NEW HAVEN: Housing for the elderly, \$500,000. Sponsor: Jewish Home for the Aged. PLAINSVILLE: Apartment, \$500,000. Sponsor: Colonial Village Assoc., Manchester. Plans: Hirsch, Hammerberg & Kaestle, New Britain. SHELTON: Garden apartments and swimming pool, \$750,000. Sponsor: Edward Ayer. Plans: Val Carlson. STRATFORD: Apartment, \$750,000. Sponsor: c/o Jack H. Schechter, Bridgeport. WETHERSFIELD: Shopping center and apartment complex, \$3 million. Sponsor: Gam Beck Realty, Hartford.

FLORIDA—CAPE CORAL: Condominium apartments, \$750,000. Sponsor: Sunset Tower & Roanoke Tower Apartments, Miami. Plans: Harold B. Davis. DUNEDIN: Condominium apartments, \$6 million. Sponsor: John R. Wilson, Clearwater. Plans: Alfred Drake, Pinellas Park. FORT LAUDERDALE: Condominium apartment and swimming pool, \$10 million. Sponsor: Maximo Corp., division of Radice Realty & Construction. Plans: E. Abraben. FORT MYERS: Condominium apartments, \$750,000. Sponsor: McIntyre Corp., c/o Harold B. Davis, architect, Cape Coral. HALLANDALE: Apartment and swimming pool, \$600,000. Sponsor: Marks Construction Co., Hollywood. Plans: Arthur A. Frimet, Hollywood. HOLLYWOOD: Apartment, \$825,000. Sponsor: Ocean Bay Club, c/o Samuel Puder, architect, South Miami. LARGO: Apartments, \$1.3 million. Sponsor: c/o Clarence Dahlquist, architect, Glenview. ST. PETERSBURG: Apartments, \$1 million. Sponsor: Paul Resop. Plans: John Hulslander. TAMPA: Garden apartments, \$3 million. Sponsor: Alfred Austin. Plans: Harry MacEwen. TREASURE ISLAND: Condominium apartments and medical complex, \$8 million. Sponsor: Donald Rosselli, St. Petersburg.

MASSACHUSETTS—BEVERLY: Apartment, \$5 million. Sponsor: Town Homes, Boston. HOLYOKE: Senior citizens housing, \$3 million. Sponsor: R.C. Diocese of Springfield. Plans: Henry J. Tessier, Springfield; Apartments and shopping center, \$1 million. Sponsor: Samuel Realty Trust. LEOMINSTER: Apartment complex, \$1,250,000. Sponsor: F. Dandini & Sons. Plans: Charles Associates. SOUTH BOSTON: Apartments, \$23 million. Sponsor: First Realty Company of Boston. Plans: S.J. Kessler & Sons, New York City.

MICHIGAN—DETROIT: Apartment, \$2 million. Sponsor: c/o Melvin H. Sachs & Assoc., Lathrup Village. Owosso: Senior citizens housing, \$1 million. Sponsor: Kiwanis Village of Owosso. ROMULUS: Apartments, \$6 million. Sponsor: Creative Homes. Plans: James H. Livingston & Assoc., Ann Arbor. ROSEVILLE: Apartment, \$1 million. Sponsor: c/o Anthony Quint. ROYAL OAKS Apartment, \$3.5 million. Sponsor: Mark Builders, Detroit. Plans: Lorenz & Paski, Detroit. TROY: Apartment, \$3,150,000. Sponsor: c/o Broleman & Rapp, architects, Orlando, Fla. WATERFORD: Apartment development, \$750,000. Sponsor: Adler Investment, c/o Stanford Rossen, architect, Detroit.

MISSOURI—BRIDGETON: 71 houses, \$1.5 million. Builder: Dot Investment, Clayton. DELLWOOD: Condominium apartment, \$3.5 million. Sponsor: Fischer & Frichtel Design & Construction, Bridgeton. HAZELWOOD: Condominium apartment, \$3.5 million. Sponsor: Levinson Corp., University City. Plans: Drake Partnership Architects, Creve Coeur. KANSAS CITY: Apartments, \$1.2

million. Sponsor: William Kalivus. Plans: Terry Chapman; Apartments, \$1.2 million. Sponsor: c/o Grunsfeld & Assoc., Chicago, Ill. ST. LOUIS: 65 houses, \$1.5 million. Builder: Harvey Ferbet, Sunset Hills; 40 houses, \$750,000. Builder: Sherwood Inn Inc., c/o Dellavis & Breece Realty; 79 houses, \$1,450,000. Builder: Midwest Realty, Olivette; 187 houses, \$2.5 million. Builder: Tahoe Development, Ferguson.

OHIO—BRUNSWICK: 90 houses, \$1.3 million. Builder: Hassax Homes, Cleveland; Townhouse apartments, \$1 million. Sponsor: Epoch Construction. CHAGRIN FALLS: Garden apartments, \$1 million. Sponsor: Hamlet Development. Plans: Thomas Edge, Dayton. CINCINNATI: 50 houses, \$1.2 million. Builder: Design & Construction Assn.; 46 houses, \$1.6 million. Builder: Murphy Bros. CLEVELAND: 40 townhouses, \$3 million. Sponsor: c/o William Dorsky, architect, COLUMBUS: Apartments, \$2.4 million. Sponsor: Falco Smith & Kelly Inc. Plans: Jack E. Titus. FAIRFIELD: 32 houses, \$800,000. Builder: Cunagin Construction. KETTERING: Apartments, \$2 million. Sponsor: Herlou Inc., Dayton. Plans: Smallwood Doench, Dayton. LANCASTER: 174 houses, \$4 million. Builder: Earl Peters. MIDDLETOWN: Townhouses, \$800,000. Sponsor: Marvin Warner Company, Cincinnati. Plans: Bakie Cates & Roth, Cincinnati. NEW CARLISLE: 400 houses, \$7 million. Builder: Accent Homes, Dayton. NORTH OLMSTEAD: 33 houses, \$1 million. Builder: W.B.W. Investment, Macedonia. SPRINGDALE: 334 houses, \$9.4 million. Builder: Fred Ross Construction, Cincinnati. YOUNGSTOWN: Row houses, apartments, recreation area and swimming pool, \$15 million. Sponsor: Westlegg Corp., Skokie, Ill.; 60 houses, \$900,000. Builder: Bertelli & Bero Construction, Poland.

PENNSYLVANIA—CAMBRIDGE SPRINGS: Housing project, \$1 million. Sponsor: Northwestern Rural Electric Co-operative Assn. HANOVER: Apartments and swimming pool, \$3 million. Sponsor: L & P Development. Plans: Lester Weckesser, Erlton, N.J. HENRYVILLE: 200 houses, 100 townhouses and apartments, \$1.2 million. Sponsor: Pocono Country Club, c/o Fred Frankel & Assoc., Philadelphia. Langhorne: Apartments, \$1 million. Sponsor: Dominic Falcone, Havertown, MANHEIM: Garden apartments, \$1.8 million. Sponsor: Calvary Fellowship Homes Inc., Lancaster. Plans: David Lynch. MIDDLETOWN: Apartments, \$2 million. Sponsor: Ippito Construction, Newark, Del. Plans: William Steiner, Downingtown. PITTSBURGH: Apartments, \$8 million. Sponsor: Urban Properties. Plans: Tassog G. Katselas; Apartment, \$7 million. Bower Hill Development, c/o General Investment & Development, Boston, Mass. Plans: Donald Drayer, Washington, D.C. SCOTT: 60 townhouses, garden apartments, \$3 million. Sponsor: Bell Development, Pittsburgh. Plans: Don Hisaka, Cleveland.

VIRGINIA—ALEXANDRIA: Garden apartments, \$1.5 million. Sponsor: K M S Venture, Bethesda, Md. Plans: Mayne, Oseroff, Van Beisen & Assoc., Arlington. BURLINGTON: Apartment, \$1.1 million. Sponsor: Marcel Beaudin. CHESAPEAKE: Townhouse apartments, \$950,000. Sponsor: Albermarle Apartments, Virginia Beach. Plans: Brundage-Cohen & Holton, Norfolk. CHESTERFIELD: Townhouses and apartments, \$1.2 million. Sponsor: Winestein & Winestein, Richmond. Plans: E. Tucker Carlton, Richmond. MARION: Dormitories, dining hall, student union and classroom buildings, \$3 million. Sponsor: Marion College. Plans: Smithey & Boynton, Roanoke. MARTINSVILLE: Harden apartments, \$1 million. Sponsor: Stratford Square Apartments. Plans: Truman Newberry Jr. Raleigh, N.C. RESTON: Townhouses, \$700,000. Sponsor: Lakeview Mall Assoc., Alexandria. Plans: Donald J. Olivola, Falls Church; 133 townhouses, \$2.5 million. Sponsor: Reston Corp. Plans: Cohen, Haft & Assoc. Silver Springs, Md. SPRINGFIELD: Garden apartments, \$4 million. Sponsor: T. N. Learner Assoc., Wheaton, Md. Plans: Cohen, Haft & Assoc., Silver Spring, Md.

Leaders start on p. 54

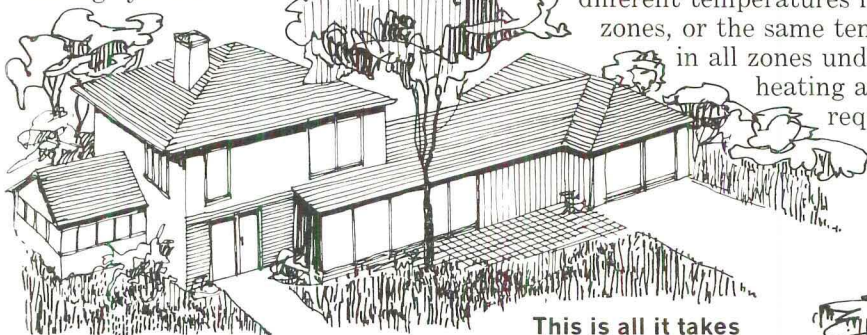
Planning to build an unusual home?

Here's how zone control can solve your heating and cooling problems with little additional cost

Successful builders are finding that a slightly unusual feature or floor plan makes their homes stand out from the competitive homes. It can capture the prospect's imagination and often is just enough to clinch the sale. But these same features can create heating and cooling problems, too. And of course, no matter how exciting the feature, if the home is uncomfortable, you'll have a dissatisfied customer.

Chances are, you have some of these features in the homes you are building now.

Here's a list of six common design features and the problems they can cause with heating and cooling systems.



- 1. In any two or three level home**, warm air tends to rise, leaving cooler air in the rooms on the lower level.
- 2. Special activity rooms.** It is obvious that bedrooms call for cooler temperatures than living areas for real comfort, but game rooms and family rooms can create comfort problems, too.

3. Large glass areas provide a great view, but they cause inside temperatures to vary with the outside weather changes . . . even with double-pane windows.

4. With a spread-out floor plan, sun, shade and wind in different areas cause widely differing heating and cooling needs.

5. Rooms over unheated areas, such as garages, often have cold floors and walls.

6. A finished basement, because it is below ground level, places unusual demands on heating and cooling systems.

Lots of potential problems, but zone control solves 'em all

Dividing your homes into two or more areas with accurate temperature control in each provides maximum comfort. Your buyers can have different temperatures in different zones, or the same temperatures in all zones under varying heating and cooling requirements.

This is all it takes

With a forced air system, all it takes is a Honeywell thermostat, damper and damper motor to control air distribution to each zone. With a hydronic system, zone valves control the water flow.

You will be pleasantly surprised at the cost of zone control

As you can see, zone control makes a lot of sense, and it isn't very complicated. The cost of additional equipment is nominal.

Compare the cost with the problem it solves, such as cold floors or uncomfortable bedrooms, and zone control becomes a necessity.

Speaking of unusual features . . . you've just added another one

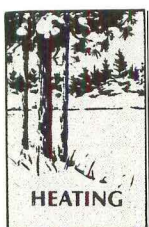
Honeywell zone control not only solves problems connected with unusual features—it is one all by itself. It's an interesting talking point and attracts attention.

After all, what's more important in a home than comfort?



SEND ME THE NEW BOOKLET on Honeywell zone control systems.

Honeywell,
Dept. HH7-402
Minneapolis,
Minnesota 55408



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Address _____

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Honeywell

Jim Durand works at home



more often these days.



**IT'S A QUIET HOME,
THANKS TO MARTIN BUILDERS —
AND CELOTEX QUIET CONDITIONING PRODUCTS.**

Not that Jim has that much more office work. He's just found a more pleasant place to do it. And he doesn't bother the kids a bit. He doesn't even know they're there. Best of all, his work now reflects the attention he's able to give it. He's happy. His family's happy. And so is his boss.

So are Martin Builders. They like pleasing their home buyers. And they like profits. Celotex gives them both. Nobody knows more about quiet homes — and how profitable they can be to build — than Celotex. Naturally. Celotex pioneered the development of acoustical tile. And nobody makes better sound-conditioning products today.

Celotex acoustical ceilings soak up noise wherever it happens. In family rooms, living rooms, playrooms. So the rest of the house stays quieter. Celotex sells a complete line of quiet conditioning products, including Celotex Soundstop* Board and Celotex Gypsum Wallboard for sound-rated partitions and floor/ceiling assemblies.

Celotex sound-conditioning products help you build noise control into homes — noise control home buyers are willing to pay more for.

So build *Quiet* Homes with Celotex building products. Write for free Celotex Sound Control Systems Guide. Gives you all the facts, sound ratings and construction details you need to build extra profits into every home. Today.

*Trademark

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Subsidiary of Jim Walter Corporation





Mr. Lynn A. Townsend (left) accepts the Chairmanship of the U. S. Industrial Payroll Savings Committee from Secretary of the Treasury Henry Fowler.

Won't you get on the 1966 business bondwagon for payroll savings?

"Important as the Payroll Savings Program has been in other years, it will be even more important in the year ahead. During the present period, every American is aware of the increasing pressures on the economy as the result of our long-sustained prosperity. And every American has reason to know about the added burdens on the country occasioned by the stepped-up military operations in Vietnam.

"With all the sound personal and patriotic reasons for buying and encouraging others to buy U. S. Savings Bonds in 1966—it makes good sense for every businessman in the country to join us on the *business bondwagon*."

These words by Mr. Lynn A. Townsend, President of Chrysler Corporation and this year's Chairman of the U. S. Industrial Payroll Savings Committee, kick off the 1966 drive for payroll savers. The goal is 1,200,000 new

savers by the end of this year. *You can help*—by setting up and encouraging Payroll Savings participation in your plant. Write U. S. Treasury Department, Savings Bonds Division, Washington, D. C. 20226—today.



NOW BONDS PAY 4.15% WHEN HELD TO MATURITY

in your plant . . . promote the PAYROLL SAVINGS PLAN for U.S. SAVINGS BONDS



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THEY CAN'T READ? Oh well...

...maybe it won't make any difference. After all, when was the last time you had a fire in your house? And, anyway, the average door lock is so darn simple to open from the inside, even your kids can do it. Or can they? What if they panic?

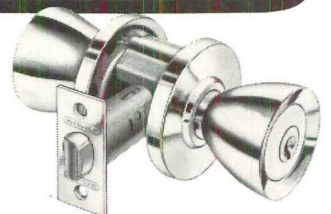
How about the door locks in your home? Are they panic proof? Do they unlock *automatically* by an *instinctive* turn of the inside knob? Or must they be unlocked first?

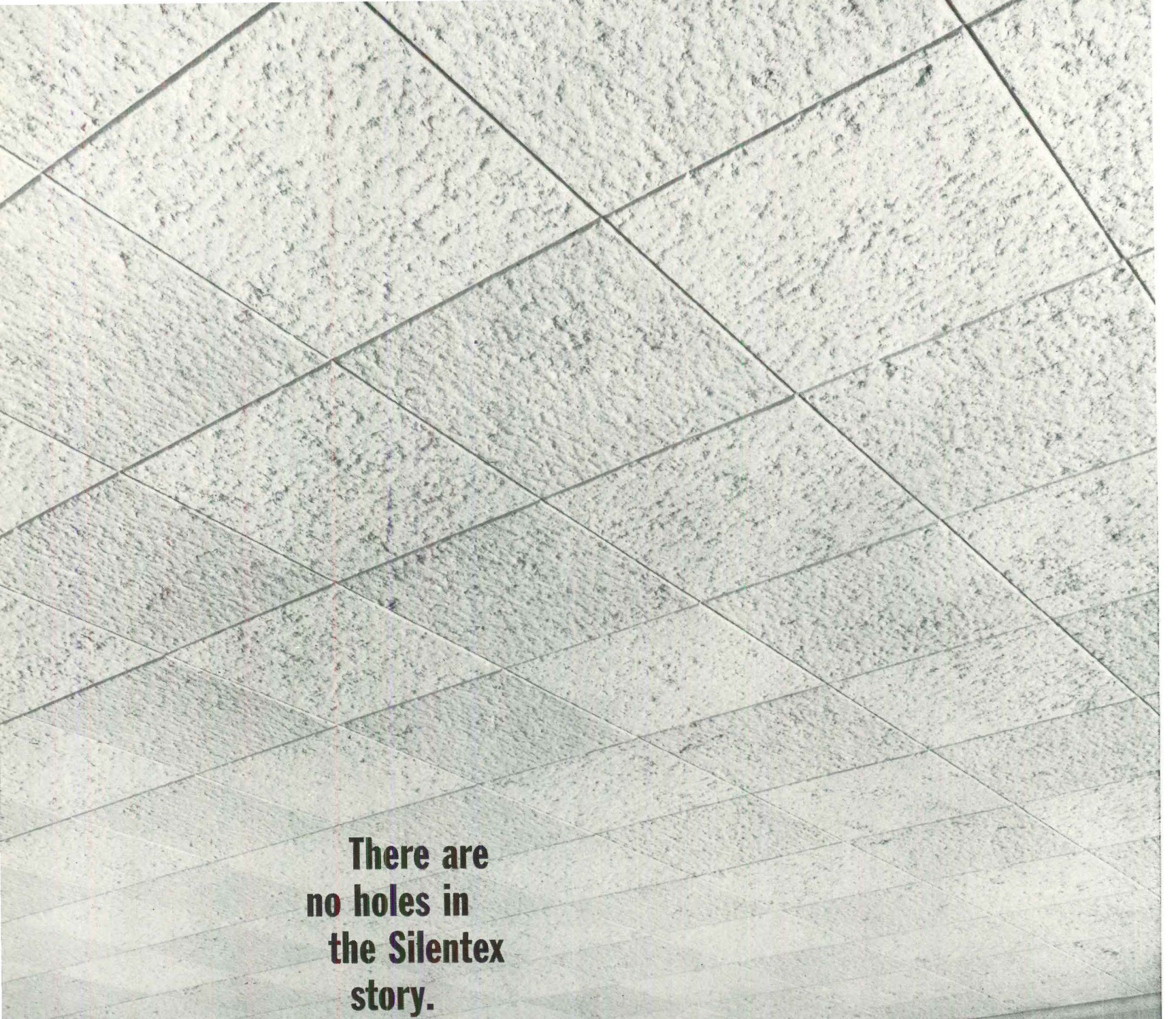
If you have Weslocks on your doors, they are panic-proof. All Weslocks are. Betting against fire and panic in your house may offer good odds, but for our money the stakes are too high.

You bet your life!

WESLOCK COMPANY • Los Angeles, California

WESLOCK®





**There are
no holes in
the Silentex
story.**

Here's an acoustical ceiling tile that offers both beauty and quiet without unsightly holes — just a beautiful brush-textured surface with an attractive wheat-and-white finish. Treat at least one ceiling in your model house with the acoustical tile that absorbs up to 80% of all noise reaching it. It's the kind of wanted feature that makes your house more salable than the rest. And it can be done without adding appreciably to the cost. Silentex can be stapled right over gypsum drywall, so in one operation you add beauty plus acoustical value and eliminate the need for joint treatment. Silentex® is only one of the 21 different consumer-tested Gold Bond ceiling tiles for you to choose from. See them now at your Gold Bond® Building Supply dealer.

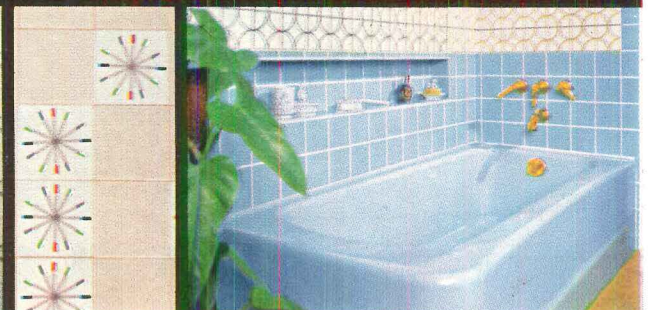
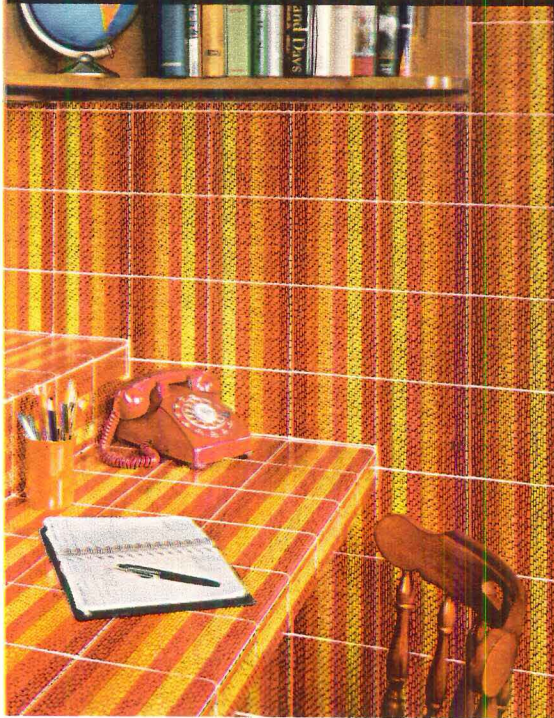


Gold Bond®
CEILING TILE

National Gypsum Company, Department HH-761N, Buffalo, New York 14225.

Circle 63 on Reader Service Card

Hard Sell

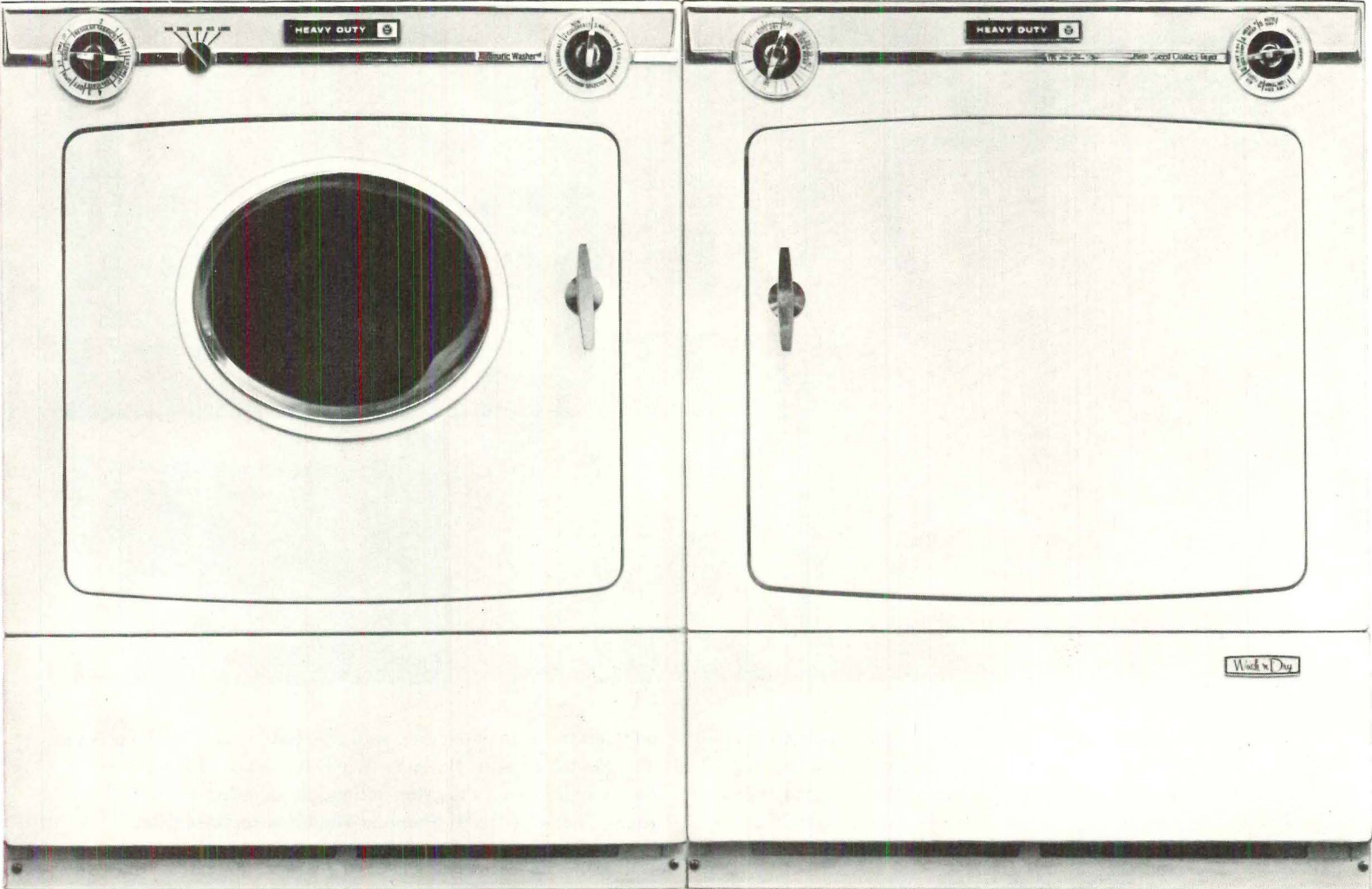


Pomona puts more "that's for me" excitement into a home... for so little cost. Potential buyers have a sales-proven soft-spot for Pomona's quality and warm-sell charm. Women love its richly accented beauty, durability and ease of maintenance. Designers love Pomona's fantastically complete line of sizes, textures, shapes

and colors... plus floor tile, wall tile, pavers and mosaics. Name it... Pomona has it. Builders "buy" it, because Pomona triggers buyer action... puts floor-to-ceiling salesmanship in any room. That's hard sell! **Pomona Tile Manufacturing Co.** 216 South Reservoir Street, Pomona, California (91766)



If you think this space can be used to better advantage...



we agree.

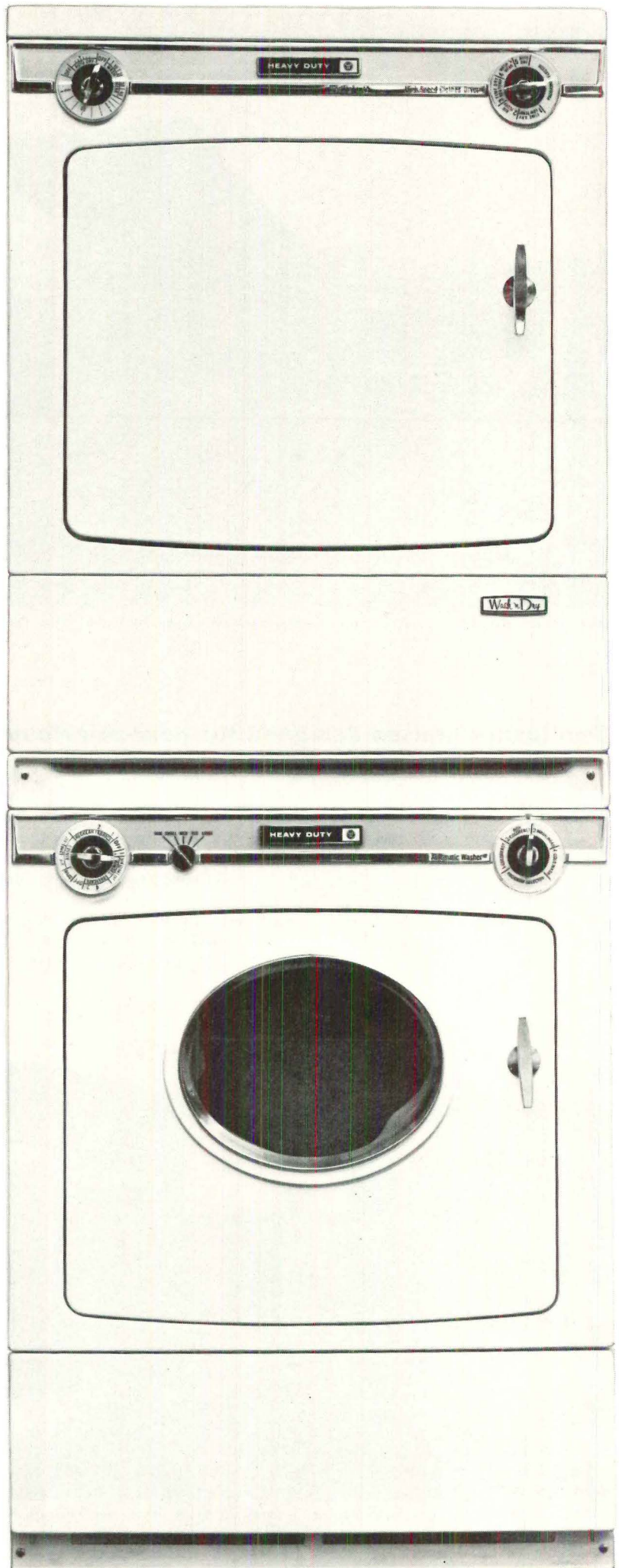
**Meet the Westinghouse Laundry Twins:
an exclusive full-sized
home laundry. Only 27 inches wide.**

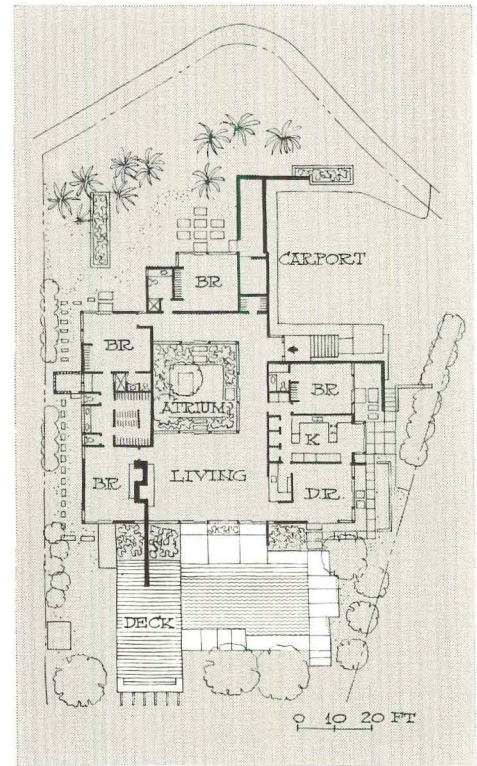
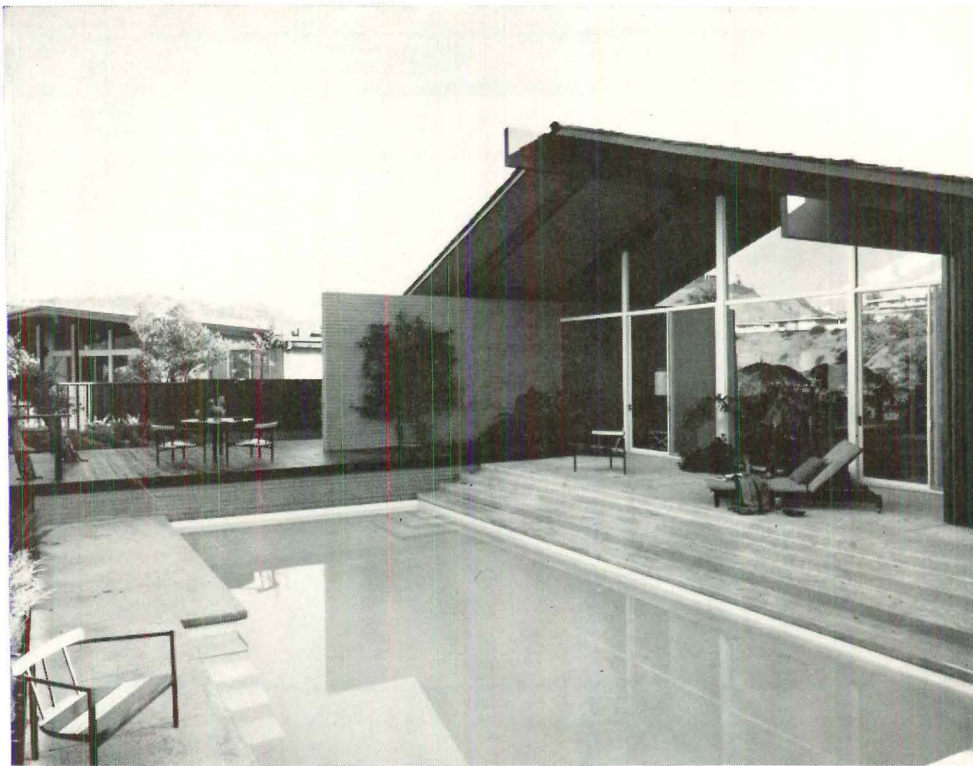
The Laundry Twins — perfect when you want a complete home laundry in a limited space. Less than four square feet. Any other combination uses twice as much. So you can stack the Laundry Twins in a bathroom, linen closet, or kitchen. Or wherever a woman wants them. And because they're front-loading, you can also put them under counters, or build them into a vanity table. No need for a special laundry room, or expensive plumbing additions.

And the Westinghouse Laundry Twins have all the special features that make washdays easier.

Westinghouse offers the most complete laundering line available. From top-loading washers to front-loading washers. With a complete line of matching gas and electric dryers. And they're called Heavy Duty, because they all have newly-designed heavy duty drive and suspension systems. Which is why, when you're looking for a clean sale of your homes, it's smart to look to Westinghouse.

You can be sure if it's Westinghouse





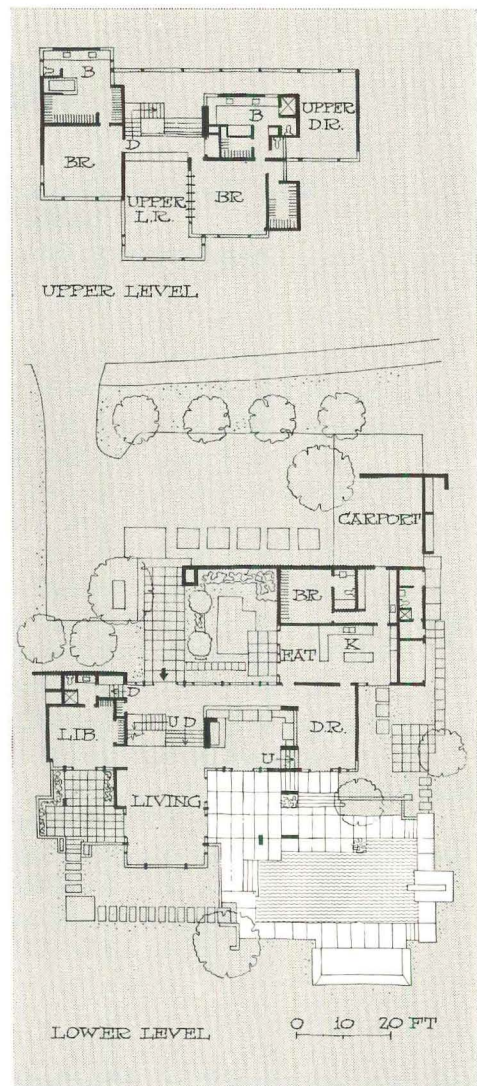
ONE-STORY HOUSE has sunken pool down steps from living room. Architects Quincy Jones and Frederick Emmons designed house around central atrium.

Two luxury houses designed for near-priceless land

The land is part of the last large parcel in exclusive—and expensive—Beverly Hills, Calif., and it commands a magnificent view. This accounts for the high price of the lots—\$100,000 for a half acre—and of the houses themselves, which start at \$250,000 (including the lot). Most buyers are former estate owners or tenants who now want smaller but equally luxurious homes.

Shown here are two of five models offered in the last 50-lot section of the 410-acre project. All the models were designed by leading architects and include such features as large swimming pools, extensive landscaping, complete carpeting, and air conditioning.

Custom houses, designed by the same architects, are also being built in the project. Builder: Trousdale Construction Co.



THREE-LEVEL HOUSE has large pool and patio on lower level, steps up to dining room, shaded court under master bedroom. Architect: Rex Lotery.

Letters start on p. 58



**Something new,
something bold...
Wonderful
Washable Flocks
from Birge**

Now the oldest wall covering manufacturer in America has developed the newest dimension in wall covering—a versatile flock of Creslan acrylic fiber. Result: a truly washable, quick-drying wall covering of exceptional beauty. For the first time a flock that doesn't absorb water; a flock that's safe to specify for installations requiring soap and water cleaning. In addition, this new flock of Creslan is exceptionally sound absorbent and non-allergenic. This flock not only takes brighter, livelier colors—but *holds* them. Available in a wide range of modern, traditional and contemporary patterns. For free "Architects and Builders Specifications Guide" or other information, write the Birge Company, Inc., 390 Niagara St., Buffalo, New York 14240. Creslan is a product of American Cyanamid Co., N. Y.

CYANAMID
Creslan[®]
LUXURY ACRYLIC FIBER

THE BATH ROOM

What's In The Cornell University Bathroom Study For You?

As a professional builder, you have a special interest in "The Bathroom," the newly published study by Prof. Alexander Kira, made under the co-sponsorship of Cornell University and American-Standard.

This is the first major, scientific study of how people perform bathroom functions . . . with detailed suggestions for the design of bathrooms and fixtures for comfort, convenience, privacy, sanitation and safety.

American-Standard believes this study makes an outstanding contribution to our knowledge of bathroom usage and existing problems. The research team at Cornell studied the bathroom without limiting their investigation because of materials,

codes or similar production and installation considerations.

Details of the 116-page report have been reviewed and illustrated in *Life* and *Time* magazines. Stories on the study have also appeared in newspapers across the country.

While many of the fixture designs in the book are experimental, the American-Standard Research Laboratory has also been studying solutions to these bathroom usage problems independently. As a result, significant product innovations are already on the market.

Right now, your new homes can feature the Vent-Away* toilet ventilator, the Stan-Sure* slip-resistant tub, Surfline* front-drain shower re-

ceptors and the Neo-Health* toilet with cleansing spray. Many other Cornell Study suggestions are also being reviewed for design and other marketing possibilities.

A large majority of the 300-odd ideas in "The Bathroom" involve bathroom design, construction and accessories. They include ideas that you can put to immediate use. For this reason you may wish to secure your personal copy . . . study it for ideas . . . and have it handy to show prospects that you are a partner with American-Standard in design leadership. The report is available as "Research Report No. 7" (\$7.00), from Cornell University, Ithaca, New York. *Trademark AR&SS Corp.

For information on the above new products, see your American-Standard representative, or telephone collect to Nick Maczkov, Manager, Building Coordination, at (212) 695-5600.

AMERICAN-STANDARD





A beautifully practical homemaking-laundry center from I-XL. Just one of many possible creative applications of standard I-XL kitchen cabinets in Imperia, Hearthside, Sculptured Spicewood or Shadow-wood designs. For complete details, see your I-XL distributor or write Dept. 2215.

THE I-XL FURNITURE CO., INC.
GOSHEN, INDIANA

The kitchen people with different ideas



FHA foreclosures

H&H: Your article about FHA repossessions [Apr.] discussed all the problems but proposed few solutions.

I am a builder in Wichita Falls, Tex., and chairman of the FHA committee of the home builders association. There are approximately 500 foreclosed FHA homes in this city of 110,000, and virtually every FHA home in the city may eventually be foreclosed unless FHA changes some of its policies. FHA seems to concern itself almost entirely with selling these foreclosed homes, while it spends very little time preventing foreclosures from occurring in the first place.

Problem: FHA often sells its homes for less than the existing mortgage balances. So the person who has owned his home for years makes payments that are considerably higher than those of the man next door who recently acquired a reconditioned, like-new home from FHA. The long-time owner feels he is a sucker to keep paying on a home whose value was wiped out by the low FHA prices.

Possible solution: Persuade FHA to consider existing mortgage balances in an area when pricing foreclosed homes for resale. See that the prices are somewhat higher than the existing balances to protect equities.

Problem: The typical FHA homeowner has found through the experience of others that he has little to fear by letting his house be repossessed. Deficiency judgments are not taken by FHA or the mortgage company, so the worst that can happen to a foreclosed owner is being reported to the credit bureau as a bad credit risk. FHA doesn't make such reports. And since many mortgage companies don't make them either, many people have repurchased homes after allowing a previous home to be foreclosed.

Possible solution: Some fear of "dumping" must be instilled. It was stated that the average foreclosure costs FHA \$2,788. A deficiency judgement would cost FHA less than \$200. A threat of lawsuit would prevent most foreclosures. If a judgment is difficult, as I have been told, surely FHA could insist that mortgage companies always report foreclosures to credit agencies.

Problem: Sometimes a transferred homeowner with little time to dispose of his home can't make payments on two homes.

Possible solution: In such cases, could FHA pay the taxes, insurance, and interest for 90 days? This would usually allow the home to be listed with a broker and sold. An affidavit that the transfer had occurred could be required from the broker.

Problem: In cities where the rate of repossessions is abnormally high, decreased

values make it almost impossible for brokers to obtain enough cash downpayment to include a commission. So the brokers spend their time selling higher-priced homes or foreclosed homes on which FHA pays a 5% commission. Either way, the homeowner needing to sell his home must do it without professional help, so he gives up easily.

Possible solution: Some means must be found to induce brokers to take listings in markets where there are many foreclosures. FHA might agree to pay half the 5% commission if the seller pays the other half. The homeowner could be required to place his half in escrow before FHA would disburse its half.

To sum up, FHA doesn't seem too concerned about foreclosures in light of its reserves. But repossessions are a terrible blight on fine neighborhoods, and everything should be done to prevent them.

ROBERT SEABURY
Robert Seabury Real Estate
Wichita Falls, Tex.

Comparison test

H&H: I make it a practice to read most of the trade publications that deal with the shelter market. It's evident to me that HOUSE & HOME, already one of the best, is improving issue by issue, primarily in providing one source of all the knowledge that a marketing director needs to keep up with the current home market. Your April issue was singularly outstanding.

ROBERT H. WELSH, general marketing manager
Kingsberry Homes Corp.
Chamblee, Ga.

Selling to transferees

H&H: Your article about the transferee market [May] says Sales Manager Robert Robinson of Ladd Enterprises subscribes to a newsletter known as *Herb Ireland's Sales Prospector* for news of transfers. What is the publisher's address?

M. JANA BROWN, broker
jaDean Real Estate
Rogers, Ark.

P.O. Box 481, 241 Crescent St., Boston, Mass. 02154

Tight-money crisis

H&H: Your "Cry Wolf" article [NEWS, May] speaks of demand for housing but does not discuss demand as being effective or ineffective. Our situation here is a pointed example

of how this relates to tighter money.

Last year our single-family starts were up 29%, and we have virtually no unsold inventory. Our market is probably one of the country's strongest. But, due to a shortage of money, qualification standards for mortgage loans have been increased to the point where much of the population, which otherwise might be interested, can no longer be described as constituting effective demand.

A further problem is that more than 50% of the funds made available last year for mortgage loans were derived from mainland sources. It is our feeling that these mainland funds have been reduced by more than 80%. As a result, we feel that our starts in 1966 will be seriously affected unless the secondary market for insured loans does an abrupt about-face.

H. HOWARD STEPHENSON, vice president
The Bank of Hawaii
Honolulu

H&H: A masterful job of analysis. I'm posting it on our bulletin board as a challenge to our staff to try to write and think this well.

SAUL SHIEFMAN, president
Saul Shiefman & Assoc., public relations
Detroit

H&H: I don't agree with Bob Morgan [president, National Association of Mutual Savings Banks] that house starts in 1966 will be "at least as high as in 1965 and perhaps a shade higher."

You have more information available to you than either Morgan or myself, but we see definite dampening caused by 1) high interest rates on conventional loans; 2) big discounts on FHA-VA loans, which could mean a substantial loss on a sale, and 3) higher wages, higher materials costs, and strikes. Here in Chicago a strike of excavators is creating a tremendous backlog that eventually will require overtime work and thus further reduce builders' profits.

It is little wonder that the builder who looks ahead to the high cost of money, the high cost of labor, and the fact that these costs must be passed on to the consumer will have little enthusiasm for building in 1966.

ROBERT H. WILSON, president
The Percy Wilson Mortgage & Finance Corp.
Chicago

Townhouse land plan

H&H: Your April "Washington Wire" column, reports that Dreyfuss-Cramer Co. of Chicago will develop 48 acres into 435 lots. Is this possible? What size lots are there?

JOE I. GATES, president
Gates & Johnson Co.
Decatur, Ill.

It is indeed possible. The project will average nine two-story townhouses per net acre.—ED.

Marketing ideas

H&H: As usual I enjoyed the entire marketing issue [May] and was able to pick up some good ideas for our use. I don't see how any sales manager can afford not to read and absorb such valuable material.

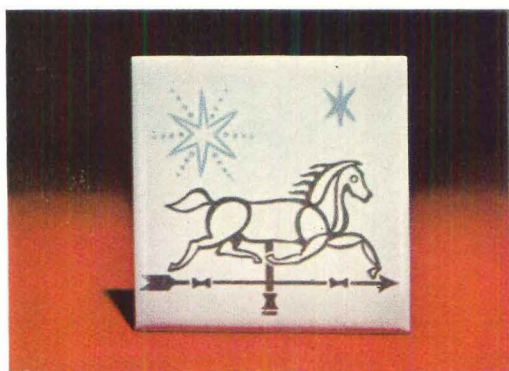
JAMES T. O'BRIEN, marketing vice president
Goodwin Homes Inc.
Moorestown, N. J.

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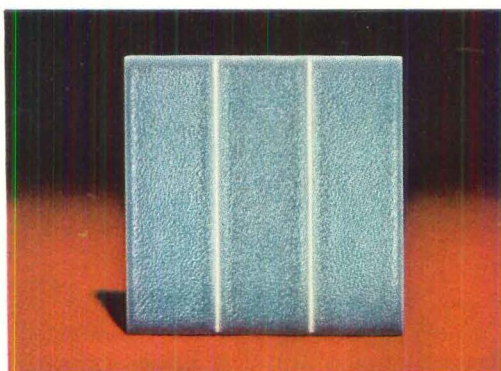
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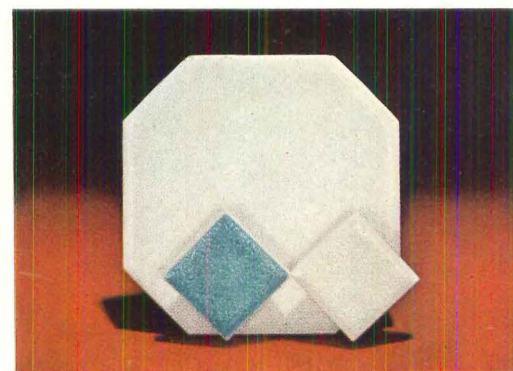
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"I love its individuality!" She'd never guess it, but it takes just a few extra dollars to give any bathroom the uniqueness of Decorated Tiles. American Olean features 70 original designs. This is Weathervane, AD-5.



"I love its newness!" And well she might, for the lustrous new crystalline tile colors add excitement to baths and powder rooms. Wall tile here is scored design SD-4, 321 Cr. Cornflower . . . a top seller in today's market.



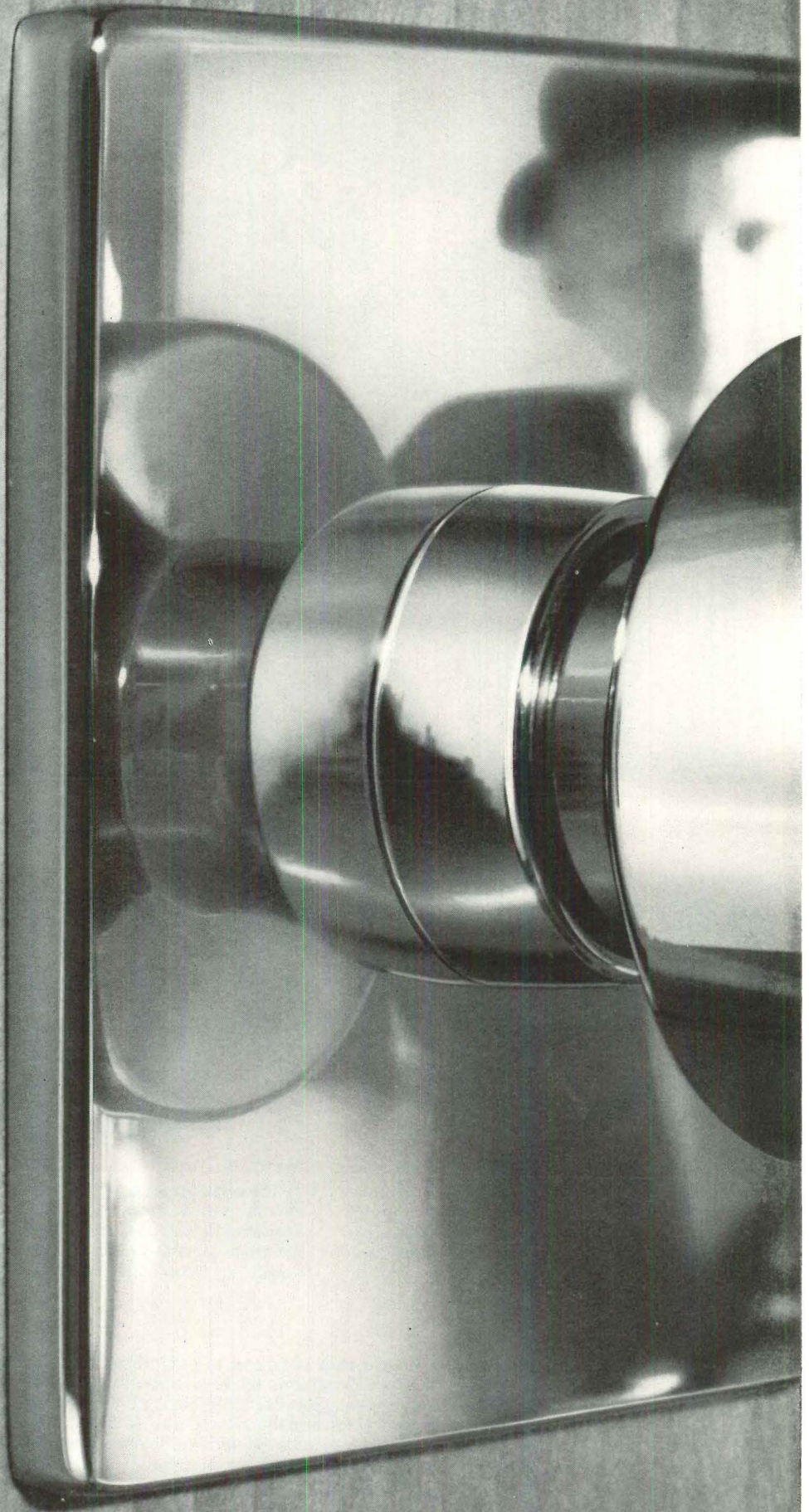
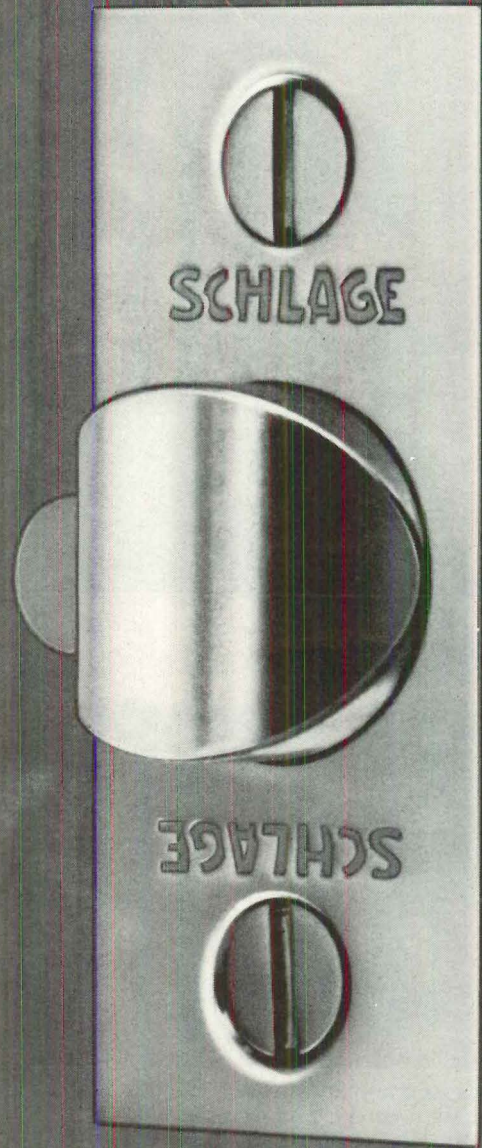
"I love its distinctiveness!" Says she as she steps on the gleaming crystalline glazed tile floor, made up of Octagon 365 Cr. White, with dots of 321 Cr. Cornflower and 365 Cr. White, subtly textured . . . everlastingly beautiful . . . so quickly salable!

A beautiful bath like this is bound to put prospects in a buying mood. Use the new look in ceramic tile to give your models individuality and extra sales appeal. Send for free Booklet 471 . . . it's full of decorating ideas and color schemes for baths, kitchens and everywhere the new tiles can stir sales excitement. Write: American Olean Tile Company, 2142 Cannon Ave., Lansdale, Pa.

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We believe that our standards of quality and value are unique in the lock industry. Our use of premium metals, our adherence to precise tolerances, and our rigid inspection system combine to produce the best locks made . . . locks made by Schlage, the people who invented the cylindrical lock.

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EDITORIAL

Open occupancy

Integrated housing is as sure as death and taxes — but hardly in the same unpleasant category

Lyndon Johnson means business about civil rights, as evidenced by last month's "White House Conference to Fulfill These Rights". He brought together more than 2,000 community leaders, who made recommendations in 12 different areas of civil rights.

But nobody has ever accused the President of being unrealistic. At the same conference, he reminded the "we want it now" thinkers: "Do not expect us, even together, to put right in one year or four, all that took centuries to make wrong."

The housing goal that came out of the conference was clear: eliminate all segregated housing. But past performance suggests that achievement will be painfully slow. Despite a series of pronouncements and statutes — including President Kennedy's 1962 Executive Order and fair housing laws in 17 states and 36 cities — few housing units have been integrated.

Would a national fair housing law do what previous statutes have failed to do? Probably, yes. Most existing laws do not cover all housing, and where there are loopholes, the open occupancy builder is vulnerable. Human nature being what it is, it's hard to sell open-occupancy housing next door to segregated housing. And since compliance with these laws rests heavily on complaint procedures, evasion is common. When the burden of enforcement rests on the victim of discrimination, not much happens.

Although an open-housing provision is still in the pending civil rights bill, few Washington observers give it a chance of passage this year. Even if it can be bulldozed through the House, it wouldn't stand much chance against a Senate filibuster. So if there is immediate progress toward open housing, it will probably be made without a federal fair housing law.

But the time lag between goals and accomplishment can be shortened, and the President's conference will help. Its real function was to stir up action at the local level, to encourage the local ferment that is just now starting for integrated housing in many communities. And, in fact, the conference unified and specified the

aims of Negroes and their white allies so that local drives should have a lot more meaning.

What's more, the Administration can make progress right now where the greatest need is — in the cities. Washington is seeking a way to return a good chunk of its income-tax revenue to the cities and states — if they go along with open housing.

And federal dollars can be a big carrot. Aid to cities under the 1965 Housing Act calls for metropolitan planning broad enough to take in suburbs and the problem of housing segregation.

Even more important than any carrot or any stick, is the moral persuasion that the Administration must apply at all times, in all places, and to all who will listen. The plain fact is that housing is still the only commodity not freely available on equal terms to everyone who can afford to pay for it.

The moral point is obvious. But there's also a practical point. When a choice of housing is finally available to minority and low-income families — probably only a few years from now — the housing industry's annual production could almost double.

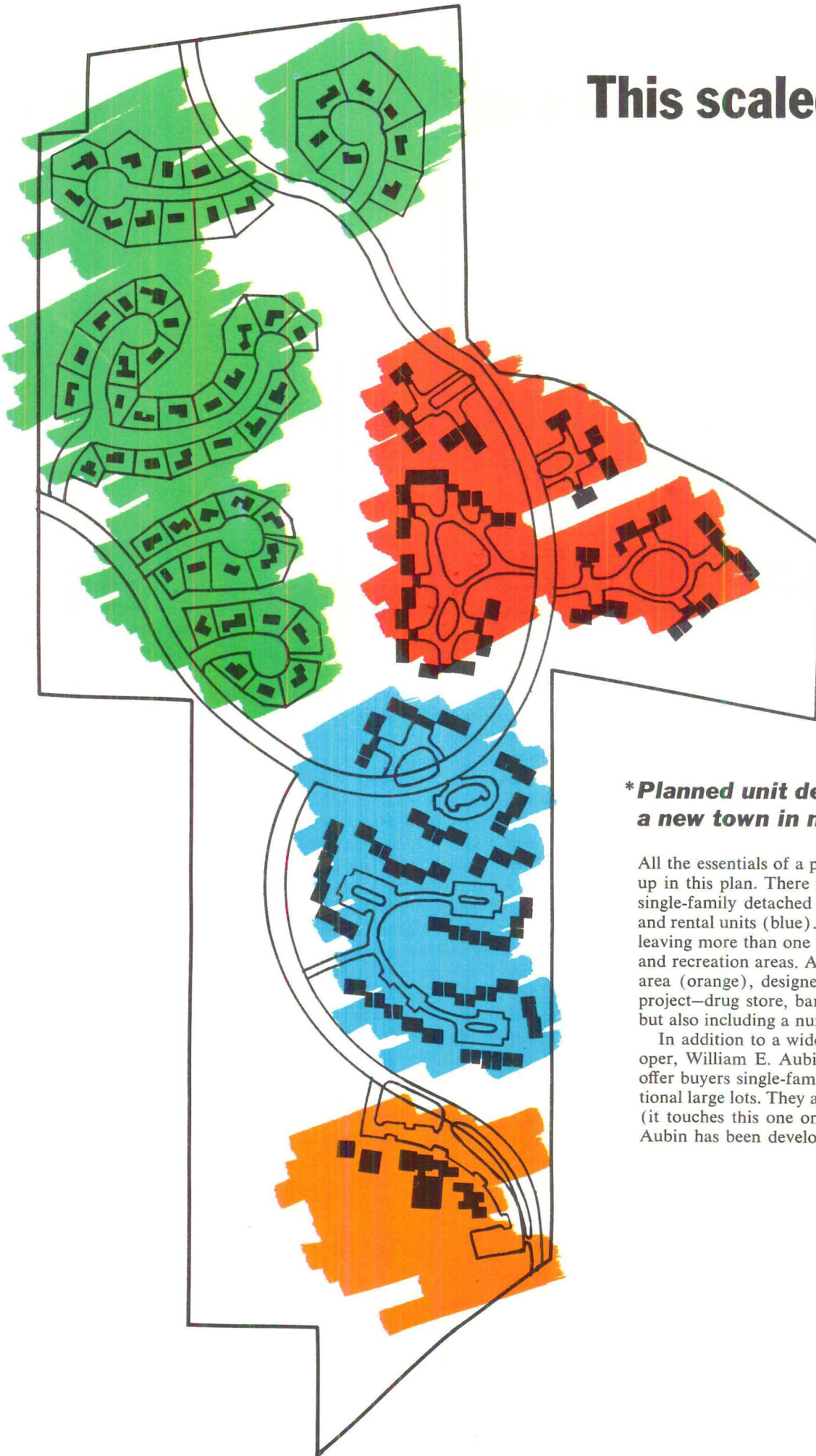
Families with incomes under \$5,000 living in dilapidated or deteriorated housing represent a potential market for 12 million houses. Homebuilding should be producing 2½ million units each year right now — and probably 3 million by 1970.

But for the builder who can't put off the problems of open occupancy until 1970 (or even until tomorrow morning), there is much good news in the experience of men who have already tackled open housing:

1. Honestly offered open housing has *not* resulted in overwhelming numbers of sales to Negroes.
2. Sales to Negroes do *not* end sales to whites.
3. Upper-middle and high-income groups are the strongest non-white housing market.
4. When a fair housing law affects all builders equally, there is no problem in open housing.

— RICHARD W. O'NEILL

This scaled-down PUD*



***Planned unit development: a new town in microcosm**

All the essentials of a planned unit development show up in this plan. There are different types of housing: single-family detached (green), condominium (red), and rental units (blue). All the buildings are clustered, leaving more than one third of the land for greenbelts and recreation areas. And there is a small commercial area (orange), designed primarily for services to the project—drug store, barber shop, beauty parlor, etc.—but also including a number of professional offices.

In addition to a wide variety of housing, the developer, William E. Aubin of Amherst, Mass., can also offer buyers single-family detached houses on conventional large lots. They are in an abutting 125-acre tract (it touches this one on the upper lefthand side) that Aubin has been developing for the past five years.

could be a milestone in small-project planning

Its 123 acres include mixed housing types, recreation facilities, a small commercial area, and a generous greenbelt. To an industry increasingly concerned with selling environment rather than simply houses, this project is particularly significant. Here's why:

1. *It brings the planned-unit-development concept down from the big-subdivision level to the realm of the smaller builder and developer.* Until he started this project last March, William E. Aubin of Amherst, Mass., averaged only about 12 houses a year plus a little light commercial work. And his biggest previous

subdivision—still being developed—is only 125 acres.

2. *It proves that PUDs, with their controversial cluster layouts, can be sold even to conservative municipalities—if they are well done.* Aubin and his land planner, Per Nylen, worked out and tore up some 30 schemes before they settled on the plan shown here. Result: the plan was approved in just six months, even though it required legislative action at both the local and state level.

The town accepted Aubin's project—and he started it in the first place—because with a well-handled PUD, everybody wins.

For the builder, PUD means a more stable market and a better long-term investment

By next spring Aubin will be able to offer prospects a choice of 1) townhouse apartments renting from \$180; 2) condominiums priced to \$25,000; or 3) detached houses on cluster lots priced to \$30,000.

"This mixture opens the project to a much broader range of buyers," says Aubin. "And it also gives me a highly flexible operation. If higher-priced housing goes sour, I can concentrate on lower-priced units or rental apartments. And if everything goes sour, I have a commercial area to build."

Aubin also feels that a diversity of residents (his first apartments, just opened, include retirees, young couples with child-

ren, and single tenants) will create a better—hence more salable—environment.

Finally, the commercial and rental portions of Aubin's project give him the chance to share in its future.

"If I build a good project and sell it all out," he says, "someone else will benefit from my good planning. But by retaining my commercial property and rental units, I keep some of the appreciation for myself." Aubin has set up his apartments so they can be sold later as condominium units. And the profit he makes from their appreciated value will be taxed as long-term capital gain rather than straight income.

For the town, PUD means better value and a higher standard for future development

Amherst officials are interested in both the financial and environmental aspects of a new project. On both counts, Aubin's development fares very well. Specifically:

It will yield high tax revenues compared with its cost to the town. Says Allen Torrey, Amherst's town manager:

"The housing units will produce at least as much revenue as if the project were conventionally planned. And the commercial property represents tax gravy."

Adds Aubin: "The tax situation will get better for Amherst over the years. Go out and look at projects that were done 20 or 30 years ago; you'll find that bad ones have dropped in value, but good ones are bringing in more taxes than ever."

It will add less to school and road budgets than a conventional subdivision. "The apartments will certainly reduce the average number of school children per family," says Torrey. "And the cluster plan gives us fewer town roads to maintain and patrol."

It will upgrade all project planning in the town. Says Theodore Bacon, who was chairman of the Amherst Planning Commission when the project was approved:

"Aubin's development will certainly improve buyers' tastes, and other builders will have to meet this standard if they are to compete."

Town Manager Torrey agrees: "Already, other builders are beginning to hire land planners for their new projects."

But PUD does not mean an easy, inexpensive way to develop a community

"The rewards of good PUD come in the form of increased salability," says Aubin. "The builder who thinks of it primarily as a way to cut his development costs is in for an unpleasant surprise."

Aubin can point to a few long-range savings. For example, part of his road system is private and can thus be built to less exacting specifications than town roads; utilities under these roads can be handled more efficiently; and the smaller lots will cut grading costs somewhat.

But, he adds, these savings are just about canceled out by added costs. Specifically:

PUDs cost more to plan. Says Aubin: "Making a conventional layout for this land would have been a breeze. The PUD

layout cost twice as much and took weeks of my time to boot."

PUDs require more cash outlay at the start, before sales have started bringing money in. Says Aubin: "You must have your recreation facilities built and much of your landscaping done when you open. Otherwise, people won't believe that you're really offering a better community."

PUDs are harder to sell to the town. Getting approval for the PUD took twice as long as for a conventional subdivision (six months vs. three months). And it could have taken much longer had not Amherst, a university town, been blessed with a progressive planning board and had not Aubin himself established a reputation as an excellent planner and builder with a previous project.

To see how Aubin convinced the planning board to approve his PUD, turn the page



Here's how Developer Aubin presented his case for PUD

The heart of the presentation was a series of acetate overlays prepared by Aubin (*third from left, above*) and his land planner, Per Nysten (*far left*), and projected on a screen at an open meeting of the Amherst Town Planning Board.

"It was an excellent presentation," says former Board Chairman Theodore Bacon (*second from left*). "It created a good atmosphere, and it showed clearly just why Aubin was laying out and developing the land the way he was."

Adds Town Manager Allen Torrey (*far right*): "The board members could understand the project from ordinary plans."

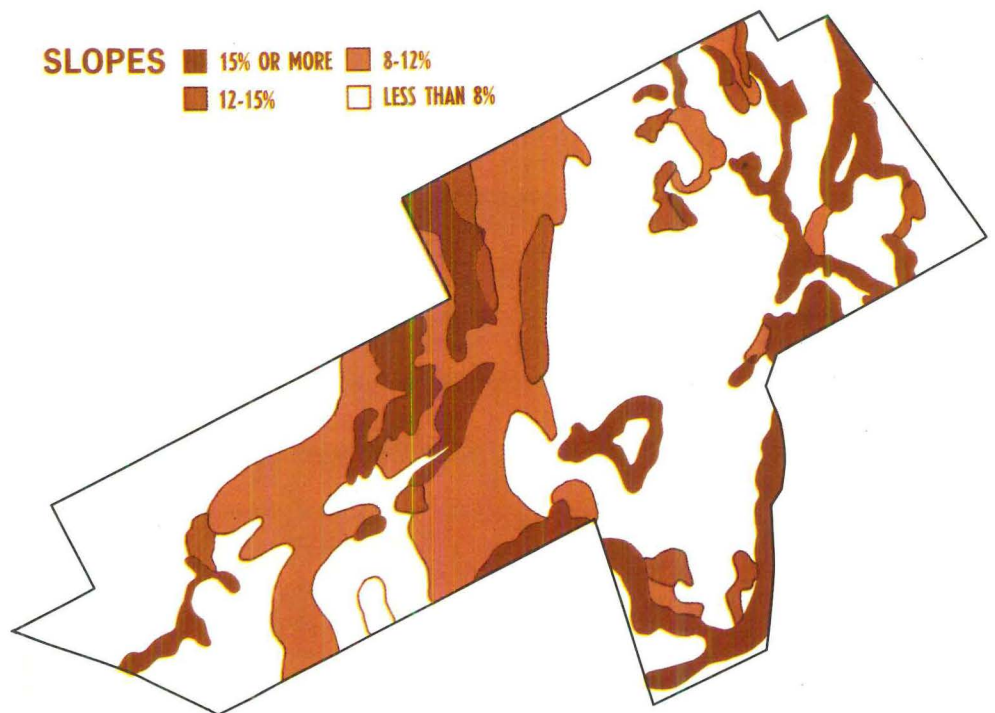
But the slide presentation made it much easier for the average interested citizen to visualize Aubin's proposal and to understand the reasoning behind it."

Aubin's graphic presentation has stirred up interest far beyond Amherst. It makes such a strong case for planned unit development that he has been asked to deliver it to NAHB members in Washington and to builder groups in other towns.

The complete presentation, along with Aubin's running comments at the Amherst meeting, is shown below and on the following five pages.

1

"This is the outline of the project, together with a slope chart. The darker the area, the steeper the slope. We converted the standard topographical map to this form because it shows the character of the land more clearly, and this is the first thing we need to know when we lay out the project."



2

"Here are the natural features of the land—open fields, woods, and water. There are also some scarred areas, such as former gravel pits, which we will repair later."

"The question is how can we adapt this land to residential use so it is most pleasing—so that it retains as much of its natural beauty as possible?"

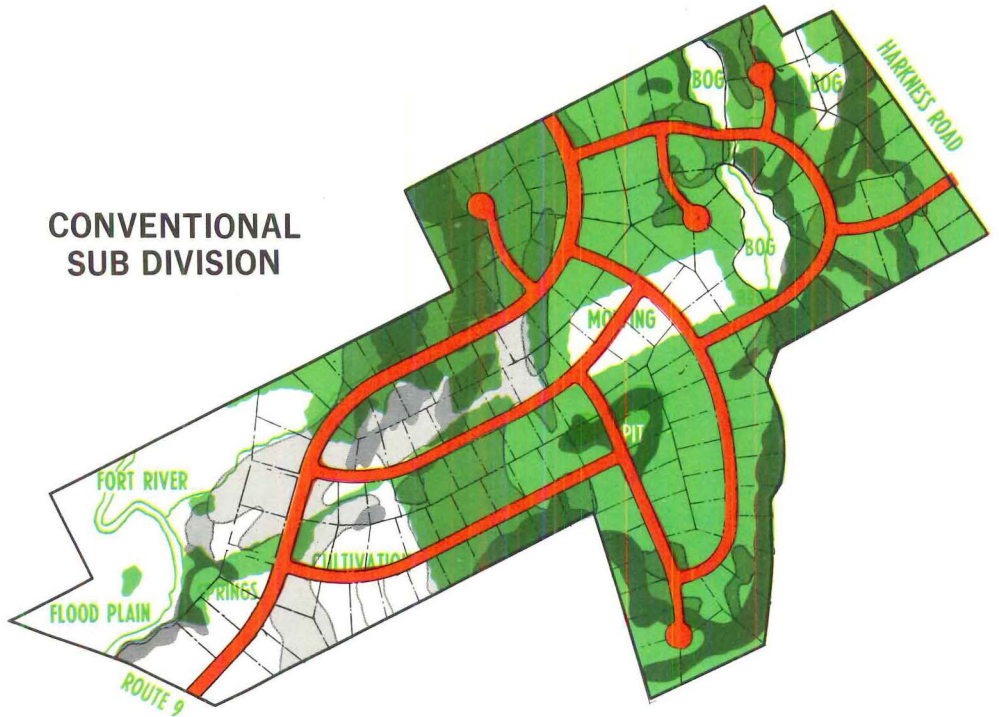


3

"If we build a conventional subdivision, according to the present by-laws, this is what it will look like. The streets are curvilinear, but essentially this is a grid plan. There are 163 lots, plus four acres of open space—all of it unbuildable land.

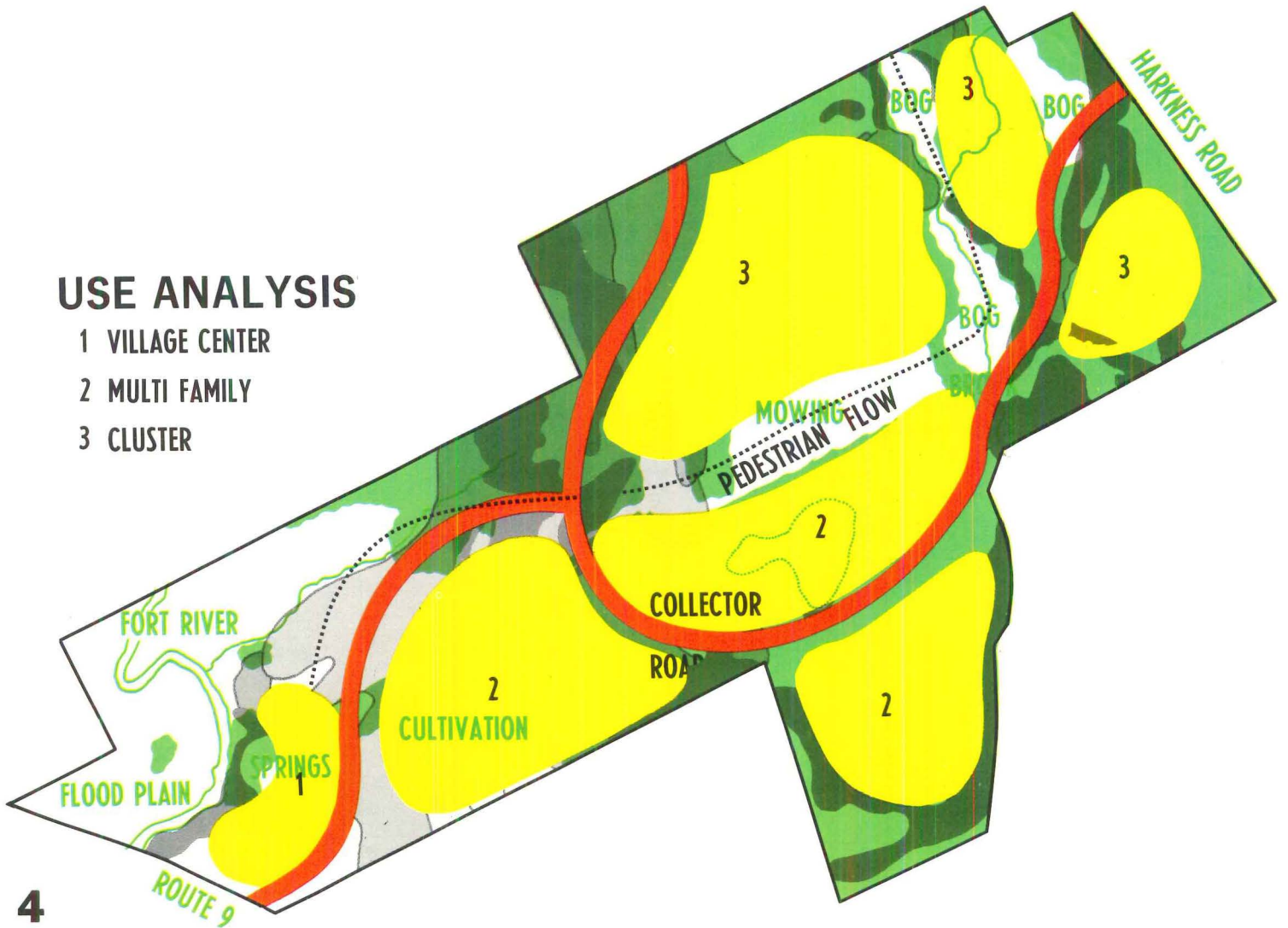
"We feel that with this plan we'd just be building more suburbia in Amherst."

CONVENTIONAL SUB DIVISION



USE ANALYSIS

- 1 VILLAGE CENTER
- 2 MULTI FAMILY
- 3 CLUSTER

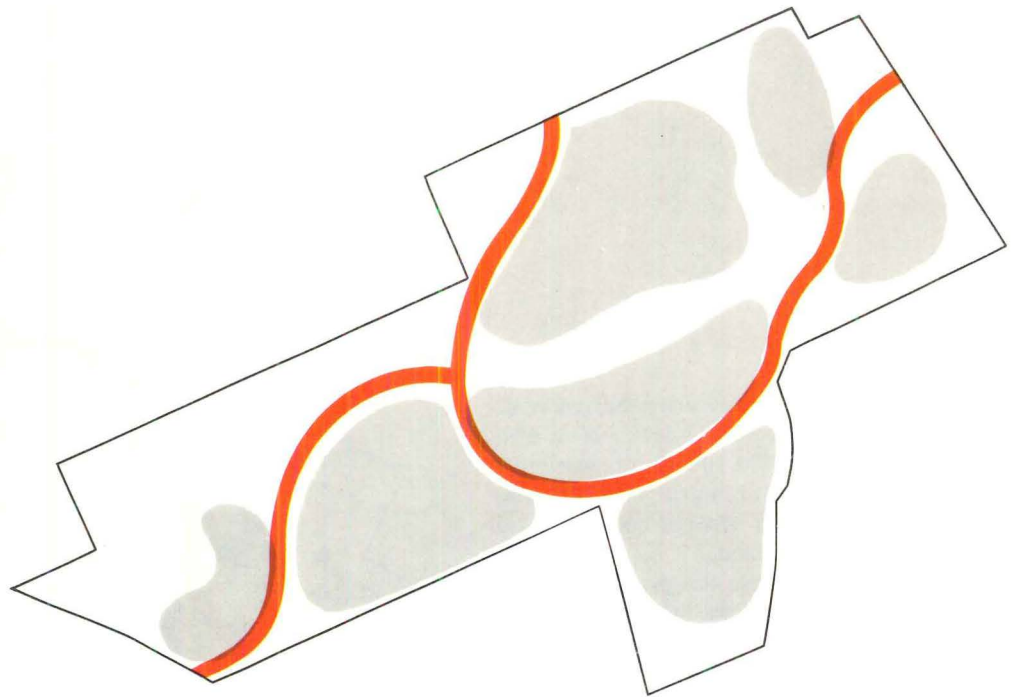


4

"Now we'd like you to look at this land in a different way. Here we show the best buildable portions of the project based on topography, soil conditions, and tree cover. We'd like to be allowed to put our buildings only in these areas. And we want to build according to the densities allowed in the rest of the town."

5

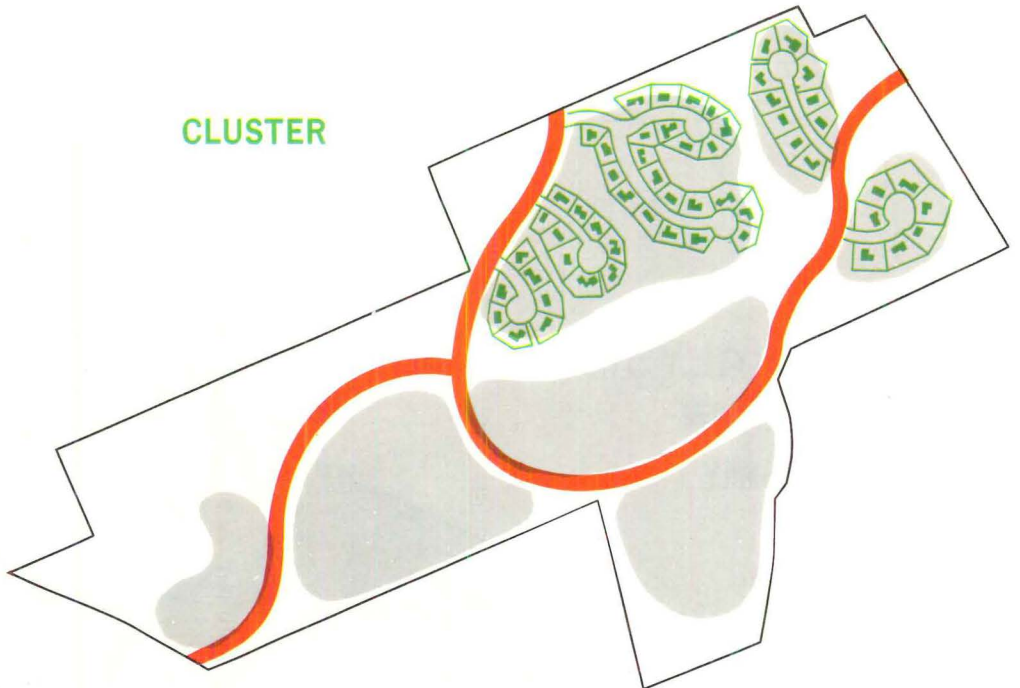
“Here again are the best buildable areas of the project, together with the main traffic routes through them. We propose to build several different kinds of housing in these areas – rental townhouses, condominiums, and detached single-family houses – plus a commercial area to serve them.”



CLUSTER

6

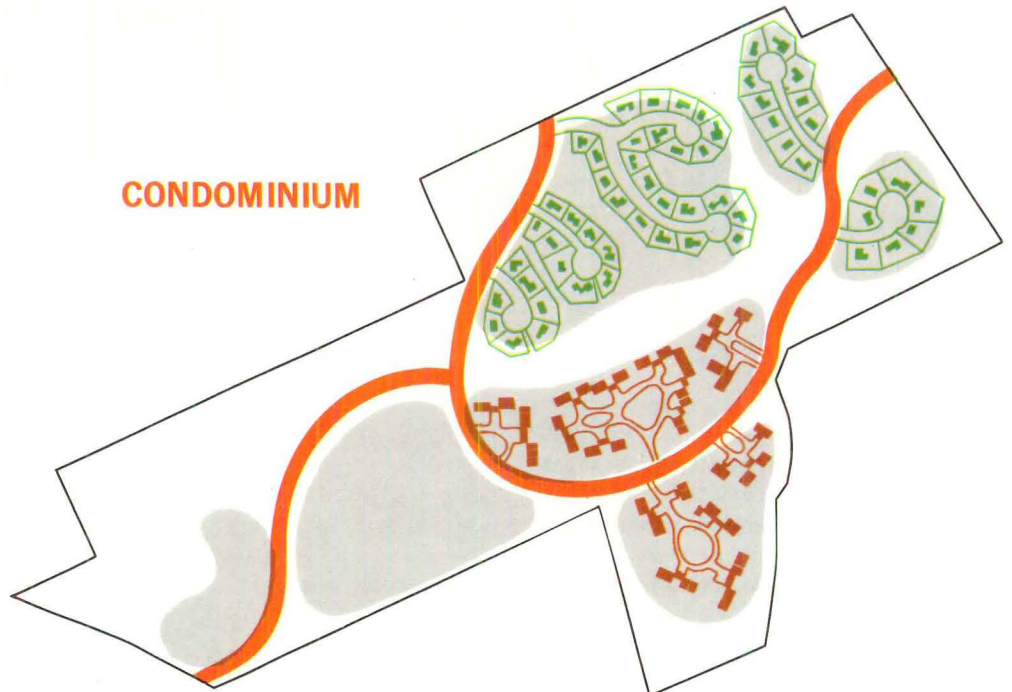
“In this section we would build single-family detached houses. They would be on cluster lots smaller than conventional lots. We chose this area because it is closest to our adjacent subdivision which has only single-family detached houses in it.”



CONDOMINIUM

7

“Here we want to build condominiums for sale. We plan both one- and two-story units, some of them with atriums. The land in this area will be held in common ownership.”

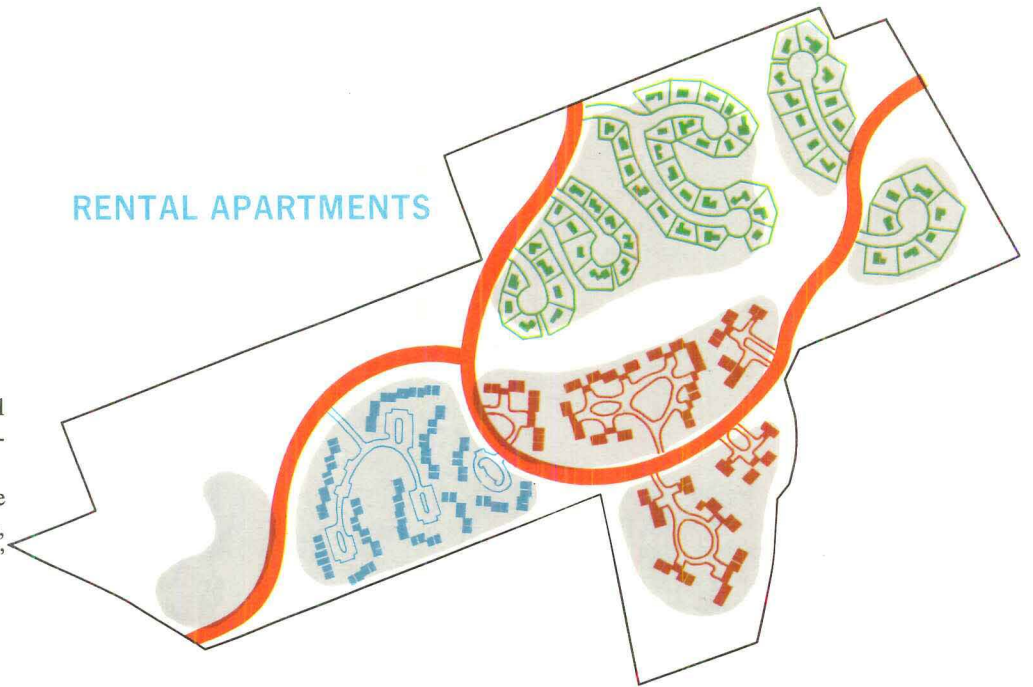


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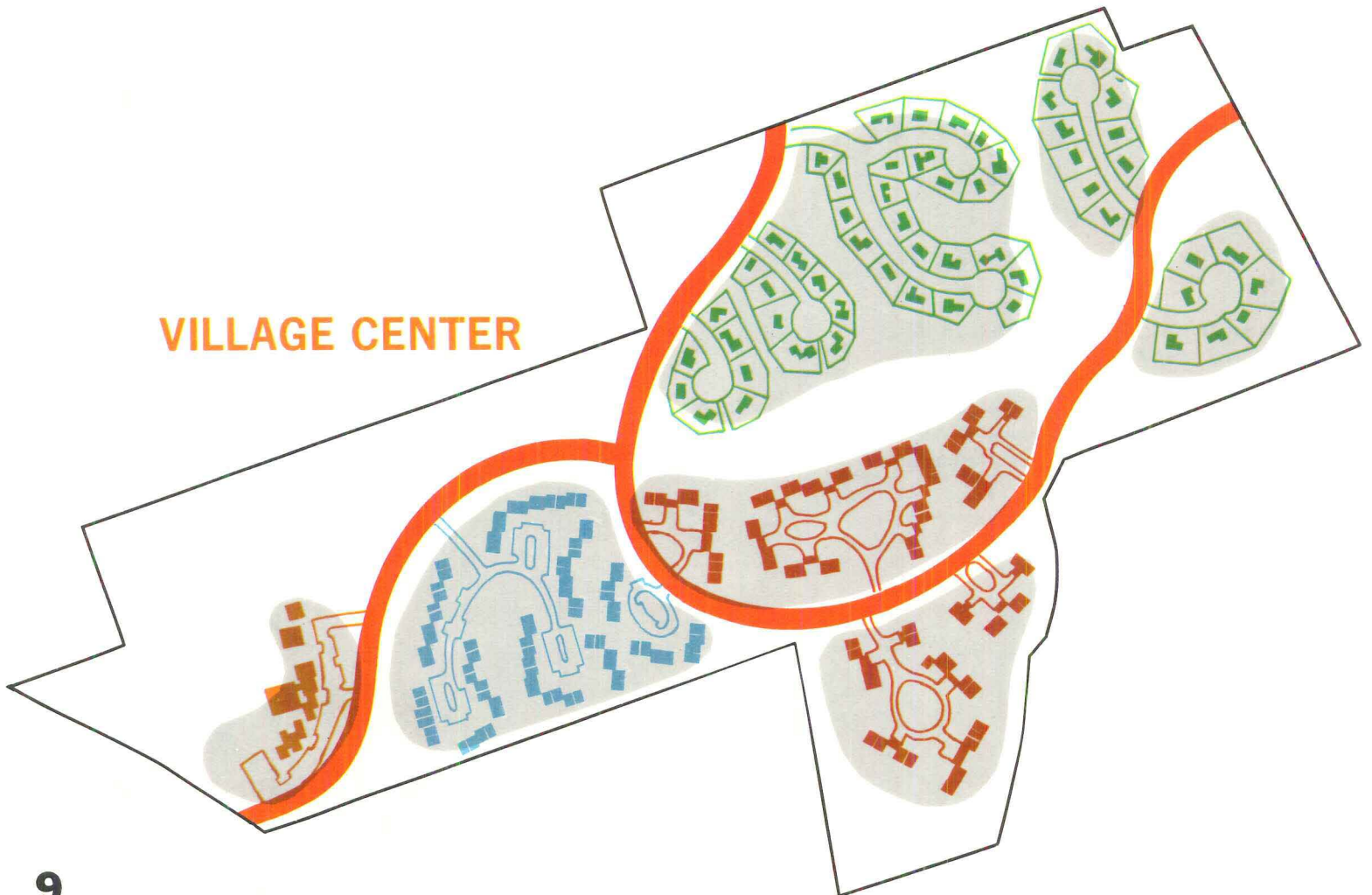
"In this section we plan to put our rental units, both two- and three-bedroom townhouses.

"Note that while we have a broad range of housing types in the project as a whole, each type is well separated from the others."

RENTAL APARTMENTS



VILLAGE CENTER



9

"Finally, since we have created a need for services, we propose a small commercial area. It is close to the main road, so its traffic avoids residential areas.

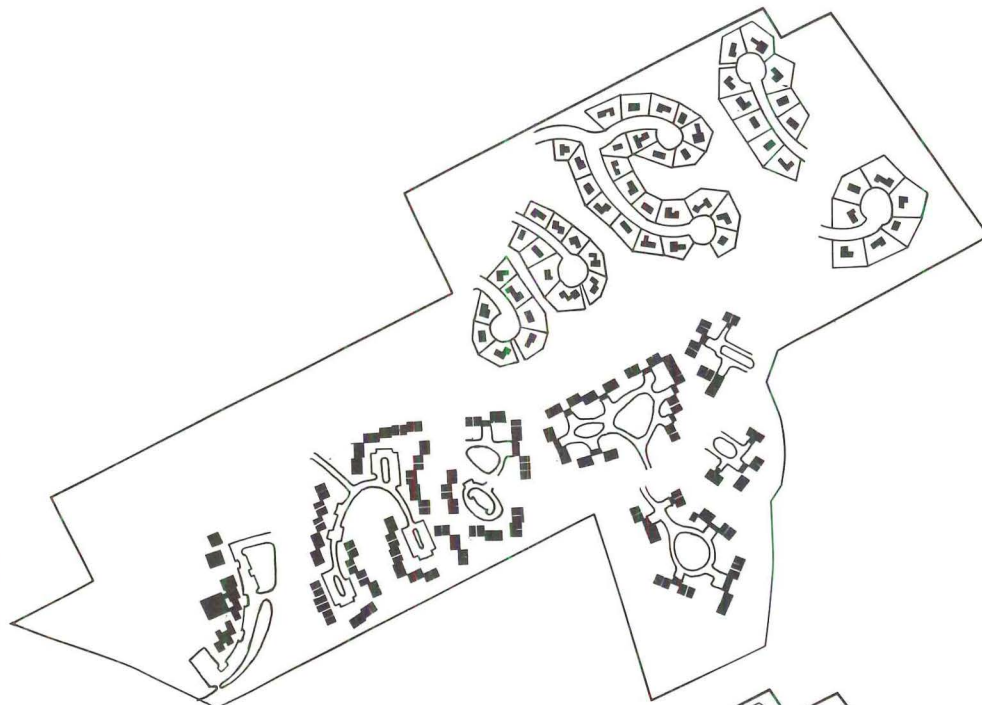
"The total number of housing units in this plan is 256. In proposing this number of units, we are not asking for any significant increase in density over what you al-

ready permit: ten units per acre for apartments and two units per acre for single family.

"What we do ask is that you do not hold us rigidly to a certain number of units per real acre, but instead allow us to average the density over the entire project and leave some land open."

10

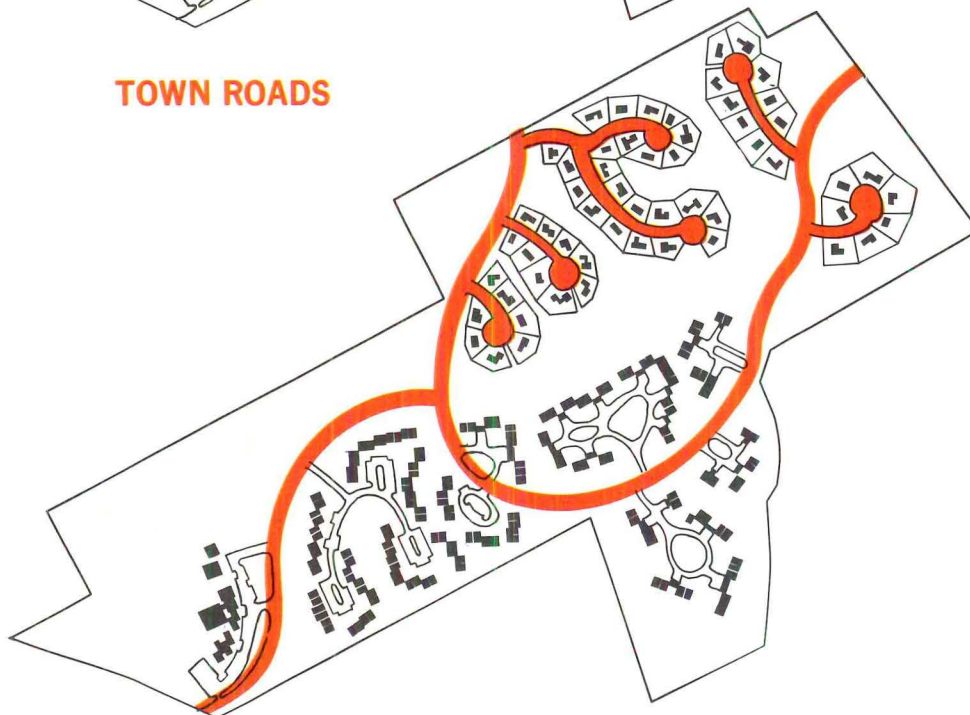
“This is the siting plan we arrived at in our last series of drawings. You remember that we chose the best buildable land for our buildings. Now we’d like to show you what kind of an environment our planned unit development would create.”



TOWN ROADS

11

“This is the total network of roads in the project that would be owned by the town. There are two miles of roads in this plan compared with three miles in the conventional layout. We save money, and so does Amherst; it costs \$4,000 a year to maintain a town road.”



NON-TOWN ROADS

12

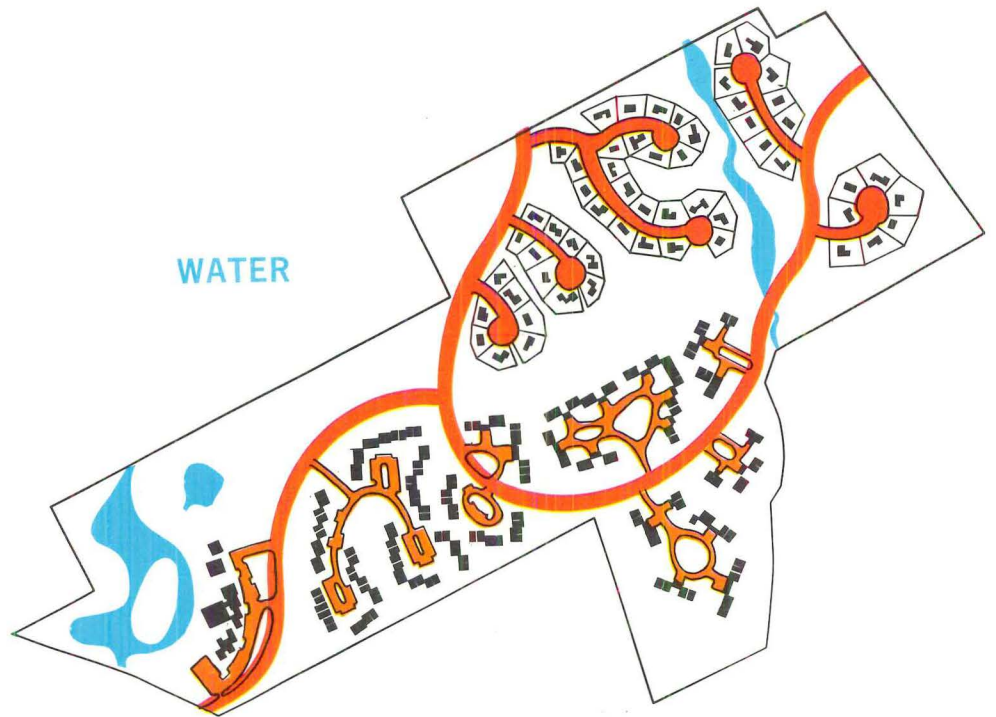
“There are more roads to be built—about a mile of them. But they would be privately owned and would thus cost the town nothing for maintenance.

“You see that none of the dwellings front on collector streets. All of them are on either cul-de-sacs or private roads.”

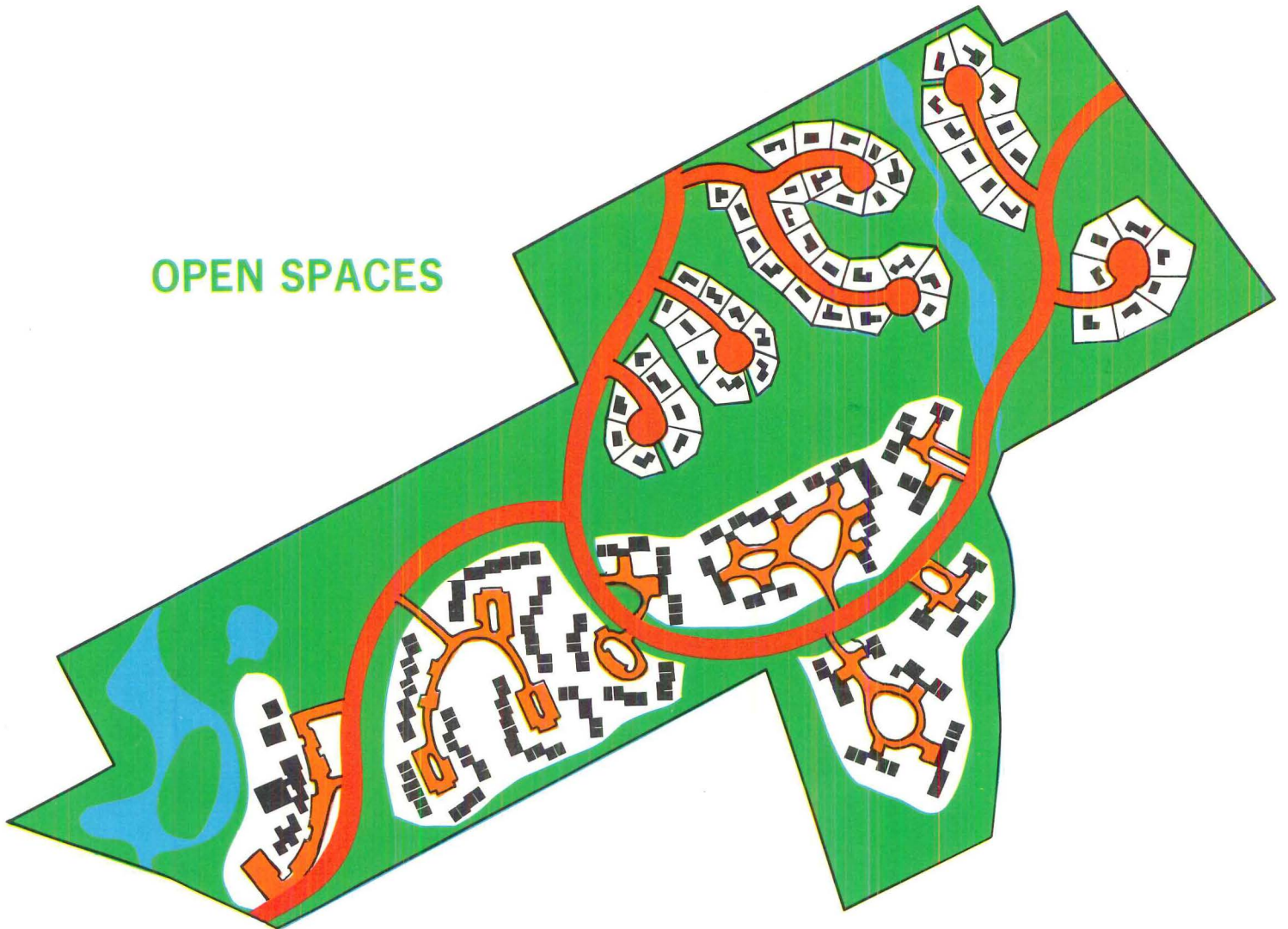


13

“These are the ponds that we will develop from the natural water areas. They will be dredged and given clean bottoms so they can be used for swimming.”



OPEN SPACES



14

“Finally, look at the open land this plan makes possible. The conventional layout has four acres—this has 44 acres, more than one-third of the whole tract. And it’s not concentrated in one place, but woven throughout the entire project. When you drive through you’ll see not masses of houses, but a wooded park.”

13 Award-winning custom houses

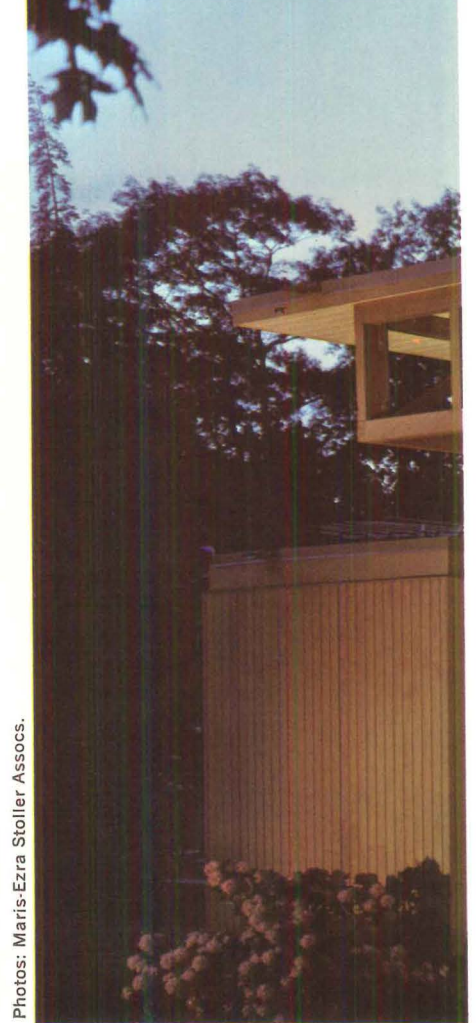
Merchant building owes a great debt to architect-designed custom houses. Over the years they have sparked such now-common features as the family room, master bedroom suite, and atrium; for the future they promise new ideas in the realm of increased privacy, more spacious interiors, and better use of difficult land.

The houses at right and on the following 12 pages belong to the future-idea category. They were cited as the best of more than 200 custom entries in the eleventh annual Homes for Better Living Program, sponsored by The American Institute of Architects in cooperation with HOUSE & HOME and *The American Home*.

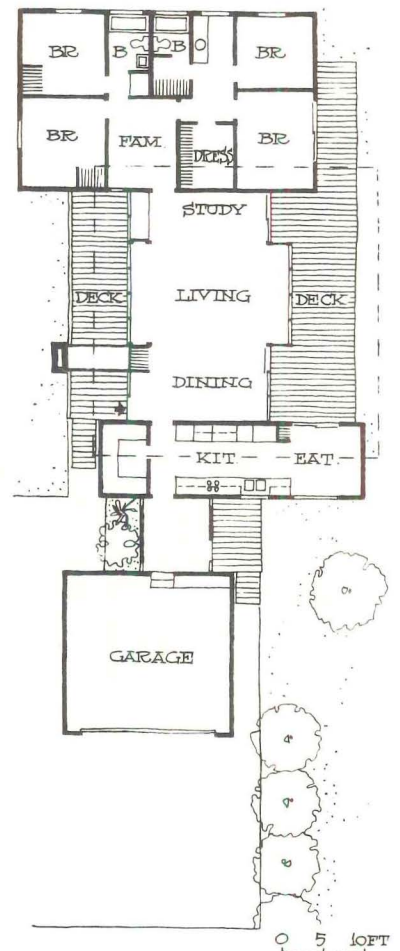
Photo: Vincent Finnigan

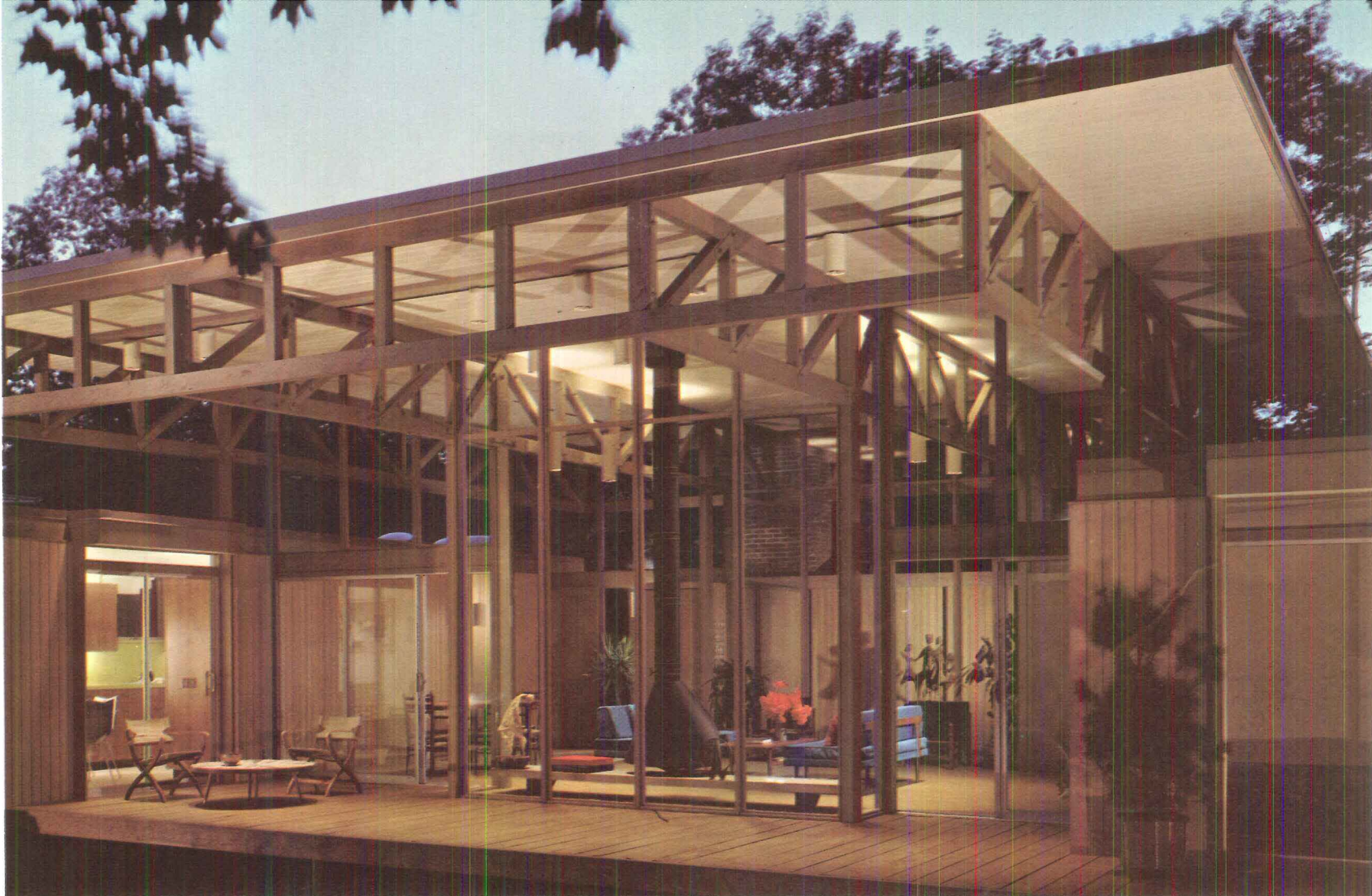


THE JUDGES (l. to r.): Tasso Katselas, AIA; Chairman Charles Warren Callister; Charles R. Colbert, FAIA; Morris Ketchum Jr., FAIA and president of AIA; and Walter F. Wagner Jr., executive editor of *Architectural Record*.



Photos: Maris-Ezra Stoller Assocs.



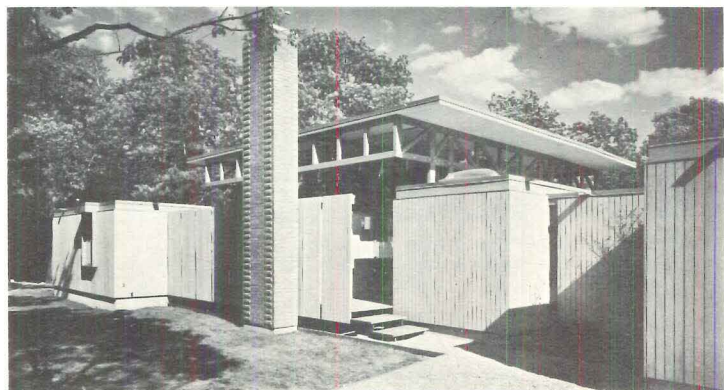


REAR DECK, sheltered by wide overhang, opens to central living pavilion and flanking rooms.

HONOR AWARD

A glass-walled living pavilion with closed wings. The exposed wood roof trusses add visual interest both indoors and out, and the wide overhang helps to protect the glass areas from direct sun and rain. A master lighting system controls ceiling fixtures which are carried out beyond the glass walls. Interior areas in sleeping and utility wings are lighted by skylights. Area: 2,472 sq. ft.

Architect: Bruce Porter Arneill. Builder: Erwin C. Griffiths. Location: Guilford, Conn.



STREET ENTRANCE is screened by high fence and blank walls. Stack is for furnace.



EXPOSED STRUCTURE of pavilion admits daylight from all sides of living-dining room.



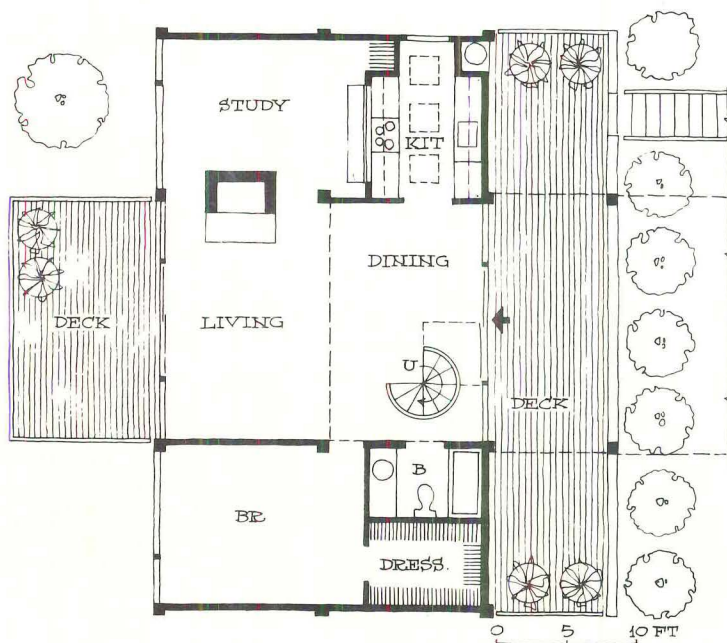
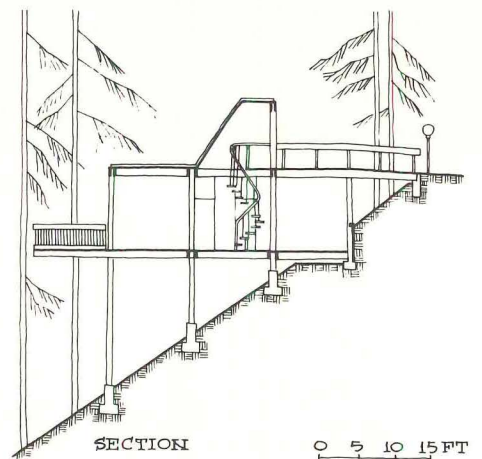
HIGH WINDOW WALL opens onto front deck, right. High fence screens deck from street.



PARTLY SHELTERED DECK stretches 40' across front of house below the entrance bridge.



ENTRANCE BRIDGE leads from street to two-story entrance well, also serves as parking area.



HONOR AWARD

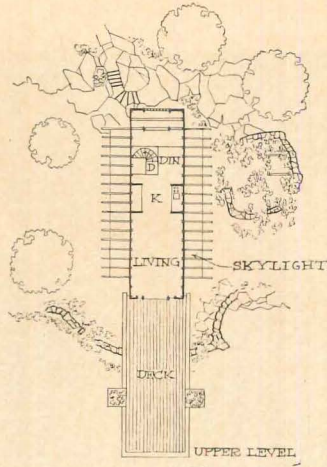
A small house on a steep site. Rough-sawn poles support both the floor and the roof, and the structure is tied to the slope by a broad bridge-deck. A two-story entrance well lets daylight down into the rear of the living room and adds to the feeling of spaciousness. Area: 1,008 sq. ft.

Architects: Fisher-Friedman Associates, Robert J. Geering, Associate. Builder: Belvedere Construction Co. Location: Mill Valley, Calif.

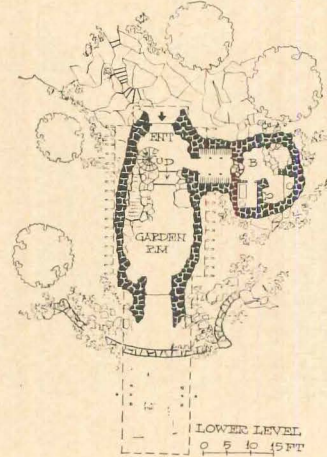
Photos: Baltazar Korab



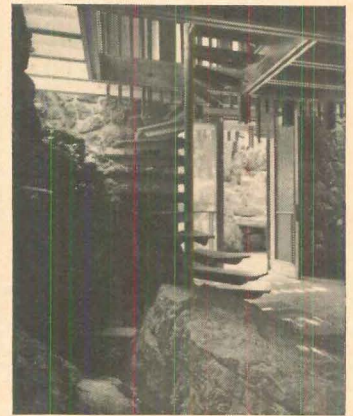
PROJECTING DECK above slope extends the living area, leaves rocky site undisturbed.



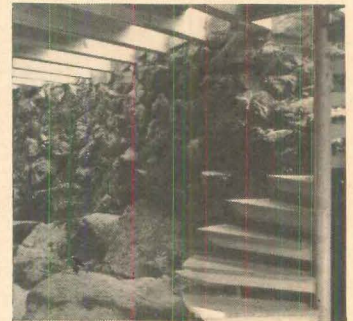
UPPER LEVEL



LOWER LEVEL
0 5 10 15 FT



CIRCULAR STAIRWAY leads up from entrance level to living area.



LOWER-LEVEL GROTTO is lit by translucent panels between joints.

AWARD OF MERIT

A narrow house on a rocky hill. The upper wooden structure, only 12' wide, sits on a slightly wider stone base, that serves as both the foundation and entrance level. A 32'-long deck extends towards a view of the surrounding lake. A small sleeping platform over the kitchen divides the living and dining-entrance areas. Total area :1,440 sq. ft.

Architect: Euine Fay Jones. Builder: Eden Isle Construction Co. Location: Heber Springs, Ark.



TWO-STORY GABLE WALL provides light for interior, which is really one big room.

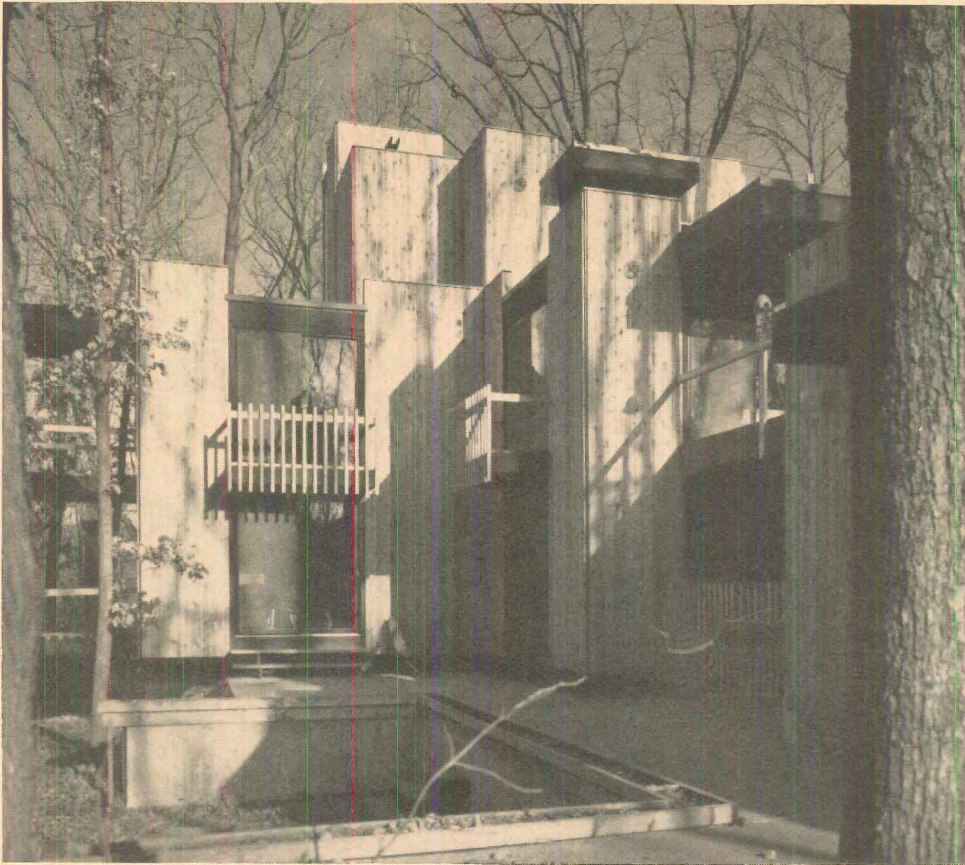


SLEEPING PLATFORM above galley kitchen divides the living room from dining area.



WOOD FLOORING carried from living area out to deck, provides continuity of space.

continued



VERTICAL FORMS, finished in rough-sawn cedar, will weather to match surrounding trees.

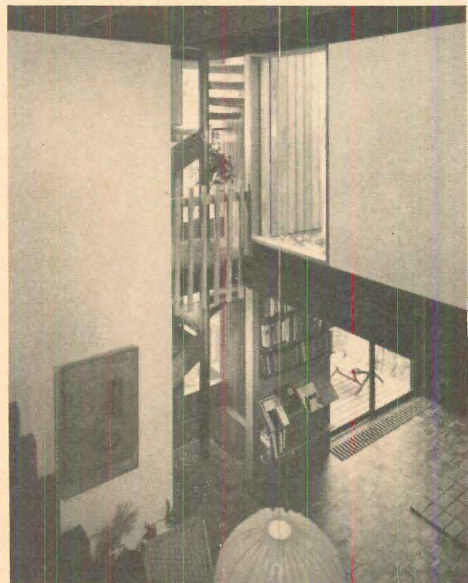


DESCENDING ROOFTOPS form series of terraces and decks.

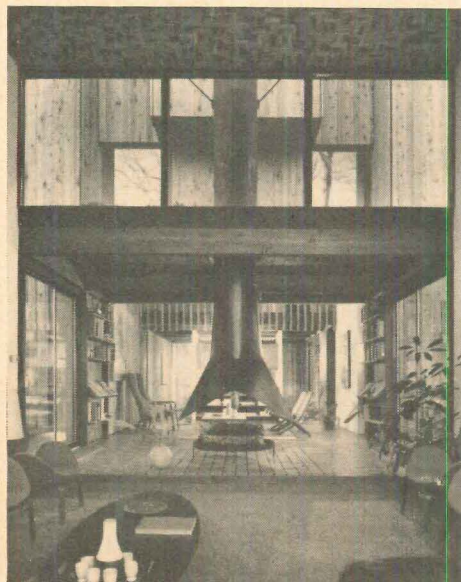
AWARD OF MERIT

A cluster of vertical boxes. Three living levels are arranged in the basic shape of a cross. Every room in the house opens to at least one deck, some rooms to two or three. The kitchen and dining room open out to a concrete terrace which surrounds the area for a future swimming pool. Area: 3,000 sq. ft.

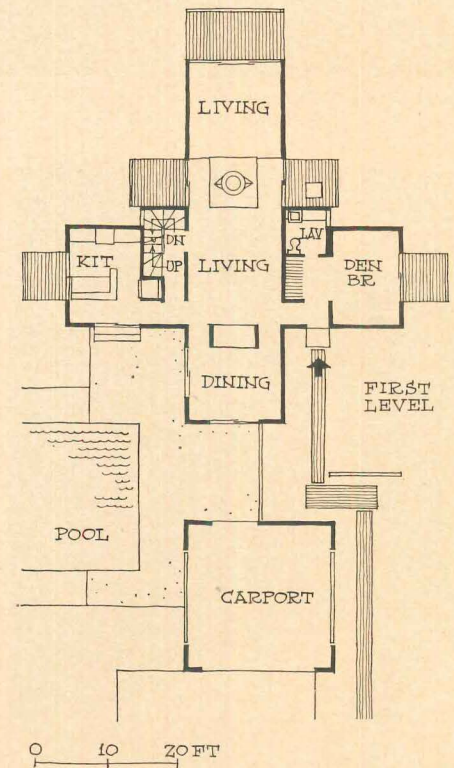
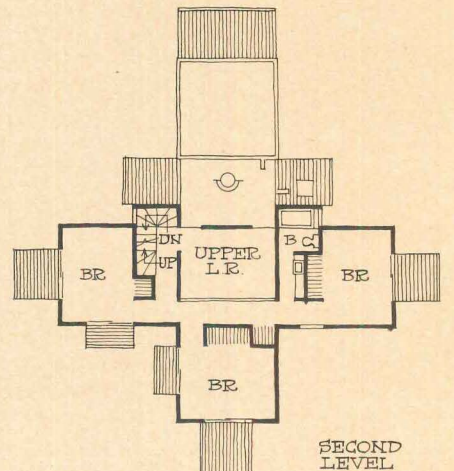
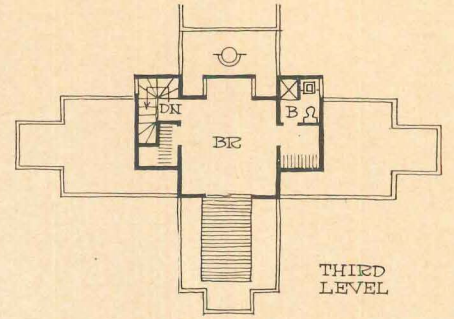
Architect: Crites & McConnell. Builder: Berger Construction Co. Location: Cedar Rapids, Ia.

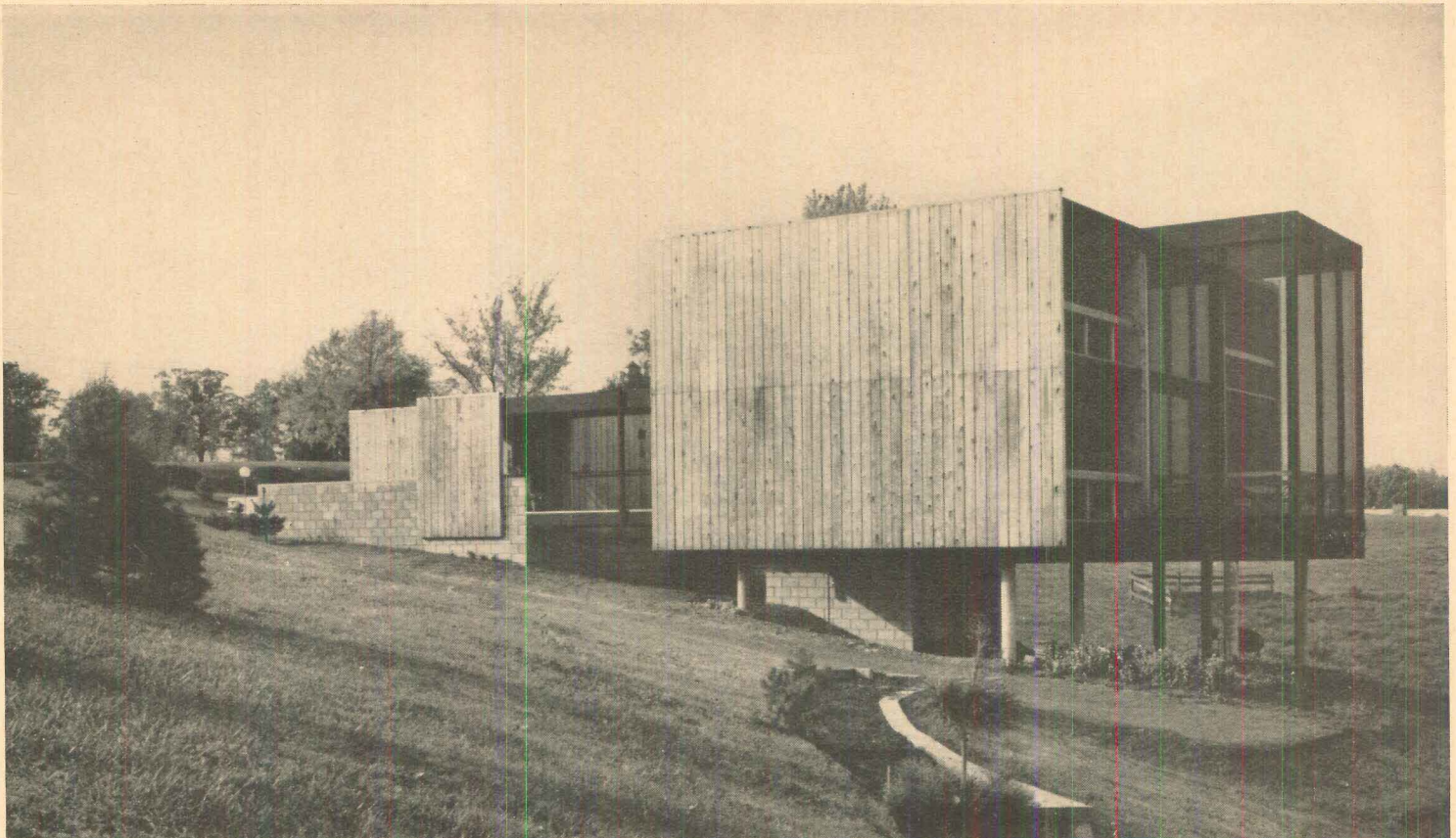


STAIRWAY, rising three levels beside narrow window wall, forms balcony over living room.

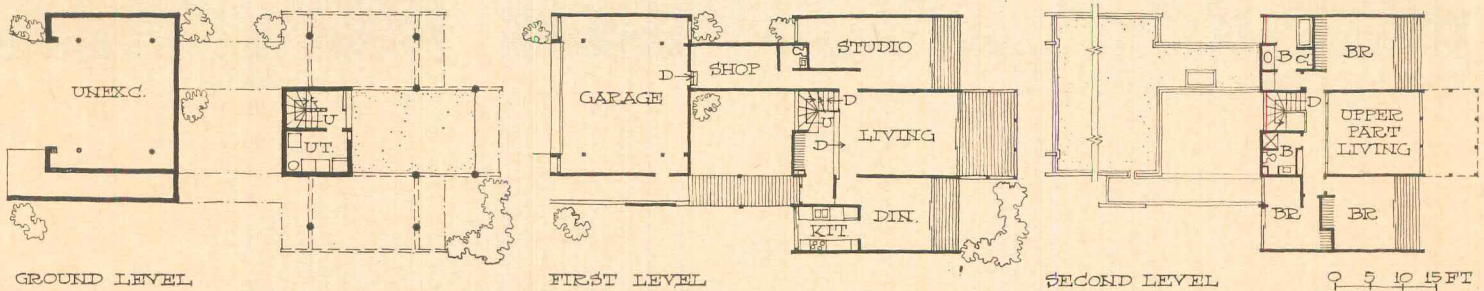


THREE-PART LIVING ROOM is divided in center by one-story fireplace area.





CUBIFORM HOUSE includes two-story section, right, on concrete piers, one-story section, left, with carport, shop, and bridge to living areas.

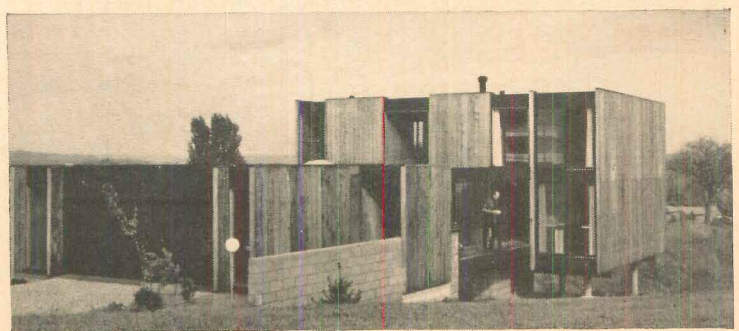


TWO-STORY LIVING ROOM is visually enlarged by window wall and projecting porch.

AWARD OF MERIT

Horizontal boxes above a gentle slope. The main living area of the house is supported by concrete piers, and it stretches off the top of the slope to command a view. The living room is two stories high and is flanked on two levels by rooms with small railed balconies. The concrete block base contains utilities and a stairway to living areas. Area: 1,908 sq. ft.

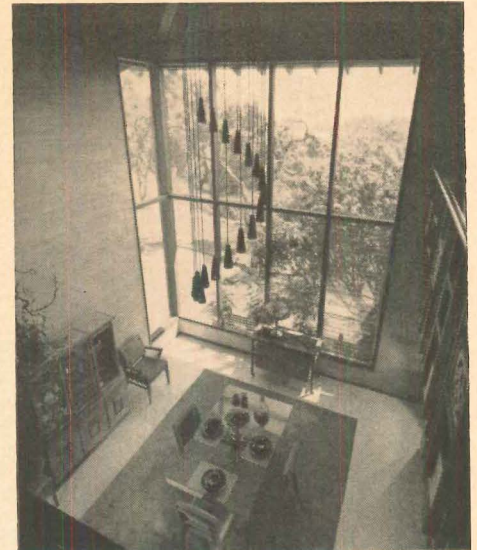
Architect: Crites & McConnell. Builder: R. E. Hall. Location: Iowa City, Ia.



ON-GRADE ENTRANCE leads across wooden bridge to lower living level of main structure.



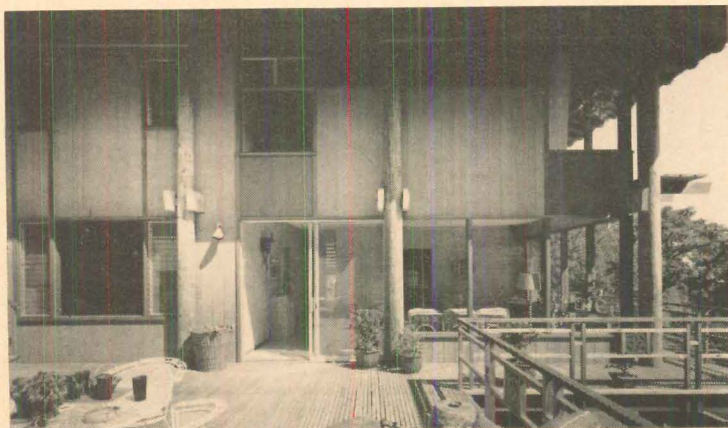
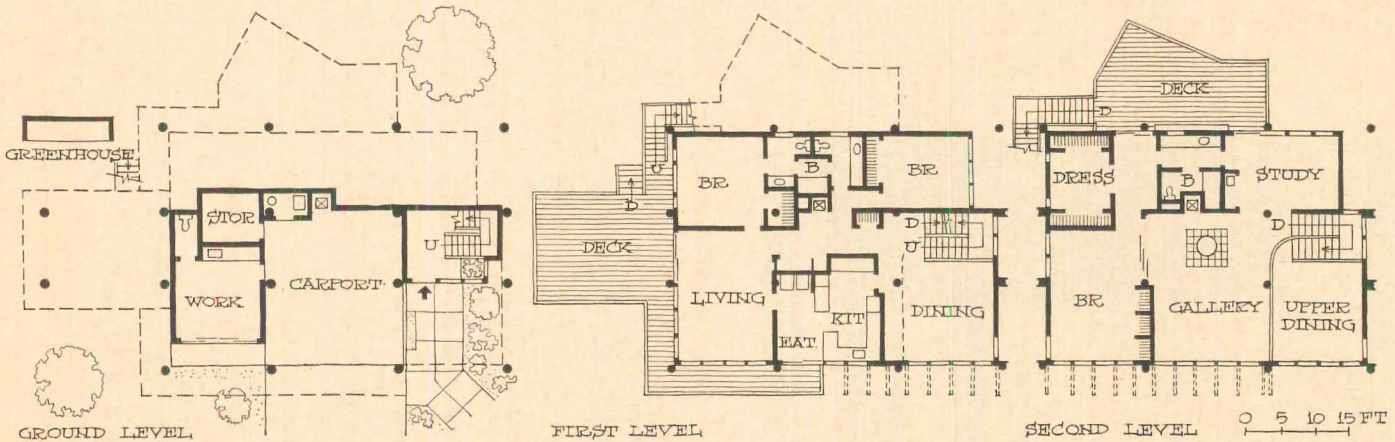
SUPPORTING POLES, sunk into the rising slope, frame the three-story structure.



TWO-STORY WINDOW WALL in dining room frames a view of distant bay and mountains.



UPPER LIVING ROOM, on top level, is open on one side (left) to two-story dining area.



SIDE DECK, off the lower living room, stretches across hillside on second level.

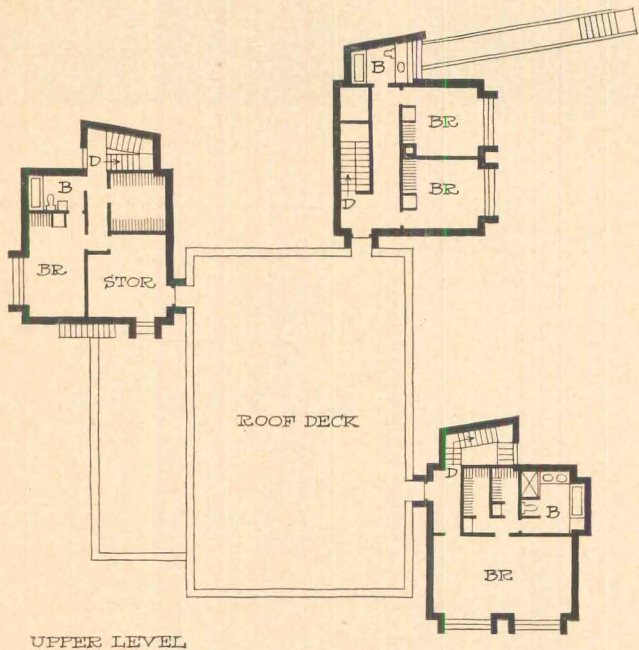
AWARD OF MERIT

A three-story house cut into a hill. The lower level, with carport and entrance, is built on a natural clearing; two living levels above are set into the steep bank behind. A deck across the front of the second level leads around one side to a larger deck, and a rear deck on the top level bridges the gap between house and hillside. Area 3,790 sq. ft.

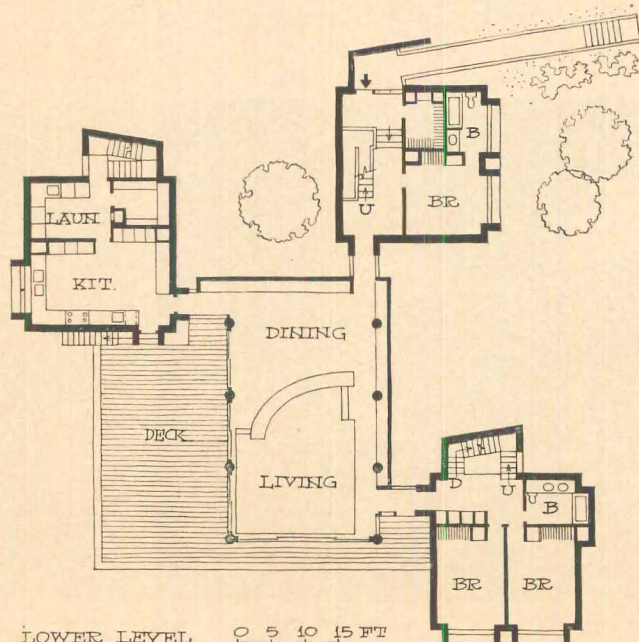
Architect: Edwin Wadsworth. Builder: Robert Forcellini. Location: Hillsborough, Calif.



VIEW FROM WATER shows rocky site, concrete supports for center section. High concrete parapets protect both upper and lower decks.



UPPER LEVEL



LOWER LEVEL

0 5 10 15 FT

AWARD OF MERIT

Brick-faced towers on a storm-swept causeway. The two living levels are a full story above the rocky site to permit high tides, battering waves, and stormy seas to pass beneath the house. Bedrooms and utility areas are in three separate concrete towers, connected by the main living area and its protected deck. A second deck forms the roof. Area: 4,500 sq. ft.

Architect: Ulrich Franzen & Assoc. Builder: E. W. Howell Co. Location: Mamaroneck, N. Y.



ENTRANCE RAMP leads from street to foyer and stairwell in one of the bedroom towers.



MASSIVE BEAMS of concrete span the open living area, support upper roof deck.



WEST WALL, broken only by recessed windows, protects house from sun and street noise.

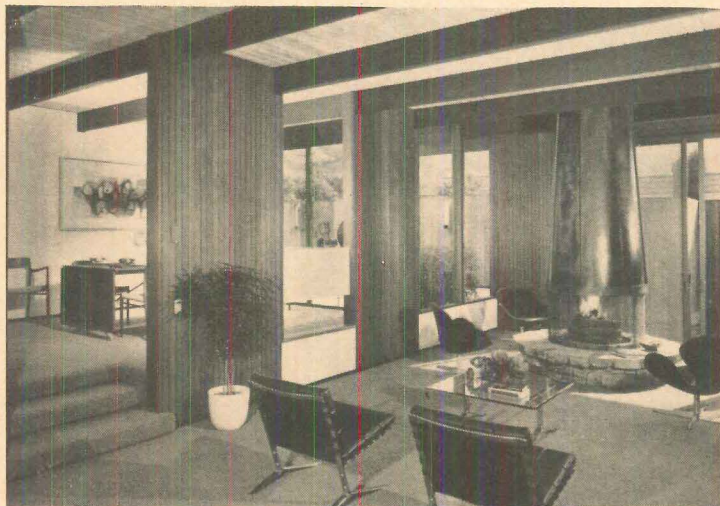
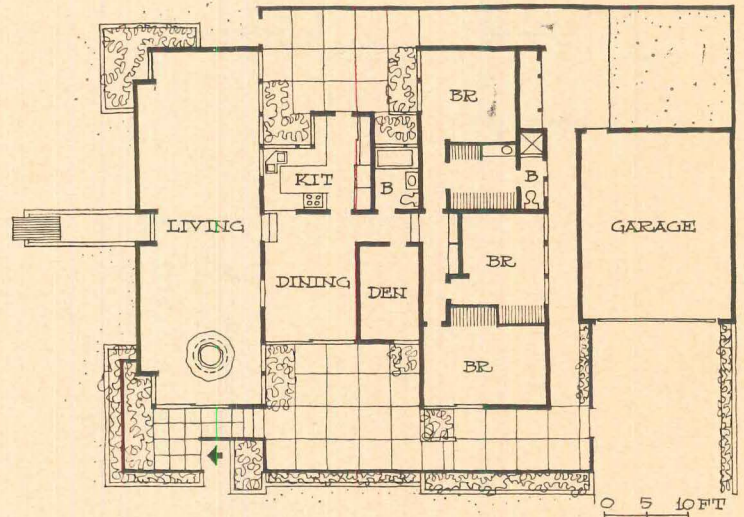


FRONT COURT, screened from street, provides completely private outdoor dining area.

HONORABLE MENTION

Private outdoor living on a small corner lot. All except one of the rooms in this small house look or open out on one of two large terraces. And both terraces are screened by high redwood fences from the heavy pedestrian traffic in the oceanside town. Direct access to the master bathroom from outside keeps sand from being tracked into the house. Area: 1,598 sq. ft.

Architect: Paul and Allard & Assocs. Builder: Shelstead Bros. Location: Del Mar, Calif.

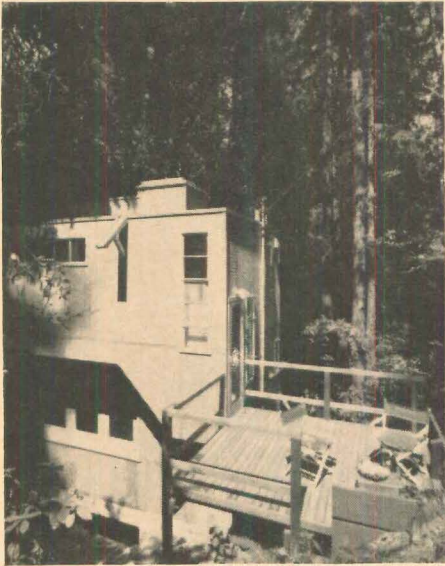


OPEN PARTITIONS permit a view of outdoor areas from living room and dining room.

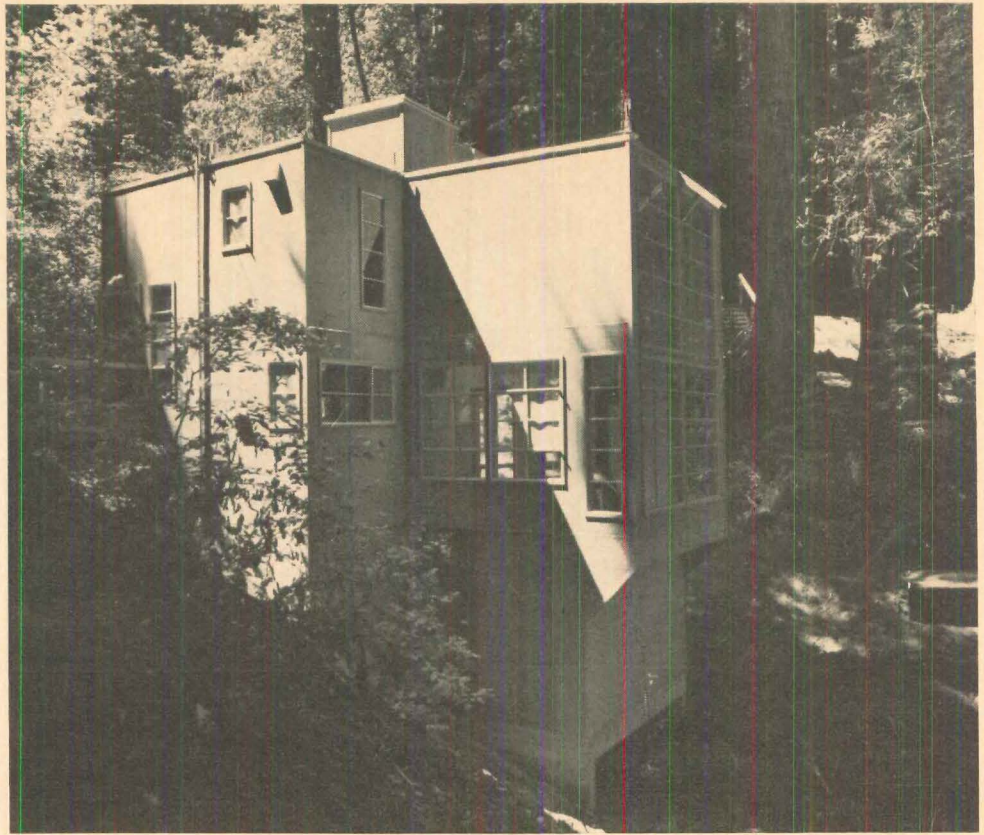


DINING ROOM, raised 18" above living room level, opens to terrace through glass doors.

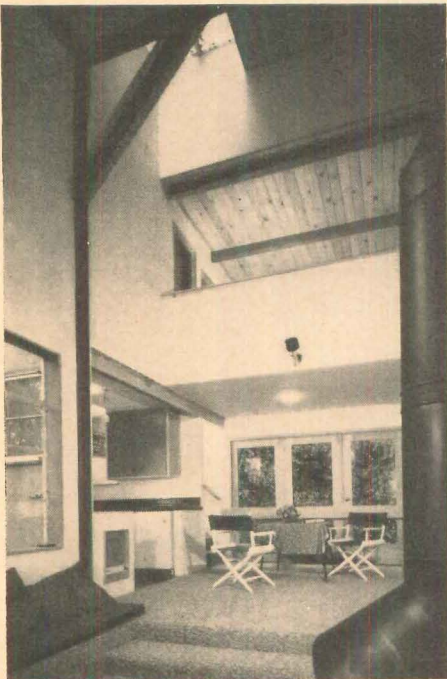
Photos: Jeremiah O. Bragstad



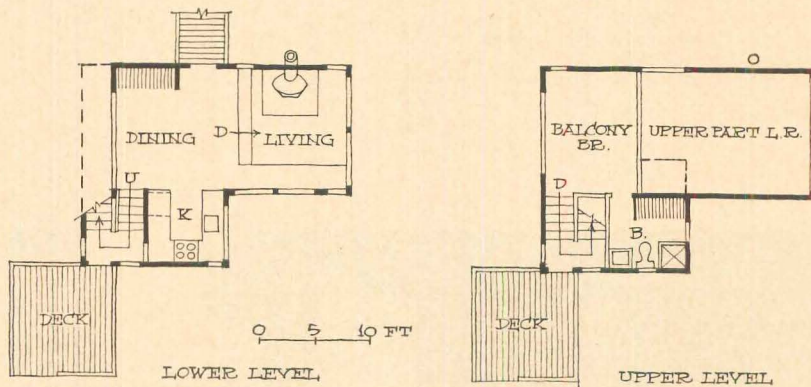
MID-LEVEL DECK off stairway landing is set into side of slope on south side of house.



L-SHAPED HOUSE is built at bottom of a ravine. Concrete foundation, below, bridges creek.



CENTRAL SKYLIGHT admits light to the whole interior. Bedroom platform is above.



HONORABLE MENTION

A tiny week-end house spanning a narrow creek. The two-story window wall provides a view of the shady ravine from the living room. The main living level has been carpeted throughout to provide informal seating areas, and one built-in couch flips down to make a double bed for extra sleeping accommodations. A central skylight admits extra daylight. Area: 528 sq. ft.

Architects: John B. Arrison, Warren C. Fuller. Builder: John Levie. Location: Woodside, Calif.



TWO-STORY WINDOWS face redwood trees. Changes in floor and ceiling levels add interest.

continued

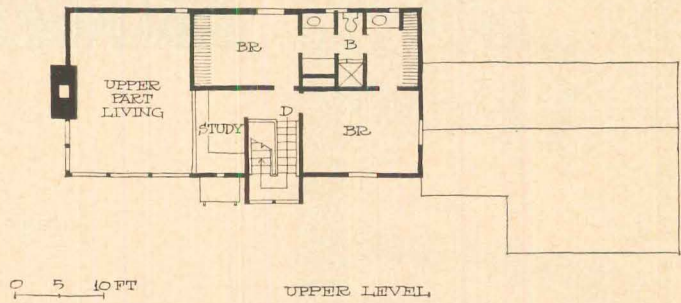
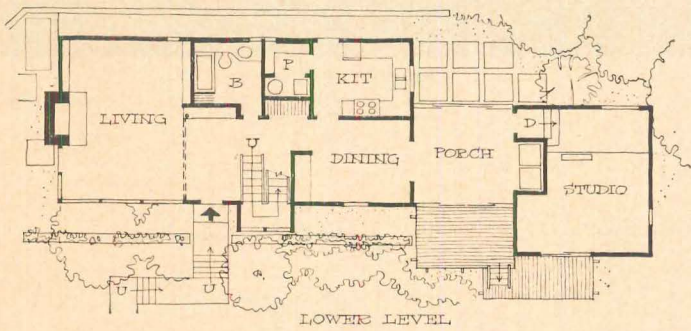
Photos: Ernest Braun



TWO-STORY STRUCTURE has projecting stairwell, center, one-story studio wing, right.



FIREPLACE WALL of living room is seen here from balcony-study on second floor.

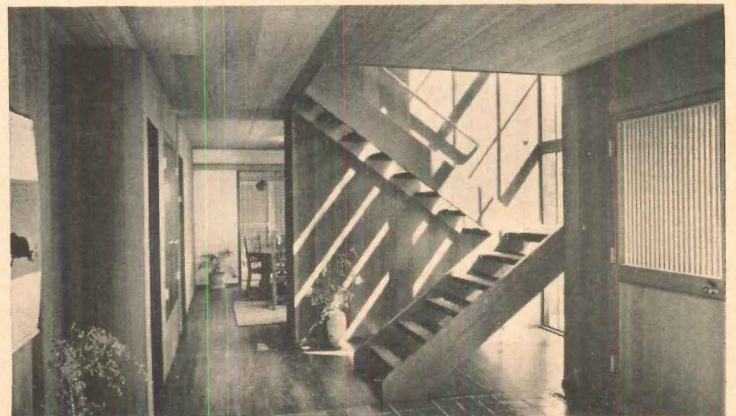


FRONT WALL of living room has full glass wall. Balcony-study is at left of windows.

HONORABLE MENTION

A window-walled house for a wooded site. The small-paned windows rise to the ceiling of the two-story living room and projecting stairwell and open up the whole house to a view of the surrounding wooded hills. Total area, including two living levels, attached one-story studio, and see-through porch, is 1,800 sq. ft.

Architect: Clement Chen & Assocs. Builder: Mikko J. Kallio. Location: Portola Valley, Calif.



REDWOOD PANELING is carried from living room through foyer, stairwell to dining area.

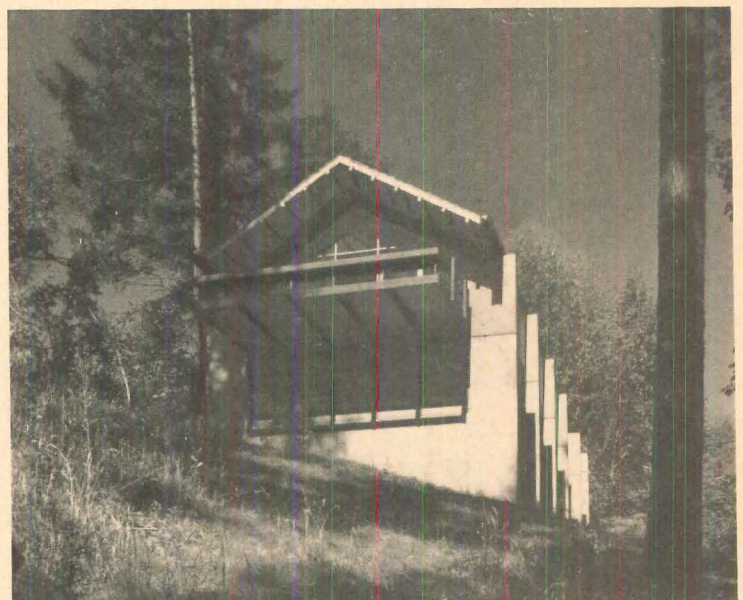


SEE-THROUGH HOUSE is tied to slope by stairway to parking area, right. Future studio will be built on the large deck shown in foreground.

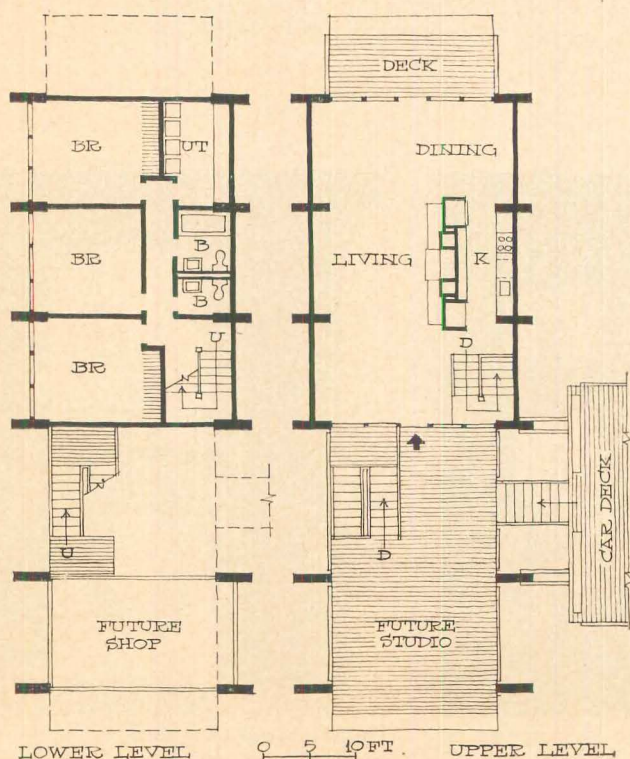
HONORABLE MENTION

A hillside house set in concrete cradles. Six U-shaped concrete sections, rooted in the slope and capped by a low-pitched roof, frame this two-story house. The living area on the upper level is one big room, divided only by the fireplace wall and open to the view at either end through gable window walls. Bedrooms and utility area are below. Area: 1,710 sq. ft.

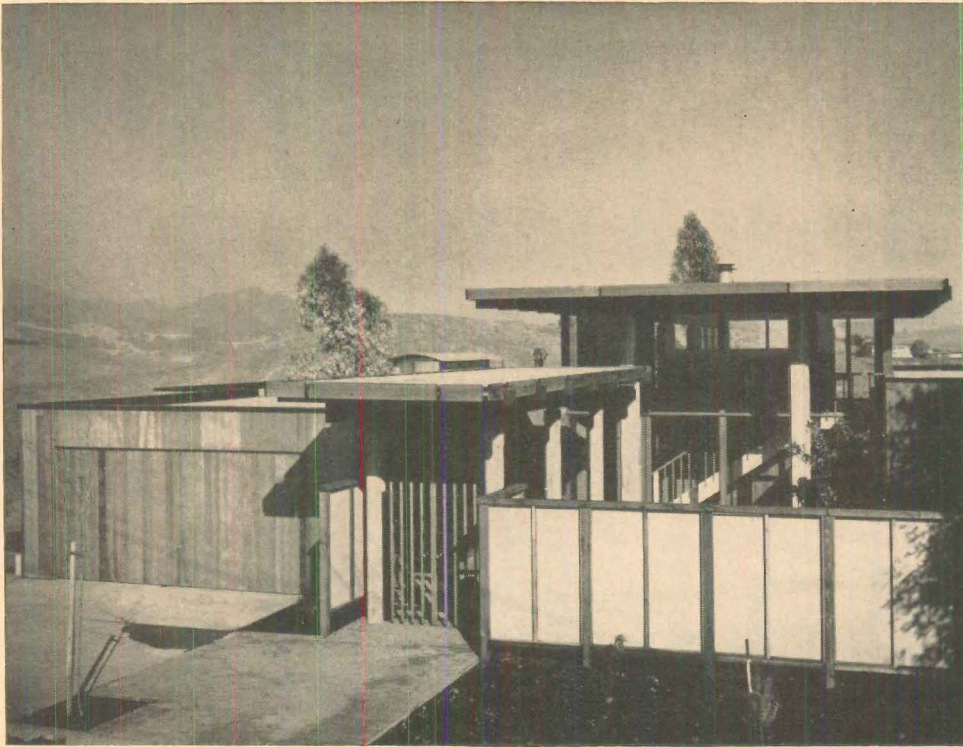
Architect: Campbell-Miller-Michael. Builder: Sam Vahey. Location: Portland, Ore.



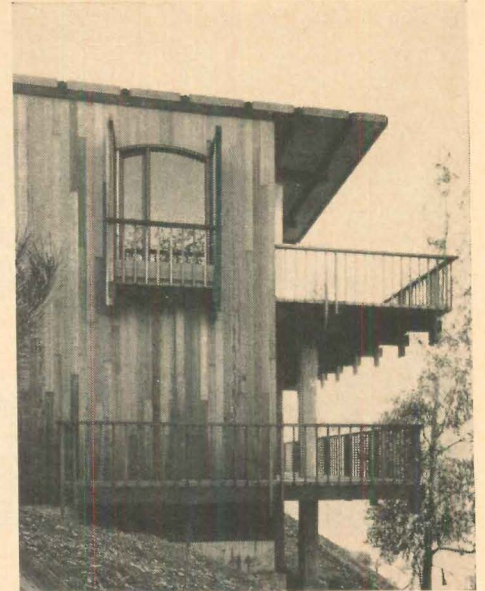
MASSIVE CONCRETE SECTIONS frame the 18'-wide wooden deck off upper-level living area.



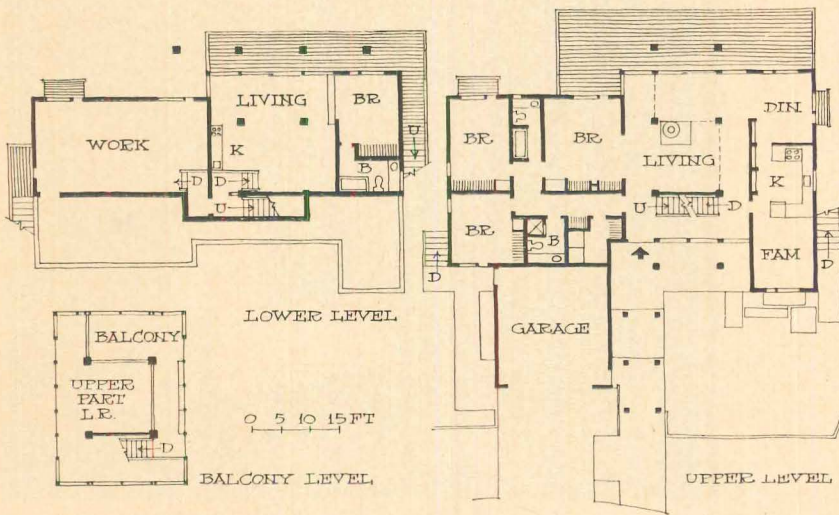
LIVING AREA makes use of projecting concrete pillars for built-in furniture, storage.



RAISED ROOF of living room lets in light from four sides. Sheltered walk is in foreground.



REAR BALCONIES extend from main living area, above, and around apartment, below.



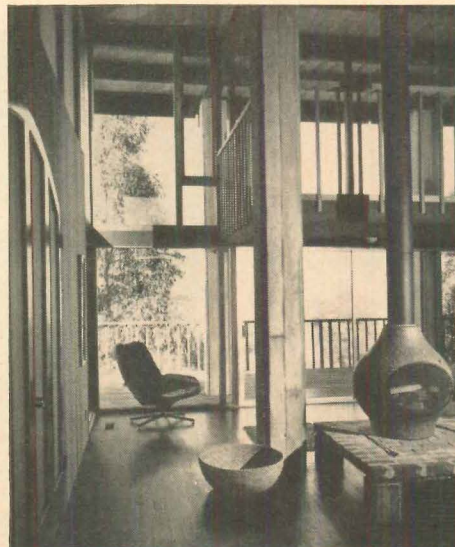
HONORABLE MENTION

A two-level house with a private apartment. Flanked by flat-roofed one-story wings, the central living room rises two stories to a canopy roof with a wide overhang. A mezzanine library runs across two sides of living room. On the lower level are work areas and a one-bedroom apartment which can be closed off and reached by outside stairways. Total area: 4,559 sq. ft.

Architects: Alan E. Morgan and Lawrence J. Franceschina. Builder (and owner): Raymond Sparrow. Location: Mill Valley, Calif.



MEZZANINE above living room, visible at left, is reached by stairway in entrance hall, right.



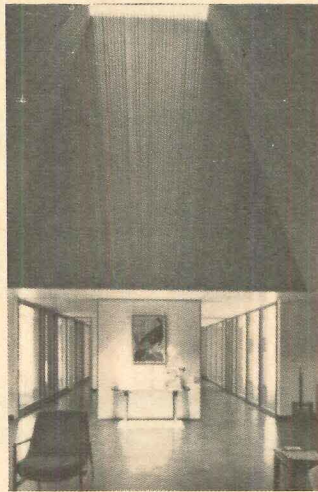
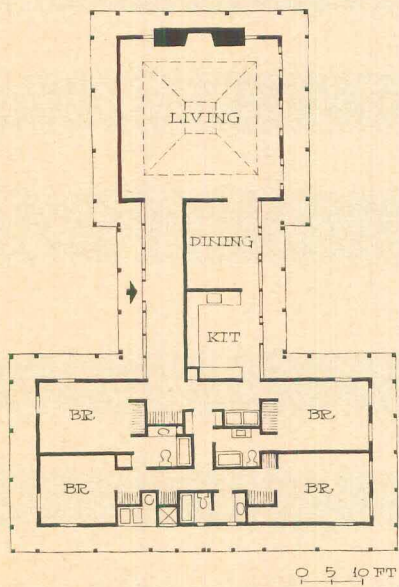
CONCRETE COLUMNS, center, support both the canopy roof and the mezzanine in background.



ARCHED WINDOW SHAPE in dining area is repeated in smaller windows and doorways.



CONTINUOUS PORTICO is supported by 54 cypress columns which give extra support during hurricane winds. Non-structural columns conceal downspouts.



WINDOWED GALLERIES lead from living room to bedrooms.

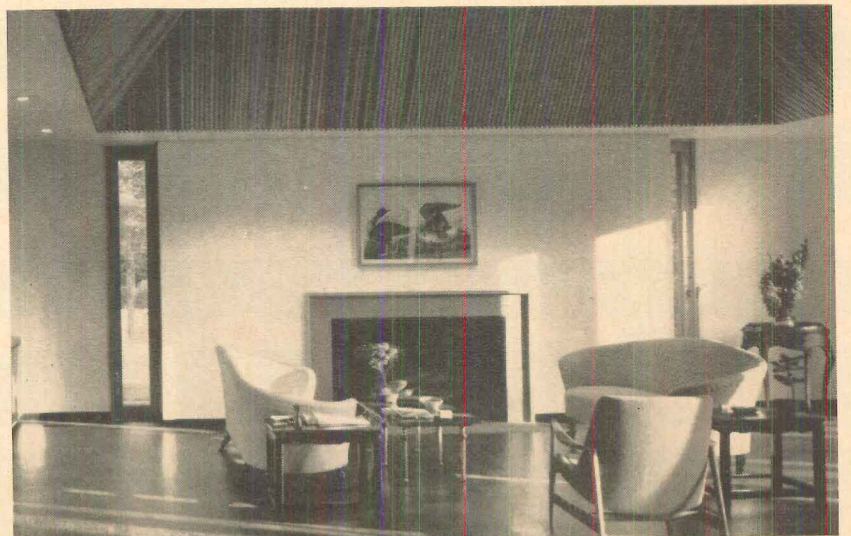


RAISED CEILING over living room is made of wood strips, culminates in skylight.

HONORABLE MENTION

A portico house with four roofs. In the living room, the ceiling follows the roof lines and rises to a central light well. A portico runs around the entire perimeter of the house, and all of the exits to it have pairs of wooden doors with single lights. The living room is separated from the sleeping area by a glass-walled neck which contains the kitchen and dining room. Area: 3,676 sq. ft.

Architect: Hugh Newell Jacobsen. Builder: Leo De Sorcy. Location: Martha's Vineyard, Mass.



NARROW WINDOWS flanking simple fireplace are repeated as doors throughout house.

	Year to	PROFIT & LOSS STATEMENT				BALANCE SHEET ITEMS (000)*		
		Revenues (000)	Per cent change	Net income (000)	Per cent change	Income per share	Invested capital	Total debt
Building Companies								
Levitt & Sons	Feb. '66	\$ 74,462	+ 24	\$ 3,254	+ 25	\$1.06	\$23,428	\$ 42,471
Del E. Webb Corp.	Dec. '65	111,014	- 5	(13,425)	a	(2.04)	23,041	144,017
(Housing & construction)		59,629	- 17	NA	NA	NA		
S. V. Hunsaker	Dec. '65	42,026	- 19	3,002	+ 21	b	8,803	46,970
Kaufman & Broad	Feb. '66	31,697	+ 8	1,072	+ 35	1.76	5,291	10,956
Jim Walter Corp.	Feb. '66	163,055	+ 3	7,266 ^c	- 7	2.58	53,405	89,052
(Housing only)	Aug. '65	29,507	- 19	NA	NA	NA		
General Builders	Dec. '65	15,395	+ 40	(440)	e	(.28)	5,116	28,707
Sproul Homes	Jan. '66	14,260	- 28	(1,190)	z	(1.07)	1,929	7,607
Kavanagh-Smith	Oct. '65	9,339	+ 27	288 ^f	+121	.57	2,622	3,914
Development Corp. of America	Dec. '65	8,372	+ 33	71	+250	.10	1,064	1,601
Presidential Realty	Jan. '66	7,248	+ 11	129	g	.10	1,405	40,350
Louis Lesser Enterprises	Mar. '66	7,065	- 38	2,020	+ 88	1.65	9,411	63,577
First National Realty	Dec. '65	NA	NA	(761)	h	(.51)	4,460	49,613
First Hartford Realty	Dec. '65	2,096	+ 31	(62)	i	(.11)	2,844	12,750
Capital Building Industries	Dec. '65	893	+ 7	(230)	j	(.17)	1,440	3,742
TOTAL BUILDING		486,922	+ 1	1,755	- 89	-	139,799	495,714
Prefabrication Companies								
National Homes	Mar. '66	78,316	+ 36	863	- 40	.18	34,765	21,109
Modern Homes	Sept. '65	25,971	- 6	(439)	k	(.26)	6,962	47,312
Albee Homes	Dec. '65	18,444	- 2	592	- 16	.36	9,243	22,649
Madway Main Line Homes	Dec. '65	18,159	+ 91	310	m	1.06	2,276	24,714
Scholz Homes	Dec. '65	10,959	+ 27	419	+125	.79	2,194	2,926
Swift Industries	Mar. '66	8,550	+ 1	177	+ 12 ^{aa}	.17	5,972	8,347
Great Lakes Homes	Dec. '65	9,039	- 34	(1,935)	n	(4.11)	1,177	4,555
Hodgson Houses	Feb. '66	6,284	+ 13	110 ^p	+ 10	.12	1,046	477
Steel Crest Homes	Nov. '65	5,455	NA	288	NA	.27	1,135	3,844
Inland Homes	Jan. '66	4,590	- 28	102	- 74	.30	3,362	3,856
Continental Homes	Mar. '66	4,129	+ 17	184	+ 29	.43	1,165	96,000
Admiral Homes	Feb. '66	2,806	+ 3	(382)	q	(.99)	633	1,718
Nationwide Homes	Mar. '66	1,509	+ 29	172	+155	.27	2,580	1,830
Techbuilt	Dec. '65	1,320	+ 11	87	+ 76	.23	114	209
TOTAL PREFABING		190,076	+9	260	-93	-	71,361	139,798
Land Development Companies								
Gulf American	Nov. '65	104,214	+ 21	14,592	+ 25	1.55	60,355	73,563
Forest City Enterprises	Dec. '65	43,284	+ 17	950	+ 33	.40	18,007	27,370
General Development	Dec. '65	29,400	- 1	2,165	+ 36	.29	47,535	54,355
Macco Realty	Dec. '65	23,292	- 17	2,019	- 24	1.04	16,708	38,750
McCulloch Oil	Mar. '66	20,452	+ 33	2,290	+ 34	.63	13,394	11,724
Deltona	Dec. '65	15,604 ^r	- 12	1,559	+ 25	1.20	14,240	19,045
Horizon Land	Feb. '66	11,933	+ 6	1,177 ^s	+ 61	.58	7,660	26,358
Holly Corp.	Jan. '66	9,979	+ 5	707	- 30	.09	5,394	10,991
Crawford Corp.	Dec. '65	7,050	+217	(1,276)	t	(1.80)	5,079	6,395
Christiana Oil	Mar. '66	6,421	+ 3	826	- 33	.32	12,393	11,118
Cousins Properties	Dec. '65	6,293	+ 29	564	+ 15	1.81	2,591	10,499
Lake Arrowhead	Jan. '66	6,214	- 9	1,214	- 15	1.79	6,360	9,410
American Realty & Petroleum	Jan. '66	5,364	- 11	653	- 37	.26	10,869	8,408
Canaveral International	Mar. '66	3,780	+ 65	686	u	.43	2,812	6,825
Royal American Industries	Mar. '66	3,290	+155	228	v	.009	2,464	12,227
Laguna Niguel	Jan. '66	2,882	- 48	199	- 84	.15 ^w	9,252	6,959
Garden Land	Dec. '65	2,004	+ 10	419	NC	.37	5,302	1,119
Southern Realty & Utilities	Mar. '66	1,548	NA	(269)	NA	1.31	5,899	6,872
American Land	Dec. '65	822	- 83	(456)	x	(.33)	284	1,702
Florida Palm-Aire	Dec. '65	541	- 28	11	+113	.05	3,099	1,176
Sunasco - 6 mos.	Mar. '66	25,659	y	4,264	y	1.87	39,122	211,603
TOTAL DEVELOPERS		302,819	+ 9	28,527	+ 15	-	243,230	337,994

() = (Loss)
 NA- Not available or not reported by company.
 NC- No change.
 a- Compared to profit of \$1,855,068 in previous 12 months.
 b- Not reported; company is wholly owned, non-consolidated subsidiary of Occidental Petroleum Corp.
 c- Includes Brentwood Mortgage Co.
 d- Deficit.
 e- Net income of \$126,113 in previous year.
 f- After special charge of \$21,480.
 g- Compared to loss of \$343,703 in previous 12 months.
 h- Net income of \$236,049 in previous 12 months.
 i- Net income of \$18,677 in previous 12 months.
 j- Compared to loss of \$226,101 in previous year.
 k- Profit of \$693,959 in previous year.
 m- Loss of \$351,789 in previous year.
 n- Profit of \$91,196 in previous year.
 p- Includes special credit of \$38,783.
 q- Loss of \$153,800 in previous year.
 r- Does not include \$14.4 million sales of 50%-owned Marco Island affiliate.
 s- Includes tax credit \$95,000.
 t- Compared to loss of \$448,041 in previous year.
 u- Loss of \$1,458,492 in previous year.
 v- Loss of \$149,737 in previous 12 months.
 w- For year to July 31, 1965.
 x- Loss of \$1,095,436 in 1964.
 y- Six months pro-forma statement; no comparisons available. Sunasco represents merger of Atlas Credit Corp. and Sunset International Petroleum Corp.
 z- Profit of \$50,055 in previous year.
 *- As of latest fiscal year.
 aa- Comparison excludes special tax credit of \$45,500 in prior year.
 Group totals exclude companies with incomplete data: First National Realty, Steel Crest Homes, Southern Realty & Utilities, Sunasco.

PUBLICLY HELD COMPANIES:

A sprinkle of red ink dampens housing's quest for capital

The best way to sum up the last 12 months for the housing industry's publicly owned companies is to say that the rich got rich and the poor got poorer. This fact holds enormous implications not only for the managers and stockholders of the companies involved but for the owners of all private building companies who must deal with lenders.

Ledgers for the latest year's performance show, for example, that six of the 14 homebuilding corporations ended in the red. Three of the 14 home manufacturing and prefabbing companies were similarly embarrassed.

Nor is that the full story. Lusk Corp., the country's tenth largest homebuilder a year ago, suffered a cash hemorrhage and had to check into a federal bankruptcy court for reorganization (H&H, Jan.). Consolidated Building Corp., Canada's largest builder with \$26.5 million sales a year ago, has just confided to shareholders that it recorded a "number of substantial losses" and has curtailed several subdivisions outside metropolitan Toronto. No figures were revealed.

On the other hand, consistent growth patterns show up clearly in the annual reports of Levitt & Sons, Jim Walter Corp., Gulf American Land Corp., and Kaufman & Broad, to cite a few.

This mixed performance finds little sympathy on Wall Street, where nobody loves a loser and the market reaction to red ink is sudden, certain, and deadly. One experienced broker labels the situation "almost a textbook case of an industry-wide shakeout. The poorly managed or undercapitalized companies don't have the boom conditions to carry them along, and they are losing out to the more soundly based concerns."

But another trademark of a classic shakeout is missing. "No one is picking up the bodies," says one analyst, "because anyone who wants to get into housing doesn't have to buy the troubles of an ailing company."

Others view the situation as the inevitable re-

sult of a fever for "hot" housing stocks that swept Wall Street from late 1959 to 1962. The hot-issue buyers have been painfully burned, and investment brokers who peddled the issues to their customers are disenchanted (although they did spread the hot-issue fever by pressuring unseasoned companies into going public at commissions of 10% and up).

Shakeout or hot-issue hangover, the uneven results have produced repercussions far beyond Wall Street. The profit picture of housing stocks tends to serve as the industry's public face to the larger investment community of mortgage lenders, bankers, and accountants. These firms tend to generalize about all housing companies from the only part of the iceberg they can see—the earnings of public companies. One highly publicized failure (Lusk's for example), or an inflated loss (Del E. Webb Corp.'s \$13 million deficit) can create an atmosphere of failure that dozens of successful, well-managed companies have difficulty overcoming.

As a result, capital, homebuilding's lifeline, becomes difficult to obtain even on terms available to small industrial concerns. When Levitt & Sons borrowed \$20 million from four life insurance companies last fall, it had to throw in warrants for 200,000 shares of stock—a common Wall Street sweetener. Kaufman & Broad had to talk to several banks before establishing an open line of unsecured credit last year. And a subsidiary of General Builders paid 11% interest on an \$800,000 second mortgage last February.

With these credit terms imposed on the big public companies, how much worse off the smaller privately held companies are is anybody's guess.

If publicly held housing companies are the standard by which the whole housing industry is judged, it's important to know why housing stocks are currently in Wall Street's kennel club. The answer, based largely on brokers' and analysts' 20-20 hindsight, starts on the next page.

continued

Wall Street: a look at what went wrong with homebuilding stocks

CURRENT PRICE VS. OFFERING PRICE			
Company	Went public	Offering price	Current price + total div.†
Dover Constr.	3/62	\$6.50	\$1.00+0
Edwards Indus.	2/61	4.50	1.25+19¢*
First Hart. Realty	6/60	10.00	6.25+95¢
Frouge	11/60	10.00	4.25+\$1.02
Kavanagh-Smith	2/60	5.00	3.00+34¢
Kaufman & Broad	11/61	10.50	13.88+\$2.85
Levitt & Sons	2/60	10.00	11.63+\$1.25
Louis Lesser Ent.	9/62	10.00	3.88+\$1.86
Sproul Homes	5/64	8.00	1.38+\$1.26
Eichler Homes	9/59	7.13	3.75+\$3.26*
Albee Homes	3/61	16.00	1.38+12¢*
Great Lakes Homes	4/62	6.50	
	12/63	8.00	1.13+22½¢
Modern Homes	7/61	9.00	3.00+70¢
Swift Indus.	1/62	9.00	2.00+0
Crawford Corp.	6/60	13.00	2.50+\$1.10
Gulf Amer. Land	3/61	1.25*	10.75+0

Losses to shareholders
*Adjusted for stock dividends
†Since going public

Only two homebuilding stocks from the new-issue flood of the early 1960s now sell above their issue prices. HOUSE & HOME's tabulation of 17 major issues in all housing categories finds only three on the plus side for buyers (*table, left*). And the count omits companies that have gone bankrupt or simply vanished.

So it is no wonder that an encouraging word about housing companies is seldom heard on Wall Street today. Instead, analysts and brokers are saying:

"A bunch of adventurers," or "We couldn't bring a homebuilding company on the market today except at a deep discount," or "Most of my clients won't touch builders—they go bankrupt."

How did housing companies get such a sorry reputation?

Profits are inconsistent, so stock prices sag badly

Housing men have always known that homebuilding profits run in boom-and-bust swings. But telling this story in the black and red of annual reports has pained investors who are unfamiliar with the industry.

"It's the volatility of earnings, not the risk, that discourages investors," observes one analyst. "They [homebuilders] have complete inability to project earnings."

Not a single homebuilding company has reported consistently rising profits since going public. Closest contender is Levitt & Sons, now basking in five successive annual gains after a losing 1961. Kaufman & Broad enjoyed six years of rising profits before stumbling—in 1964—mostly because of a fling at general contracting. Last year was a red year for such companies as Del E. Webb, General Builders, Consolidated Building Corp., First National Realty, and Sproul Homes.

Investors have reacted to this roller coaster record by tagging housing stocks with fire-sale prices. Blue-chip industrials sell at 16 times earnings. But Levitt & Sons sells at around 11 times its \$1.05 earnings of the last 12 months, and the price-to-earnings ratio of Kaufman & Broad and Jim Walter is only 8.

Indeed, housing stocks are held in such low esteem that a goodly number sell below book value per share (*table, left*).

No builder is big enough to be called 'national'

"Their size is against them—no one thinks of a homebuilding company as a national venture," says one analyst who champions building companies. "There is no established plant with an outpouring of goods that is marketed nationally under an established brand name. And there may be delays in moving from one location to

another. Shareholders don't like these interruptions."

Analysts single out Levitt & Sons as the builder which has made greatest strides in overcoming these drawbacks. Levitt now sells in a dozen subdivisions in six metropolitan areas (including the suburbs of Paris) and always uses the magic "Levitt" name to maintain product identification.

Another approach to national status is being made by Jim Walter Corp., which is emerging as the prototype of a new homebuilding entity: a materials producer (through the purchase of Celotex Corp. in 1962) that also builds houses. But Jim Walter's homebuilding sales have slipped from \$41.9 million (14,292 houses) in 1961 to \$29.5 million (6,144 houses) last year.

The building companies' failure to grow to national stature has an oft-overlooked side effect: so few shares of housing stocks are available for purchase that the companies cannot attain a national following among shareholders or big institutions. And as the table at right shows, the market for housing stocks is thin indeed. Taken as a group, the 19 homebuilding companies on H&H's monthly list were valued at \$156 million recently—not much more than the value of a medium sized industrial corporation. The thin market hurt recently when one fund had to drop plans to buy into a housing company because it could not find enough shares available to meet its minimum purchase amount.

Insider control casts doubts on management continuity

"This is still a very personal industry," notes one senior analyst. "Many companies carry the founder's name and these original owners have been reluctant to give up their controlling interest."

Insider control, as Wall Street terms it, has long been an acknowledged fact of life in housing companies—the table at right shows typical examples—and homebuilders who went public pondered over how to get fresh capital from Wall Street without yielding effective control.

In retrospect, Wall Street feels that housing companies may have taken too little cash and given up too little control. In some cases—Lusk Corp. is cited—the companies sold just enough stock to pay off their current bills but not enough to assure themselves a strong financial base.

Hence Wall Street gives high marks to companies whose founders have delegated day-to-day operational decisions—Bill Levitt is a prime example—or divested themselves of absolute control—Jim Walter and his managers own only 15% of his company's stock. Both are training new managers to take over at some future date.

PRICE VS. BOOK VALUE		
Company	Per share	
	Book value	Recent price
General Builders	\$4.06	\$2.63
Kaufman & Broad	8.67	13.88
Levitt & Sons	7.80	11.63
Del E. Webb	3.41	3.88
Jim Walter Corp.	22.63	17.75
National Homes	7.39	3.25
Gulf Amer. Land	5.90	10.75

Builders: one-family specialists shine, but high debt hurts apartment men

THIN MARKET IN HOUSING STOCKS

Company	Shares	Market value (millions)
Jim Walter Corp.	2,530,485	\$ 44.9
Del E. Webb Corp.	6,594,542	25.6
Levitt & Sons	3,035,840	35.3
Presidential Realty	1,292,782	13.9
Kaufman & Broad	610,440	8.5
All builders \$155.9		
Gulf American Land	9,525,791	102.4
General Devel.	7,514,480	48.8
Arvida	5,984,463	46.4
Royal Am. Indus.	18,641,258	37.3
McCulloch Oil	3,316,247	32.7
All developers \$453.2		

TIGHT CONTROL BY INSIDERS

Company	Principal owner	% of shares controlled
Royal Amer. Indus.	John MacArthur (through a wholly owned company)	79%
Gulf Amer. Land	Leonard & Julius Rosen	66
Levitt & Sons	William Levitt	66
Kaufman & Broad	Eli Broad & Don Kaufman	64
Albee Homes	William, Alex & Sam Gross	62
Swift Indus.	I. H. Gordon	53
Del E. Webb Corp.	Del E. Webb	43
General Builders	Janis Risbergs	40

MOST PROFITABLE

(net as % of equity)

S. V. Hunsaker	34%
Louis Lesser Enter.	21%*
Levitt & Sons	17%
Kaufman & Broad	13%
Jim Walter Corp.	11%
Kavanagh-Smith	11%

*Unaudited

The real pros found a better housetrap in 1965: the detached one-family house, constructed more efficiently every year, or the townhouse, built for sale as a condominium or cooperative.

In the face of a 3% dip in national housing starts, four of the five top sales records were turned in by one-family specialists—Levitt & Sons, S. V. Hunsaker, Kaufman & Broad and Jim Walter Corp.—who reaped profits by knowing the one-family business and sticking to it.

Kavanagh-Smith of Greensboro, N. C., also stuck to one-family units and boosted sales by 27% and profits by 121%. But the company's two major stockholders disagreed on whether this showing was good enough, and last month Roger Kavanagh resigned as president, selling enough stock to give A. Griswold Smith control.

Competition forced apartment builders to scramble for profits. All are highly leveraged (a high debt-to-equity ratio) and a slight dip in revenues proved the straw that broke the back of previous earnings records. And when these apartment builders sought to lighten their debt by selling an apartment building, the search for a buyer was often long and arduous. The one-two punch of falling income and heavy debt spelled red ink for three high-rise builders—General Builders, First National Realty, and First Hartford Realty.

Debt was not poison to everyone. Presidential Realty, the most highly leveraged apartment builder on the roster with a debt load nearly 29 times greater than its \$1.4 million equity, returned to the profit path after a dip into the red. But all the gain and then some came from a \$450,000 profit on one office-building sale.

Debt troubles of a different nature made Del E. Webb Corp. everybody's choice for top loser of the year. Total income dipped 5% and profit plummeted from \$2.5 million to a \$2.3 million loss. Webb himself, resuming the presidency after the flamboyant departure of L. C. Jacobson (News, Apr.), took the operating loss as a cue for a thorough book cleaning. He devalued his holding in three Sun City retirement centers and other community building ventures to the tune of \$5.2 million and wrote down the value of some farm and motel holdings enough to compile an astounding \$13.4 million loss.

But Webb reported a profit for the March 1966 quarter and predicted a return to the black for the full year. Observers close to the company are inclined to agree; there seems to be no more bad news skulking in the wings.

The Webb loss was so huge that in the aggregate, 14 homebuilding companies could muster a total of only \$1.8 million profit on \$487 million sales, a minuscule

0.36% profit margin; excluding Webb, the margin rose to 4.0%. Again excluding Webb, the companies earned about 13.2% on the capital invested by stockholders. S. V. Hunsaker was the most profitable builder, returning 34% on the equity of its sole owner, Occidental Petroleum Corp. (see table, left). Hunsaker garnered half its income by selling off raw land.

Home manufacturing companies fared little better. Combined sales climbed 9%, but profits dropped 92%—from \$3.7 million to \$260,000. Hardest hit was Great Lakes Homes, \$1.9 million in the red. Some prefabbers have taken on heavy debt loads, and last month the one prefabber which nearly doubled sales over 1964, Madway Main Line Homes, said tight money had placed its assets in a "frozen condition" and asked federal bankruptcy court protection while it reorganized.

In a perilous year, three leading builders made these key decisions

Kaufman & Broad. Two of K&B's four local markets — southern California and Phoenix—looked weak to the company's market researchers going into the year and actually did get worse, both ending with a 50% drop in starts.

But President Eli Broad resisted the temptation to seek greener pastures—and perhaps run into unforeseen zoning or labor problems. Instead he decided to stay and even expand in southern California, which he still considers "the largest and most active housing market in the United States." Two subdivisions netted \$5.8 million sales last year, and Broad has now opened two new tracts. His prediction: "We expect our volume this year in California to about triple that of a year ago."

Broad is satisfied that there is "a lot of growth force" in Detroit (where K&B's 1965 sales hit \$13.6 million) and Chicago (\$4.7 million), and looks for modest improvement in Phoenix.

A builder who has shunned all normal construction loans, Broad signed up for a \$2.5-million loan from a Detroit bank early in 1965, then converted it into a five-year term loan last January. The arrangement gives K&B terms similar to those accorded most manufacturing companies. Even counting this loan, Broad's balance sheet shows a low \$2 of debt for each \$1 of stockholders' equity (vs. nearly a 4:1 ratio for all builders).

General Builders. "We were trying to carry a three-ton load with a one-ton truck," says President Janis Risbergs. "Our liabilities hit \$40 million, eight times our capital of only \$5 million.

"So now we have sold three buildings, and by the end of June it will be \$24 million in liabilities to \$6 million.

continued

BEST PROFIT MARGINS
(net as % of revenue)

Louis Lesser Ent.	28.6%*
S. V. Hunsaker	7.1%
Levitt & Sons	4.3%
Jim Walter Corp.	3.6%
Kaufman & Broad	3.4%
*Unaudited	

"Then," says this native Latvian "we will no more be pregnant."

But all three buildings were carried on GB books during 1965, so the company showed a \$440,000 loss after depreciation even though operations generated \$47,000 in cash. Risbergs bemoans his accountants' refusal to count profits until a sale is closed: "At Beacon [N. Y.] we made \$250,000 a year for two years, but it is just now showing."

Besides selling the three apartments, GB sold 212 houses on Long Island and in Atlanta. Risbergs ordered a sales drive after he smelled tight money coming in December. Now he says he is in a solid cash position—"only a 1½-ton load."

Levitt & Sons. Fresh off a fifth consecutive year of rising profits, President Bill Levitt has taken two important steps to insure reaching a targeted 20% increase in house production — to an estimated 4,550 units—this year.

First, Levitt sold \$20 million in 15-year notes to four insurance companies, replacing a patchwork of short-term loans with a unified payment schedule requiring payments of only \$2.1 million a year. Levitt calls the deal "a milestone . . . substantial recognition of the great progress Levitt & Sons has made since the war." Even with the new financing, Levitt carries a light \$1.90 in debt for each \$1 of equity.

Second, Levitt lined up all the mortgage money he needs for the coming year. He announced this move in a special memo to shareholders "because there has been so much publicity about the scarcity of mortgage money."

To minimize his risk, Levitt is pushing harder than ever—and with increasing success—to presell his houses. In early June he reported that 81% of all his production through next February was sold out. "We are No. 1 in the field," he said, "and we mean to stay there."

Land developers: Florida's profits sweet as an orange—California a lemon

Florida's three big developers made it a golden year:

Gulf American's net: up 25% to \$14.5 million.

General Development: up 36% to \$2 million.

Deltona (the Mackle brothers): up 25% to a profit of \$1.6 million.

The Southwest's big operators also did well. McCulloch Oil (Lake Havasu City, Ariz.) posted a 34% increase, and Horizon Land gained 61% over its previous year's earnings from Texas and New Mexico properties.

But there was bad news from California, where 1965 housing starts skidded to 185,000 from a 1963 peak of 292,000, and where economists were predicting another 15% drop this year.

The decline particularly hurt land development, always ultra-sensitive to general real estate nervousness. Christiana Oil's profit fell 33%, Lake Arrowhead's dipped 15%* and Laguna Niguel's tumbled 84%—to \$199,123 on \$2.9 million revenues.

Even old reliable Macco, whose profits had climbed steadily for eight years through a record 1964 (H&H May '65), reported a 24% decline in earnings for the year, during which it became a part of the Pennsylvania Railroad (*see below*).

California's slump was not the only land industry problem. The land companies still had enormous amounts of cash tied up in acreage for long periods. Only two companies on HOUSE & HOME's list of 21—Cousins Properties of Atlanta and Forest

City Enterprises of Cleveland—managed to turn over equity as often as twice in relation to revenue. Only nine others turned equity over once, in contrast to homebuilding companies that turned it over from four to six times (*see earnings chart*). As a group, the land industry's 21 companies, with equity of \$243 million, turned equity over 1.3 times on \$303 million in revenues in 1965.

Here are the year's key management decisions by four land developers.

Gulf American land is the nation's most profitable major developer (*see Profitability box*) because it maintains collections and down payments at 25% of receivables from buyers. That's the point at which cash inflow exceeds outgo.

How does Gulf American do it?

"We decided on tighter control of purchasers before and after the sale," explains Chairman Leonard Rosen. "We eliminate the delinquent before he becomes a customer. For buyers, we use a public relations program to advise them of what a value they have and what they are paying for. This way, they know they are not being fooled."

The company achieved a favorable cash flow two years ago, and President Julius Rosen now says collections "are more dependable than the weather predictions." They were \$52 million last year, a gain of \$10 million, with money from the new River Ranch Acres in Florida's Polk County adding to the take from Cape Coral on the Gulf Coast. That's a healthy 26% of \$201 million in receivables, and brother Julius estimates collections at \$60 million for 1966.

He also predicts a 25% increase in sales

MOST PROFITABLE
(net as % of equity)

Gulf American	24%
Canaveral International	24
Cousins Properties	22
Lake Arrowhead	19
McCulloch Oil	17

* But Lake Arrowhead's profit ratios to equity and revenue were excellent. See "Profit" boxes with this article.

BEST PROFIT MARGINS
(net as % of revenue)

Garden Land Co.	21%
Lake Arrowhead	20
Canaveral International	18
Sunasco Inc.	17
Gulf American	14

—to \$130 million—and a 20% average increase for the next three years with the help of foreign markets now providing a mere 3% of sales but ready, Rosen says, to deliver 20% if the company pushes. He summarizes almost sadly:

“Every year you have more and more customers but not more land.”

Macco Realty's major decision in 1965 was to sell itself to the Pennsylvania, and Macco President Carl C. Gregory says his company's 24% profit decline traces in part to the fact that his key sales executives lost valuable production time while tied up on aspects of the railroad deal. But Gregory thinks “a realistic recognition of the market in southern California” is a better explanation. Macco's 100,000 acres—including a one-third interest in the 87,500-acre Rancho California in Riverside County—lie generally along the state's expansion paths, but sales were off 17%. Gregory says both revenues and profit are up for the first quarter of 1966.

“I'm extremely optimistic,” he says. “We'll emerge a bigger, stronger company.”

Crawford Corp. President Hamilton Crawford sold four Georgia and Florida subdivisions last year and says the deals preempted enough executive time to account for a \$1.28 million loss (on \$7 million in revenues). Crawford is concentrating on new-town Crofton near Washington and says sales through May equalled the same period in 1965.

Sunasco Corp. of Philadelphia appears on HOUSE & HOME's developer list as a new member born of a merger decision uniting Atlas Credit Corp. (Philadelphia) and Sunset International Petroleum (Beverly Hills). The new company reported \$4 million earnings on \$25.6 revenues in a six-month pro-forma accounting to March 31. It listed some interesting figures on house sales and lot sales to builders in its eight California tracts:

Development	Location	Total units	Homes sold	Lots sold
San Carlos	San Diego	8,000	1,000	1,000
Hacienda Hills	Whittier	3,000	600	800
Whitney Ranch	Sacramento	31,000	110	335
San Marin	San Francisco	4,500	140	400
Thousand Oaks Rancho	Los Angeles Palo Alto	4,000 700	—	500 —
Arastradero				
Villa La Jola	San Diego	4,500	—	—
Mountain Park	Los Angeles	7,000	—	—

Enter the giants: billion-dollar companies move boldly into housing

In fact, big corporations have been in housing for quite some time, as HOUSE & HOME reported in January 1963 (“The Emerging Giants”). But the new giants have more money and greater staying power. Many have been in some phase of real estate for decades but are just now cutting their teeth on houses and apartments.

The \$2½-billion Pennsylvania Railroad leads the way with its purchases of Arvida Corp. in Florida and Macco in California (NEWS, Sept.). The railroad already owned Great Southwest Corp. in Texas. Its investment in the three housing and land companies now totals \$65 million.

Westinghouse, with \$1.6 billion in assets, has bought Florida millionaire James S. Hunt's Coral Ridge Properties for \$30-\$36 million.

General Electric, with assets of \$3.2 billion, has just taken over the Red Rock Hill project in San Francisco's renewal area. G.E. is already joint-venturing residential projects in Hartford, Conn., and Louisville, Ky.

Alcoa, with assets exceeding \$1.7 billion, has now brought its investment in ten projects in six major cities up to \$60 million. The completed developments will include 18,000 high-rise apartments and 500 townhouses.

Gulf Oil, a \$5.2-billion company, is backing Developer Robert E. Simon Jr. with \$17 million in his new city of Reston, 18 miles from Washington. Humble Oil, a division of huge Jersey Standard, has at

least \$30 million in Clear Lake City near Houston.

Transamerica Corp., a Los Angeles finance company with \$2 billion in resources, has purchased Seattle's Bell & Valdez Inc., one of the Northwest's largest homebuilders.

A number of smaller giants are either wetting their feet or wading in deeper.

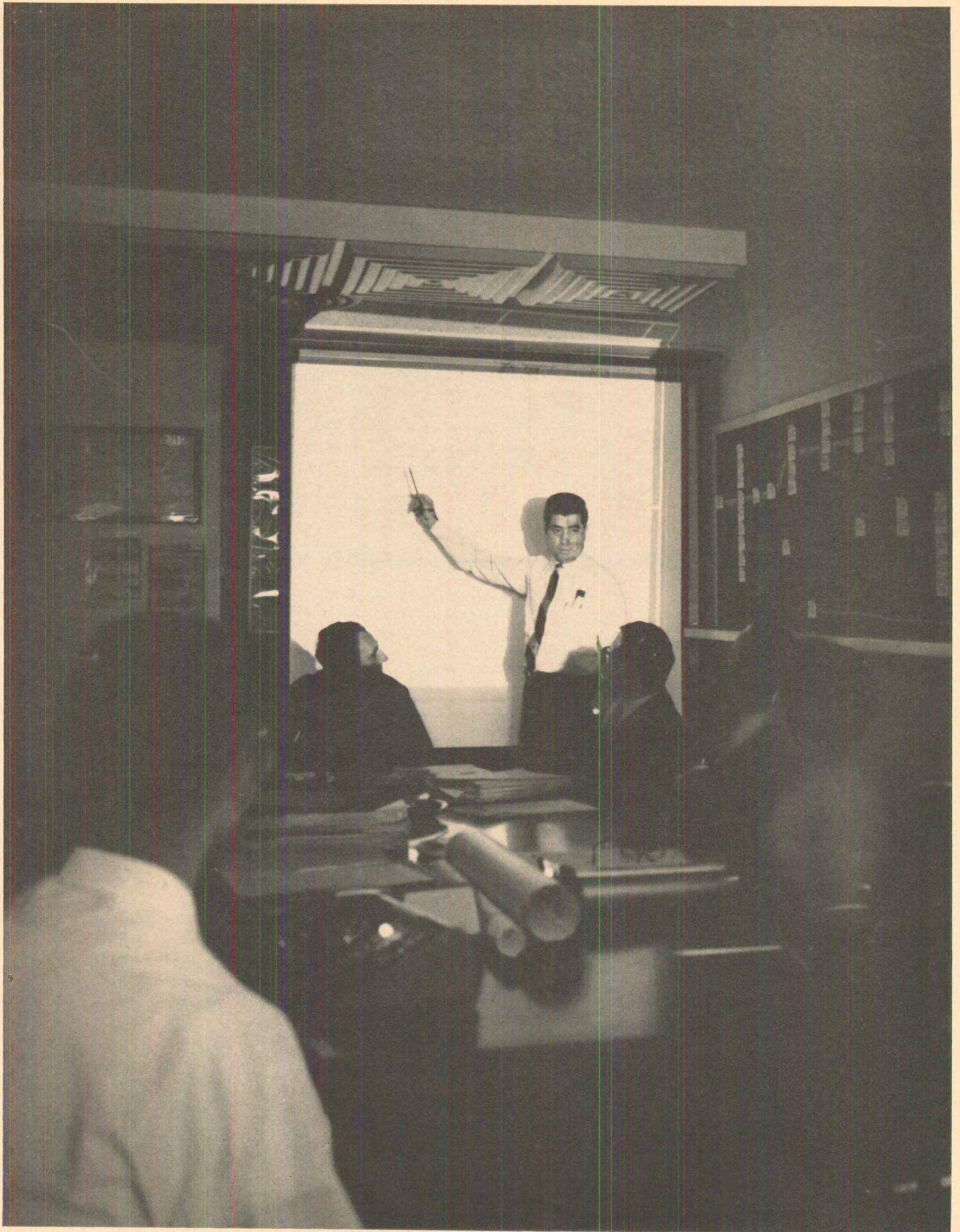
U.S. Plywood (assets: \$382 million) is quietly financing several homebuilders and developers. USP has \$5 million invested and will boost this to more than \$6 million this year. It provided the front money for 600 units in 1965 and will do the same for 800 units in 1966. Not included: 400 units built in Hawaii by a subsidiary.

Great Lakes Carbon Corp. has just broken ground for a \$600-million community at Rancho Camarillo, between Los Angeles and Santa Barbara.

Evans Products, building materials maker in Portland, Ore., bought the Capp Homes Group of builders. And Boise Cascade (lumber) entered a joint venture with Builder Ray Watt of California.

The new breed of giants moved in steadily all through 1965, passing an older breed that is leaving housing. The departures included Union Carbide (Qualstan Homes), Alside Aluminum, Rohr Aircraft, and a number of top producers of building materials—Armstrong Cork, Certain-Teed Products, Koppers, National Gypsum, and Libby-Owens-Ford.

—EDWIN W. ROCHON & K.D. CAMPBELL





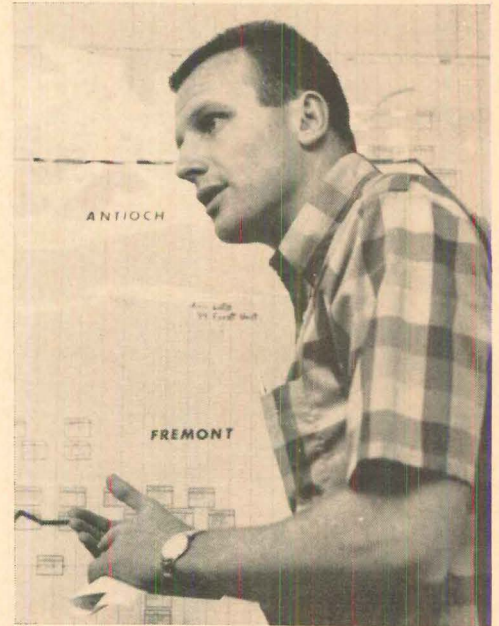
This 24' room is packed with visual aids for fast planning and tight control. Builder Jules Duc calls it his . . .

'Decision pit'

Duc's name for the room is apt: It's the place where he and his staff (*in surrounding photos*) decide everything affecting a \$20-million annual volume—and make these decisions as painlessly as possible.

Like a lot of other successful builders, Duc (*center of photo at bottom right*) found fast growth was a mixed blessing. In nine years, annual sales of his company—Duc & Elliot of San Jose, Calif.—rose from 40 houses to 800 in ten tracts (plus apartments and commercial buildings). But in the process, his management began disintegrating.

Duc delegated authority, went to computerized cost control, and set up network scheduling. But these solutions didn't click until he built his "decision pit"—the low-cost (\$2,000) control room shown in detail on the next four pages.



Duc's control room: it shows his whole operation in a 12'x24' layout

The most important display in the room is a complete record of job progress mounted on 24 sliding tackboard panels (*photo right*). It's all there on highly visual, regularly updated charts—the status of construction and sales in each current project, and how far planning has progressed on projects yet to be started.

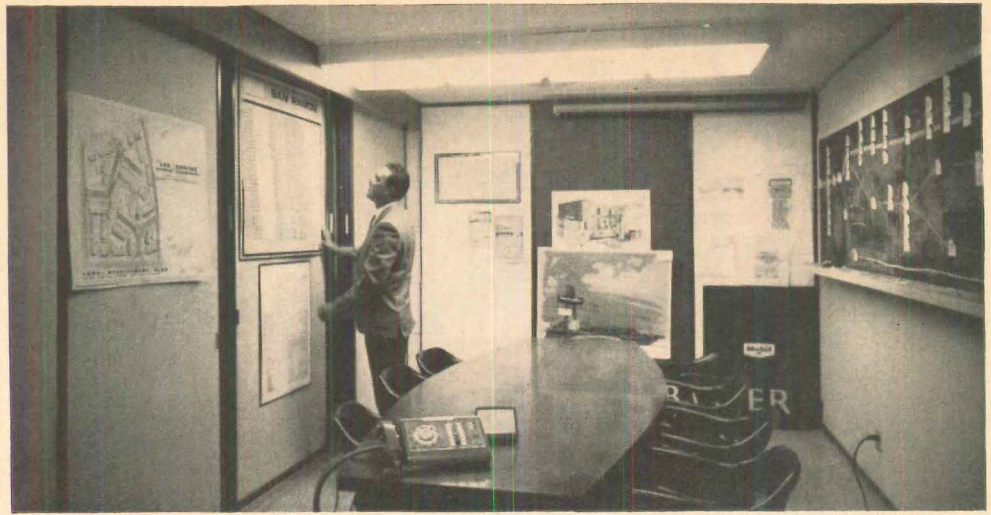
Says Duc's executive vice president, Jack Aiello: "You can spend a few minutes looking at these charts, and you know immediately where you are. You don't have to track down superintendents to find out what's going on."

A second display wall—covered with tackboard and pegboard—is used for reviewing new ads, signs, house designs, and other material at weekly meetings held separately by top management, superintendents, and salesmen.

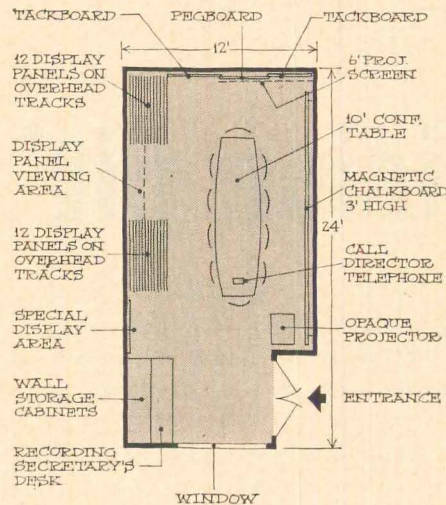
Also on this wall is a 6' movie screen for an opaque projector. New house designs can be projected directly off architects' renderings. And when Duc's men discover a construction problem or spot a good idea in a competitor's tract, they can photograph it with a Polaroid camera and show it on the screen right away.

Other equipment in the room includes a recording secretary's desk, storage cabinets, and a conference table. When the room is relocated, in about a year, Duc will add tape recording equipment for evaluating sales presentations.

Next to the progress charts, however, the most important visual aid is the equipment used to set them up in the first place.



Photos: Ted Streshinsky



4'x8" PANELS of tackboard on overhead tracks give Duc (*top photo*) full job-progress story.

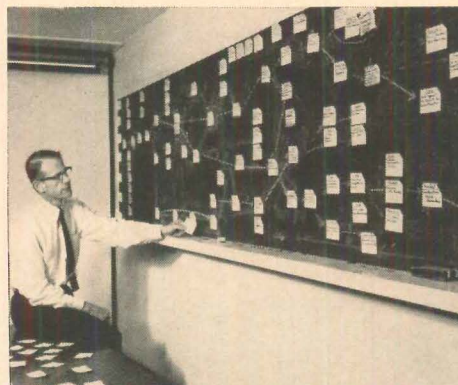
Duc's control system: key tools are a blackboard and a \$1 computer

These tools make Duc's charting system easy to set up and easy to change. The system, called Pert-O-Graph, combines the scheduling techniques of CPM (Critical Path Method) with the planning techniques of PERT (Program Evaluation and Review Techniques), which was developed for the Polaris missile program in 1958.

To set up a Pert-O-Graph construction chart, Duc and his superintendents first decide on the significant "events"—work steps—in building a house and how much time it will take to complete them.

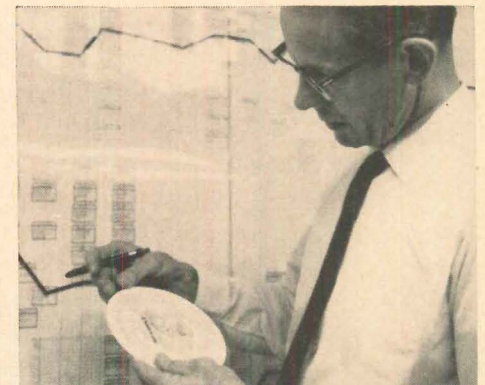
Each event is printed on a small card. The card is attached to a piece of magnetized, adhesive-faced plastic (available in rolls from audio-visual stores). Cards are then spotted on the magnetic blackboard and connected by chalklines according to suggested priority. As priorities are argued out and established, the cards and lines can be quickly shifted.

Deciding how much time to allow for



MAGNETIC BLACKBOARD is convenient tool for listing and organizing steps in a project.

each event is where the \$1 computer comes in. The computer—actually a circular slide rule—automatically applies the PERT formula for estimating job time. The formula: Make three time estimates—an optimistic one, a most-likely one, and a pessimistic one; then multiply the



\$1 COMPUTER for estimating job time contains scales on reverse side for figuring costs.

most likely estimate by four, add the optimistic and pessimistic estimates to it, and divide by six.

Later, when the superintendents and others update the schedule charts (*next page*), the computer simplifies making adjustments for unforeseen slowdowns.

Duc's construction control: his superintendents make it work with ease

"All you have to do is push that little green line along." That's how one superintendent describes the updating of Duc's new construction charts. Here's why the charts simplify job control.

After the step-by-step network (below) is drawn up for a particular kind of house, it is abbreviated to a single strip of 1/4" spaces representing work steps. Five major steps ("milestone" events)—completion of foundation, subfloor, framing inspection, interior paint, and final completion—are pictured on the strip as tiny house silhouettes. The strips are made up as acetate templates and attached as needed to the project charts.

Once a week—and perhaps more often in the near future—Duc's six superintendents ink in the spaces to make a lengthening green line that represents completed work steps on each house in each project.

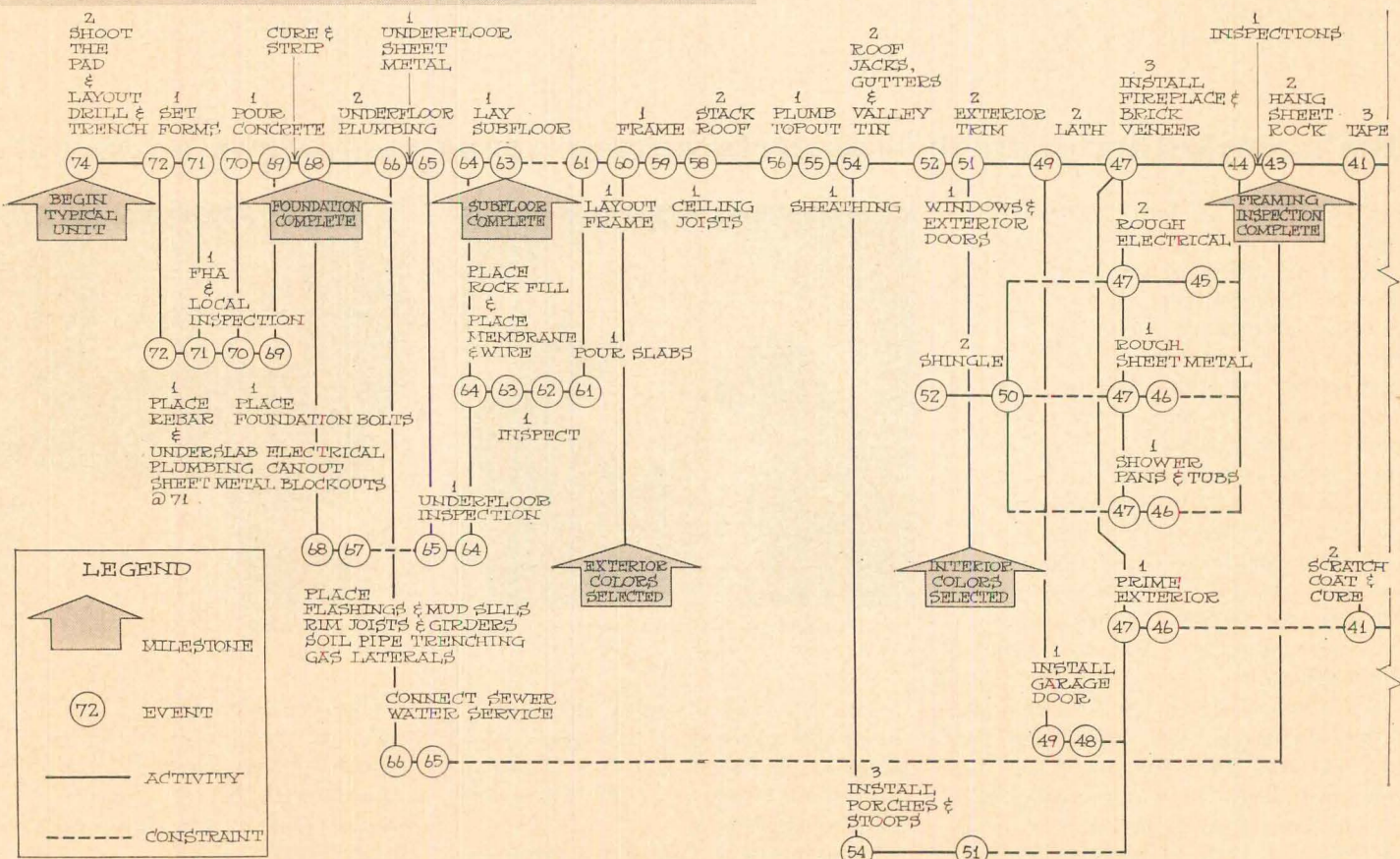
The supers have no paperwork, yet they know exactly where they stand. In the past, if a superintendent fell behind on a job, he would tend to double his crew size across the board. Today he can pinpoint where extra manpower would push a slow job along and not waste labor.

The charts also tell the controller where he stands, letting him forecast cash flow six weeks ahead. But he must also follow Duc's planning charts (next page).



PROGRESS CHARTS, updated by superintendents, are based on detailed planning networks like the one below (only about half is shown), which allows 74 days for a one-story house.

HOUSE CONSTRUCTION NETWORK (FIRST PHASE)





SPANISH STYLING—a trend led by Duc & Elliot—shows in facade of a \$32,000 two-story.



ORNATE DOORS, treated to simulate old leather, reflect Duc's attention to details.



LAVISH FOYER, accented by tile floor and wrought-iron balustrade, is typical Duc flair.

Duc's houses: they reflect foresighted research into buyers' tastes

Duc's research has been so accurate that he has repeatedly anticipated design trends. And this, he believes, is one of the secrets of his company's success. Example: "We foresaw a demand for Spanish influence two years before the trend developed locally. We began offering a house with a walled patio, wrought iron, and Spanish detailing throughout, and it became one of our most popular models."

But until he set up his control scheme last winter, Duc found he was giving less and less time to this kind of research because he was forced to run around solving crises caused by bad organization. In fact, architects were

beginning to get such poor data on prospective customers and neighborhoods that their finished designs were sometimes too expensive for the market.

Duc's new planning charts shorten his development schedules by weeks and once again give him the time he needs to keep ahead of buyers.

Duc & Elliot is well known for its custom touches—particularly in hardware, fixtures, and trimwork (*photos*).

And part of Duc's new control system—fast feedback on house costs—will let him know exactly how much he can spend on such details. Like many builders, he gets weekly reports from a computer center that show cash out-

flow on each house matched against the house budget. But from now on Duc will cost out only completed houses in groups of 25. The information will be faster and more accurate than piecemeal feedback.

Duc will concentrate next on quality control. His reason: "Getting houses built is no problem now—if we need another 100 houses, all we do is schedule them. But with ten tracts spread over four counties, we have a big problem with callbacks. They average \$100 a house, up from \$50 not long ago." The answer—now being worked out—is a method of tying quality control into the progress charts.

What's going on in the bushes?



Just the most efficient electric condensing unit in the industry.

Janitrol's 52 Series electric condenser is easy to hide in the bushes. Efficient upflow design not only gives you more cooling capacity in less space, it directs hot exhaust air up and away from growing things. It's easy to hide on a rooftop, too. Or nestle it up snug on a slab against the house—zero clearance needed for back and sides. Or bank several in a row, for big system cooling at small unit cost.

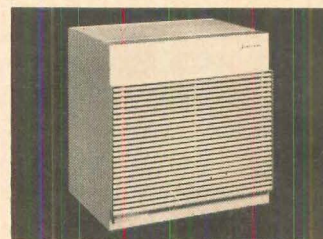
Janitrol planned it that way—to make air conditioning easy no matter what the need. As part of the original specs—or as quick-convert add on. For individual homes or complete shopping centers, offices and factories.

Janitrol also made servicing easy, with front-opening service panels. And made

servicing almost obsolete with quality craftsmanship. Made cabinets durable and weather resistant. And gave them special acoustical treatment for extra quietness of operation.

So with Janitrol 52 Series electric condensers, when something goes on in the bushes, you probably won't hear it. And neither will your customers.

Janitrol gives you five basic models to choose from... 3, 4, 5, 7½ and 10 ton, plus the broadest line of air handling equipment in the industry. Before you start your next job, get at least one estimate from your Janitrol dealer. He's in the Yellow Pages. Janitrol gives you more to work with.



*Darling...
insist on the
In-Sink-Erator
stainless steel
Invincible 77
Disposer*

*Every interior part touched by water
is warranted against corrosion for life!**

One look at the new Invincible 77 disposer and its sensational warranty puts any woman in a home-buying mood. Why? Now the best is better than ever! Armored in shining stainless steel, the built-in invisible corrosion guard. New diamond-hard No. 10 Damascus steel shredder table and stationary grind ring. Rugged, new ½ h.p. motor. And, of course, these great exclusives: patented Automatic Reversing Switch, customer Self-Service Wrench, and Detergent Shield. Other In-Sink-Erator models for homes and apartments in all price ranges.

*No other disposer equals the In-Sink-Erator lifetime corrosion warranty (8 vital parts): stationary grind ring, shredder table, polypropylene detergent shield, lower body, stopper, container body, sink flange, and drain elbow. Plus five year parts protection against defects in workmanship and material on all other parts, including the above.

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write for details and free sales aids.*

ISE[®] In-Sink-Erator[®]
Originator and perfecter of the garbage disposer

In-Sink-Erator Manufacturing Co. • Racine, Wisc.
Posed by actress Wanda Hendrix





Now! RCA WHIRLPOOL Central Vacuum Systems

to give your homes more buy appeal

Here's a new convenience that adds almost irresistible appeal to a home! Women love the fact that there's no messy bag to empty with an RCA WHIRLPOOL central vacuum system . . . no recirculation of dust . . . no heavy machinery to drag around . . . no loud cleaning noise. And they can *see* that it cleans *really* clean because of its tremendous, constant suction and outside exhaust. Even men are impressed by the entirely new areas of usage it opens up . . . whisking up workshop shavings, picking up grass clippings from the patio, emptying ash trays, lifting heavy dirt from garage floors.

Easy to install! The RCA WHIRLPOOL central vacuum system is simplicity itself to install. And no major modification of plans is necessary to install it in any home you build, even if the decision to add the system is made after the house is sold.

A choice of two systems! The RCA WHIRLPOOL central vacuum is available as a *dry* pickup system which has a dirt collecting receptacle. Or there is a *wet* pickup system in which dirt is flushed away . . . it's self-cleaning. The wet pickup system can also be used to carry away scrub water or spilled liquids, a convenience women find hard to resist!

A top-quality product backed by national advertising! Women recognize the RCA WHIRLPOOL brand name for quality and dependable service. And they're hearing about the new RCA WHIRLPOOL central vacuum system in a schedule of 12 ads appearing in national consumer publications this summer and fall. Your prospects are going to be asking for it . . . make sure you can offer the

RCA WHIRLPOOL central vacuum system in your homes. Mail the coupon today!

Get in on the ground floor with this exciting new convenience that can help you sell more homes! Send for the complete story today.

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Benton Harbor, Michigan 49023

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Tell me all about RCA WHIRLPOOL central vacuum systems and the profit opportunities they offer.

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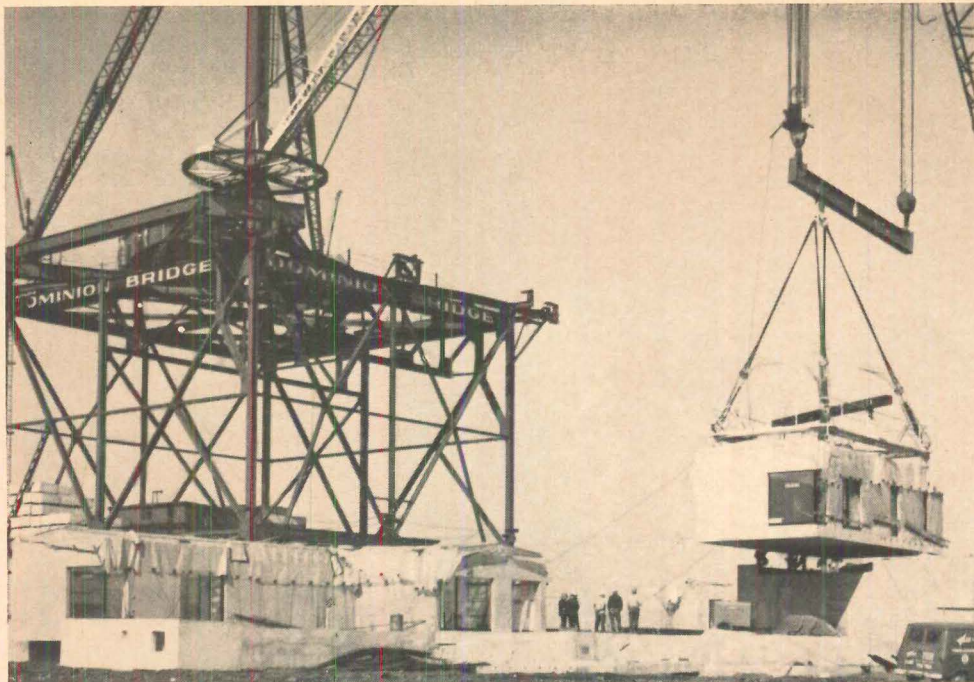
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City _____ State _____ Zip _____

It's easier to sell an RCA WHIRLPOOL than sell against it!

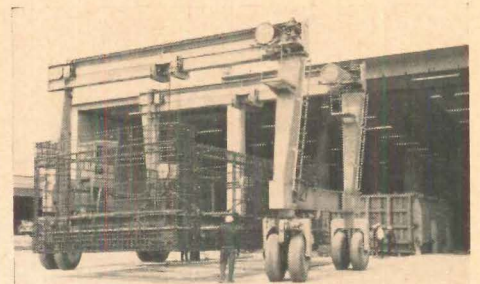


CENTRAL VACUUM SYSTEMS

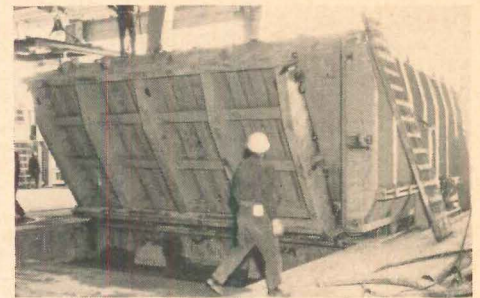


DERRICK for placing precast boxes is track-mounted on 70'x70' base. Auxiliary crane, visible

at upper right, picks smaller items like planters, railings and access stairs from stockpiles.



REBARs for structural boxes are preassembled in cage form, then lifted into concrete molds.



MOLD for precast boxes has hinged sides which can enclose many combinations of interior forms.

From one concrete box: 15 different house plans

The dimensions of the box—38'6"x17'6"x10'—are constant. Its flexibility lies in the many changes that can be made in interior layout, door and window openings, and relationships of one box to another.

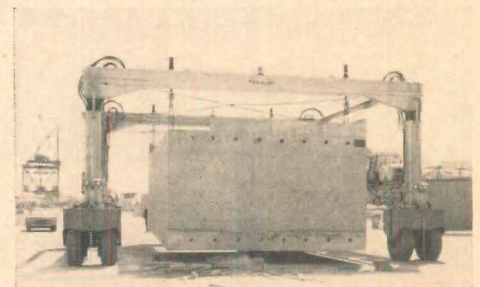
A Canadian architect, Moshe Safdie, designed the unit for an unusual high-density housing project—Habitat 67—now being built as part of Canada's 1967 World Exhibition in Montreal. Like other modular concrete cells used in housing, this one can be mass-produced and requires no exterior finish. But unlike other cells, it is 100 per cent loadbearing and requires no supporting framework.

Safdie's ambitious scheme calls for stacking 354 boxes in a 13-level pyramid (photo, below) to create 158 dwelling units ranging in size from 600 to 1,700 sq. ft. Each unit will have a 17'x38' gar-

den (the roof of the unit below) and a high degree of privacy. The over-all complex will include service roads and elevator cores which will contribute some structural support.

But most of the load will be carried by the boxes themselves. They are heavily reinforced (photo, top right), vertically post-tensioned to a stress of 200 tons, and bolted directly to one another. Concrete strength is 5,000 to 6,000 psi.

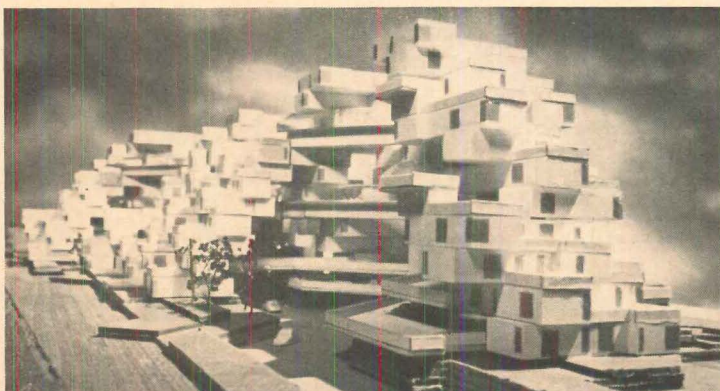
All construction work—including plumbing, wiring, and even glazing—is done on the ground close to the building site. The boxes are cast and steam-cured in a 200'x400' plant, then moved to sand-blasting and finishing yards by a rubber-tired travel-lift (photo, right). Interior finishing is speeded up by the use of big components like unitized bathrooms molded out of a single plastic shell.



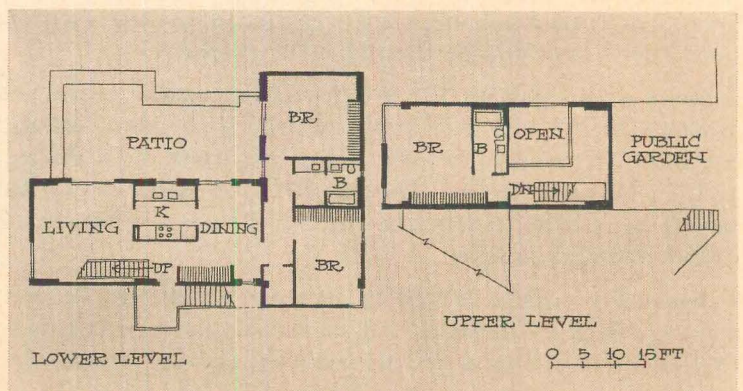
TRAVEL-LIFT of 100-ton capacity carries concrete box to finishing area and erection site.



FINISH and fixtures are applied to box before it is placed. Truss-and-tarp roof is temporary.



PYRAMID of concrete boxes is held together by post-tensioning and bolting. Architect's model shows how service roads are built in at various levels.



PLAN of three-bedroom concrete living unit consists of two modular boxes at one level, a third box above, and the roof of a fourth box below.

New products start on p. 111

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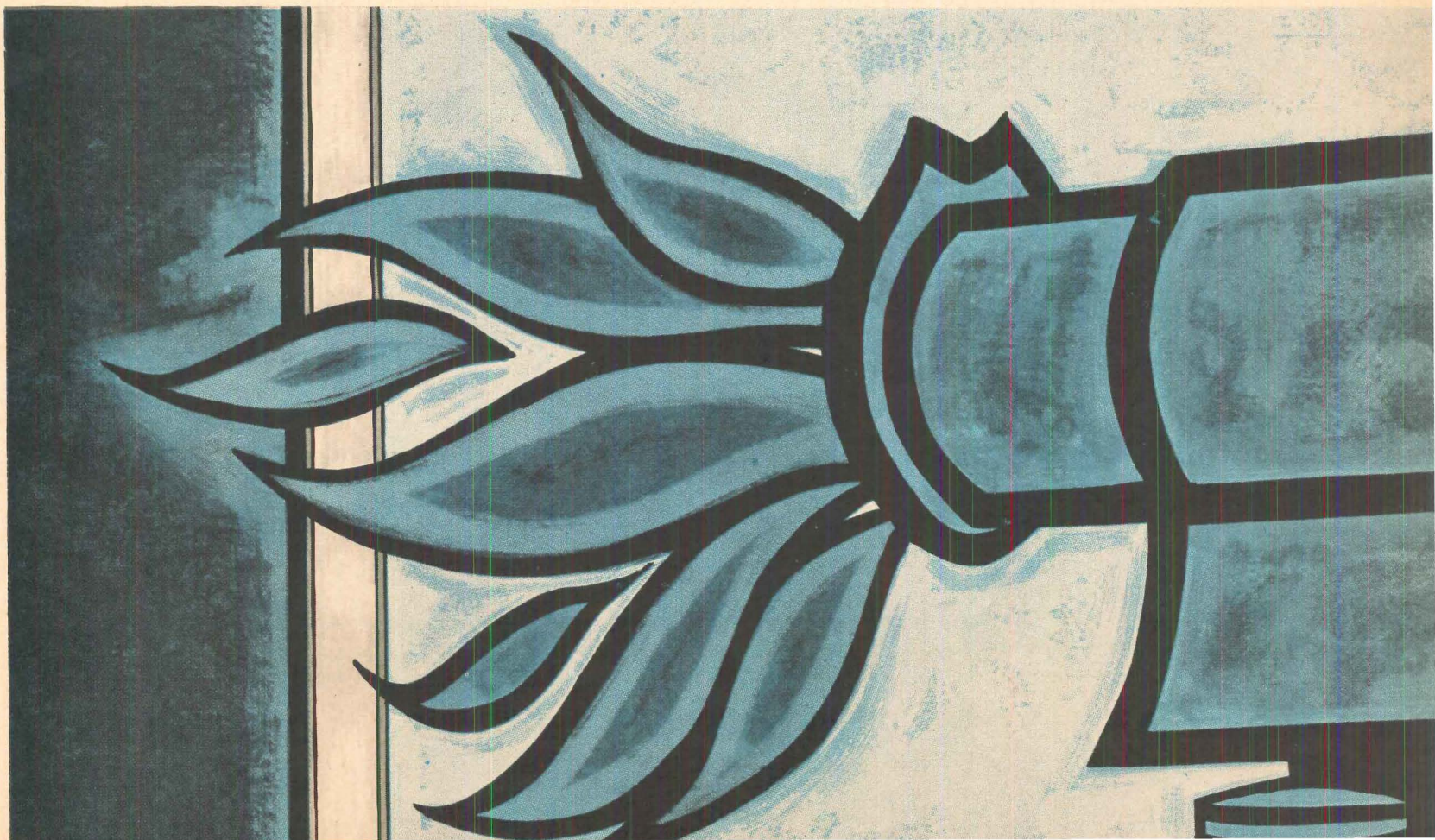


GEORGIA-PACIFIC

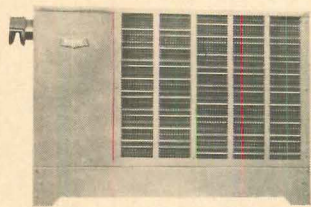


GYPSUM DIVISION

2 INDUSTRIAL BOULEVARD, PAOLI, PENNSYLVANIA



After introducing
4-ton unit, then
the 7½-ton unit
unit, the 15-ton
the 20-ton unit



Bryant quietly introduces the 3-ton

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and ready for simple, time-saving installation on a roof or a slab. It's compact: 45¼" wide x 33¼" high x 50¼" deep.

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On your next light industrial or commercial job, look into the Bryant line of heating (warm air, hot water, steam)

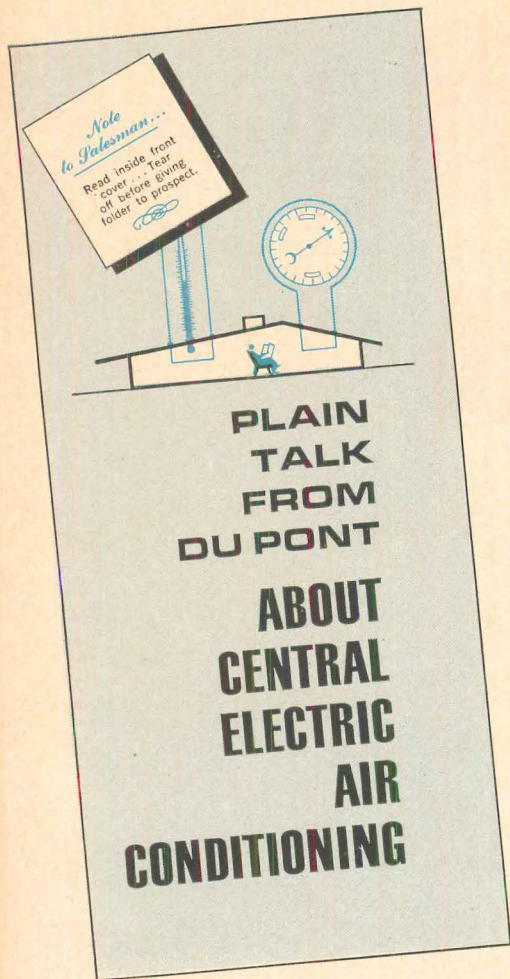
and air conditioning (gas or electric). You may be pleasantly surprised with the quality, pricing and flexibility of the Bryant line.

Call the local Bryant dealer, distributor or Factory Branch.

Bryant Manufacturing Company, Indianapolis, Ind. 46207.



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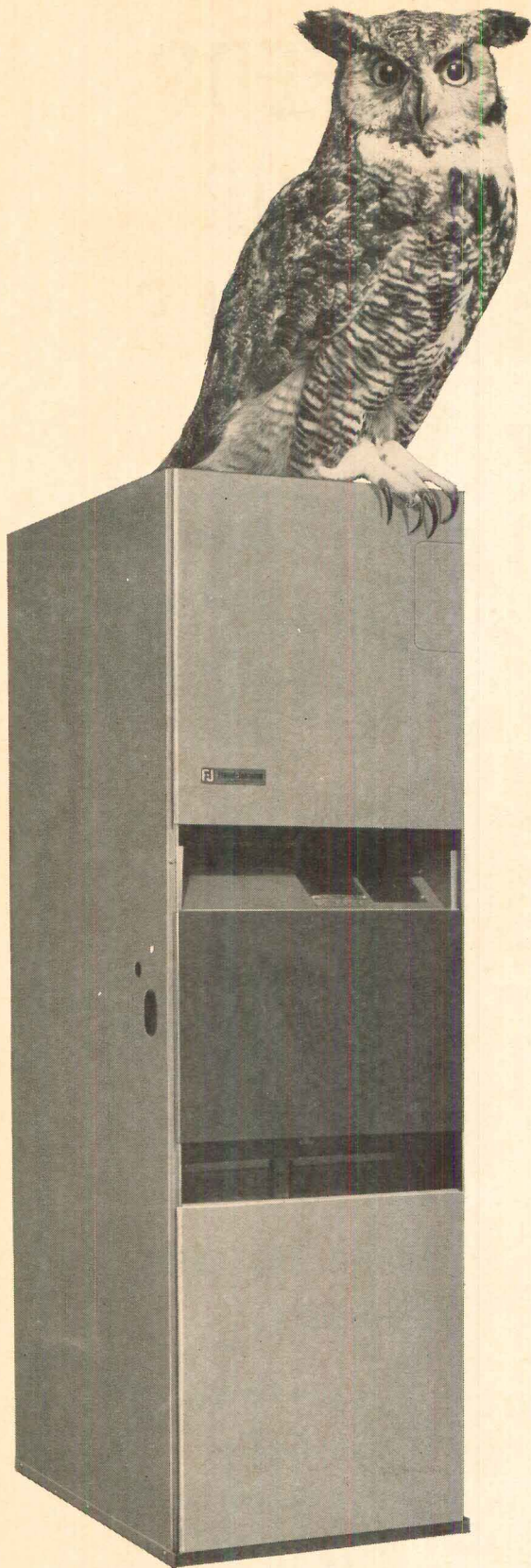
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Illustrated: F-J's "Silent 67" air conditioning furnace with built-in coil compartment. Heating to 200,000 BTUH, cooling to 6 nominal tons.



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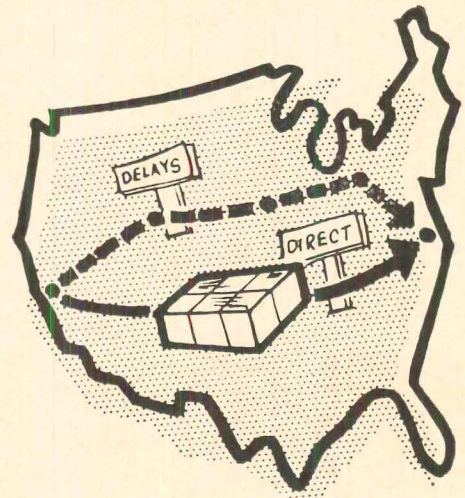
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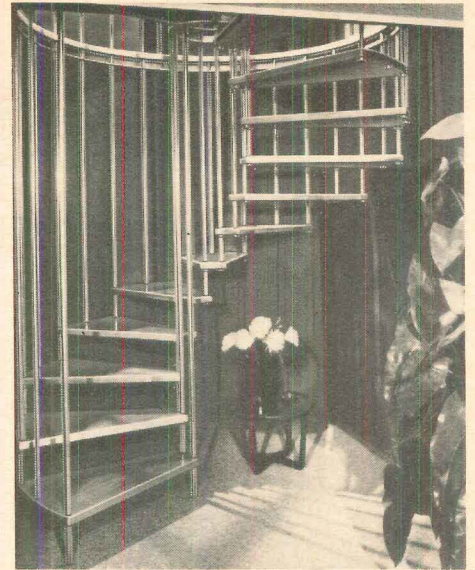
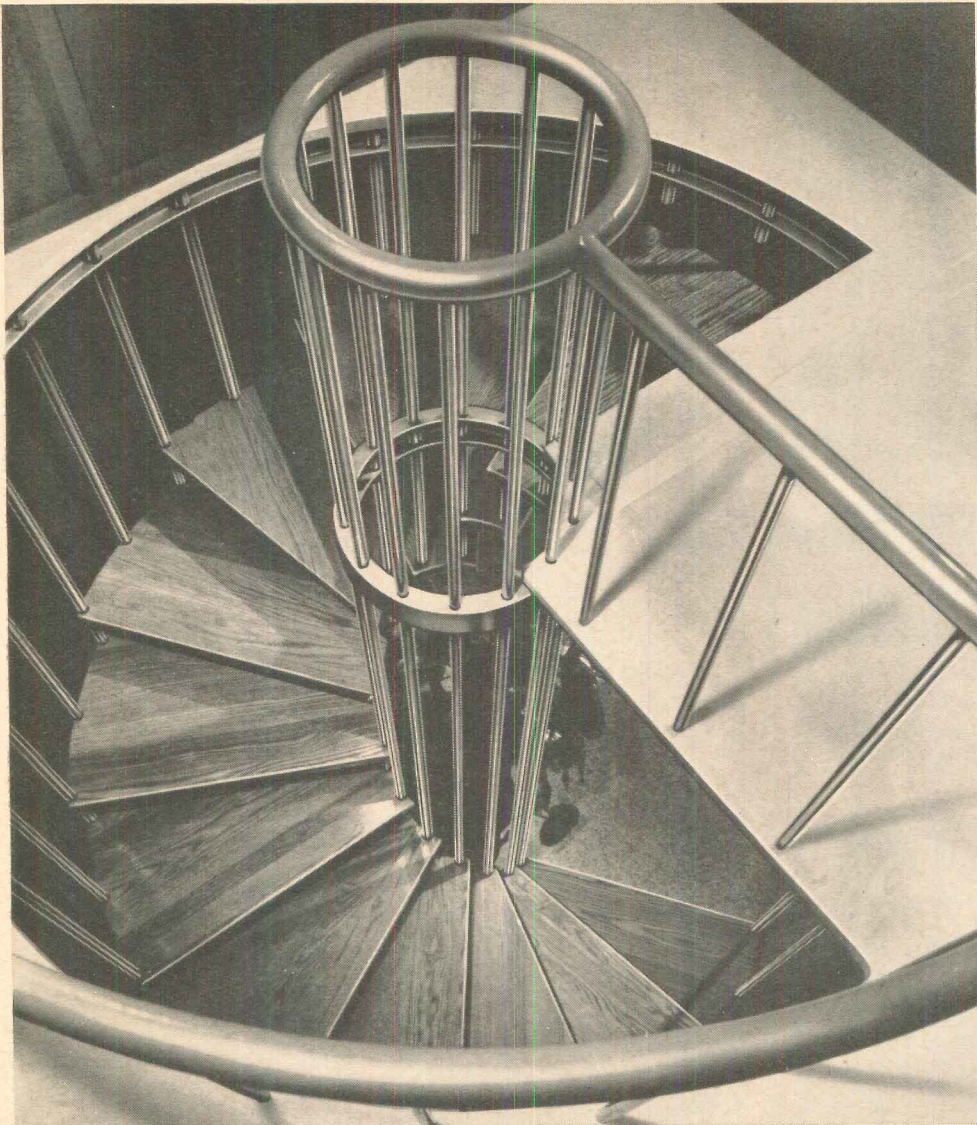


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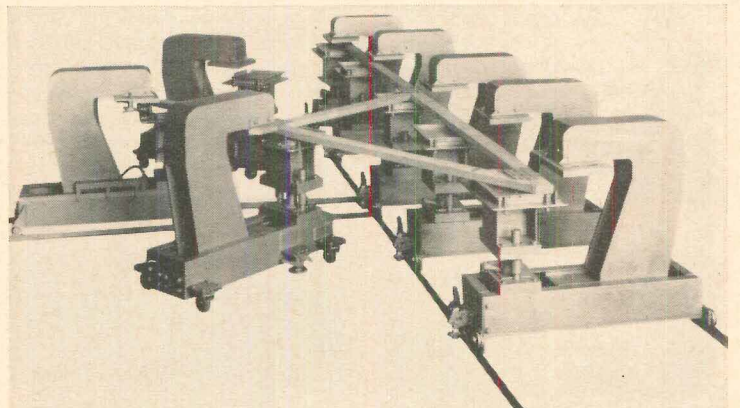
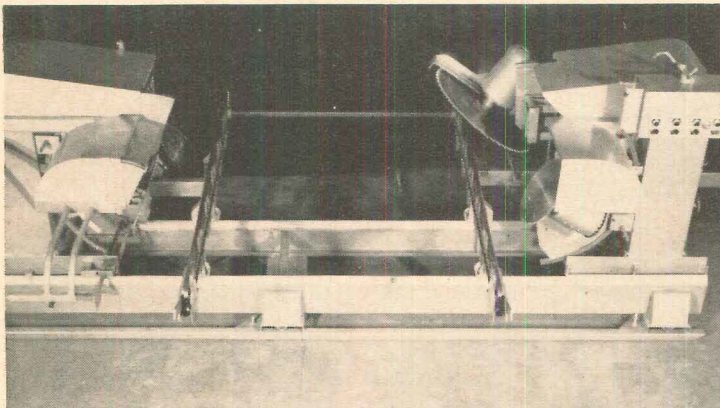
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Packaged spiral staircase hangs from a steel ring

Gold-anodized aluminum tubing is suspended from the ring and laminated oak treads are suspended from the tubing. So the entire load of this compact stairway is carried by the second-level floor. Finished opening is 7'0 $\frac{1}{4}$ " square and the manufacturer recommends that headers be doubled.

The tubing, of $\frac{3}{4}$ " diameter, comes cut and drilled for an 8 $\frac{1}{4}$ " rise but can be field-cut for lesser rises. Passage space between the inner and outer tubes is 32 $\frac{1}{4}$ " and the tubes are spaced so no handrail is needed. The 12 or 13 treads, 1 $\frac{1}{4}$ " thick, can be arranged in either a clockwise or counterclockwise spiral. Pease Woodwork, Hamilton, Ohio. Circle 270 on Reader Service card.



Scaled-down component machines put automated production within the reach of smaller shops

The multi-saw lumber cutter shown at left looks and performs like the high-speed production saws used by dozens of big home manufacturers. But it is actually a scaled-down version that costs 50% less and takes up 25% less floor space.

Only 6' wide, the compact cutter nevertheless offers such mechanized features as 1) a remote read-out system that lets the operator make change-over adjustments without get-

ting close to the saw blades and 2) a lumber-gripper feed system that aligns material before cutting and ejects the finished pieces. Clary, Fort Worth, Tex. Circle 271 on Reader Service card.

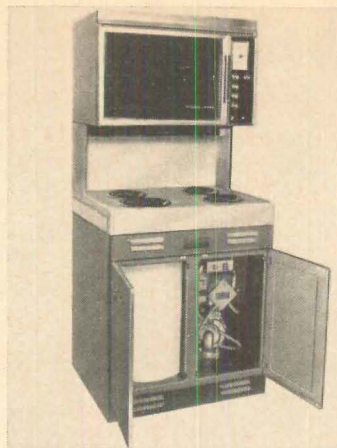
The pushbutton truss assembler shown at right is as fast as some of the largest truss machines—two men can produce a truss on it in 80 seconds—but not as expensive. It is an hydraulically powered jig consisting of

eight, ten or twelve track-mounted heads operated simultaneously by a single control. There is no need to flip trusses, because one squeeze of the heads presses no-nail gussets into both sides of the truss joints. The jig produces all basic truss styles—fink, king post, multi-king post, scissors, and flat—with chord lengths to 60', and requires 25'x50' of floor space. Idaco, Oakland, Calif. Circle 272 on Reader Service card

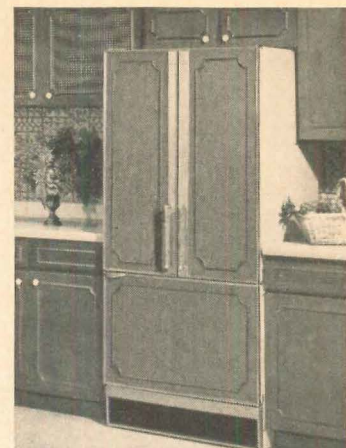
Kitchens



Electric built-in line includes six ovens in three sizes and four surface units in two sizes—26" and 36". A fluorescent tube lights the glass control panel on double-oven model. In white and five colors. O'Keefe & Merritt, Los Angeles. *Circle 307 on Reader Service card*



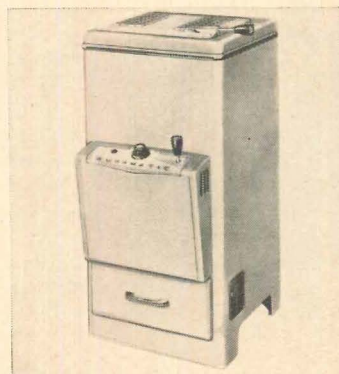
Electric home center combines hydronic heating system, hot water supply system, and four-burner oven-range in a unit 30" wide and 24" deep. Also available without range in 36"-high undercounter cabinet. In six colors. Heat-Timer, New York. *Circle 308 on Reader Service card*



Refrigerator-freezer with twin doors and interchangeable fronts is available in three models in two sizes: 18.2 cu. ft. and 16.2 cu. ft. Six decorator panels of vinyl clad metal are offered as an option at time of purchase or later. Sears, Chicago. *Circle 313 on Reader Service card*



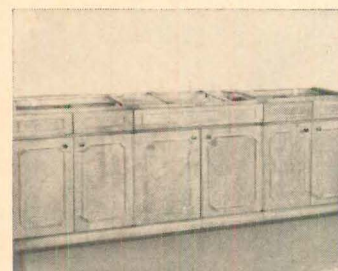
Ducted hood features an easy-to-remove aluminum mesh filter and an extra-wide enclosed light. Comes in several colors with a 200-cfm impeller-type fan, and may be ducted horizontally or vertically through a 3¼"x10" duct. Nutone, Cincinnati, Ohio. *Circle 316 on Reader Service card*



Gas incinerator has firebrick lining and zinc-coated steel jacket in beige baked-enamel finish. It incorporates an aluminized steel liner between the firebrick and outer shield. Approved by American Gas Assn. Duramatic, Cleveland. *Circle 309 on Reader Service card*



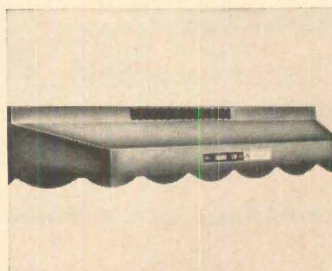
Compact gas range has "broiler bay" set at waist level and an upper oven at eye level. Glass-oven window is transparent when oven light is on, but when light is off, window becomes a mirror. Roper, Kankakee, Ill. *Circle 314 on Reader Service card*



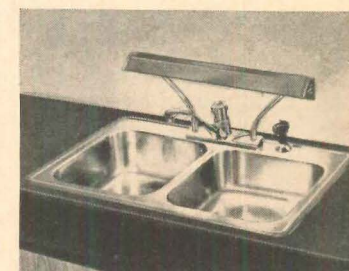
Combination cabinet unit 96" long includes a 36" sink base set between two 30" door cabinets. Other combinations are offered in lengths of 60", 66", 72", and 84", with single units as narrow as 9". Delivered assembled. Long-Bell, Portland, Ore. *Circle 315 on Reader Service card*



Push-pull mixing valve is now available with two-level, cast-iron enamel sink. The one-piece valve is ideal for cabinet-face, counter-top, or tile-face installation. The 32"x21" sink includes a high-level rinse compartment. Graning, El Monte, Calif. *Circle 311 on Reader Service card*

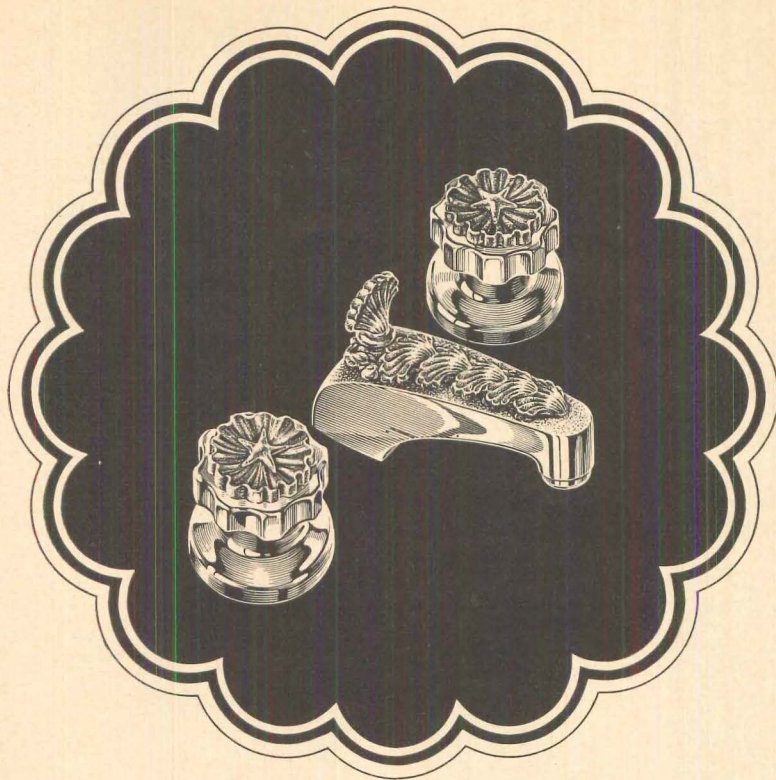


No-duct range hood with two-speed fan is available in 24", 30", 36", and 42" lengths. Push-button controls are mounted on hood front. Finishes: satin stainless steel, shaded coppertone, white, antique white, and other colors. Rangemaster, Union, Ill. *Circle 312 on Reader Service card*



Double-bowl sink in medium price range comes equipped with built-in light and single-handle faucet. Sink is constructed of 20-gauge nickel-bearing stainless steel. Line also includes single- and triple-bowl sinks. Just Mfg. Franklin Park, Ill. *Circle 310 on Reader Service card*

New products continued on p. 114



"Hawaiian Shell," one of several designs chosen by Walter Carrington Builders, Austin, Texas, for several hundred homes in the \$25,000 to \$40,000 price range.

The irresistible power of elegance

Eye appeal is "buy appeal," and today's homebuyers are seeking every touch of luxury that can be afforded them. That's why more and more builders have discovered that decorative bathroom fittings by Artistic Brass are the turning point in a successful sale. Artistic Brass not only enhances the appearance of the bathroom but also creates a connotation of elegance that extends throughout the entire home. All metal parts in Artistic Brass fittings are made of solid brass and are crafted to offer years of service. Installation takes no more care than with ordinary fittings. There's an Artistic Brass ensemble to fit the exact need for moderately-priced or custom-designed homes. Over 72 designs from which to choose with finishes in polished or satin chrome, brass or gold. Select Artistic Brass for your next project. This kind of elegance doesn't cost . . . it sells.

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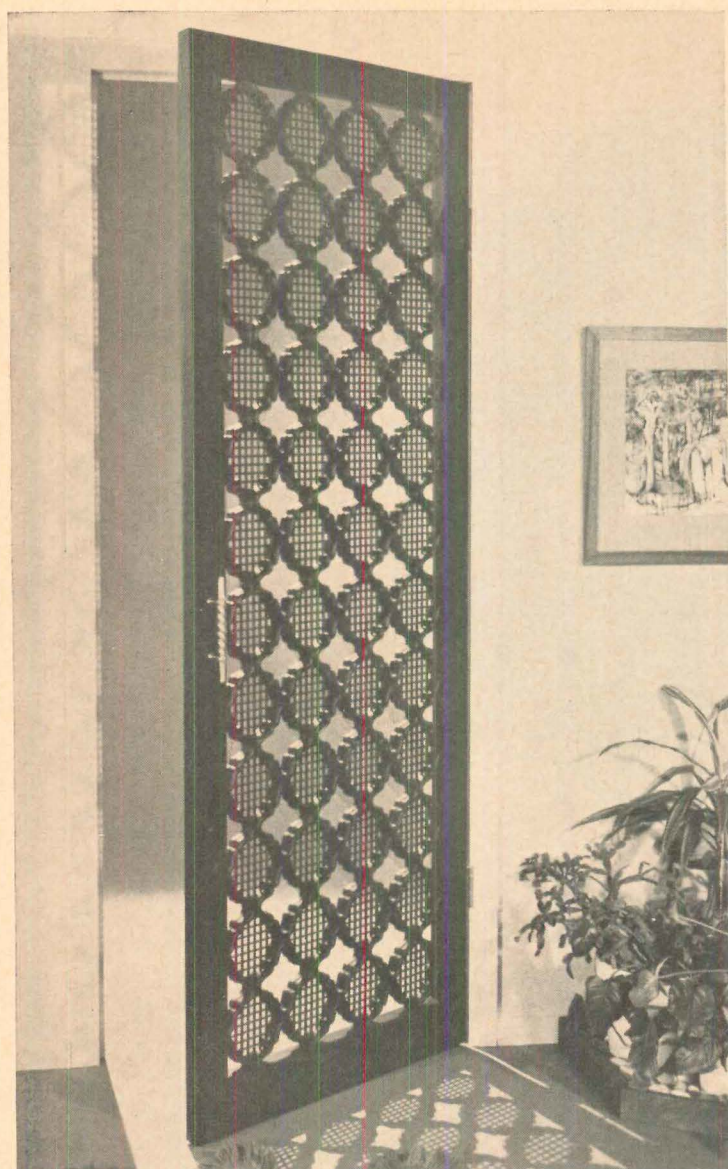


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Sold through leading plumbing, hardware
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Doors & windows



Sculptured-grille door consists of plastic panels set in a hardwood frame. Choice of four designs in three finishes: black matte, yellow gold, and medium gold. Size: 30"x81"x $\frac{3}{8}$ ". Harvey Design Workshop, Lynbrook, N.Y. Circle 295 on Reader Service card



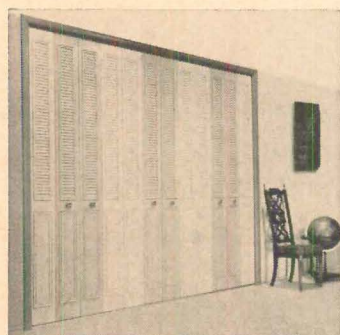
Hydraulic door closer for storm and screen doors requires 2 $\frac{3}{4}$ " between doors and permits 180° opening. Fits doors from $\frac{7}{8}$ " to 1 $\frac{1}{8}$ " thick. Built-in temperature compensation eliminates seasonal adjustments. Ridge, Elkhart, Ind. Circle 293 on Reader Service card



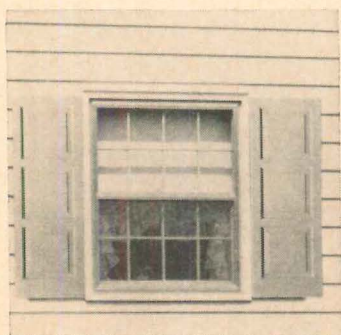
Safety glass— $\frac{1}{8}$ " thick—is intended for storm door glazing. Glass is several times stronger under impact than ordinary $\frac{1}{8}$ " glass and, should the safety glass break, it crumbles into granular particles with no jagged edges. Pittsburgh Plate Glass, Pittsburgh. Circle 294 on Reader Service card



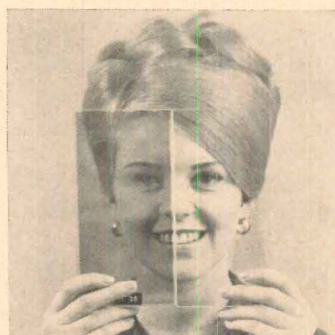
Pinstripe glass— $\frac{1}{4}$ " thick—incorporates vertical strands of high-strength steel wire imbedded $\frac{1}{2}$ " apart. The filaments are combined with glare-reducing glass (left) or clear glass (right). American Saint Gobain, Kingsport, Tenn. Circle 296 on Reader Service card



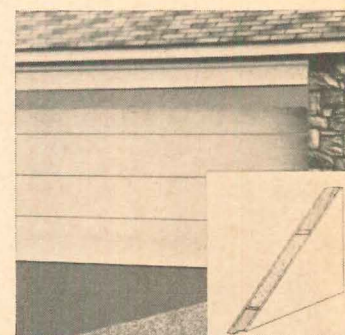
Bifold doors are constructed of 24-gauge steel panels welded to 24-gauge channels. Aluminum tracks are precut to standard widths. Doors come in six styles, in 6'8" and 8'10" heights, and are finished in baked enamel. Kennatrack, Canton, Ohio. Circle 297 on Reader Service card



Styrene shutter coated with vinyl is available in raised-panel style. The 16"-wide shutter comes in white or black, and in lengths from 35" to 79". Also available: cross-rail and full louvre designs. New Castle Products, New Castle, Ind. Circle 292 on Reader Service card

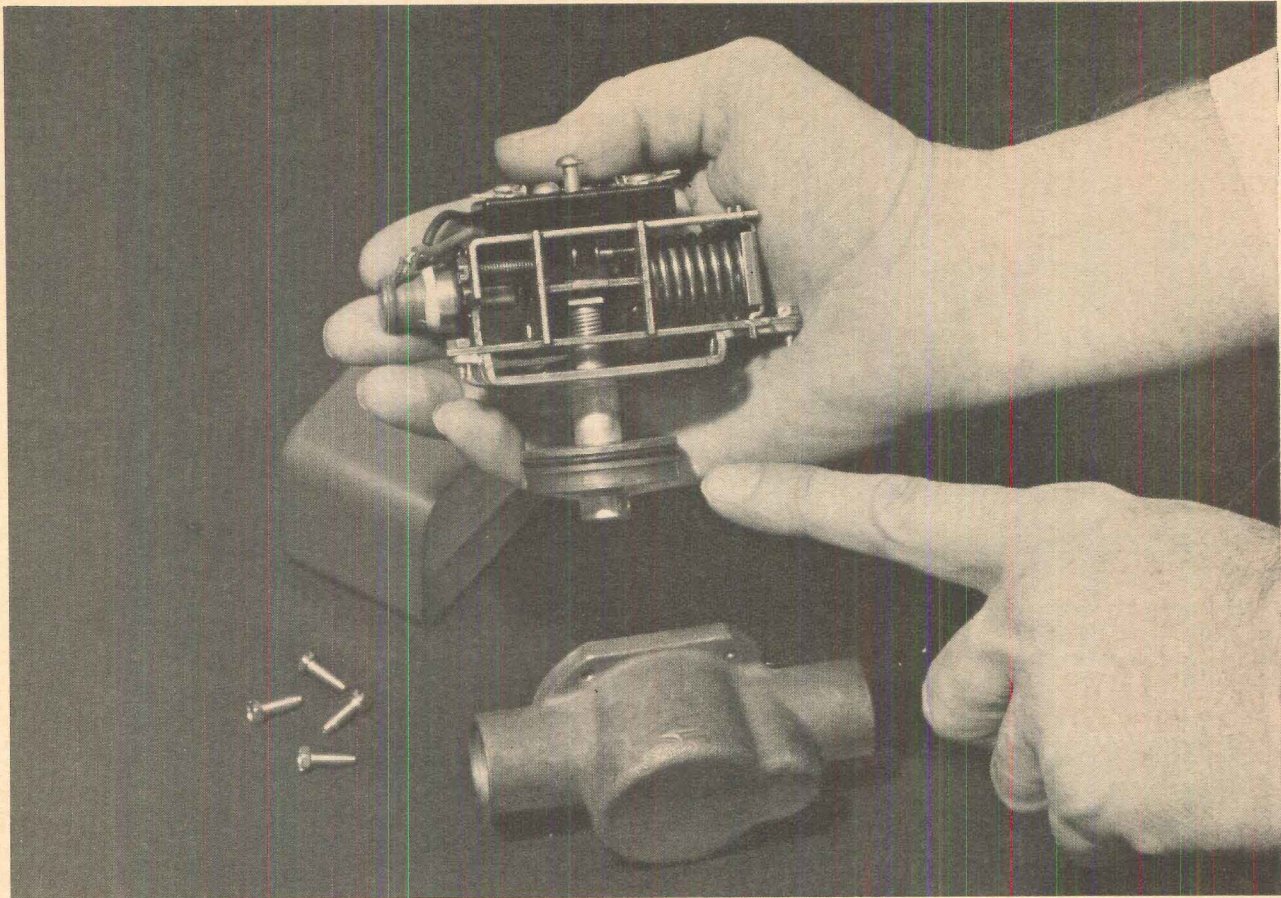


Plastic window film—blue-gray in color—is applied like a decal to the inside of the pane to deflect heat and glare. The film is 1-mil thick polyester with an aluminum vapor coating available in two densities. 3M, St. Paul, Minn. Circle 290 on Reader Service card



Flush garage door faced with $\frac{1}{8}$ " hardboard is intended for use on insulated garages. An expanded polystyrene core and heavy wood frame are bonded between the hardboard (see section). Comes in standard widths. Calder Mfg., Lancaster, Pa. Circle 291 on Reader Service card

New products continued on p. 116



No hammering with B&G smooth zone control

The uniform operating characteristics of B&G Zone Control Valves assure the quiet, dependable control a good hydronic system deserves. A unique thermal expansion heat motor provides controlled "slow opening" to minimize expansion noises by eliminating abrupt changes in water temperatures. "Slow closing" to eliminate noise due to water hammer.

These valves provide positive shut-off against differential heads of 60 feet and system pressure up to 125 psig. No gears or cams to wear. This compact Zone Control Valve can be easily installed. Virtually

leakproof, yet it can be very readily serviced without draining the system.

Here's a truly low cost way to achieve quality zone control... for modern comfort conditioning. Available in 1/2", 3/4", 1" or 1 1/4" solder connections for operating temperatures up to 240° F. Contact your local heating wholesaler. Or, for free copy of Bulletin A-417, write ITT Bell & Gossett, Fluid Handling Division, Morton Grove, Illinois, Dept. 10N.



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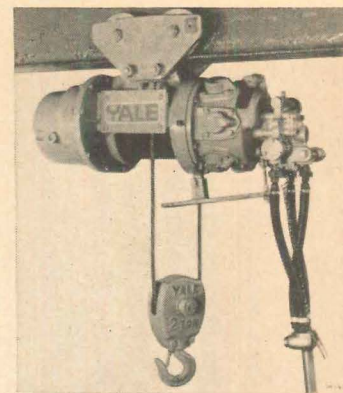
Tools & equipment



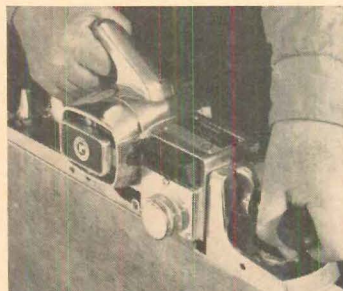
Fork-lift truck designed especially for rough terrain can be safely towed at highway speeds up to 70 mph. Lift rating is 5,000 and 6,000 lbs. at 24" load centers. Standard masts lift to 21', optional masts to 30'6". Scotsman, Tulsa, Okla. *Circle 250 on Reader Service card*



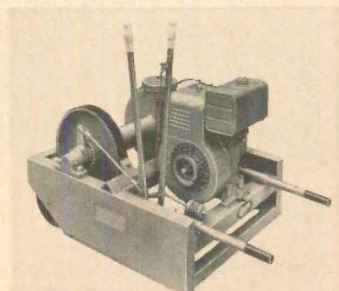
Rock drill can be switched to breaking or driving by replacing the drill chuck with a breaker chuck. The unit is powered by a 11.3-cu.-in. gasoline engine, weighs 61.5 lbs. and has a drilling speed of 250 rpm. Chicago Pneumatic, New York. *Circle 251 on Reader Service card*



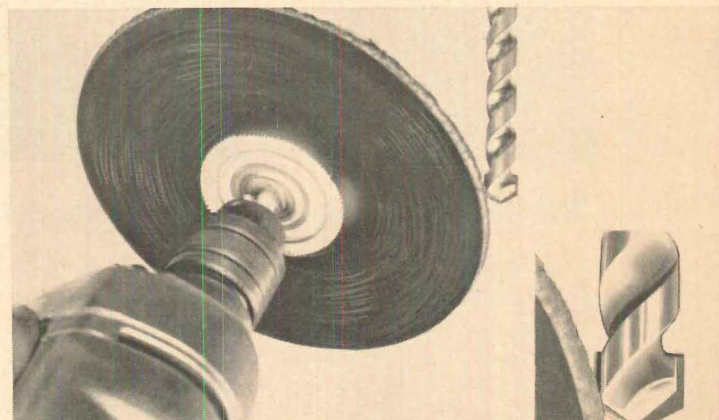
Air-powered hoist comes in capacities of two, three, five and ten tons. The unit's three-hose control system is powered by an air-cooled radial piston motor and protected by an automatic safety brake. Yale & Towne, Forrest City, Ark. *Circle 318 on Reader Service card*



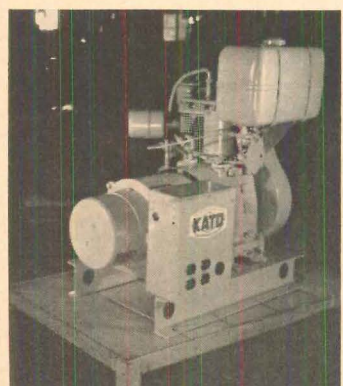
Power plane makes surface, edge and bevel cuts, producing a 3"-wide cut up to 1/8" deep. Depth of cut may be adjusted while the plane is in operation. Motor rating: 10 amp, 1 1/2 hp. Cutter speed: 15,000 rpm. Rockwell Mfg., Pittsburgh. *Circle 319 on Reader Service card*



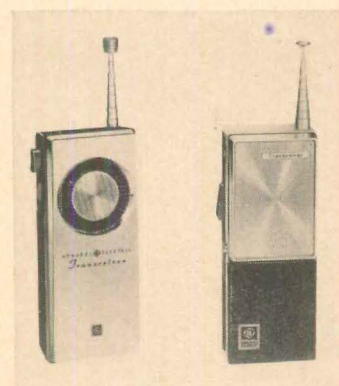
Materials hoist of 200- to 1,000-lb. capacity uses rope or wire cable and rolls on self-contained wheels. Lifting speed: 330' per minute. Throttle and brake lever design permits one-hand speed and brake control. Hauck, Teterboro, N.J. *Circle 320 on Reader Service card*



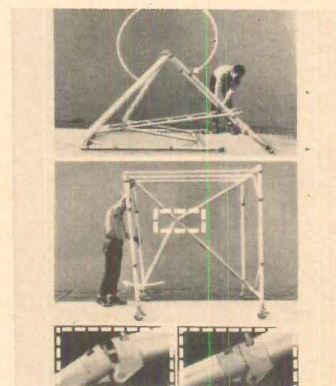
Grinding disc of silicon carbide is designed for sharpening carbide-tipped masonry drills and other single-point carbide tools with a portable power drill. The 5" disc can also be used to sand masonry. Rex-Cut, Fall River, Mass. *Circle 321 on Reader Service card*



Portable generator of 4,000 watt capacity contains five receptacles—four 115-volt and one 230-volt—and features a solid-state voltage regulator. It can be used for operating lights, motors, and power tools. Kato, Mankato, Minn. *Circle 322 on Reader Service card*



Two-way radio for field use consists of two hand-size transceivers with sending-receiving range of up to two miles. Each unit uses six 1 1/2-volt penlight batteries and contains a 51" antenna. Weight: 1 1/4 lbs. General Electric, Syracuse, N.Y. *Circle 323 on Reader Service card*



Aluminum scaffold unfolds in ten seconds from a flat package only 6 1/2" thick. Height is 7', weight is 81 lbs., legs are adjustable. Sections can be stacked up to form a movable tower of any height. Up-right Scaffolds, Berkeley, Calif. *Circle 324 on Reader Service card*



Gasoline engine weighs only 4 3/4 lbs., measures approximately 6"x6"x6", and runs 45 minutes to one hour on 1.4 pints of gas. Suggested uses: battery charger, cement mixer, emergency pump, generator. L.M. Cox, Santa Ana, Calif. *Circle 325 on Reader Service card*

New products continued on p. 118



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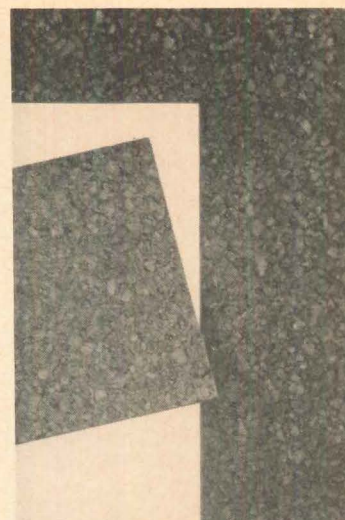
Interiors



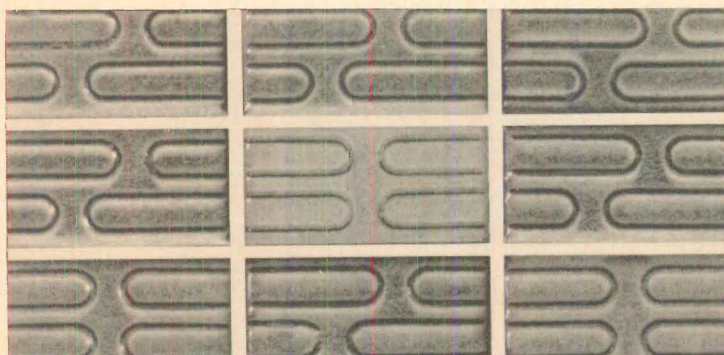
Woodgrained hardboard simulates the grain and texture of chestnut in either light or dark tones. It consists of a tempered hardboard base coated with a washable plastic finish, and comes in 8"x16" planks 1/4" thick. Marlite, Dover, Ohio. *Circle 279 on Reader Service card*



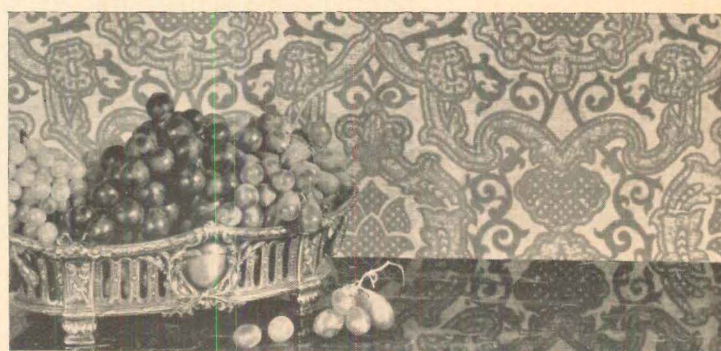
Panel room dividers feature translucent polystyrene inserts framed in walnut-stained moldings. The movable dividers are 26" wide. Their height is adjustable. Both amber and olive are offered. Panelboard Manufacturing, Newark, N.J. *Circle 284 on Reader Service card*



Cork wall panels are 12" x 12" and are sold with adhesive backing to simplify installation. The panels, which are genuine imported cork, make ideal bulletin boards, according to the manufacturer. The Decro-Wall Corp., Yonkers, N.Y. *Circle 285 on Reader Service card*



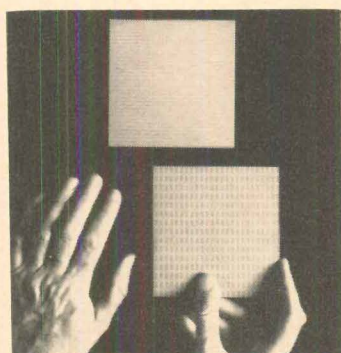
Matte-glazed ceramic tile comes in three dimensional "Romanesque" pattern that permits design continuity between tiles. Tiles are 1"x2"x3/16" and are mesh mounted. Choice of seven antique colors. Amsterdam, New York. *Circle 280 on Reader Service card.*



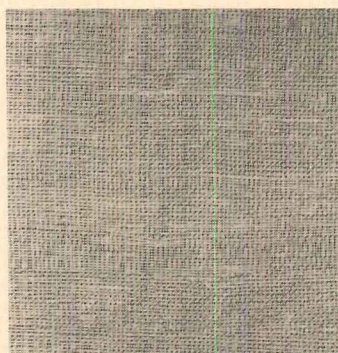
Velour-finished wallcovering is available in vinyl and vinyl-coated paper. The deeply flocked pattern comes in red, flame, orange, mustard, beige, and in beige tones on burlap background. James Seeman Studios, Garden City Park, N.Y. *Circle 281 on Reader Service card*



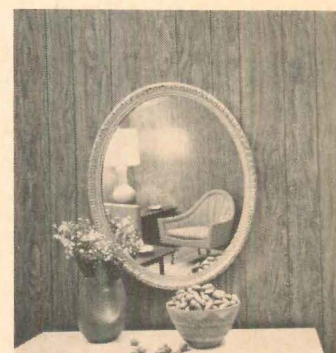
Cork brick—3/8" thick, 2" wide, 12" long—can be used on wood, plaster, fiber board, cement or concrete block walls. The material has sound-deadening and thermal insulating properties. Available in red or white. Dodge Cork, Lancaster, Pa. *Circle 282 on Reader Service card*



Plastic laminate is offered in three grid patterns: 1) combination of circles, triangles and squares (top); 2) delicate mesh (bottom); and 3) repeated rectangles (not shown). Grids are superimposed on solid colors. Westinghouse, Hampton, S.C. *Circle 283 on Reader Service card*



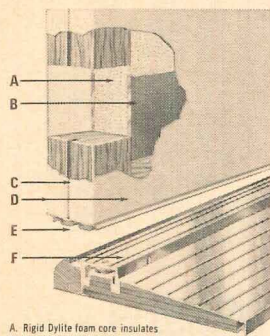
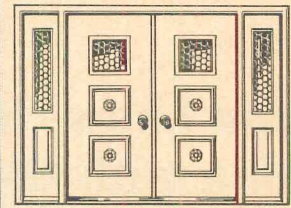
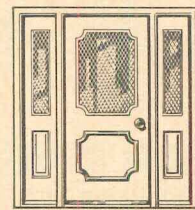
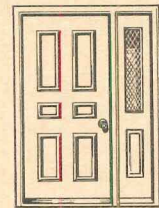
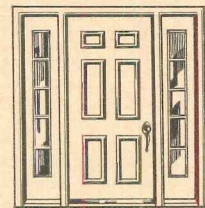
Vinyl wallcovering, called Tahiti, has a typical casement weave and a highly adhesive fabric backing that simplifies installation. The material, which is supple, is available in 54"-wide rolls. McCordi Corp., Mamaroneck, N.Y. *Circle 286 on Reader Service card*



Woodgrain panel is offered in a new finish, Imperial Pecan. The pecan grain pattern, says the maker, has long been popular in the south. The panels are finished with Mar-Guard and are scuff and soil resistant. Abitibi Corp., Detroit. *Circle 287 on Reader Service card*

New products continued on p. 120

**No need to mar beauty of entrance
with either screen door...or storm door!**



A. Rigid Dylite foam core insulates
B. Internal "lick" strip
C. Thermal break—ends condensation
D. Galvanized steel facings
E. Seal strip on door—not walked on
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A Pease Ever-Strait exclusive! **Ventilated sidelights with full screen panels!** Gives front door ventilation... and privacy. Homeowners can keep door closed, since screened sidelights open for ample air flow. Positive vinyl member weather-seals edge of sidelights when closed to prevent drafts.

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Pease Ever-Strait Doors give **triple protection** against weather. And of course the most famous feature of all in Ever-Strait Doors is they **can't warp!** No call-backs ever. Select from 26 beautiful exterior door designs, delivered primed and pre-hung in a wood frame.

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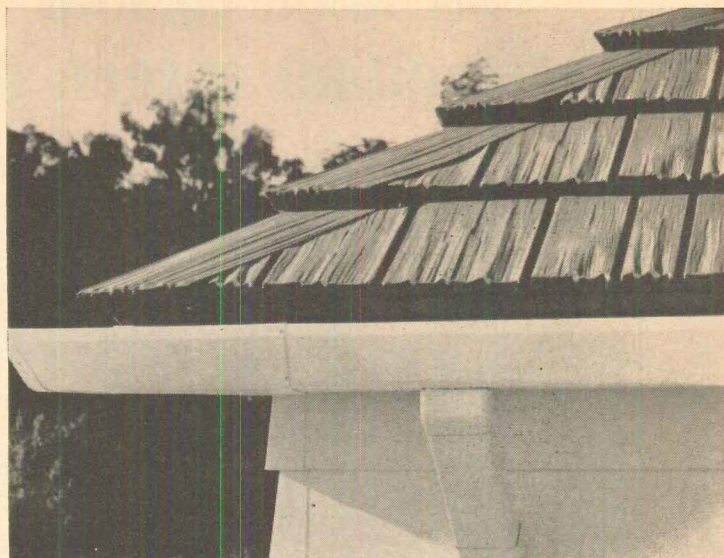
CANADA: Whitjax, Ltd., Montreal North, P. Q.; Toronto, Ontario

Marling Lumber Company, Janesville, Wisconsin

NEW PRODUCTS

start on p. 111

Exteriors



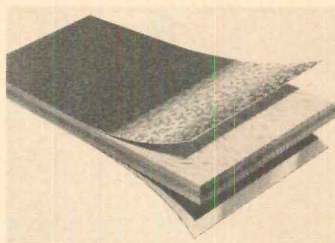
Aluminum shingle simulates wood shakes and comes in brown, white, green. Weight: 50 lbs. per square. Also shown is a rain carrying system of heavy gauge aluminum. Both products are guaranteed 20 years. Kaiser, Oakland, Calif. *Circle 275 on Reader Service card*



Precast block—compared with conventional face brick in photo above—is made of limestone, marble, and granite aggregates bonded with cement. It is laid up like brick or stone. Face is textured, edges are beveled. Miami Stone, Indianapolis. *Circle 273 on Reader Service card*



Soffit system consists of V-groove panels in 6" or 12" widths and 10' lengths which are field cut. The pieces are then inserted into preformed, factory-finished accessories and locked together in a tongue-and-groove joint. Alcoa, Pittsburgh. *Circle 274 on Reader Service card*



Prefinished siding combines plywood core with aluminum facings. Finished side is ten-mil textured aluminum sheet with baked-enamel surface. Back side is two-mil reflective foil. Size: 5/16" thick, 4' wide, up to 10' long. Weyerhaeuser, Tacoma. *Circle 276 on Reader Service card*



Heavyweight shingle of asphalt imbedded with a mixture of ceramic and mineral granules is guaranteed for 25 years. Its sculptured design and grained texture produce a shadow effect. Weight: 385 lbs. per square. Certain-teed, Ardmore, Pa. *Circle 277 on Reader Service card*

New literature starts on p. 124

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Circle 44 on Reader Service Card

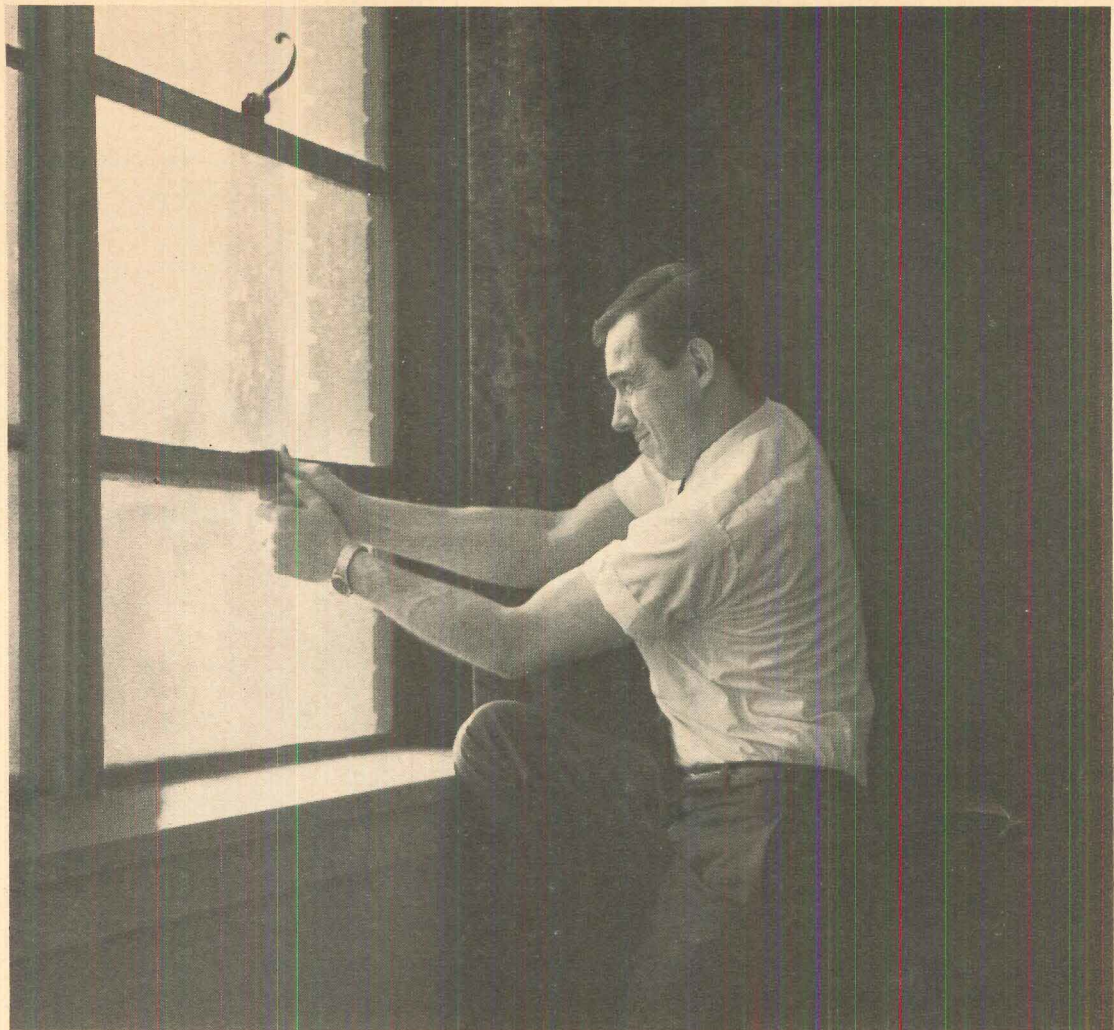
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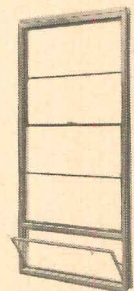
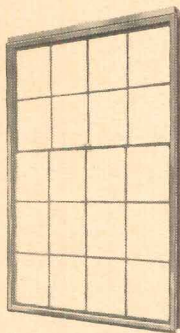


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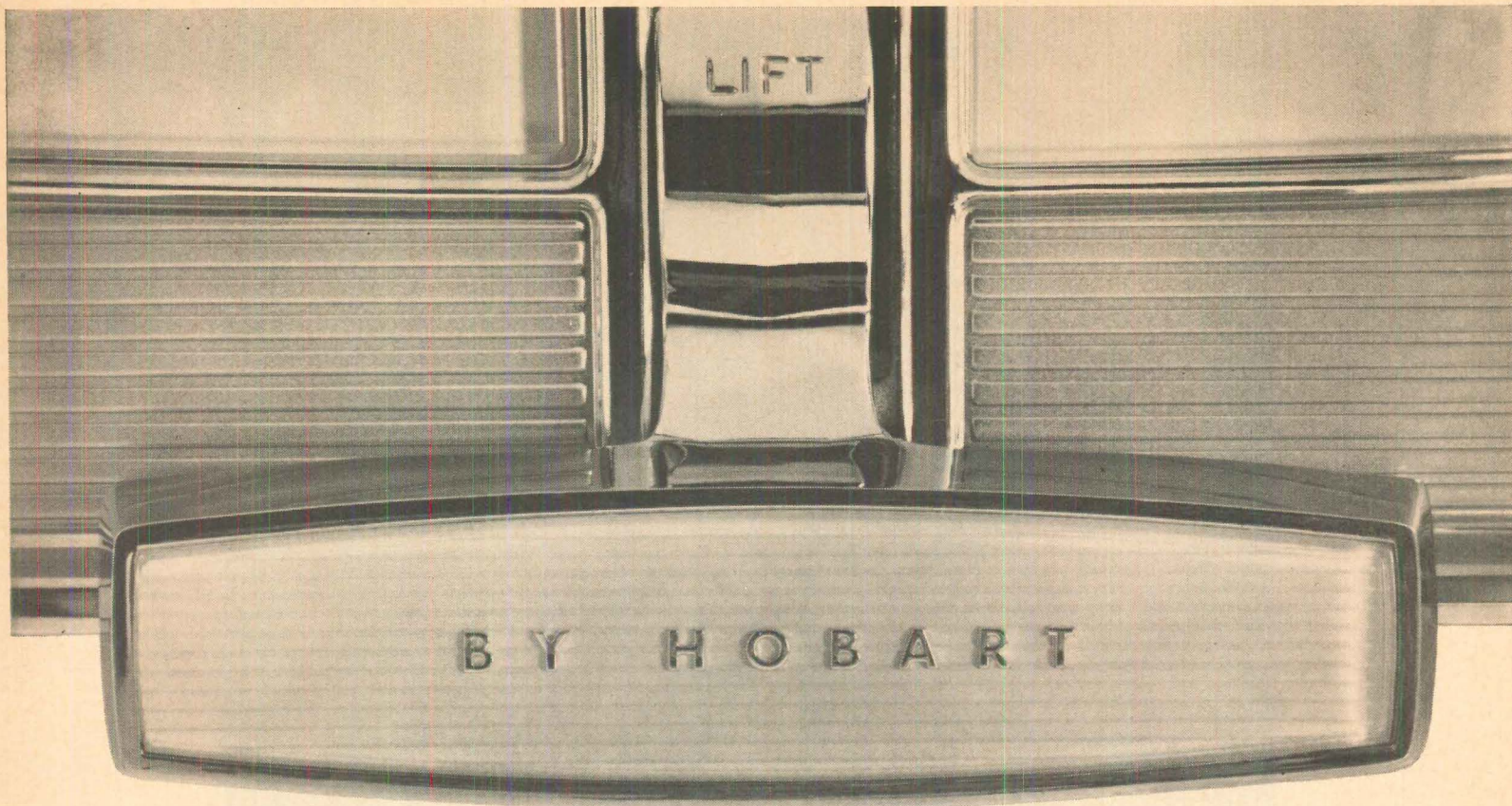
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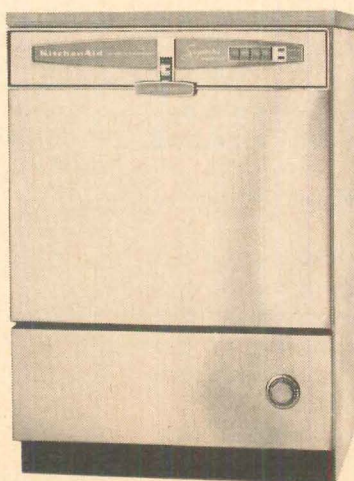
Here's an open-and-shut sales closer.

There's a strong sales story on the handle of every KitchenAid dishwasher: the Hobart name.

It shows your prospects that you install the best appliances. That price isn't your only consideration.

The Hobart name proves it. Remind your customers that Hobart has made commercial dishwashers for over 80 years. We're specialists who also make dishwashers for hotels, schools, restaurants and institutions.

Our service records prove our dishwashers



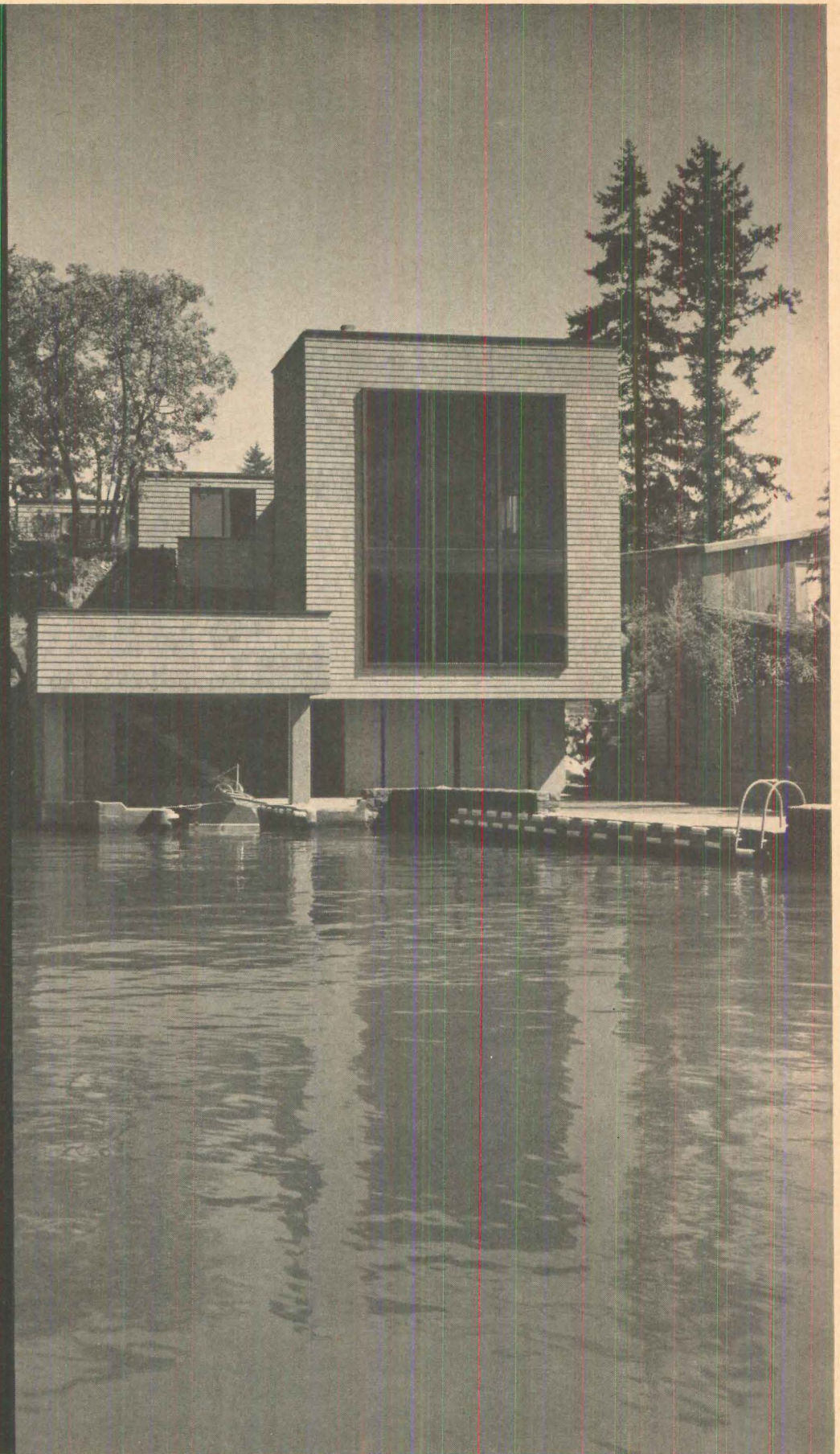
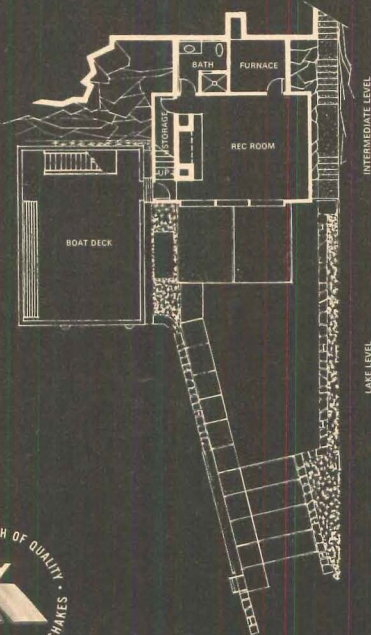
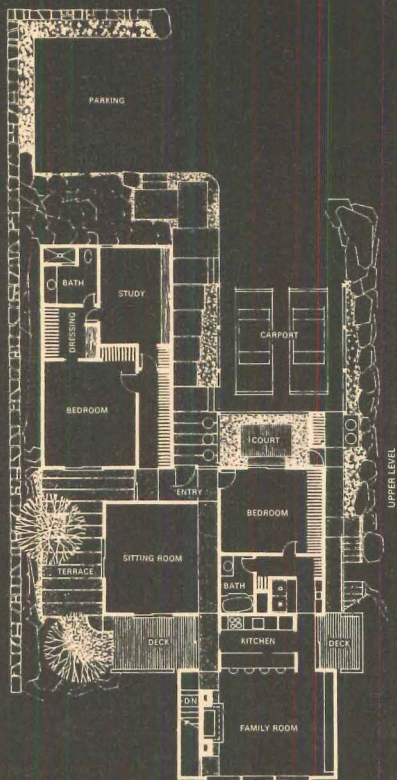
work better and last longer with few call-backs.

So install KitchenAid dishwashers and let our quality reputation help sell your houses. See your distributor for details, or write Dept. 6DS-7, KitchenAid Home Dishwasher Division, The Hobart Manufacturing Company, Troy, Ohio 45373.

And for a sales closer, remember our handle. It can help you close the sale as well as the dishwasher door.

KitchenAid®
Dishwashers

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*Residence, Lake Oswego, Oregon
 Architect: Edgar Wilson Smith
 Certigrade Shingles, #1 grade,
 16" Fivex with 6" to the weather,
 and stained driftwood gray.*

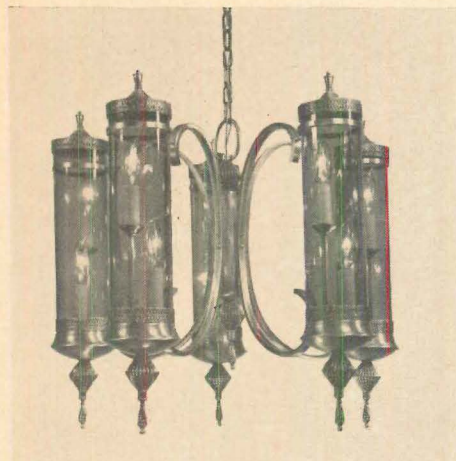
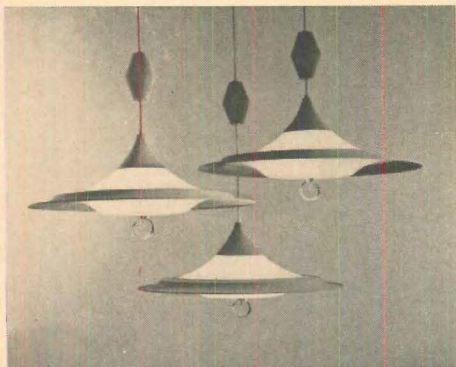
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High-fashion lighting ideas enhance catalog of fixtures

The catalog presents 818 lighting fixtures—the entire 1966 line of Moe Light. But in addition to product photographs, the manufacturer has included numerous photos of fixtures used dramatically in room settings, so the catalog is a source of decorating ideas as well as a buying guide. All illustrations are in full color and the pages are bound in hard covers and carefully indexed. For a copy, send 50¢ to: Residential Lighting Division, Thomas Industries Inc., 207 East Broadway, Louisville, Ky. 40202.

For copies of free literature, circle the indicated number on the Reader Service card, page 137.

CONCRETE FINISHING. Information sheet tells how to use a new liquid that, when sprayed over concrete immediately after screeding, reduces evaporation from the plastic surface up to 80%. Purpose: to minimize finishing problems caused by wind, heat and dryness. Master Builders, Cleveland. *Circle 330 on Reader Service card*

WALLBOARD APPLICATION. A new multi-purpose joint compound with a vinyl base performs equally well for taping, topping and texturing and, when bulk-mixed, has a wet life of 30 to 60 days. Advantages and application instructions are summarized on a data sheet. Georgia-Pacific, Paoli, Pa. *Circle 331 on Reader Service card*

CRAWLER TRACTOR. A 16-page catalog enumerates—with photos, schematics and specification tables—the advantages of owning a 180-hp D7E tractor and matched accessories. Caterpillar, Peoria, Ill. *Circle 332 on Reader Service card*

GARBAGE DISPOSER. A new stainless-steel model gets the spotlight in a full-color catalog showing six different domestic disposers. Includes data on: 1) lifetime corrosion warranty, 2) five-year parts protection, and 3) 750 authorized service centers. In-Sink-Erator, Racine, Wis. *Circle 333 on Reader Service card*

PRECAST CONCRETE. Five wall patterns that can be laid up with brick-like masonry are illustrated in a four-page brochure that also includes detailed installation recommendations and specifications. Miami Stone, Indianapolis. *Circle 334 on Reader Service card*

METAL BRIDGING. Choice of sizes (nine) and method of installation (without nails) are the subjects of a product design and specification sheet on galvanized metal bridging. Timber Engineering, Washington, D.C. *Circle 335 on Reader Service card*

CAULKS AND SEALANTS. Fold-out catalog explains product characteristics, uses, applications, and shipping weights of putties, caulks, sealants and adhesives. McGuffie, Cleveland. *Circle 336 on Reader Service card*

HARDBOARD DOOR FACING. Information sheet includes characteristics, fabrication details and cost savings. Masonite, Chicago. *Circle 337 on Reader Service card*

ALUMINUM SOFFIT-FASCIA. Instruction sheet tells—with detailed drawings—how to cut metal soffit, plan an installation, and combine the metal system with other building materials. Alcoa, Pittsburgh. *Circle 338 on Reader Service card*

WATERPROOF MEMBRANE. Vapor barrier promises lifetime foundation waterproofing in areas of excessive moisture and water vapor. Illustrated specification sheet shows typical installation methods. Philip Carey Mfg., Cincinnati. *Circle 339 on Reader Service card*

BATHROOM CABINETS. Full-line color catalog shows wide model selection, including mirrors, and brass and chrome accessories. Miami-Carey, Cincinnati. *Circle 340 on Reader Service card*

ELECTRONIC AIR CLEANER. Specifications and capacity data are presented in an eight-page technical bulletin. Cambridge Filter, Syracuse, N.Y. *Circle 341 on Reader Service card*

GARAGE DOORS. Fiberglass and aluminum models are shown in a variety of installations, and in several styles including flush, ranch, colonial, and raised panel. Hardware and electronic operator system is briefly mentioned. Raynor Mfg., Dixon, Ill. *Circle 343 on Reader Service card*

TWO-WAY RADIO. Typical system costs, frequency bands and new mobile and base station equipment are the subjects of a 20-page bulletin. General Electric, Lynchburg, Va. *Circle 356 on Reader Service card*

MARKETING GUIDES. Revised editions of *A Marketing Plan for Home Builders* and *A Marketing Plan for Apartment Builders*—written by marketing consultant William R. Smolkin and first published in 1962 and 1964—are now available. Subjects include: market research, sales forecasting, multi-family site selection, advertising and sales promotion. Barrett Division, Allied Chemical, New York. *Circle 360 on Reader Service card*

FLUSH METAL DOORS. Full-line catalog—with specifications, details, and dimensions—shows swinging and sliding steel and aluminum doors plus hardware. Underwriters' Laboratories Requirements and limitations are included. Dusing and Hunt, Le Roy, N.Y. *Circle 350 on Reader Service card*

STORAGE IDEAS. Novel storage ideas for every room in the house, designed by Richard Himmel, AIA, make up a full-color, 20-page brochure. Fourteen storage plans are illustrated. Each includes a materials list. For a copy send 50¢ to: Weyerhaeuser Co., Box B 3321, Tacoma, Wash. 98401.

WOOD FLOORING. Research booklet compares resiliency of wood floors with other materials. Maple Flooring Manufacturers Assn., Oshkosh, Wis. *Circle 351 on Reader Service card*

SHEATHING, SIDING, PANELING. Indexed full-line catalog covers decorative paneling, plywood, siding and sheathing, hardboard, composition board, and gypsumboard. Includes installation instructions and specification charts. Georgia-Pacific, Portland, Ore. *Circle 352 on Reader Service card*

POWER TOOLS. Thirty-two-page catalog shows 53 electric and battery-operated tools plus accessories. Featured are three models of a new drill that operates at any speed forward or reverse. Skil, Chicago. *Circle 353 on Reader Service card*

PILE WEATHERSTRIPPING. Information sheet shows a selection of installation hardware for woven pile weatherstripping, and tells how to install it on doors and all types of windows. Also includes engineer's performance data. Schlegel Mfg., Rochester, N.Y. *Circle 342 on Reader Service card*

PRE-ASSEMBLED GYPSUM PANELS. Diagrammed specification bulletin shows how to install factory-fabricated, studless partition panels. U.S. Gypsum, Chicago. *Circle 357 on Reader Service card*

SEALING COMPOUND. A pourable joint-sealing compound which cures to a strong rubber with high elasticity is ideally suited for sealing joints in walkways where heel penetration is a problem. Application properties are included in a technical bulletin. Essex Chemical, Clifton, N.J. *Circle 358 on Reader Service card*

TRUCK ADD-ON COMPARTMENTS. Designed for stake and platform truck chassis, compartments can be stacked, butted together or mounted under truck platform. Eleven-page catalog gives complete measurements and choices, as well as installation photos. Pierce Auto Body Works, Appleton, Wis. *Circle 359 on Reader Service card*

MATERIALS HANDLING. Twenty-page booklet tells—with photos, drawings and weight tables—how to handle lumber and gypsumboard in box-cars and flatcars. Lift-truck cost data is included. Clark Equipment, Battle Creek, Mich. *Circle 345 on Reader Service card*

CONTEMPORARY LIGHTING. Full-line catalog presents fixture arrangements that anticipate lighting requirements for any room, and includes a cross-referenced index to simplify selection. Lighting arrangements are illustrated in both color and black and white. Heifetz, Clinton, Conn. *Circle 347 on Reader Service card*



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